

QUARTERLY PERFORMANCE REPORT

OKLAHOMA STATE PENSION COMMISSION



December 31, 2017

Don Stracke, CFA, CAIA, Senior Consultant
Tony Ferrara, CAIA, Consultant
Zachary Noe, Performance Analyst



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

TABLE OF CONTENTS

- 1. Market Environment Update and Outlook**
- 2. OK Pension Commission**
- 3. Oklahoma Teachers**
- 4. Oklahoma PERS**
- 5. Oklahoma Firefighters**
- 6. Oklahoma Police**
- 7. Oklahoma Law**
- 8. Oklahoma Judges**
- 9. Oklahoma Wildlife**



Market Environment Update and Outlook



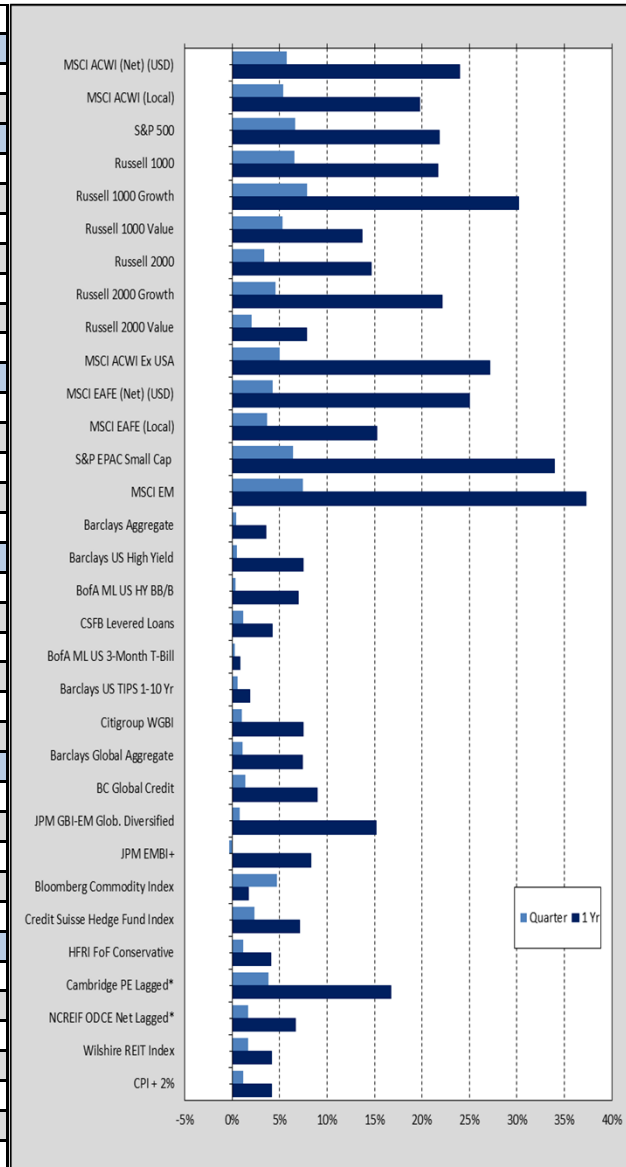
ECONOMIC ENVIRONMENT

- **Fourth quarter GDP growth rate (advance estimate) increased at a modest 2.6%.**
 - Retail sales ended December at +5.6% on a YoY basis. In the same period last year the YoY growth rate was 3.9%.
 - Corporate profits (ended July) as a percent of GDP increased slightly to 9.53% from 9.5% (in April) and remain elevated relative to historical levels.
 - The inventory-to-sales ratio ended November down at 1.3 from 1.4 and has remained relatively flat since early 2010.
 - The U.S. trade deficit widened by 2.3% ended November as imports increased.
- **The unemployment rate decreased to 4.1% from 4.2% in Q4; U-6, a broader measure of unemployment, decreased to 8.1% from 8.3% during the fourth quarter.**
- **The Case-Shiller Home Price Index (ended October) increased to 195.6 from 194.1 and remains at levels higher than that of pre-financial crisis levels of 150.9.**
- **Rolling 12-month seasonally-adjusted CPI saw a down-tick to 2.1% at the end of December from 2.2% at the end of September; Capacity Utilization marginally increased to 77.9% in Q4 from 76.1% in Q3.**
- **Fed Funds rate was increased to a targeted range of 1.25% - to – 1.50%. The 10-year Treasury Yield (constant maturity) finished Q4 at 2.4%, up from 2.2% in September.**
- **The Fed balance sheet decreased slightly during Q4 2017, while the European Central Bank balance sheet continues to increase.**
 - ECB held its benchmark refinance rate at 0%, deposit rates -0.4% and asset purchases would slow from €60 billion per month to €30 billion per month.
- **S&P valuations increased slightly in Q4 remaining above the 10-year and long-term averages.**
 - Cyclically adjusted Shiller PE ratio (32.5x) is above the long-term average of 16.8x and above the 10-year average of 23.3x.



MARKET ENVIRONMENT – Q4 2017 OVERVIEW

		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
World Equity Benchmarks						
MSCI ACWI (Net) (USD)	World	5.7%	24.0%	9.3%	10.8%	4.7%
MSCI ACWI (Local)	World (Local Currency)	5.3%	19.8%	9.7%	12.6%	5.4%
Domestic Equity Benchmarks						
S&P 500	Large Core	6.6%	21.8%	11.4%	15.8%	8.5%
Russell 1000	Large Core	6.6%	21.7%	11.2%	15.7%	8.6%
Russell 1000 Growth	Large Growth	7.9%	30.2%	13.8%	17.3%	10.0%
Russell 1000 Value	Large Value	5.3%	13.7%	8.7%	14.0%	7.1%
Russell 2000	Small Core	3.3%	14.6%	10.0%	14.1%	8.7%
Russell 2000 Growth	Small Growth	4.6%	22.2%	10.3%	15.2%	9.2%
Russell 2000 Value	Small Value	2.0%	7.8%	9.5%	13.0%	8.2%
International Equity Benchmarks						
MSCI ACWI Ex USA	World ex-US	5.0%	27.2%	7.8%	6.8%	1.8%
MSCI EAFE (Net) (USD)	Int'l Developed	4.2%	25.0%	7.8%	7.9%	1.9%
MSCI EAFE (Local)	Int'l Developed (Local Currency)	3.7%	15.2%	8.5%	11.4%	3.3%
S&P EPAC Small Cap	Small Cap Int'l	6.4%	34.0%	14.1%	13.1%	5.6%
MSCI EM	Emerging Equity	7.4%	37.3%	9.1%	4.3%	1.7%
Domestic Fixed Income Benchmarks						
Barclays Aggregate	Core Bonds	0.4%	3.5%	2.2%	2.1%	4.0%
Barclays US High Yield	High Yield	0.5%	7.5%	6.4%	5.8%	8.0%
BofA ML US HY BB/B	High Yield	0.4%	7.0%	6.0%	5.6%	7.3%
CSFB Levered Loans	Bank Loans	1.2%	4.2%	4.5%	4.3%	4.6%
BofA ML US 3-Month T-Bill	Cash	0.3%	0.9%	0.4%	0.3%	0.4%
Barclays US TIPS 1-10 Yr	Inflation	0.5%	1.9%	1.8%	0.1%	2.8%
Global Fixed Income Benchmarks						
Citigroup WGBI	World Gov. Bonds	1.0%	7.5%	1.7%	0.1%	2.7%
Barclays Global Aggregate	Global Core Bonds	1.1%	7.4%	2.0%	0.8%	3.1%
BC Global Credit	Global Bonds	1.3%	8.9%	2.9%	2.3%	4.1%
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local Currency)	0.8%	15.2%	2.5%	-1.5%	3.6%
JPM EMBI+	Em. Mkt. Bonds	-0.3%	8.3%	6.5%	3.3%	6.8%
Alternative Benchmarks						
Bloomberg Commodity Index	Commodities	4.7%	1.7%	-5.0%	-8.5%	-6.8%
Credit Suisse Hedge Fund Index	Hedge Fund	2.3%	7.1%	2.5%	4.3%	3.2%
HFRI FoF Conservative	Fund of Hedge Funds	1.1%	4.1%	2.1%	3.4%	0.9%
Cambridge PE Lagged*	Private Equity	3.8%	16.7%	10.4%	13.3%	9.6%
NCREIF ODCE Net Lagged*	Real Estate	1.6%	6.7%	9.8%	10.6%	4.1%
Wilshire REIT Index	REIT	1.7%	4.2%	5.2%	9.3%	7.3%
CPI + 2%	Inflation/Real Assets	1.1%	4.2%	3.6%	3.4%	3.6%



* As of 9/30/2017



MARKET ENVIRONMENT

Global Equity

- **U.S. equities as measured by the S&P 500 posted strong gains in the fourth quarter (+6.6%).**
- **Small cap stocks underperformed large cap stocks during the quarter, with the Russell 2000 Index returning 3.3% and the Russell 1000 Index returning 6.6%.**
- **International equities underperformed U.S. markets during the quarter, returning 5.0%, as measured by the MSCI ACWI ex-U.S. Index. Emerging markets returned 7.4% as measured by the MSCI Emerging Markets Index in U.S. dollar terms.**
 - Developed international markets returned 4.2% in USD terms, while in local currency terms returned 3.7% as measured by the MSCI EAFE Index.

Private Equity

- **Capital commitment momentum slowed in Q3 2017, however aggregate capital raised has risen versus last year and was dominated by the five largest investment vehicles.**
- **Private equity fundraising totaled \$95 billion in Q3 2017.**
 - North America focused private equity funds raised \$64 billion.
 - Asia focused private equity funds raised \$9.4 billion.
 - Europe focused private equity raised \$20 billion.
- **Private equity dry powder continued its increase to record levels and stands at \$954 billion.**



MARKET ENVIRONMENT

Fixed Income

- **The nominal yield curve continued to flatten in Q4. Long term yields decreased 5 –to- 12 basis points across 20 to 30 year treasury bonds while short term yields increased 33 basis points for the 3 month and 45 basis points in the one year.**
- **The spread between two and 10 year rates decreased to 51 basis points from 86 basis points in Q4.**
- **Treasury Inflation-Protected Securities, or TIPS, returned 0.5% during the quarter, as measured by the BBg Barclays US TIPS 1-10 Yr Index.**
- **The BBg Barclays Long Duration Credit Index gained 3.16%.**
- **Long Treasuries gained 2.37% and investment-grade US corporate debt gained 0.4%.**
- **The BBg Barclays 1-3 year US Government/ Credit Index returned -0.21%. US high yield bonds gained 0.5% as spreads compressed.**
- **Emerging markets debt had mixed results.**
 - US dollar-denominated debt, as measured by the JP Morgan EMBI Index, returned -0.3%; local currency debt gained 0.8%, according to the JP Morgan GBI-EM BD Index.



MARKET ENVIRONMENT

Real Assets/Inflation-Linked Assets

- **Energy remains attractive despite volatile oil prices.**
 - Private equity and debt opportunities are attractive.
 - Fire sale prices never materialized but focusing on assets outside of the hottest zip codes provides potential for strong returns as market normalizes.
- **Infrastructure – select opportunities to access growth markets.**
 - High quality assets are receiving premium bids from direct investors (Pension Funds and Sovereigns) with low costs of capital and long hold horizons; focus on mismanaged or niche opportunities.
- **Metals & Mining – have commodity prices bottomed?**
 - Improving Metals & Mining fundamentals but limited to assets near production
- **Timber – low return potential and limited opportunity for outperformance.**
- **Agriculture – near-term slowdown in price appreciation creates opportunity to invest in a strong (very) long term outlook supported by demographic trends.**



MARKET ENVIRONMENT

Commodities

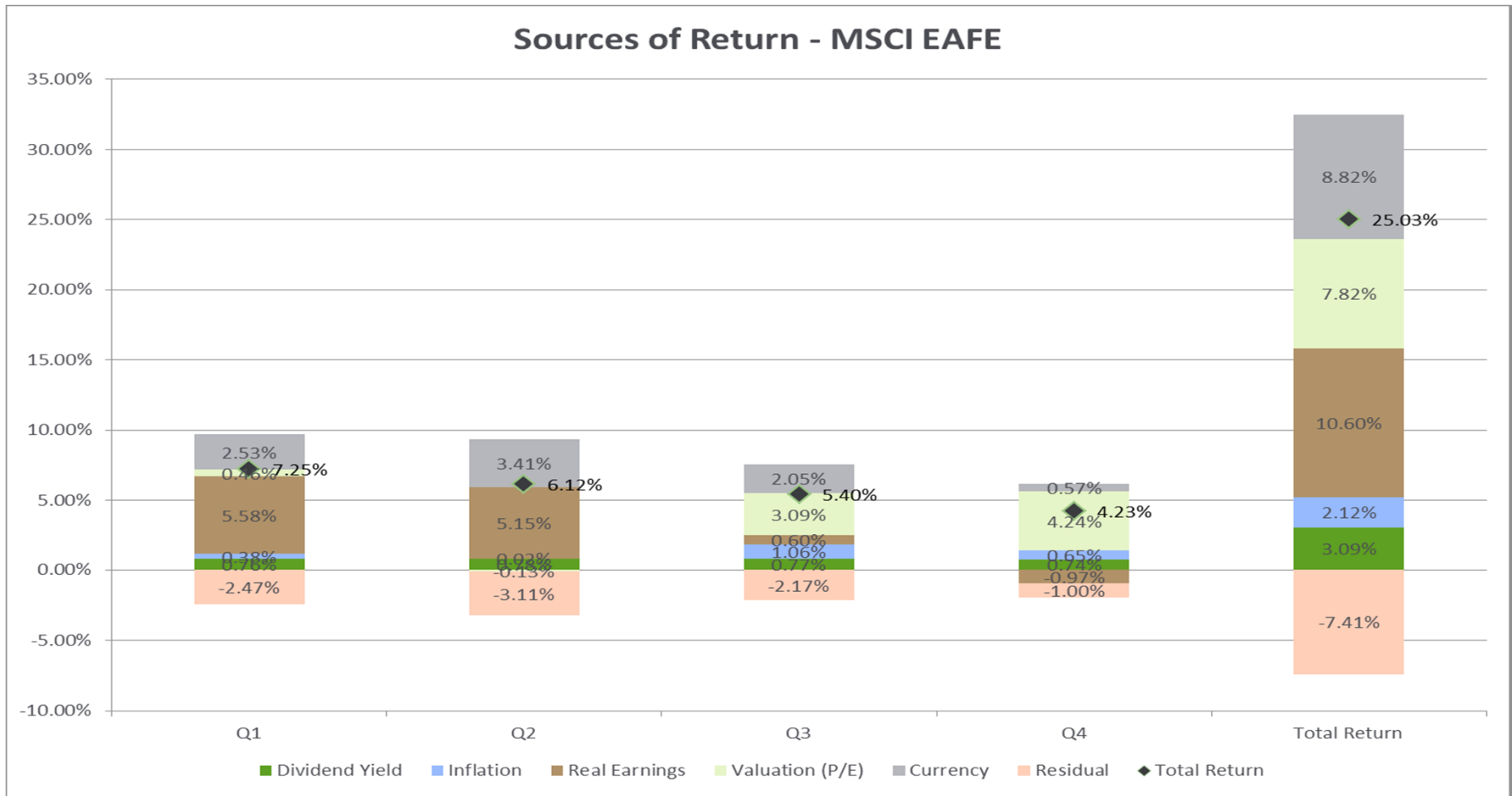
- **Commodities gained 4.7% as measured by the Bloomberg Commodity Index.**
 - US Dollar weakness led to stronger commodity prices broadly.

Real Estate

- **NEPC continues to be neutral on core real estate in the US and remains positive on non-core real estate, that is, value-add and opportunistic strategies.**
- **Real estate fundamentals (rent growth, occupancy, net absorption) remain strong; however, valuations are high on an absolute and relative basis.**
 - Rising interest rates have been baked into existing valuations but excess cap rate expansion (beyond general expectations) will reset valuations.
 - REIT sector has been volatile and remain at the high end of historical FFO multiple ranges
- **Overall, the non-core real estate investment environment in the U.S. is normalizing; however, select areas remain attractive.**
- **Europe is viewed as the best place for a marginal dollar of non-core real estate investment.**
- **Emerging markets in Latin America (Brazil) and Asia (China, India) may have strengthening opportunities.**



CALENDAR YEAR 2017 – ATTRIBUTION OF MSCI EAFE RETURNS



Spot Rates

1 USD = 0.935 Euro

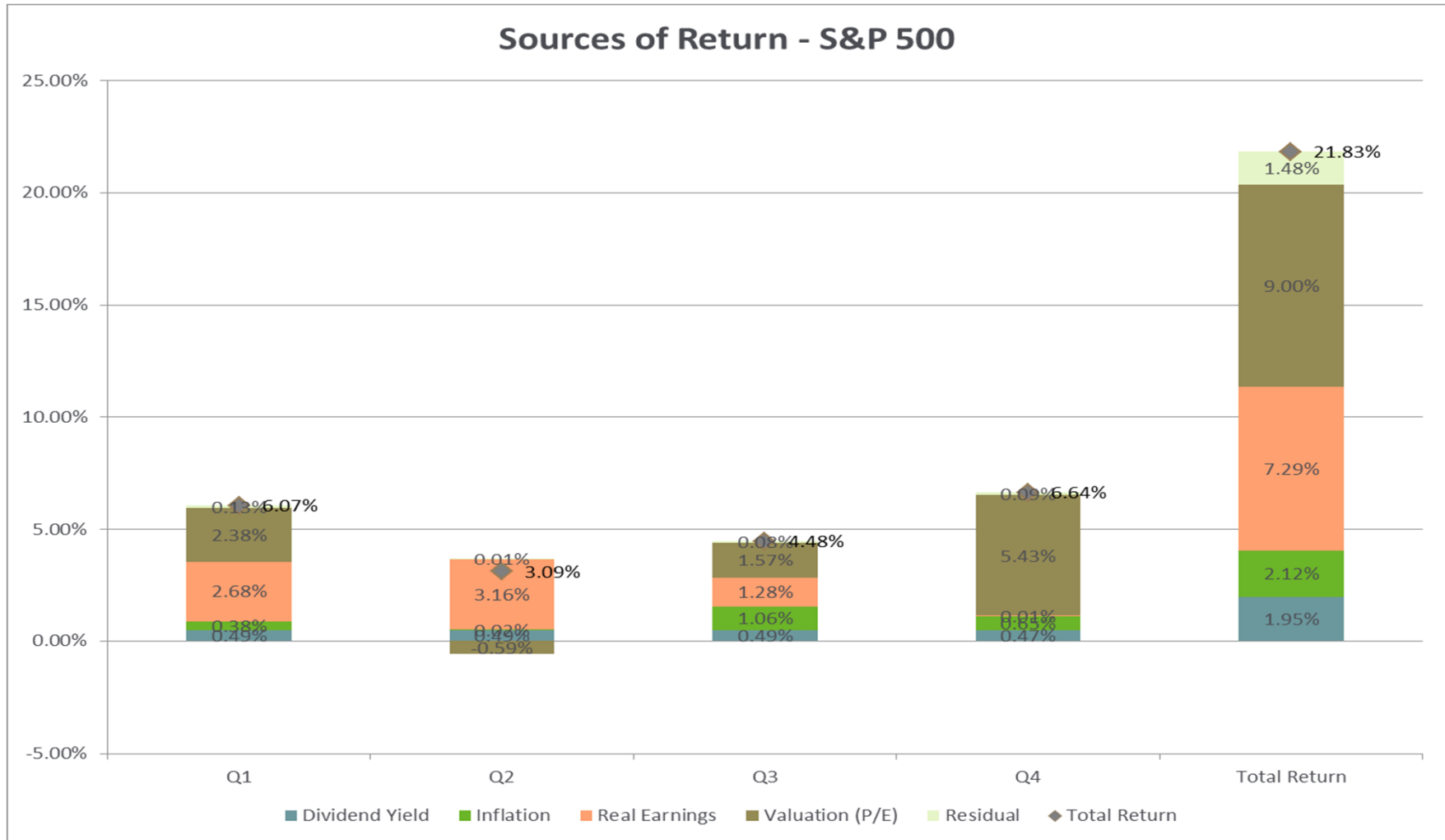
1 USD = 0.876 Euro

1 USD = 0.847 Euro

1 USD = 0.832 Euro



CALENDAR YEAR 2017 – ATTRIBUTION OF S&P 500 RETURNS



Spot Rates

1 USD = 0.935 Euro

1 USD = 0.876 Euro

1 USD = 0.847 Euro

1 USD = 0.832 Euro



KEY MARKET THEMES

Extended US Economic Cycle

Economic cycles do not die of old age

The US economy is in an extended expansionary cycle despite being eight years removed from the last recession

Financial health of US consumers and ongoing recovery of the housing market continue to drive economic growth

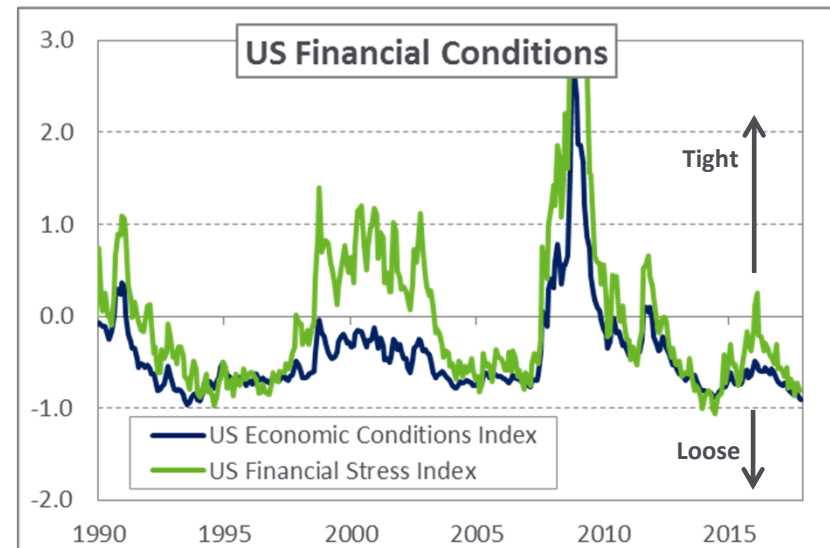
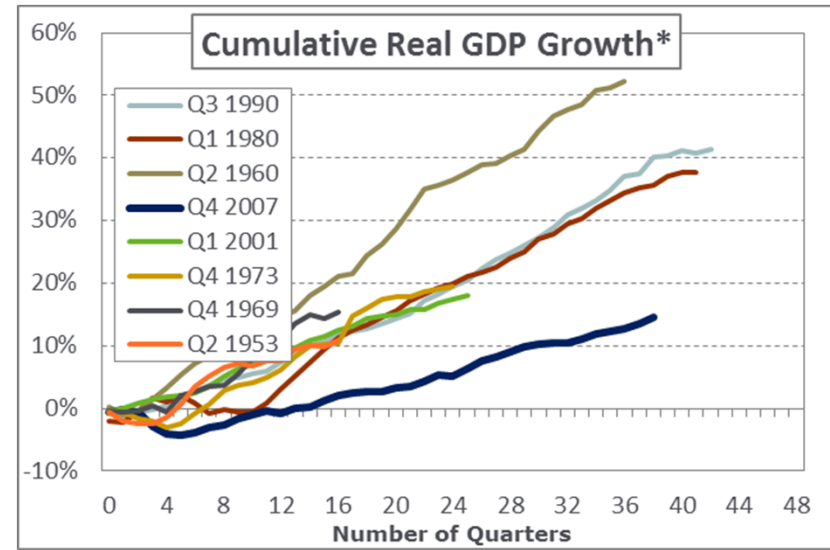
A prolonged US economic expansion can support a continued rally for US equities despite elevated valuation levels

US financial conditions remain loose and support steady economic gains

Low inflation provides a foundation for positive economic conditions and reinforces the Fed's gradual monetary policy approach

Moderating US dollar strength is another form of easy financial conditions, benefiting global trade flows and credit creation

Reversal in these easy conditions may be fueled by actions outside the US, such as a misstep by global central banks and/or increased volatility in the Chinese yuan



Source: (Top) Bloomberg, *Cumulative GDP growth from prior cycle peak
Source: (Bottom) Federal Reserve Bank of Chicago and Kansas City



KEY MARKET THEMES

Extended US Economic Cycle

Excess capacity remains in the system and provides fuel for the expansion

Labor market gains have been robust but slack remains as many have not returned to the workforce

Muted wage gains and low inflation metrics are reflective of the excess capacity remaining in the US economy

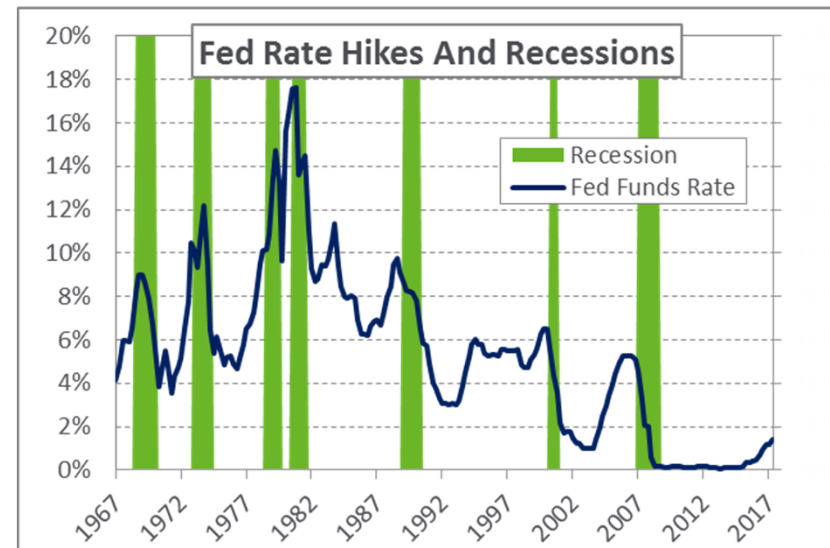
Tax cuts and fiscal stimulus can potentially remove spare economic capacity and be a catalyst for an uptick in inflation measures

US recession concerns are muted

An acceleration in inflation leading to a tightening of financial conditions has historically been a catalyst to end economic expansions

However, improved US household balance sheets have room to expand and support further consumer spending gains

Improving global economic conditions reinforce an expansion of the US economy as global growth factors synchronize



Source: (Top) Federal Reserve Bank of St. Louis

Source: (Bottom) Federal Reserve, NEPC



KEY MARKET THEMES

Synchronized Economic Resurgence

Global economic conditions are improving in a synchronized fashion

Coordinated global growth factors reinforce economic gains across the globe and are distinct from the extension of the US economic cycle

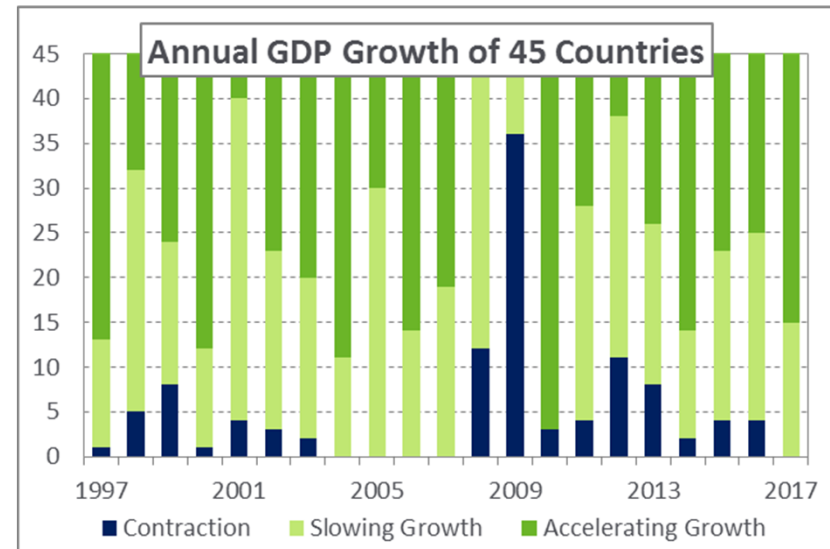
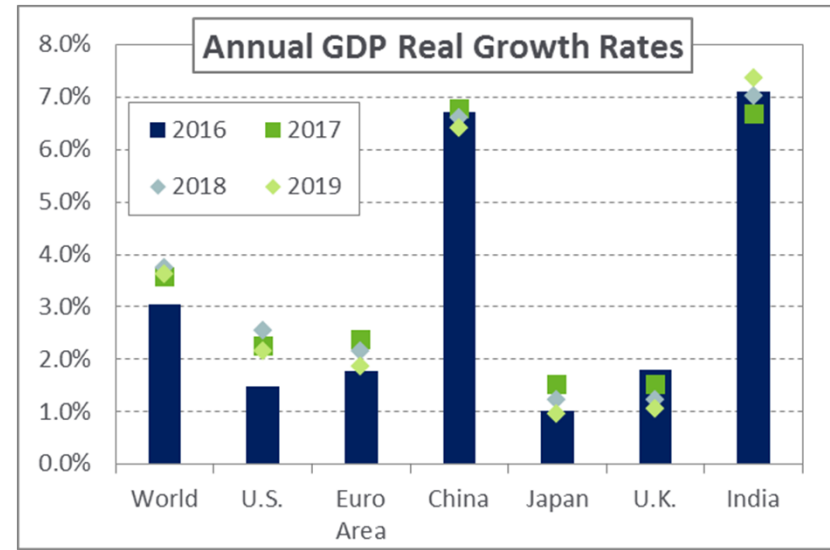
Non-US corporate revenues and equities are best positioned to benefit from a widespread boost in global economic conditions

Positive growth rates harmonized across the globe are relatively rare

Conditions are the result of Europe, Japan, and large parts of the emerging world transitioning out of economic malaise

Persistence of the theme over several years would provide a substantial benefit to equity markets globally – specifically in Europe and Japan

Historically, periods of synchronized growth have been derailed by higher inflation levels and central banks tightening policy



Source: (Top) OECD
Source: (Bottom) OECD



KEY MARKET THEMES

Synchronized Economic Resurgence

Erosion of excess economic capacity is a catalyst to boost economic gains

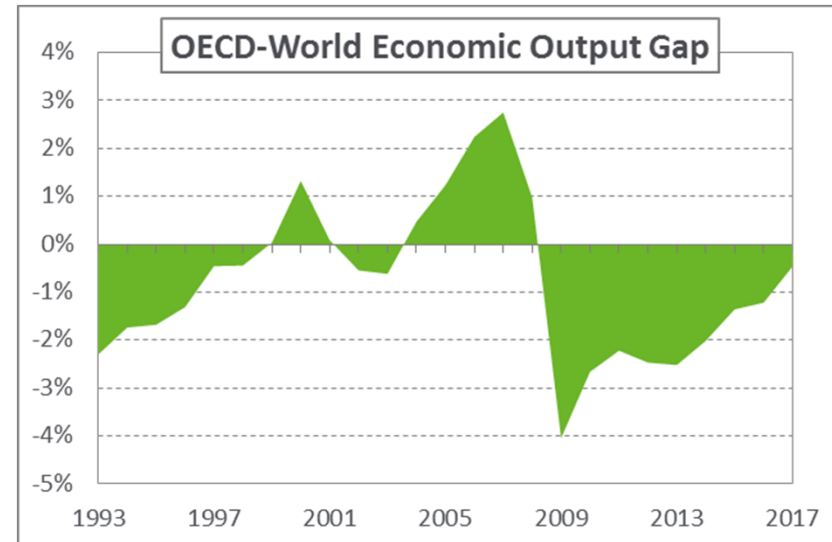
Despite recent labor market improvements, potential for labor reform in Europe and improved workforce participation in Japan offer multi-year benefits to economic growth

Material decline in emerging market inflation provides a cushion for real interest rates to fall and fuel an expansion of economic activity

Economic resurgence is delicate and can be disrupted by lingering global risk factors

US dollar strength, dislocation in China's credit expansion, and restrictive US trade policy pose the greatest threats

The foundation of synchronized economic resurgence is the continuation of positive trends associated with the other key market themes



Source: (Top) OECD
Source: (Bottom) IMF



KEY MARKET THEMES

Federal Reserve Gradualism

The Federal Reserve is expected to slowly increase interest rates

Expected path of Fed policy through 2020 matters more than timing of the next hike as the disconnect between market expectations and Fed signaling has grown

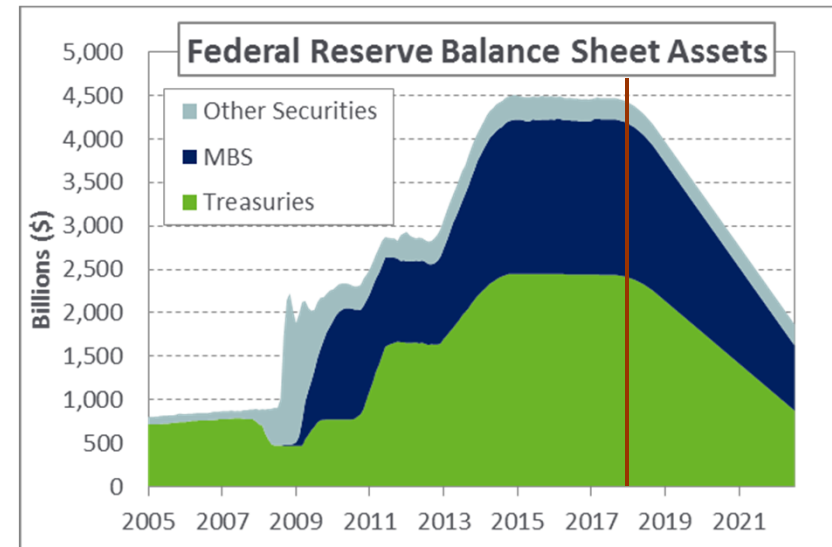
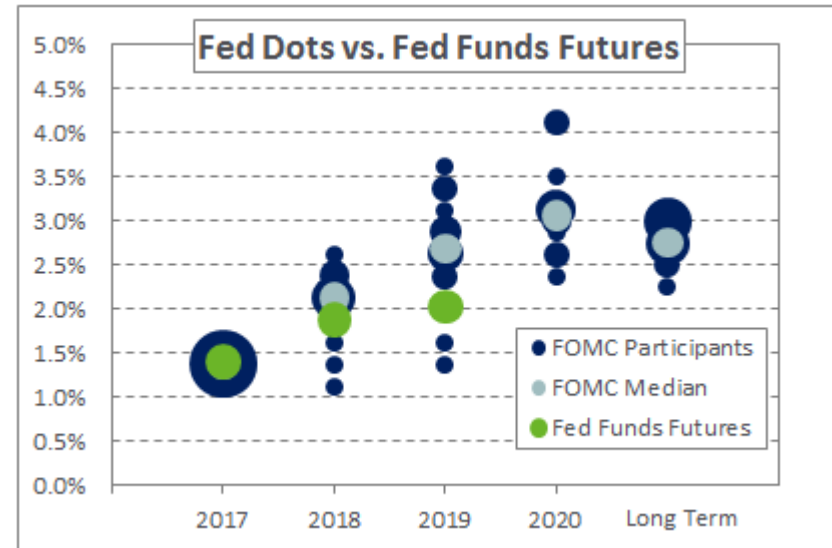
A relatively accommodative Fed is likely to continue, unless there is a dramatic acceleration in inflation

The Fed's balance sheet normalization is a low grade tightening of monetary policy but its impact is untested

Fed is expected to be careful and data dependent yet balance sheet disbursement into a strong economy will likely have tightening effects – in the same way balance sheet expansion had easing effects

The balance sheet will gradually shrink over time assuming conditions remain supportive

The gradual progression of balance sheet reduction combined with the accommodative policies of global central banks supports easy global financial conditions



Source: (Top) Bloomberg, NEPC
Source: (Bottom) Bloomberg, NEPC



KEY MARKET THEMES

Federal Reserve Gradualism

Gradualism is the policy of choice globally as the major central banks manage unprecedented initiatives

ECB's QE program is expanding but at a slower rate

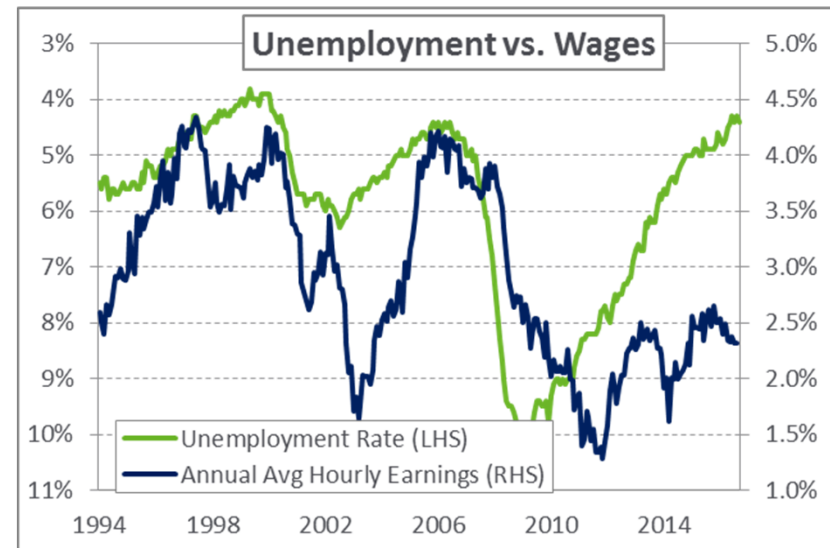
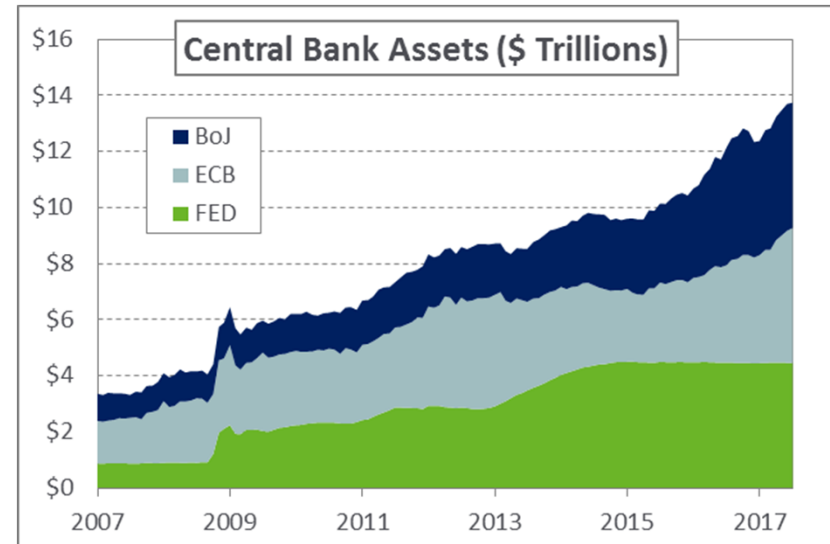
However, the reinvestment of balance sheet holdings is likely to continue for an extended period of time

Bank of Japan's QE yield-curve control program has rapidly slowed bond purchases but solidified steepness in the yield curve

Inflation expected to shift marginally higher in the coming years

Improvements in wage growth and aggregate economic activity support modest upticks in inflation but still within the Fed's tolerance bands to gradually raise rates

Fed has stated a willingness to let the economy "run hot" and accept some inflation to repair the deflationary effects of the past decade



Source: (Top) Bloomberg, NEPC
Source: (Bottom): Bloomberg, FRED



KEY MARKET THEMES

China Transitions

China is the global growth engine but faces fundamental transitions

China's economic transition is pivoting from production and investment focused to a service and consumption based economy

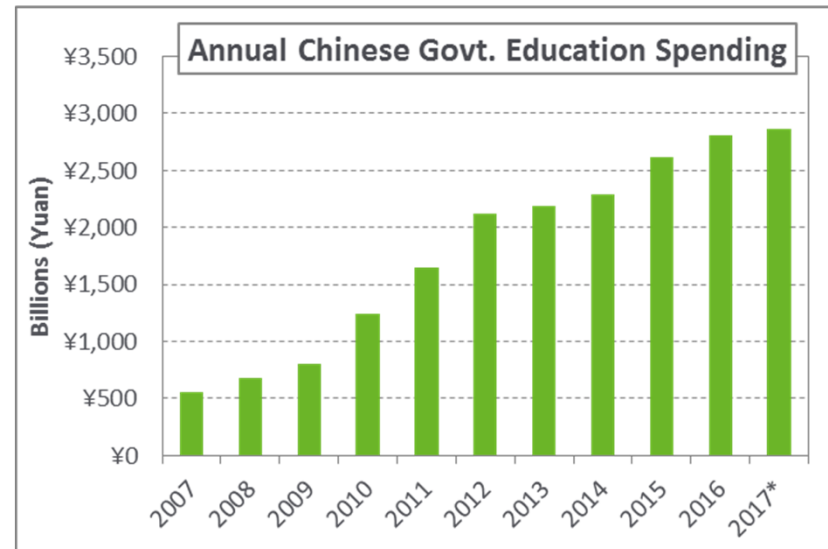
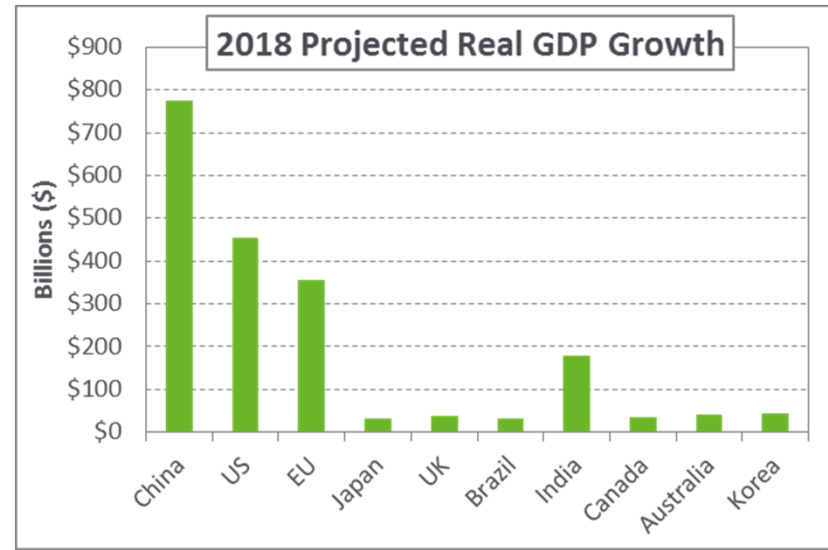
Fixed investment is required to sustain the production based economy and support employment as the rural population moves to urban centers

Any disruption to these transitions will have global repercussions due to China's role in the global economy

China must manage competing social goals in attempting to sustain growth

Engineering an orderly transition to a consumer-led economy requires supporting employment outside the major cities and improving quality of life metrics such as air quality in the urban centers

Future growth in a services based economy requires advancement in productivity, technology, and a more skilled labor force



Source: (Top) Bloomberg

Source: (Bottom) Bloomberg, *Includes estimate for Nov/Dec 2017



KEY MARKET THEMES

China Transitions

The PBOC is tasked with straddling a delicate path as the economy evolves

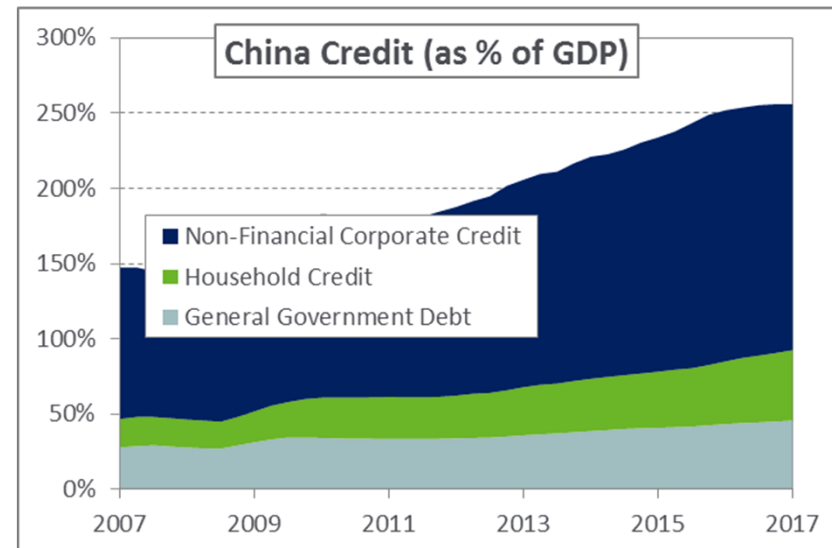
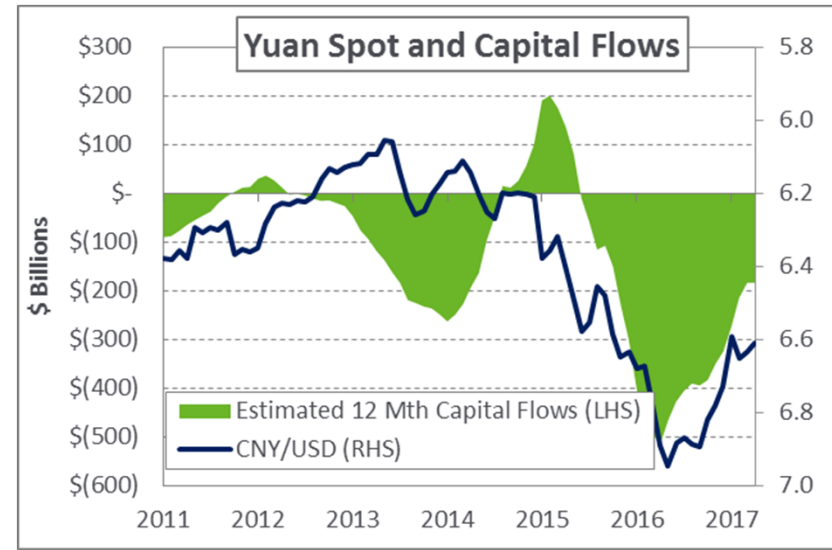
China maintains control of its currency and monetary policy but would have to make concessions to open its capital account and allow the free movement of capital in order to encourage investment

Restrictions on capital markets are slowly being eased, with an eye towards limiting social disruption

China's government is negotiating a balance of tightening credit expansion and support for economic growth

Continued credit expansion and real estate development risk inflating asset price bubbles and pose a systemic risk

Markets have responded positively to the PBOC's management of a more stable yuan as capital outflow pressure has eased but currency devaluation remains a tail risk



Source: (Top) Bloomberg, NEPC
Source: (Bottom) Bank of International Settlements



KEY MARKET THEMES

Globalization Backlash

Uneven economic growth and wage gains have fueled political discontent in the developed world

Election results in France have assuaged fears of political gridlock in the EU

Italian election in first half of 2018 is another potential flashpoint on globalization

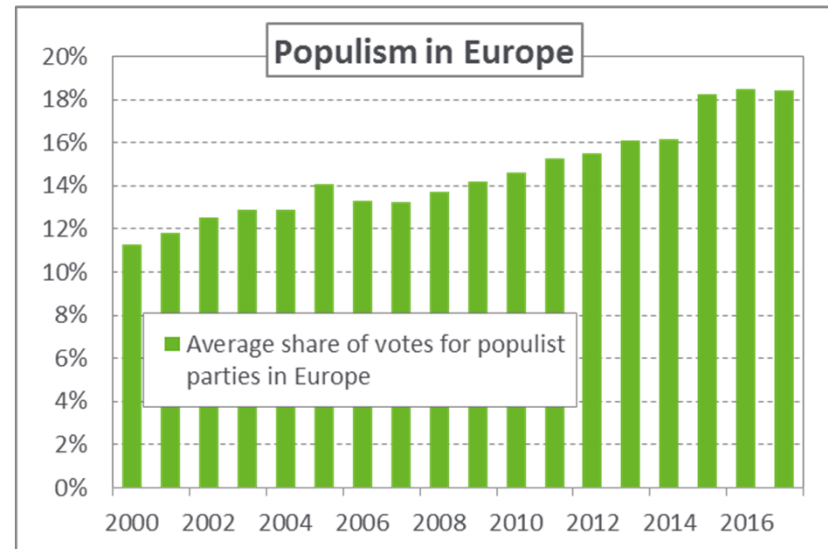
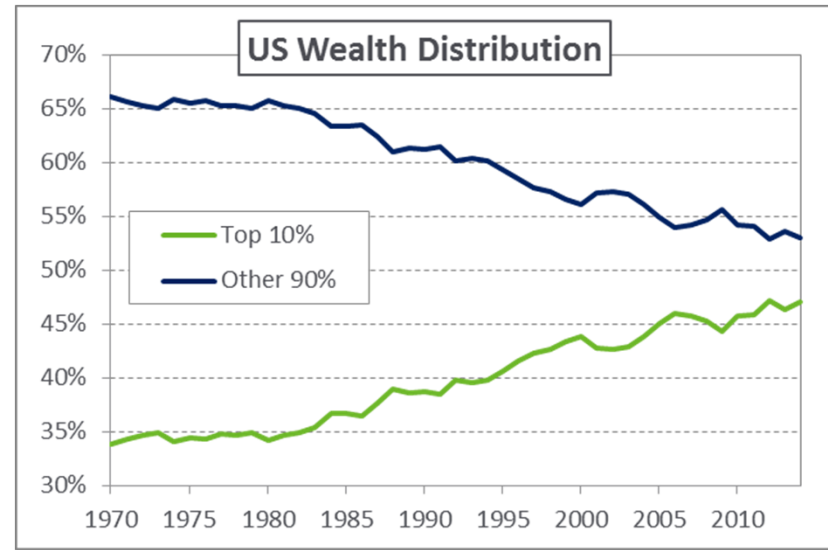
Anti-establishment political bias is likely a long term trend and potentially leads to higher levels of currency volatility over time

For many nations, a turn inward is associated with globalization fatigue

Often fuels greater expression of nationalism and increased geopolitical risks as multilateral relationships are reassessed

Populist movements destabilize the political order and shifts away from political orthodoxy heighten tail risks

However, equity markets often overreact to geopolitical concerns and sell-offs can be a buying opportunity for investors



Source: (Top) World Wealth & Income Database

Source: (Bottom) World Bank



KEY MARKET THEMES

Globalization Backlash

Major shifts in US trade policy did not materialize in 2017

However, a more aggressive protectionist policy would represent a material risk to global markets and the world economy

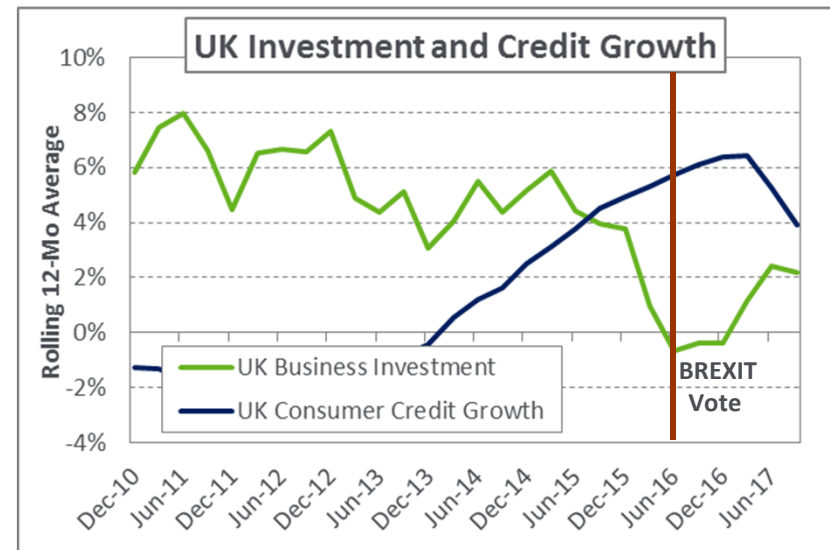
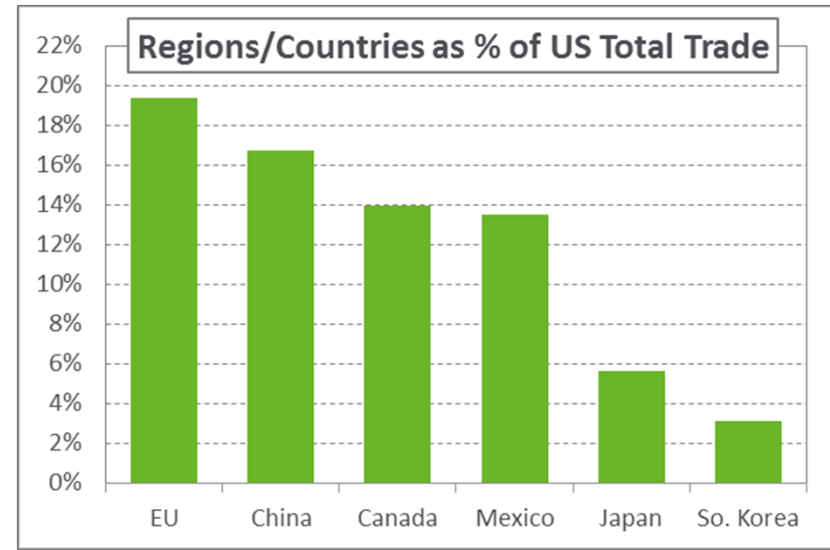
Markets have taken to interpreting the US administration's rhetoric with a grain of salt but ongoing NAFTA negotiations are a concern

The UK serves as a live case study for the effects of globalization backlash

While it is early in the process, economic metrics across the country have turned lower in the 18 months since UK voted to leave the European Union

Expected disruption to financial regulations, customs controls, and business confidence in the UK are proving to be a cautionary tale for a turn away from globalization

However, the economic unease of voters remain and popularity of anti-establishment political parties poses a risk to the global economic order



Source: (Top) Federal Reserve Bank of St. Louis

Source: (Bottom) Bloomberg



OK Pension Commision



ASSET ALLOCATION SUMMARY

Key Policy Items		Teachers [^]	TRS 12/31/16	PERS*	PERS 12/31/16	Firefighters	FTRS 12/31/16	Police **	POLICE 12/31/16
TOTAL EQUITY	Target	57.5%	57.5%	68.0%	68.0%	57.0%	57.0%	50.0%	50.0%
	Actual	58.9%	57.3%	68.3%	69.0%	65.2%	62.9%	54.3%	52.4%
	Range	37.5-73.5	37.5-73.5	59.2-76.8	59.2-76.8	42-62	42-62	25-80	25-80
Large Cap	Target	17.0%	17.0%	34.0%	38.0%	29.4%	29.4%	15.0%	15.0%
	Actual	18.3%	15.4%	34.3%	39.6%	34.7%	34.4%	17.6%	16.7%
	Range	12-23	12-23	31.2-36.8	35-41	24.4-34.4	24.4-34.4	10-20	10-20
MidCap	Target	13.0%	13.0%	-	-	-	-	-	-
	Actual	10.9%	14.7%	-	-	-	-	-	-
	Range	8-18	8-18	-	-	-	-	-	-
Small Cap	Target	10.0%	10.0%	6.0%	6.0%	12.6%	12.6%	5.0%	5.0%
	Actual	10.0%	11.8%	6.9%	7.2%	16.3%	15.5%	7.2%	8.1%
	Range	5-15	5-15	3.2-8.8	3.2-8.8	7.6-17.6	7.6-17.6	0-15	0-15
International / Equity	Target	17.5%	17.5%	28.0%	24.0%	15.0%	15.0%	15.0%	15.0%
	Actual	19.7%	15.4%	28.6%	22.2%	14.9%	13.0%	10.6%	13.6%
	Range	12.5-22.5	12.5-22.5	25-31	21-27	10-20	5-15	5-25	5-25
Long/Short Equity	Target	-	-	-	-	-	-	15.0%	15.0%
	Actual	-	-	-	-	0.1%	-	14.1%	14.0%
	Range	-	-	-	-	-	-	10-20	10-20
TOTAL FIXED INCOME	Target	23.5%	23.5%	32.0%	32.0%	20.0%	20.0%	15.0%	15.0%
	Actual	21.4%	21.5%	29.8%	30.5%	15.4%	16.1%	15.7%	16.4%
	Range	18.5-28.5	18.5-28.5	27.5-36.5	27.5-36.5	10-30	10-30	10-20	10-20
Dom. Fixed Income/High Yield	Target	23.5%	23.5%	32.0%	32.0%	13.0%	13.0%	-	-
	Actual	21.4%	21.5%	29.8%	30.5%	8.5%	10.0%	-	-
	Range	18.5-28.5	18.5-28.5	27.5-36.5	27.5-36.5	0-28	0-28	-	-
Int'l & Global Fixed Income	Target	-	-	-	-	7.0%	7.0%	7.5%	15.0%
	Actual	-	-	-	-	6.0%	6.1%	15.7%	16.4%
	Range	-	-	-	-	2-12	2-12	10-20	10-20
TOTAL ALTERNATIVES	Target	19.0%	19%	0%	0%	23.0%	23%	35.0%	35.0%
	Actual	19.3%	21.2%	0.1%	0.1%	19.2%	19.9%	28.3%	28.9%
	Range	17.1-20.9	17.1-20.9	0-5	0-5	5-40	5-40	10-60	10-60
Low Volatility Hedge Funds	Target	-	-	-	-	5.0%	5.0%	10.0%	10.0%
	Actual	-	-	-	-	3.3%	4.4%	7.5%	8.1%
	Range	-	-	-	-	0-10	0-10	5-15	5-15
Private Equity/MLP's	Target	12.0%	12.0%	-	-	8.0%	8.0%	10.0%	10.0%
	Actual	12.3%	13.9%	-	-	2.9%	2.1%	8.5%	8.0%
	Range	7-17	7-17	-	-	0-15	0-15	5-15	5-15
Real Estate/Real Assets	Target	7.0%	7%	0%	0%	10.0%	10%	15.0%	15.0%
	Actual	7.0%	7.3%	0.1%	0.1%	12.8%	13.4%	12.1%	12.8%
	Range	2-12	2-12	0-5	0-5	5-15	5-15	0-30	0-30
CASH	Actual	0.3%	0.1%	0.2%	0.3%	0.4%	1.0%	1.6%	2.2%
Actuarial Assumed Rates		7.5%		7.0%		7.5%		7.5%	

[^]Master Limited Partnerships included in Private Equity allocation.

*The Russell 3000 index was broken down into Large Cap & Small Cap allocations for the PERS retirement plan

**Real Assets are included in Real Estate

Please note that allocations may not add to 100% due to rounding.

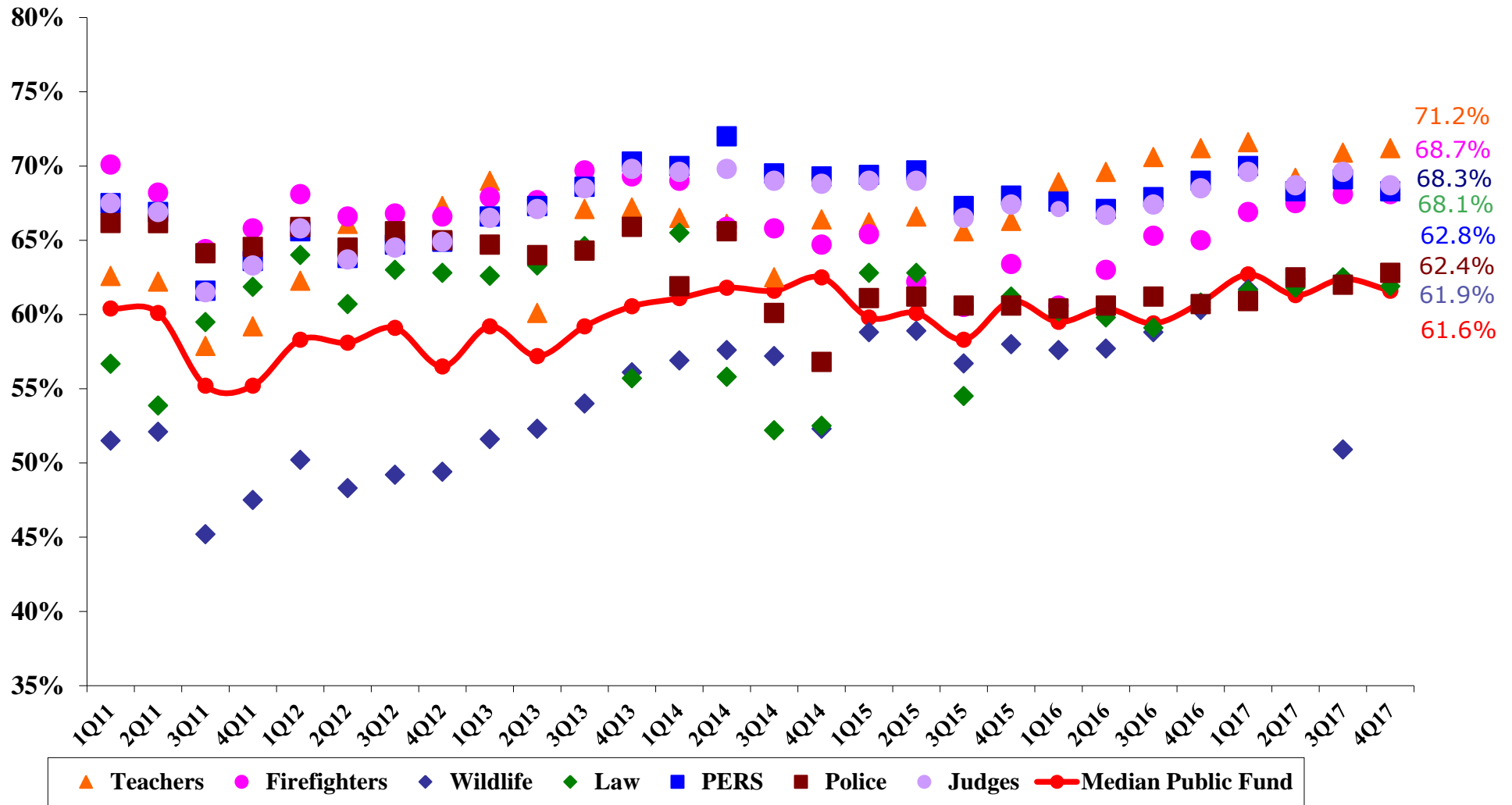
Out of
Range



ASSET ALLOCATION SUMMARY

Key Policy Items		Law	Law 12/31/16	Judges	Judges 12/31/16	Wildlife	Wildlife 12/31/16
TOTAL EQUITY	Target	55.0%	55.0%	68.0%	68.0%	50.0%	50.0%
	Actual	59.2%	58.1%	68.7%	68.5%	62.4%	60.3%
	Range	55-65	55-65	59.2-76.8	59.2-76.8	40-65	40-65
<i>Large Cap</i>	Target	20.0%	20.0%	34.0%	38.0%	50.0%	50.0%
	Actual	29.3%	28.7%	34.9%	39.2%	39.8%	43.4%
	Range	15-25	15-25	31.2-36.8	35-41	40-65	40-65
<i>MidCap</i>	Target	-	-	-	-	0.0%	0.0%
	Actual	-	-	-	-	4.7%	6.1%
	Range	-	-	-	-	0-10	0-10
<i>Small Cap</i>	Target	10.0%	10.0%	6.0%	6.0%	0.0%	0.0%
	Actual	6.3%	6.6%	6.5%	7.1%	1.5%	3.4%
	Range	5-15	5-15	3.2-8.8	3.2-8.8	0-10	0-10
<i>International I Equity</i>	Target	15.0%	15.0%	28.0%	24.0%	0.0%	0.0%
	Actual	14.7%	12.6%	28.9%	22.2%	6.3%	7.4%
	Range	5-15	5-15	25-31	21-27	0-15	0-15
<i>Long/Short Equity</i>	Target	10.0%	10.0%	-	-	-	-
	Actual	10.2%	10.2%	-	-	-	-
	Range	5-15	5-15	-	-	-	-
TOTAL FIXED INCOME	Target	30.0%	30.0%	32.0%	32.0%	40.0%	40.0%
	Actual	27.7%	28.4%	31.0%	31.0%	34.1%	35.6%
	Range	25-35	25-35	27.5-36.5	27.5-36.5	35-55	35-55
<i>Dom. Fixed Income/High Yield</i>	Target	20.0%	20.0%	32.0%	32.0%	40.0%	40.0%
	Actual	18.6%	19.9%	29.5%	31.0%	41.8%	35.6%
	Range	15-25	15-25	27.5-36.5	27.5-36.5	35-55	35-55
<i>Int'l & Global Fixed Income</i>	Target	10.0%	10.0%	-	-	-	-
	Actual	7.9%	8.5%	-	-	-	-
	Range	5-15	5-15	-	-	-	-
TOTAL ALTERNATIVES	Target	15.0%	15.0%	-	-	10.0%	0.1
	Actual	12.8%	13.4%	-	-	3.9%	2.4%
	Range	5-15	5-15	-	-	0-10	0-10
<i>Low Volatility Hedge Funds</i>	Target	-	-	-	-	-	-
	Actual	-	-	-	-	-	-
	Range	-	-	-	-	-	-
<i>Private Equity /MLP's</i>	Target	5.0%	5.0%	-	-	-	-
	Actual	2.7%	2.7%	-	-	-	-
	Range	0-5	0-5	-	-	-	-
<i>Real Estate/Real Assets</i>	Target	10.0%	0.10	-	-	-	-
	Actual	10.1%	10.7%	-	-	-	-
	Range	2-12	2-12	-	-	-	-
CASH	Actual	0.2%	0.1%	0.2%	0.5%	2.0%	1.8%
Actuarial Assumed Rates		7.5%		7.0%		7.0%	

EQUITY COMMITMENT (PUBLIC EQUITY + PRIVATE EQUITY)



TOTAL FUND ATTRIBUTION ANALYSIS

Performance Attribution

Teachers Attribution Analysis	Last 3 Mo.	1 Yr	3 Yrs	5 Yrs
Wtd. Actual Return	4.0%	16.0%	7.9%	10.8%
Wtd. Index Return *	3.8%	15.3%	8.1%	10.1%
Excess Return	0.2%	0.7%	-0.2%	0.7%
Selection Effect	0.0%	0.1%	-0.2%	0.5%
Allocation Effect	0.1%	1.0%	0.3%	0.6%
Interaction Effect	0.0%	-0.4%	-0.4%	-0.3%

PERS Attribution Analysis	Last 3 Mo.	1 Yr	3 Yrs	5 Yrs
Wtd. Actual Return	4.3%	17.1%	7.7%	9.4%
Wtd. Index Return *	4.0%	16.5%	7.6%	8.9%
Excess Return	0.3%	0.6%	0.1%	0.5%
Selection Effect	0.2%	0.6%	0.2%	0.3%
Allocation Effect	0.1%	0.1%	0.0%	0.2%
Interaction Effect	0.0%	0.0%	0.0%	0.0%

Firefighters Attribution Analysis	Last 3 Mo.	1 Yr	3 Yrs	5 Yrs
Wtd. Actual Return	4.4%	18.8%	9.2%	11.0%
Wtd. Index Return *	4.3%	15.6%	8.4%	10.7%
Excess Return	0.1%	3.2%	0.8%	0.3%
Selection Effect	0.1%	3.2%	0.8%	0.3%
Allocation Effect	0.0%	0.0%	0.0%	0.0%
Interaction Effect	0.0%	0.0%	0.0%	0.0%

Police Attribution Analysis	Last 3 Mo.	1 Yr	3 Yrs	5 Yrs
Wtd. Actual Return	3.3%	13.2%	7.1%	8.4%
Wtd. Index Return *	3.0%	13.4%	7.3%	8.8%
Excess Return	0.2%	-0.2%	-0.2%	-0.4%
Selection Effect	0.2%	-0.3%	-0.3%	-0.2%
Allocation Effect	0.3%	0.8%	0.1%	0.3%
Interaction Effect	-0.2%	0.0%	0.3%	0.0%



TOTAL FUND ATTRIBUTION ANALYSIS

Law Attribution Analysis	Last 3 Mo.	1 Yr	3 Yrs	5 Yrs
Wtd. Actual Return	3.4%	14.7%	7.0%	8.8%
Wtd. Index Return *	3.6%	14.3%	7.4%	8.8%
Excess Return	-0.2%	0.4%	-0.5%	0.1%
Selection Effect	-0.4%	-0.1%	-0.6%	-0.3%
Allocation Effect	0.2%	0.3%	0.1%	0.3%
Interaction Effect	-0.1%	0.1%	0.0%	0.0%

Judges Attribution Analysis	Last 3 Mo.	1 Yr	3 Yrs	5 Yrs
Wtd. Actual Return	4.2%	16.9%	7.7%	9.2%
Wtd. Index Return *	4.2%	16.9%	7.7%	9.0%
Excess Return	0.0%	0.0%	0.0%	0.2%
Selection Effect	-0.1%	-0.1%	0.1%	0.1%
Allocation Effect	0.1%	0.1%	-0.1%	0.2%
Interaction Effect	0.0%	0.0%	0.0%	0.0%

Wildlife Attribution Analysis	Last 3 Mo.	1 Yr	3 Yrs	5 Yrs
Wtd. Actual Return	3.9%	14.6%	7.0%	8.8%
Wtd. Index Return *	3.6%	12.8%	6.9%	9.1%
Excess Return	0.3%	1.8%	0.1%	-0.3%
Selection Effect	-0.3%	2.1%	-0.6%	-1.9%
Allocation Effect	0.0%	1.1%	0.6%	0.4%
Interaction Effect	0.6%	-1.4%	0.0%	1.1%



TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Oklahoma State Pension Commission	32,795,820,540	100.0	4.0	20	8.0	19	16.4	25	7.9	28	10.2	8	6.9	9
S&P 500			6.6	1	11.4	1	21.8	1	11.4	1	15.8	1	8.5	1
BBgBarc US Aggregate TR			0.4	99	1.2	99	3.5	99	2.2	99	2.1	99	4.0	98
60% S&P 500 / 40% BBgBarc Aggregate			4.1	16	7.3	44	14.2	68	7.8	31	10.3	7	7.0	8
MSCI EAFE			4.2	11	9.9	1	25.0	1	7.8	32	7.9	75	1.9	99
Teachers	16,349,208,991	49.9	4.0	22	7.9	19	16.2	28	7.9	27	11.0	3	7.7	1
TEACHERS Allocation Index			3.3	68	6.9	62	13.9	75	7.4	52	10.2	8	6.9	10
TEACHERS Policy Index			3.5	56	6.9	61	14.1	72	7.1	64	9.3	35	6.3	30
PERS	9,831,231,389	30.0	4.3	8	8.3	7	17.1	15	7.8	35	9.4	32	6.5	18
PERS Allocation Index			4.1	18	8.1	15	16.5	23	7.7	40	9.1	38	6.3	26
PERS Policy Index			4.1	18	8.1	14	16.9	19	7.8	33	9.1	39	6.1	41
Firefighters	2,661,183,414	8.1	4.4	5	8.5	4	18.7	4	9.2	4	11.0	3	6.4	20
FIREFIGHTERS Allocation Index			4.0	22	7.9	19	15.5	42	8.3	11	10.4	6	6.4	22
FIREFIGHTERS Policy Index			4.1	16	7.7	27	16.4	25	8.7	6	10.8	4	7.1	7
Police	2,508,222,307	7.6	3.3	74	6.4	81	13.2	87	7.1	65	8.4	57	5.4	75
POLICE Allocation Index			3.3	69	6.7	69	13.4	86	6.4	88	7.7	79	5.3	77
POLICE Policy Index			3.8	33	7.5	33	15.5	43	6.6	80	7.8	78	5.5	70
Law	989,496,003	3.0	3.4	67	7.2	50	14.7	59	7.0	71	8.8	48	5.9	49
LAW Allocation Index			3.7	45	7.4	42	14.6	60	7.6	42	8.8	47	6.0	45
LAW Policy Index			3.3	72	6.7	69	13.4	86	7.5	44	9.4	32	6.3	30
Judges	342,057,723	1.0	4.2	14	8.2	8	16.9	19	7.7	38	9.2	37	6.3	23
JUDGES Allocation Index			4.1	15	8.2	12	16.7	21	7.5	45	9.0	42	6.1	43
JUDGES Policy Index			4.1	18	8.1	14	16.9	19	7.8	33	9.1	39	6.1	43
Wildlife	114,420,713	0.3	3.9	28	6.7	71	14.3	67	6.8	74	8.7	51	5.4	74
WILDLIFE Allocation Index			3.6	53	7.1	54	14.4	66	7.2	58	8.7	51	6.0	46
WILDLIFE Policy Index			3.6	49	6.5	74	12.8	89	6.9	73	9.1	39	6.6	14
InvestorForce Public DB Gross Median			3.6		7.2		15.1		7.4		8.7		5.9	

Returns are gross of manager fees.



TOTAL FUND PERFORMANCE DETAIL

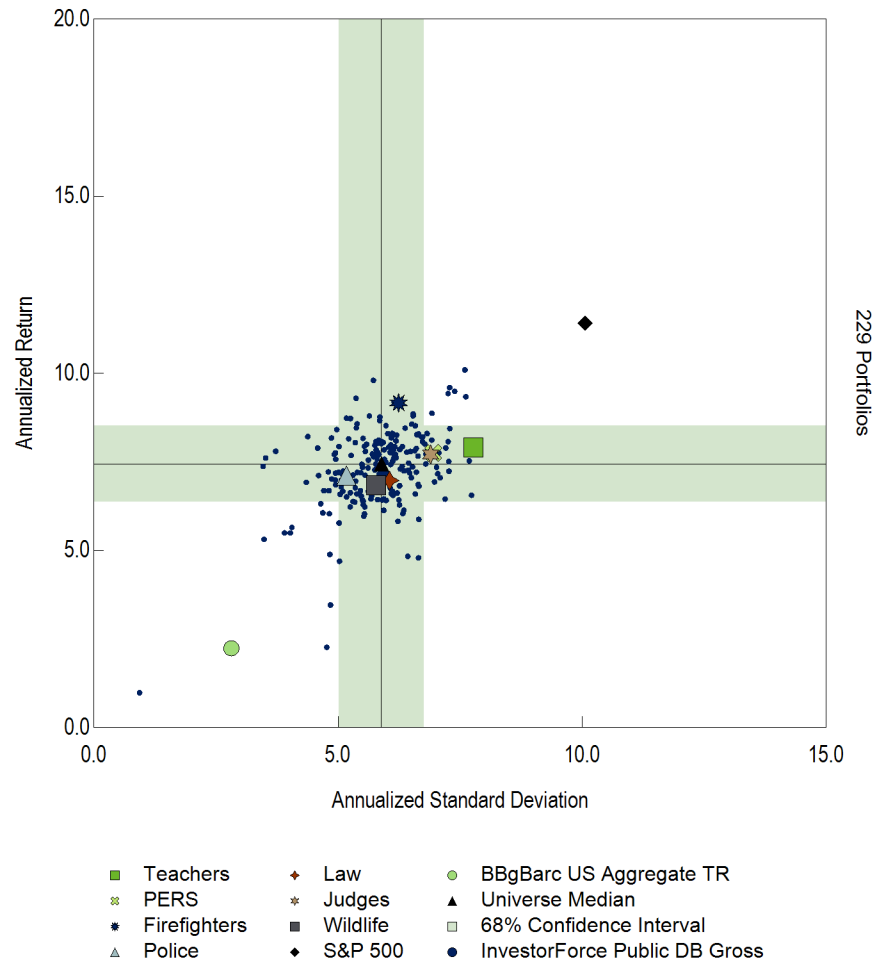
	Market Value (\$)	% of Portfolio	2017 (%)	Rank	2016 (%)	Rank	2015 (%)	Rank	2014 (%)	Rank	2013 (%)	Rank
Oklahoma State Pension Commission	32,795,820,540	100.0	16.4	25	9.5	5	-1.5	83	7.5	12	20.4	7
S&P 500			21.8	1	12.0	1	1.4	11	13.7	1	32.4	1
BBgBarc US Aggregate TR			3.5	99	2.6	99	0.5	35	6.0	45	-2.0	99
60% S&P 500 / 40% BBgBarc Aggregate			14.2	68	8.3	27	1.3	13	10.6	1	17.6	30
MSCI EAFE			25.0	1	1.0	99	-0.8	75	-4.9	99	22.8	1
Teachers	16,349,208,991	49.9	16.2	28	11.4	1	-2.9	98	8.1	4	24.0	1
TEACHERS Allocation Index			13.9	75	11.0	1	-2.0	89	8.2	4	21.2	3
TEACHERS Policy Index			14.1	72	10.6	1	-2.5	95	6.7	28	18.7	20
PERS	9,831,231,389	30.0	17.1	15	7.7	52	-0.8	74	7.4	15	16.6	40
PERS Allocation Index			16.5	23	8.1	34	-0.9	77	7.0	21	15.9	48
PERS Policy Index			16.9	19	8.1	34	-0.9	76	7.0	21	15.3	53
Firefighters	2,661,183,414	8.1	18.7	4	7.3	61	2.1	6	6.9	24	21.1	3
FIREFIGHTERS Allocation Index			15.5	42	9.4	5	0.5	35	6.1	40	21.5	3
FIREFIGHTERS Policy Index			16.4	25	8.7	15	1.6	10	8.7	3	19.8	12
Police	2,508,222,307	7.6	13.2	87	7.5	57	1.0	21	5.1	68	16.1	46
POLICE Allocation Index			13.4	86	6.7	80	-0.4	63	5.0	70	14.8	59
POLICE Policy Index			15.5	43	7.1	70	-1.9	89	4.5	79	14.8	59
Law	989,496,003	3.0	14.7	59	7.2	66	-0.4	65	6.8	28	16.8	38
LAW Allocation Index			14.6	60	8.3	29	0.3	42	7.1	20	14.6	62
LAW Policy Index			13.4	86	8.6	18	1.0	22	7.0	21	17.5	31
Judges	342,057,723	1.0	16.9	19	8.1	36	-1.1	79	7.0	22	16.0	47
JUDGES Allocation Index			16.7	21	7.9	44	-1.2	81	6.7	29	15.9	48
JUDGES Policy Index			16.9	19	8.1	34	-0.9	76	7.0	21	15.3	53
Wildlife	114,420,713	0.3	14.3	67	6.6	82	0.1	49	7.9	7	15.5	50
WILDLIFE Allocation Index			14.4	66	8.0	37	-0.3	61	7.7	10	14.4	64
WILDLIFE Policy Index			12.8	89	7.2	67	1.0	22	9.5	1	15.4	51
InvestorForce Public DB Gross Median			15.1		7.7		0.1		5.8		15.5	

Returns are gross of manager fees.



TOTAL FUND RISK/RETURN - 3 YEARS

3 Years Ending December 31, 2017



3 Years Ending December 31, 2017

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Oklahoma State Pension Commission	--	--	--	--
Teachers	7.90%	27	7.78%	99
PERS	7.75%	35	6.95%	92
Firefighters	9.17%	4	6.24%	70
Police	7.12%	65	5.17%	21
Law	6.97%	71	6.06%	60
Judges	7.71%	38	6.90%	91
Wildlife	6.83%	74	5.79%	45

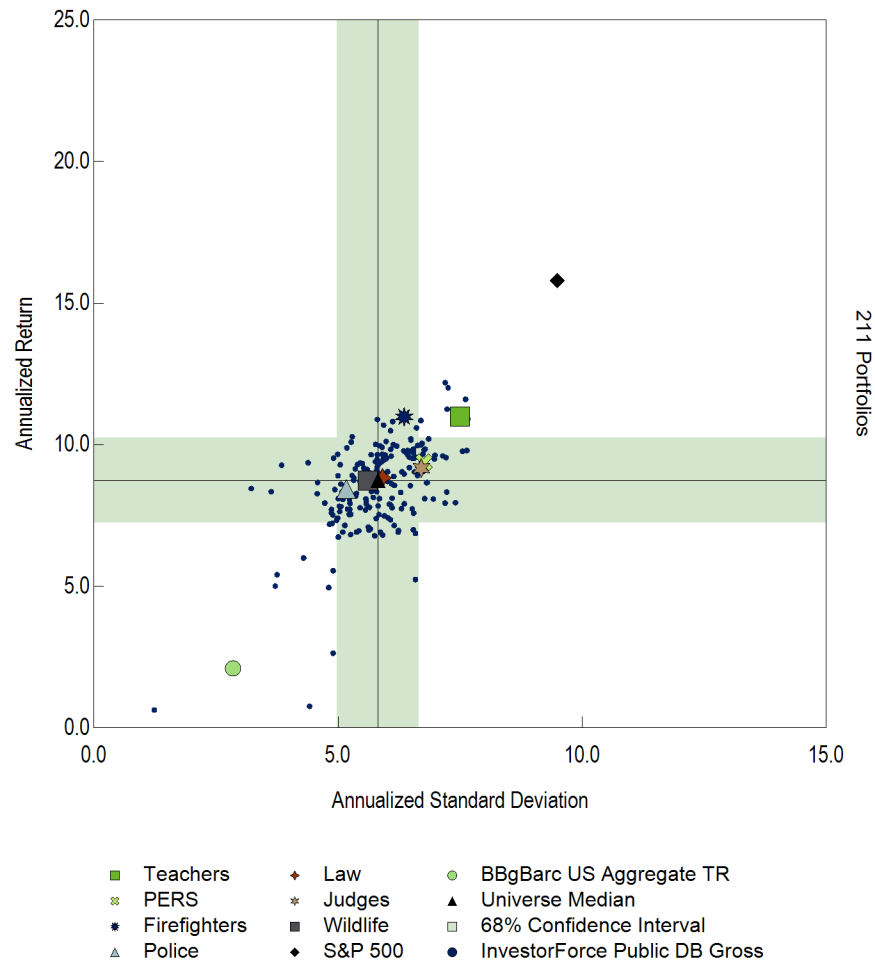
3 Years Ending December 31, 2017

	Sharpe Ratio	Rank	Sortino Ratio	Rank
Oklahoma State Pension Commission	--	--	--	--
Teachers	0.96	91	1.30	95
PERS	1.05	79	1.50	77
Firefighters	1.40	12	1.98	21
Police	1.29	25	1.91	26
Law	1.08	73	1.59	67
Judges	1.06	79	1.51	76
Wildlife	1.11	70	1.58	69



TOTAL FUND RISK/RETURN - 5 YEARS

5 Years Ending December 31, 2017



5 Years Ending December 31, 2017

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Oklahoma State Pension Commission	--	--	--	--
Teachers	11.00%	3	7.50%	99
PERS	9.38%	32	6.76%	90
Firefighters	10.98%	3	6.36%	75
Police	8.43%	57	5.17%	21
Law	8.83%	48	5.91%	58
Judges	9.17%	37	6.71%	89
Wildlife	8.72%	51	5.61%	39

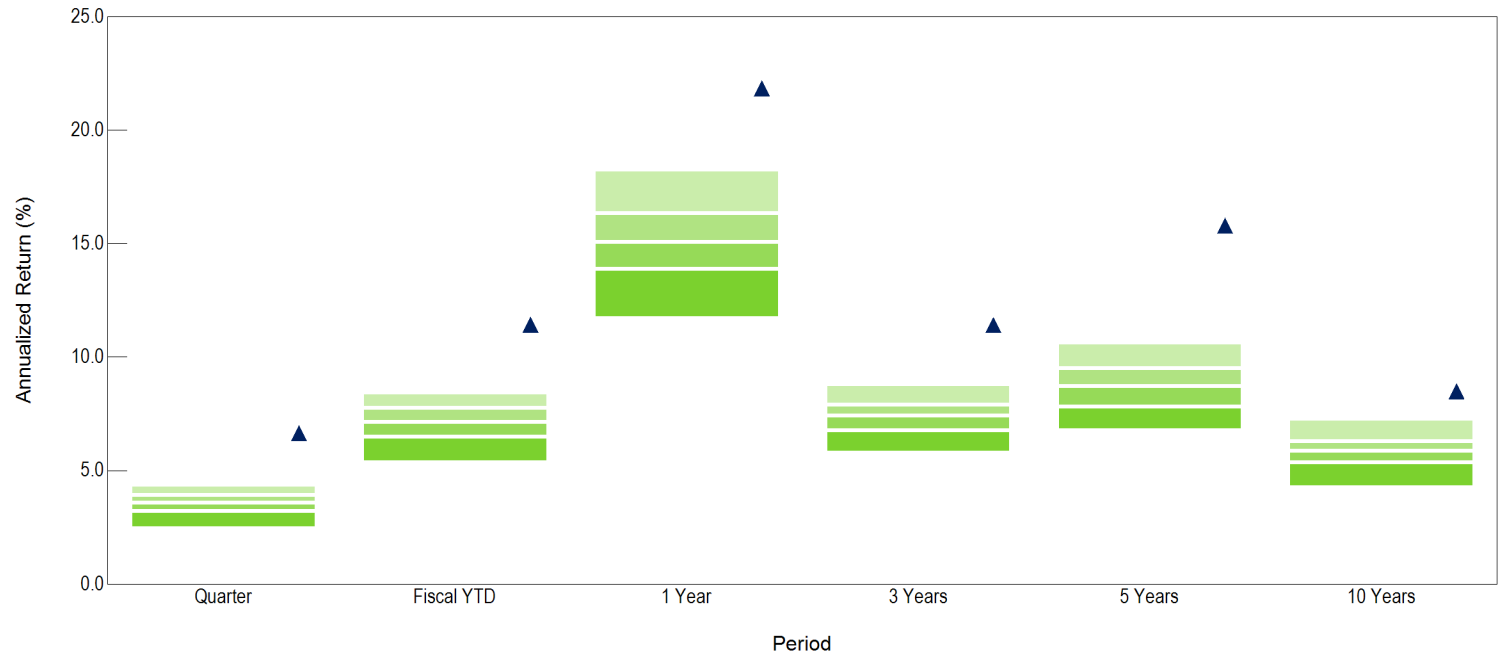
5 Years Ending December 31, 2017

	Sharpe Ratio	Rank	Sortino Ratio	Rank
Oklahoma State Pension Commission	--	--	--	--
Teachers	1.43	58	2.20	72
PERS	1.35	71	2.20	72
Firefighters	1.69	9	2.85	18
Police	1.58	24	2.83	19
Law	1.45	55	2.38	57
Judges	1.33	75	2.21	71
Wildlife	1.51	38	2.45	51



TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

Oklahoma State Pension Commission vs. InvestorForce Public DB Gross

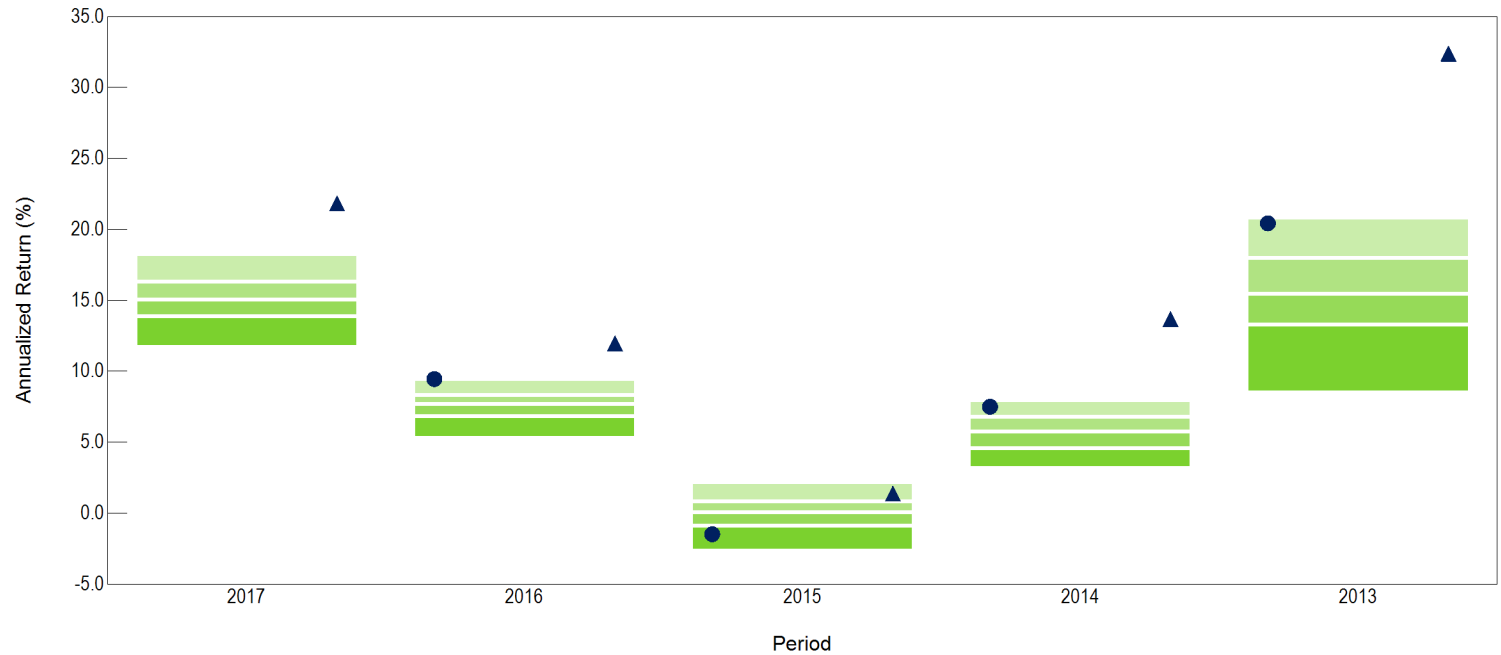


	Return (Rank)											
5th Percentile	4.4	8.4	18.2	8.8	10.6	7.3						
25th Percentile	3.9	7.8	16.4	7.9	9.5	6.3						
Median	3.6	7.2	15.1	7.4	8.7	5.9						
75th Percentile	3.2	6.5	13.9	6.8	7.9	5.4						
95th Percentile	2.5	5.4	11.7	5.8	6.8	4.3						
# of Portfolios	252	251	251	229	211	167						
● Oklahoma State Pension Commission	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)
▲ S&P 500	6.6	(1)	11.4	(1)	21.8	(1)	11.4	(1)	15.8	(1)	8.5	(1)



TOTAL FUND RETURN SUMMARY VS. PEER

Oklahoma State Pension Commission vs. InvestorForce Public DB Gross



	Return (Rank)									
5th Percentile	18.2		9.4		2.2		8.0		20.8	
25th Percentile	16.4		8.4		0.9		6.8		18.0	
Median	15.1		7.7		0.1		5.8		15.5	
75th Percentile	13.9		6.9		-0.9		4.6		13.3	
95th Percentile	11.7		5.3		-2.6		3.2		8.5	
# of Portfolios	251		305		316		248		231	
● Oklahoma State Pension Commission	--	(-)	9.5	(5)	-1.5	(83)	7.5	(12)	20.4	(7)
▲ S&P 500	21.8	(1)	12.0	(1)	1.4	(11)	13.7	(1)	32.4	(1)



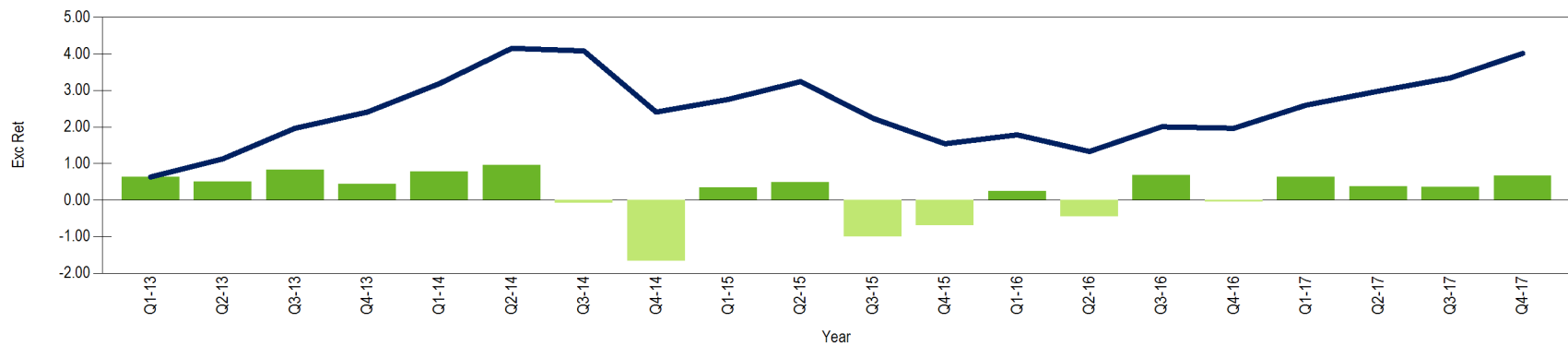
OKLAHOMA TEACHERS



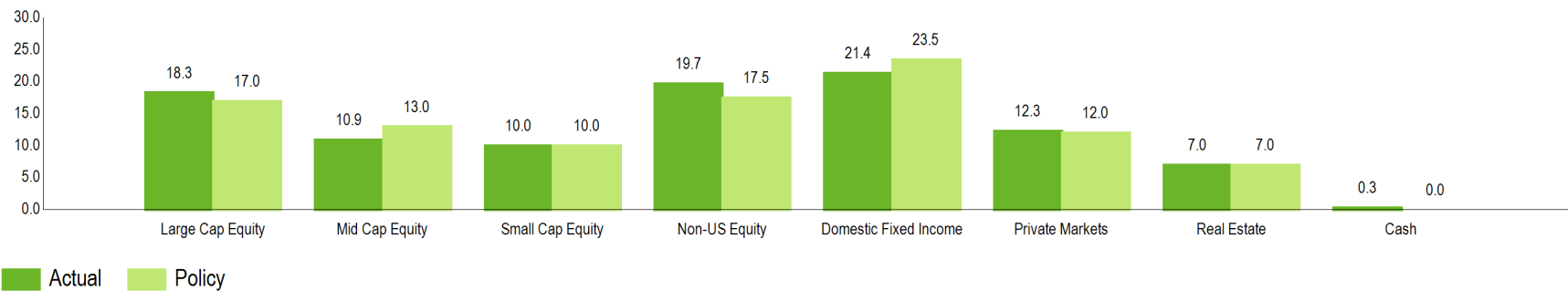
TOTAL FUND PERFORMANCE SUMMARY

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK TEACHERS	\$16,349,208,991	4.0%	22	7.9%	19	16.2%	28	7.9%	26	11.0%	3	7.7%	1
<i>TEACHERS Allocation Index</i>		3.3%	68	6.9%	62	13.9%	75	7.4%	52	10.2%	8	6.9%	10
<i>TEACHERS Policy Index</i>		3.5%	56	6.9%	61	14.1%	72	7.1%	64	9.3%	35	6.3%	30
<i>InvestorForce Public DB Gross Median</i>		3.6%		7.2%		15.1%		7.4%		8.7%		5.9%	

Quarterly and Cumulative Excess Performance

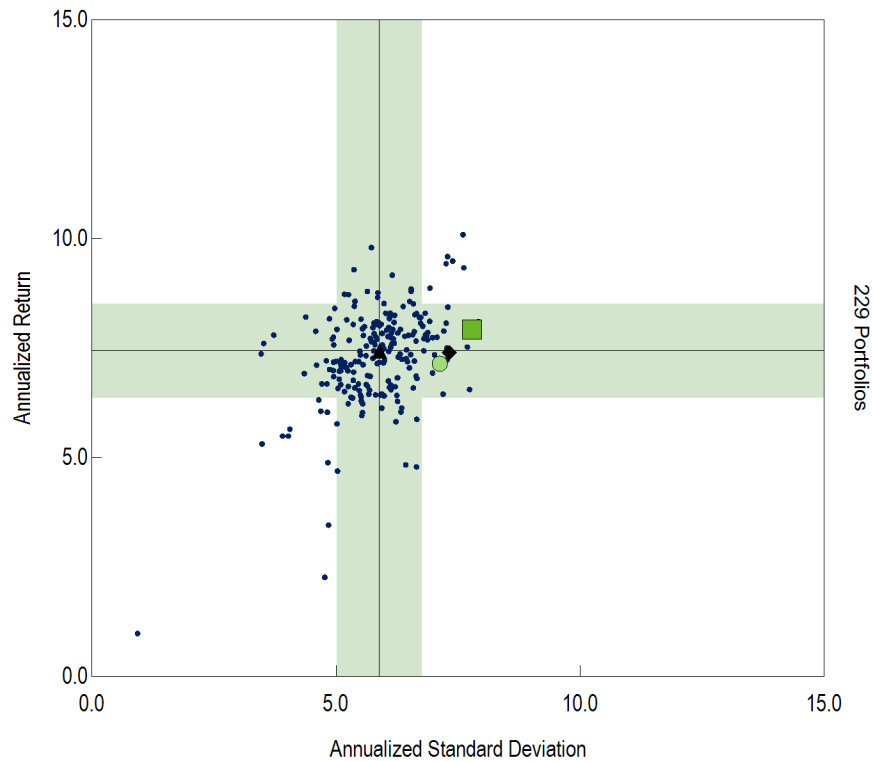


Actual vs Target Allocation (%)



TOTAL FUND RISK/RETURN - 3 YEARS

3 Years Ending December 31, 2017



229 Portfolios

- OK TEACHERS
- ◆ TEACHERS Allocation Index
- TEACHERS Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Gross

3 Years Ending December 31, 2017

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK TEACHERS	7.92%	26	7.78%	99
TEACHERS Allocation Index	7.40%	52	7.32%	98
TEACHERS Policy Index	7.15%	64	7.13%	94

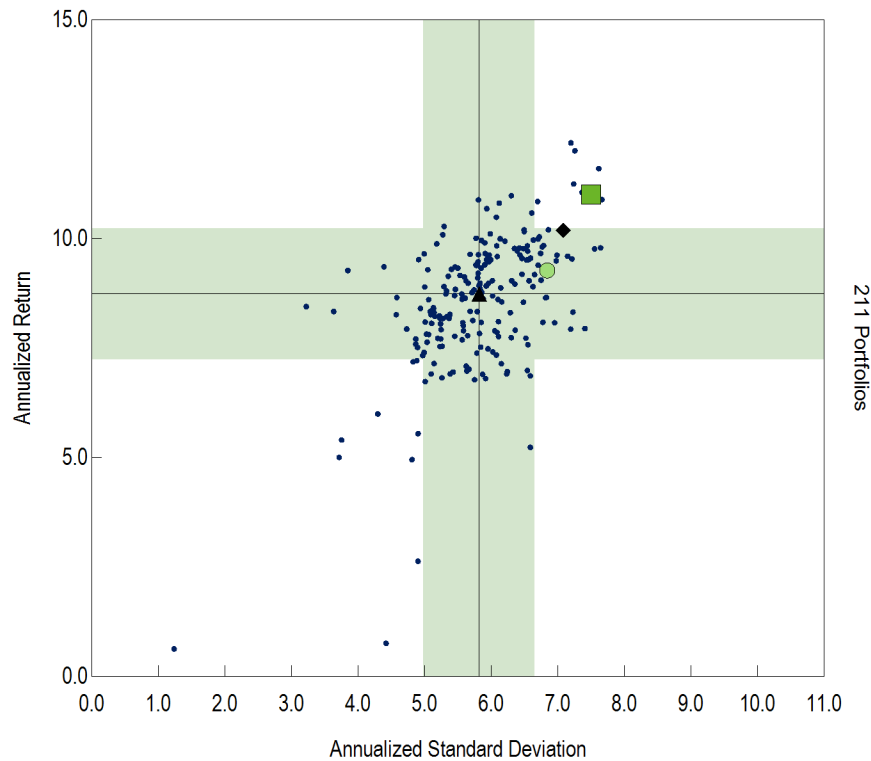
3 Years Ending December 31, 2017

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK TEACHERS	0.96	91	1.30	95
TEACHERS Allocation Index	0.95	92	1.32	94
TEACHERS Policy Index	0.94	92	1.38	90



TOTAL FUND RISK/RETURN - 5 YEARS

5 Years Ending December 31, 2017



- OK TEACHERS
- ◆ TEACHERS Allocation Index
- TEACHERS Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Gross

5 Years Ending December 31, 2017

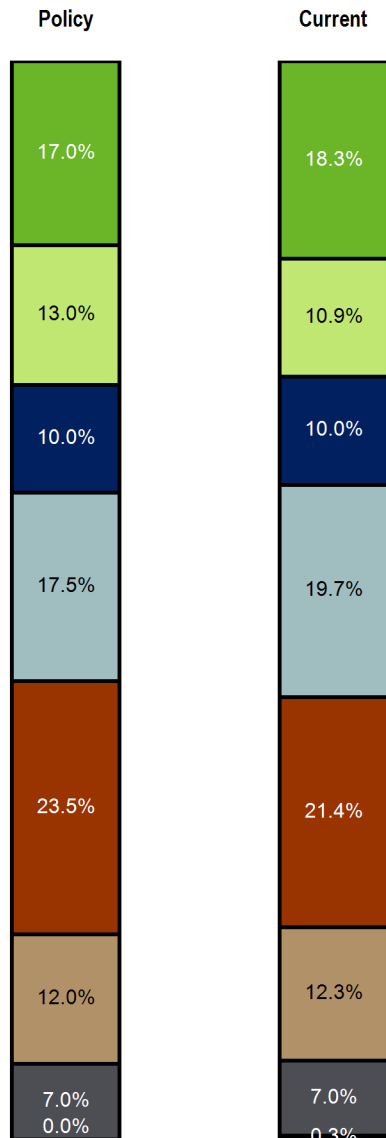
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK TEACHERS	11.01%	3	7.50%	99
TEACHERS Allocation Index	10.19%	8	7.08%	95
TEACHERS Policy Index	9.28%	35	6.84%	93

5 Years Ending December 31, 2017

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK TEACHERS	1.43	57	2.20	72
TEACHERS Allocation Index	1.40	64	2.22	70
TEACHERS Policy Index	1.32	76	2.21	71



TOTAL FUND ASSET ALLOCATION VS. POLICY TARGETS



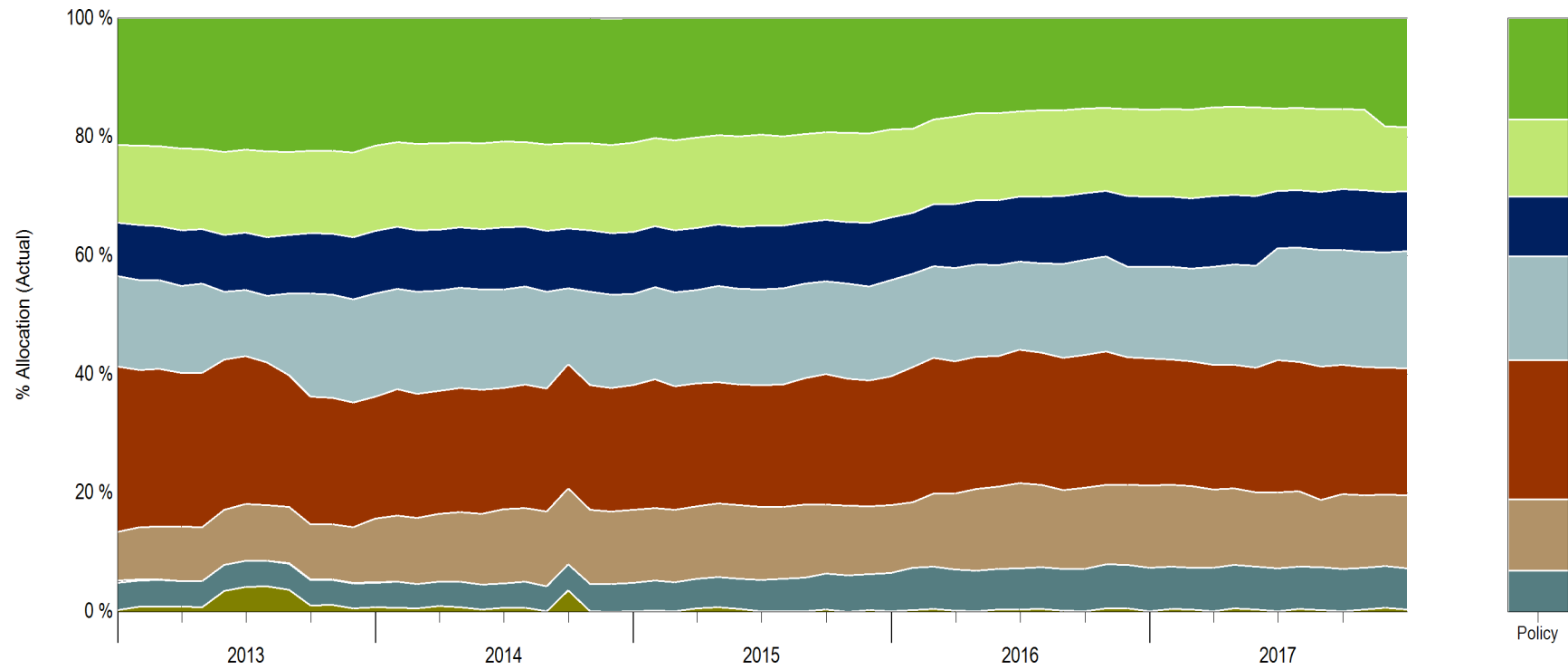
Asset Allocation vs. Target							
	Current	Policy	Current Difference*	Policy Range	Within Range		
Large Cap Equity	\$2,991,874,376	17.0%	18.3%	1.3%	12.0% - 23.0%	Yes	
Mid Cap Equity	\$1,783,147,126	13.0%	10.9%	-2.1%	8.0% - 18.0%	Yes	
Small Cap Equity	\$1,641,953,171	10.0%	10.0%	0.0%	5.0% - 15.0%	Yes	
Non-US Equity	\$3,223,469,090	17.5%	19.7%	2.2%	12.5% - 22.5%	Yes	
Domestic Fixed Income	\$3,497,093,545	23.5%	21.4%	-2.1%	18.5% - 28.5%	Yes	
Private Markets	\$2,015,010,790	12.0%	12.3%	0.3%	7.0% - 17.0%	Yes	
Real Estate	\$1,143,550,094	7.0%	7.0%	0.0%	2.0% - 12.0%	Yes	
Cash	\$53,110,799	0.0%	0.3%	0.3%	0.0% - 5.0%	Yes	
Total	\$16,349,208,991	100.0%	100.0%				

*Difference between Policy and Current Allocation



TOTAL FUND ASSET ALLOCATION HISTORY

Asset Allocation History



- Large Cap Equity
- Small Cap Equity
- Domestic Fixed Income
- Private Equity
- Cash
- Mid Cap Equity
- Non-US Equity
- Private Markets
- Real Estate



TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
OK TEACHERS	16,349,208,991	100.0	4.0	22	7.9	19	16.2	28	7.9	26	11.0	3	7.7	1
TEACHERS Allocation Index			<u>3.3</u>	68	<u>6.9</u>	62	<u>13.9</u>	75	<u>7.4</u>	52	<u>10.2</u>	8	<u>6.9</u>	10
Over/Under			0.7		1.0		2.3		0.5		0.8		0.8	
TEACHERS Policy Index			3.5	56	6.9	61	14.1	72	7.1	64	9.3	35	6.3	30
InvestorForce Public DB Gross Median			3.6		7.2		15.1		7.4		8.7		5.9	
Total Equity Composite	9,640,443,763	59.0	5.8	38	11.8	36	23.9	48	10.4	41	14.1	18	7.6	22
Russell 3000			<u>6.3</u>	25	<u>11.2</u>	46	<u>21.1</u>	66	<u>11.1</u>	30	<u>15.6</u>	10	<u>8.6</u>	11
Over/Under			-0.5		0.6		2.8		-0.7		-1.5		-1.0	
eV All Global Equity Gross Median			5.4		10.9		23.5		9.9		12.1		6.0	
U.S. Equity Comp	6,416,974,673	39.2	5.9	52	11.1	47	20.6	46	10.4	55	15.7	43	9.0	58
S&P 500			<u>6.6</u>	35	<u>11.4</u>	42	<u>21.8</u>	37	<u>11.4</u>	37	<u>15.8</u>	40	<u>8.5</u>	70
Over/Under			-0.7		-0.3		-1.2		-1.0		-0.1		0.5	
eV All US Equity Gross Median			5.9		10.8		19.5		10.7		15.3		9.3	
Sawgrass Large Growth	659,965,259	4.0	7.2	40	11.6	71	23.1	88	10.2	85	15.6	67	8.8	71
Russell 1000 Growth			<u>7.9</u>	24	<u>14.2</u>	27	<u>30.2</u>	42	<u>13.8</u>	27	<u>17.3</u>	34	<u>10.0</u>	37
Over/Under			-0.7		-2.6		-7.1		-3.6		-1.7		-1.2	
eV US Large Cap Growth Equity Gross Median			7.0		12.7		28.8		12.3		16.7		9.6	
Hotchkis & Wiley Large Cap Value	715,763,306	4.4	7.8	14	10.4	56	19.8	26	10.4	37	16.7	12	8.6	37
Russell 1000 Value			<u>5.3</u>	74	<u>8.6</u>	79	<u>13.7</u>	87	<u>8.7</u>	74	<u>14.0</u>	66	<u>7.1</u>	82
Over/Under			2.5		1.8		6.1		1.7		2.7		1.5	
eV US Large Cap Value Equity Gross Median			6.2		10.8		17.2		9.7		14.6		8.2	
Aronson Mid Cap	451,262,450	2.8	7.4	18	12.0	25	19.4	51	9.2	69	15.9	35	9.8	48
Russell MidCap			<u>6.1</u>	46	<u>9.8</u>	59	<u>18.5</u>	54	<u>9.6</u>	64	<u>15.0</u>	56	<u>9.1</u>	66
Over/Under			1.3		2.2		0.9		-0.4		0.9		0.7	
eV US Mid Cap Equity Gross Median			5.9		10.1		19.6		10.3		15.1		9.7	
Frontier	435,159,657	2.7	3.9	92	8.5	85	24.7	61	10.9	43	15.4	40	9.7	41
Russell MidCap Growth			<u>6.8</u>	39	<u>12.4</u>	31	<u>25.3</u>	58	<u>10.3</u>	55	<u>15.3</u>	41	<u>9.1</u>	56
Over/Under			-2.9		-3.9		-0.6		0.6		0.1		0.6	
Wellington	447,189,687	2.7	4.0	91	8.9	83	30.4	16	8.9	75	15.1	47	7.9	85
Russell MidCap Growth			<u>6.8</u>	39	<u>12.4</u>	31	<u>25.3</u>	58	<u>10.3</u>	55	<u>15.3</u>	41	<u>9.1</u>	56
Over/Under			-2.8		-3.5		5.1		-1.4		-0.2		-1.2	
eV US Mid Cap Growth Equity Gross Median			6.2		11.1		25.9		10.5		15.1		9.3	



TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Hotchkis & Wiley Mid Cap	449,535,332	2.7	6.4	27	9.2	51	9.3	94	5.8	93	14.2	68	11.5	11
<i>Russell MidCap Value</i>			<u>5.5</u>	49	<u>7.8</u>	69	<u>13.3</u>	73	<u>9.0</u>	74	<u>14.7</u>	60	<u>9.1</u>	68
Over/Under			0.9		1.4		-4.0		-3.2		-0.5		2.4	
<i>eV US Mid Cap Value Equity Gross Median</i>			5.5		9.2		14.8		9.9		15.2		9.9	
Shapiro Capital	792,814,779	4.8	6.1	11	17.5	3	26.3	2	13.9	8	18.5	2	12.5	9
<i>Russell 2000 Value</i>			<u>2.0</u>	81	<u>7.3</u>	77	<u>7.8</u>	75	<u>9.5</u>	69	<u>13.0</u>	78	<u>8.2</u>	88
Over/Under			4.1		10.2		18.5		4.4		5.5		4.3	
Frontier Capital Management Small Cap Value	208,644,310	1.3	3.4	60	8.9	56	6.8	82	11.8	27	--	--	--	--
<i>Russell 2000 Value</i>			<u>2.0</u>	81	<u>7.3</u>	77	<u>7.8</u>	75	<u>9.5</u>	69	<u>13.0</u>	78	<u>8.2</u>	88
Over/Under			1.4		1.6		-1.0		2.3					
Neumeier Poma Investment Counsel Small Cap Value	189,567,661	1.2	6.1	11	12.9	11	23.1	3	16.6	1	--	--	--	--
<i>Russell 2000 Value</i>			<u>2.0</u>	81	<u>7.3</u>	77	<u>7.8</u>	75	<u>9.5</u>	69	<u>13.0</u>	78	<u>8.2</u>	88
Over/Under			4.1		5.6		15.3		7.1					
<i>eV US Small Cap Value Equity Gross Median</i>			3.7		9.2		11.2		10.5		14.6		10.1	
Geneva Capital Management Small Cap Growth	229,678,147	1.4	3.2	84	9.9	70	23.7	54	15.6	7	--	--	--	--
<i>Russell 2000 Growth</i>			<u>4.6</u>	58	<u>11.1</u>	53	<u>22.2</u>	62	<u>10.3</u>	64	<u>15.2</u>	63	<u>9.2</u>	61
Over/Under			-1.4		-1.2		1.5		5.3					
Wasatch Advisors Small Cap Growth	221,247,721	1.4	8.0	9	14.5	18	25.7	44	14.1	16	--	--	--	--
<i>Russell 2000 Growth</i>			<u>4.6</u>	58	<u>11.1</u>	53	<u>22.2</u>	62	<u>10.3</u>	64	<u>15.2</u>	63	<u>9.2</u>	61
Over/Under			3.4		3.4		3.5		3.8					
<i>eV US Small Cap Growth Equity Gross Median</i>			4.9		11.3		24.3		11.6		15.8		9.8	



TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Domestic Passive Equity	1,616,145,811	9.9	5.5	--	10.0	--	19.9	--	10.2	--	15.4	--	--	--
S&P 500			<u>6.6</u>	--	<u>11.4</u>	--	<u>21.8</u>	--	<u>11.4</u>	--	<u>15.8</u>	--	<u>8.5</u>	--
Over/Under			-1.1		-1.4		-1.9		-1.2		-0.4			
Northern Trust S&P 500 Cap Wgt	362	0.0	2.5	99	7.1	99	17.0	70	9.9	86	14.7	80	--	--
S&P 500			<u>6.6</u>	26	<u>11.4</u>	32	<u>21.8</u>	26	<u>11.4</u>	30	<u>15.8</u>	25	<u>8.5</u>	78
Over/Under			-4.1		-4.3		-4.8		-1.5		-1.1			
SSgA S&P Eq Weighted Index Fund	105	0.0	1.8	99	5.4	99	13.8	88	8.1	99	14.5	87	--	--
S&P 500			<u>6.6</u>	26	<u>11.4</u>	32	<u>21.8</u>	26	<u>11.4</u>	30	<u>15.8</u>	25	<u>8.5</u>	78
Over/Under			-4.8		-6.0		-8.0		-3.3		-1.3			
eV US Passive Equity Gross Median			6.3		11.2		21.1		11.1		15.6		8.7	
Northern Trust Russell 1000	646,725,116	4.0	--	--	--	--	--	--	--	--	--	--	--	--
Russell 1000			<u>6.6</u>	--	<u>11.4</u>	--	<u>21.7</u>	--	<u>11.2</u>	--	<u>15.7</u>	--	<u>8.6</u>	--
Over/Under														
Sci Beta US HFE MBMS	969,420,228	5.9	--	--	--	--	--	--	--	--	--	--	--	--
S&P 500			<u>6.6</u>	--	<u>11.4</u>	--	<u>21.8</u>	--	<u>11.4</u>	--	<u>15.8</u>	--	<u>8.5</u>	--
Over/Under														
International Equity Composite	3,223,469,090	19.7	5.7	33	13.2	37	32.0	41	10.1	48	9.3	50	3.5	62
MSCI ACWI ex USA			<u>5.0</u>	52	<u>11.5</u>	57	<u>27.2</u>	75	<u>7.8</u>	83	<u>6.8</u>	90	<u>1.8</u>	93
Over/Under			0.7		1.7		4.8		2.3		2.5		1.7	
eV All ACWI ex-US Equity Gross Median			5.0		11.9		30.6		9.9		9.2		4.1	
Causeway - Value	493,409,484	3.0	6.1	13	14.3	9	31.7	14	8.6	65	8.4	70	3.9	50
MSCI EAFE			<u>4.2</u>	50	<u>9.9</u>	50	<u>25.0</u>	55	<u>7.8</u>	77	<u>7.9</u>	73	<u>1.9</u>	87
Over/Under			1.9		4.4		6.7		0.8		0.5		2.0	
eV EAFE Value Equity Gross Median			4.2		9.9		25.5		9.8		9.5		3.9	
Allianz Intl	1,038,089,953	6.3	5.1	49	12.7	41	28.6	65	--	--	--	--	--	--
MSCI ACWI ex USA			<u>5.0</u>	53	<u>11.5</u>	58	<u>27.2</u>	77	<u>7.8</u>	82	<u>6.8</u>	89	<u>1.8</u>	93
Over/Under			0.1		1.2		1.4							
eV ACWI ex-US Equity Unhedged Gross Median			5.1		12.1		30.8		10.0		9.2		4.3	
Wellington Intl	487,988,690	3.0	5.1	51	14.2	27	38.6	16	--	--	--	--	--	--
MSCI ACWI ex USA			<u>5.0</u>	53	<u>11.5</u>	58	<u>27.2</u>	77	<u>7.8</u>	82	<u>6.8</u>	89	<u>1.8</u>	93
Over/Under			0.1		2.7		11.4							
eV ACWI ex-US Equity Unhedged Gross Median			5.1		12.1		30.8		10.0		9.2		4.3	
Northern Trust Intl - Liquidating	405,303	0.0												

Allianz Intl and Wellington Intl are funded on 6/16/2016.



TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
International Small Cap Equity	1,203,575,660	7.4	6.2	51	12.8	63	32.5	71	12.2	70	11.7	57	--	--
MSCI ACWI ex USA			<u>5.0</u>	78	<u>11.5</u>	77	<u>27.2</u>	89	<u>7.8</u>	99	<u>6.8</u>	99	<u>1.8</u>	99
Over/Under			1.2		1.3		5.3		4.4		4.9			
eV ACWI ex-US Small Cap Equity Gross Median			6.3		14.7		35.3		13.2		12.1		7.4	
Advisory Research Int'l Small Cap	1,021,165	0.0	0.9	99	1.1	99	15.2	97	7.1	99	8.8	90	--	--
MSCI ACWI ex USA			<u>5.0</u>	78	<u>11.5</u>	77	<u>27.2</u>	89	<u>7.8</u>	99	<u>6.8</u>	99	<u>1.8</u>	99
Over/Under			-4.1		-10.4		-12.0		-0.7		2.0			
EPOCH Int'l Small Cap	294,486,943	1.8	6.1	53	15.3	48	32.8	71	13.0	55	11.3	66	--	--
MSCI ACWI ex USA			<u>5.0</u>	78	<u>11.5</u>	77	<u>27.2</u>	89	<u>7.8</u>	99	<u>6.8</u>	99	<u>1.8</u>	99
Over/Under			1.1		3.8		5.6		5.2		4.5			
Wasatch Int'l Small Cap	301,591,480	1.8	4.9	81	13.2	62	35.1	51	13.7	42	12.3	48	--	--
MSCI ACWI ex USA			<u>5.0</u>	78	<u>11.5</u>	77	<u>27.2</u>	89	<u>7.8</u>	99	<u>6.8</u>	99	<u>1.8</u>	99
Over/Under			-0.1		1.7		7.9		5.9		5.5			
Wellington Int'l Small Cap	305,400,138	1.9	6.7	29	13.4	61	35.4	50	12.6	61	12.7	43	--	--
MSCI ACWI ex USA			<u>5.0</u>	78	<u>11.5</u>	77	<u>27.2</u>	89	<u>7.8</u>	99	<u>6.8</u>	99	<u>1.8</u>	99
Over/Under			1.7		1.9		8.2		4.8		5.9			
eV ACWI ex-US Small Cap Equity Gross Median			6.3		14.7		35.3		13.2		12.1		7.4	
SSGA Emerging Market Small Cap	301,075,934	1.8	7.3	16	12.9	62	35.0	52	--	--	--	--	--	--
MSCI Emerging Markets Small Cap (Gross)			<u>9.3</u>	1	<u>15.6</u>	46	<u>34.2</u>	55	<u>8.7</u>	98	<u>5.7</u>	99	<u>3.1</u>	99
Over/Under			-2.0		-2.7		0.8							
eV ACWI ex-US Small Cap Equity Gross Median			6.3		14.7		35.3		13.2		12.1		7.4	
Fixed Composite	3,497,093,545	21.4	1.2	22	2.6	23	6.7	26	4.1	32	4.0	30	7.0	17
BBgBarc US Aggregate TR			<u>0.4</u>	54	<u>1.2</u>	59	<u>3.5</u>	59	<u>2.2</u>	65	<u>2.1</u>	63	<u>4.0</u>	61
Over/Under			0.8		1.4		3.2		1.9		1.9		3.0	
eV All US Fixed Inc Gross Median			0.5		1.5		4.0		2.8		2.6		4.5	
Loomis Sayles Core Plus	678,474,294	4.1	0.8	19	2.2	13	5.6	21	3.3	47	3.3	36	6.9	3
BBgBarc US Aggregate TR			<u>0.4</u>	84	<u>1.2</u>	97	<u>3.5</u>	99	<u>2.2</u>	96	<u>2.1</u>	99	<u>4.0</u>	98
Over/Under			0.4		1.0		2.1		1.1		1.2		2.9	
Mackay Shields Core Plus	656,635,659	4.0	0.6	52	1.8	48	5.2	41	2.6	90	2.7	81	5.6	29
BBgBarc US Aggregate TR			<u>0.4</u>	84	<u>1.2</u>	97	<u>3.5</u>	99	<u>2.2</u>	96	<u>2.1</u>	99	<u>4.0</u>	98
Over/Under			0.2		0.6		1.7		0.4		0.6		1.6	



TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Lord Abbett Core Plus	670,326,344	4.1	0.5	67	1.6	73	4.5	70	3.1	64	3.1	54	5.6	35
BBgBarc US Aggregate TR			<u>0.4</u>	84	<u>1.2</u>	97	<u>3.5</u>	99	<u>2.2</u>	96	<u>2.1</u>	99	<u>4.0</u>	98
Over/Under			0.1		0.4		1.0		0.9		1.0		1.6	
eV US Core Plus Fixed Inc Gross Median			<u>0.6</u>		<u>1.8</u>		<u>5.0</u>		<u>3.3</u>		<u>3.1</u>		<u>5.3</u>	
Hoisington Long Bonds	555,585,058	3.4	3.5	9	4.1	85	10.3	85	2.6	99	3.8	95	7.4	88
BBgBarc US Aggregate TR			<u>0.4</u>	99	<u>1.2</u>	99	<u>3.5</u>	99	<u>2.2</u>	99	<u>2.1</u>	99	<u>4.0</u>	99
Over/Under			3.1		2.9		6.8		0.4		1.7		3.4	
eV US Long Duration Fixed Inc Gross Median			<u>3.0</u>		<u>4.8</u>		<u>11.7</u>		<u>5.2</u>		<u>5.1</u>		<u>8.3</u>	
Loomis High Yield	299,614,517	1.8	0.7	45	3.1	30	8.6	18	5.7	69	5.4	68	--	--
BofA Merrill Lynch US High Yield Master II TR			<u>0.4</u>	74	<u>2.5</u>	59	<u>7.5</u>	52	<u>6.4</u>	35	<u>5.8</u>	47	<u>7.9</u>	43
Over/Under			0.3		0.6		1.1		-0.7		-0.4			
Lord Abbett High Yield	321,304,535	2.0	1.2	17	3.8	11	9.2	10	7.8	7	7.5	7	--	--
BofA Merrill Lynch US High Yield Master II TR			<u>0.4</u>	74	<u>2.5</u>	59	<u>7.5</u>	52	<u>6.4</u>	35	<u>5.8</u>	47	<u>7.9</u>	43
Over/Under			0.8		1.3		1.7		1.4		1.7			
Mackay High Yield	315,153,138	1.9	0.8	38	3.3	21	7.7	41	7.6	10	6.4	22	--	--
BofA Merrill Lynch US High Yield Master II TR			<u>0.4</u>	74	<u>2.5</u>	59	<u>7.5</u>	52	<u>6.4</u>	35	<u>5.8</u>	47	<u>7.9</u>	43
Over/Under			0.4		0.8		0.2		1.2		0.6			
eV US High Yield Fixed Inc Gross Median			<u>0.6</u>		<u>2.6</u>		<u>7.5</u>		<u>6.1</u>		<u>5.7</u>		<u>7.7</u>	
Total Private Equity	1,208,758,324	7.4	2.7	--	4.6	--	13.2	--	12.7	--	15.5	--	--	--
Cambridge Associates US All PE			<u>0.0</u>	--	<u>3.8</u>	--	<u>11.7</u>	--	<u>10.1</u>	--	<u>12.5</u>	--	<u>9.2</u>	--
Over/Under			2.7		0.8		1.5		2.6		3.0			
Legacy LP - Aldus PE	28,860,155	0.2	1.6	--	-2.3	--	3.4	--	5.7	--	9.2	--	--	--
Pimco Bravo	4,539,653	0.0	-4.9	--	-6.5	--	-13.0	--	0.7	--	10.8	--	--	--
PIMCO Bravo 2	152,273,900	0.9	1.0	--	4.0	--	10.4	--	9.9	--	--	--	--	--
OK - OTRS/Franklin Park	971,850,548	5.9	3.0	--	4.9	--	14.4	--	14.0	--	14.1	--	--	--
Pimco COF II	23,324,305	0.1	5.3	--	7.5	--	13.4	--	--	--	--	--	--	--



TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
PIMCO Bravo 3	27,909,763	0.2	2.4	--	8.7	--	--	--	--	--	--	--	--	--
Master Limited Partnerships	806,252,466	4.9	1.1	--	-0.6	--	-6.2	--	-6.9	--	5.8	--	--	--
<i>Alerian MLP Index</i>			<u>-0.9</u>	--	<u>-4.0</u>	--	<u>-6.5</u>	--	<u>-9.3</u>	--	<u>-0.1</u>	--	<u>6.0</u>	--
Over/Under			2.0		3.4		0.3		2.4		5.9			
Chickasaw Capital Management	306,471,229	1.9	-0.1	--	-2.6	--	-7.7	--	-6.1	--	8.7	--	--	--
<i>Alerian MLP Index</i>			<u>-0.9</u>	--	<u>-4.0</u>	--	<u>-6.5</u>	--	<u>-9.3</u>	--	<u>-0.1</u>	--	<u>6.0</u>	--
Over/Under			0.8		1.4		-1.2		3.2		8.8			
Swank Capital Cushing	499,781,237	3.1	1.9	--	1.7	--	-4.0	--	-6.6	--	7.0	--	--	--
<i>Alerian MLP Index</i>			<u>-0.9</u>	--	<u>-4.0</u>	--	<u>-6.5</u>	--	<u>-9.3</u>	--	<u>-0.1</u>	--	<u>6.0</u>	--
Over/Under			2.8		5.7		2.5		2.7		7.1			
Total Core Real Estate	1,143,550,094	7.0	1.3	--	3.1	--	6.7	--	9.9	--	10.5	--	--	--
<i>NCREIF Property Index</i>			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			-0.5		-0.4		-0.3		0.5		0.3			
L & B Real Estate	266,215,788	1.6	1.6	--	3.6	--	8.7	--	11.2	--	11.1	--	--	--
<i>NCREIF ODCE</i>			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			-0.5		-0.4		1.1		0.8		-0.4			
Heitman Real Estate	296,257,340	1.8	2.0	--	3.4	--	7.5	--	10.6	--	11.3	--	--	--
<i>NCREIF ODCE</i>			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			-0.1		-0.6		-0.1		0.2		-0.2			
AEW Real Estate	285,534,009	1.7	0.1	--	2.2	--	5.9	--	9.5	--	9.9	--	--	--
<i>NCREIF ODCE</i>			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			-2.0		-1.8		-1.7		-0.9		-1.6			
L & B Gold Driller	66,829,095	0.4	0.1	--	0.0	--	5.6	--	1.7	--	--	--	--	--
<i>NCREIF ODCE</i>			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			-2.0		-4.0		-2.0		-8.7					
Greenoak Real Estate	35,935,085	0.2	-0.4	--	0.9	--	8.2	--	4.5	--	--	--	--	--
<i>NCREIF ODCE</i>			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			-2.5		-3.1		0.6		-5.9					



TOTAL FUND PERFORMANCE DETAIL

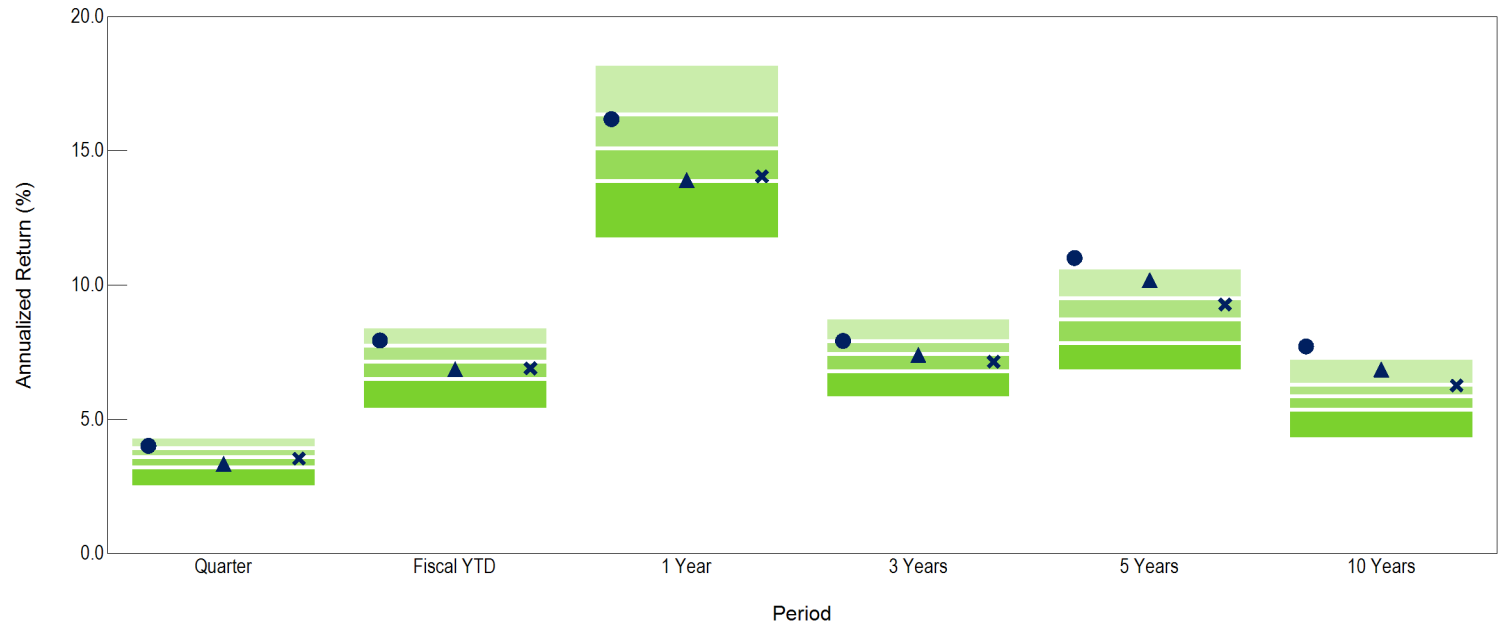
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Antheus Capital	45,868,719	0.3	-1.7	--	-3.0	--	-12.9	--	-4.5	--	--	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			-3.8		-7.0		-20.5		-14.9					
Dune Real Estate	51,223,489	0.3	4.4	--	8.9	--	15.2	--	13.4	--	--	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			2.3		4.9		7.6		3.0					
Landmark Realty	24,789,236	0.2	4.5	--	4.8	--	10.2	--	26.5	--	--	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			2.4		0.8		2.6		16.1					
American Realty	40,270,035	0.2	2.4	--	5.2	--	11.2	--	11.9	--	--	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			0.3		1.2		3.6		1.5					
Starwood Capital	30,627,298	0.2	4.9	--	8.2	--	15.0	--	--	--	--	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			2.8		4.2		7.4							
Property ACQ Fund	96,176	0.0	0.3	--	--	--	--	--	--	--	--	--	--	--
91 Day T-Bills			<u>0.3</u>	--	<u>0.6</u>	--	<u>0.9</u>	--	<u>0.4</u>	--	<u>0.3</u>	--	<u>0.3</u>	--
Over/Under			0.0											

Performance numbers are shown gross of fees.



TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

OK TEACHERS vs. InvestorForce Public DB Gross

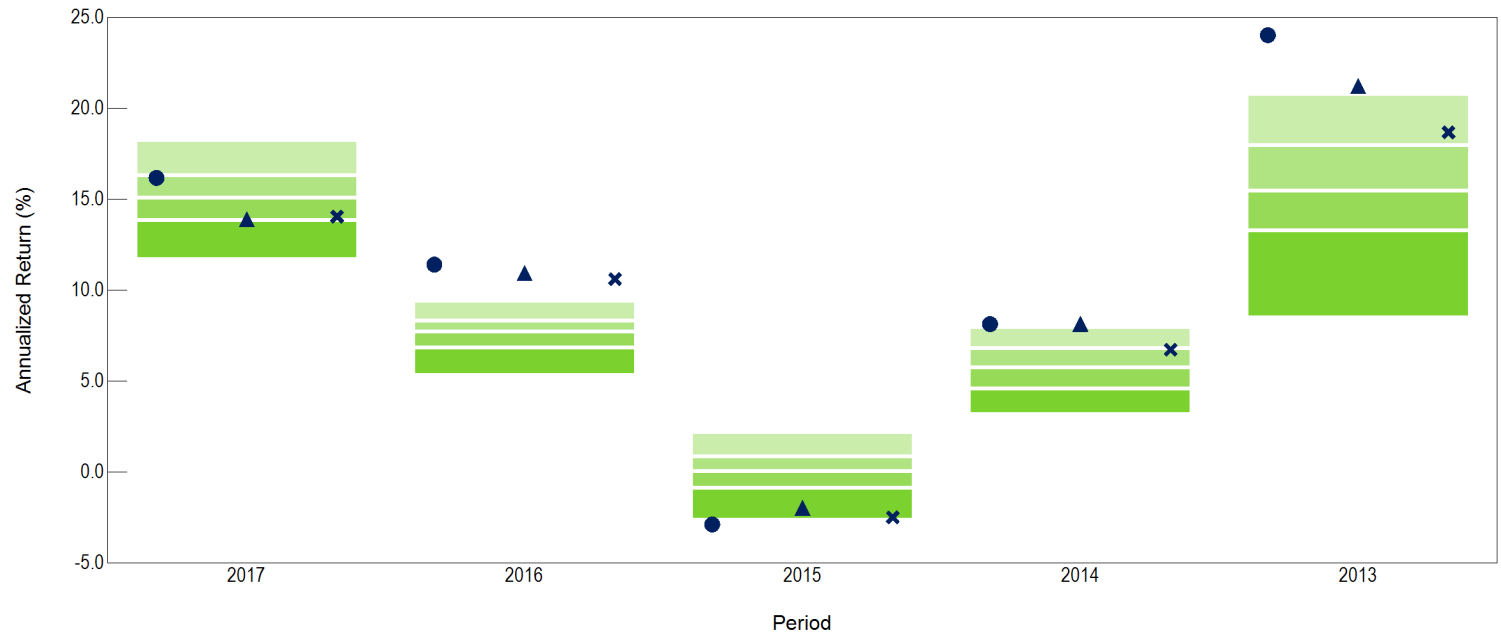


	Return (Rank)											
5th Percentile	4.4		8.4		18.2		8.8		10.6		7.3	
25th Percentile	3.9		7.8		16.4		7.9		9.5		6.3	
Median	3.6		7.2		15.1		7.4		8.7		5.9	
75th Percentile	3.2		6.5		13.9		6.8		7.9		5.4	
95th Percentile	2.5		5.4		11.7		5.8		6.8		4.3	
# of Portfolios	252		251		251		229		211		167	
● OK TEACHERS	4.0	(22)	7.9	(19)	16.2	(28)	7.9	(26)	11.0	(3)	7.7	(1)
▲ TEACHERS Allocation Index	3.3	(68)	6.9	(62)	13.9	(75)	7.4	(52)	10.2	(8)	6.9	(10)
× TEACHERS Policy Index	3.5	(56)	6.9	(61)	14.1	(72)	7.1	(64)	9.3	(35)	6.3	(30)



TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

OK TEACHERS vs. InvestorForce Public DB Gross



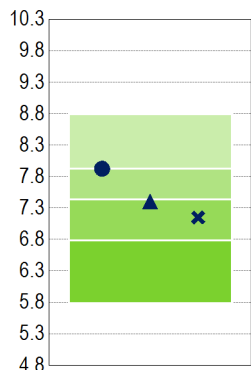
	Return (Rank)									
5th Percentile	18.2		9.4		2.2		8.0		20.8	
25th Percentile	16.4		8.4		0.9		6.8		18.0	
Median	15.1		7.7		0.1		5.8		15.5	
75th Percentile	13.9		6.9		-0.9		4.6		13.3	
95th Percentile	11.7		5.3		-2.6		3.2		8.5	
# of Portfolios	251		305		316		248		231	
● OK TEACHERS	16.2	(28)	11.4	(1)	-2.9	(97)	8.1	(4)	24.0	(1)
▲ TEACHERS Allocation Index	13.9	(75)	11.0	(1)	-2.0	(89)	8.2	(4)	21.2	(3)
× TEACHERS Policy Index	14.1	(72)	10.6	(1)	-2.5	(95)	6.7	(28)	18.7	(20)



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

OK TEACHERS vs. InvestorForce Public DB Gross 3 Years

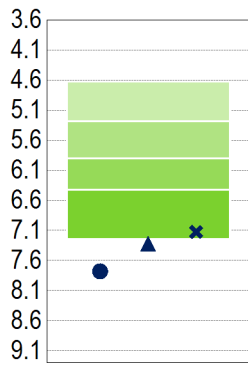
Anlzd Return



● OK TEACHERS	
Value	7.92
Rank	26
▲ TEACHERS Allocation Index	
Value	7.40
Rank	52
× TEACHERS Policy Index	
Value	7.15
Rank	64

Universe	
5th %tile	8.79
25th %tile	7.93
Median	7.44
75th %tile	6.79
95th %tile	5.79

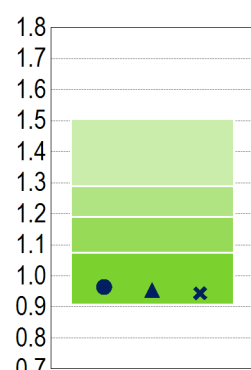
Anlzd Standard Deviation



● OK TEACHERS	
Value	7.78
Rank	99
▲ TEACHERS Allocation Index	
Value	7.32
Rank	98
× TEACHERS Policy Index	
Value	7.13
Rank	94

Universe	
5th %tile	4.62
25th %tile	5.27
Median	5.89
75th %tile	6.41
95th %tile	7.24

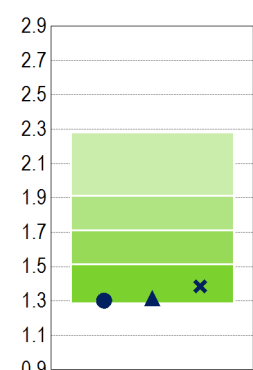
Sharpe Ratio



● OK TEACHERS	
Value	0.96
Rank	91
▲ TEACHERS Allocation Index	
Value	0.95
Rank	92
× TEACHERS Policy Index	
Value	0.94
Rank	92

Universe	
5th %tile	1.51
25th %tile	1.29
Median	1.19
75th %tile	1.08
95th %tile	0.91

Sortino Ratio



● OK TEACHERS	
Value	1.30
Rank	95
▲ TEACHERS Allocation Index	
Value	1.32
Rank	94
× TEACHERS Policy Index	
Value	1.38
Rank	90

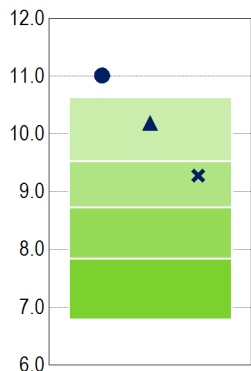
Universe	
5th %tile	2.28
25th %tile	1.92
Median	1.71
75th %tile	1.52
95th %tile	1.29



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

OK TEACHERS vs. InvestorForce Public DB Gross 5 Years

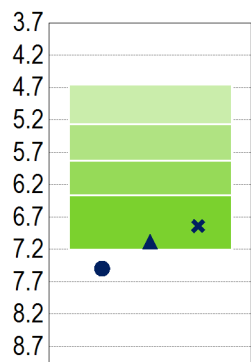
Anlzd Return



● OK TEACHERS	
Value	11.01
Rank	3
▲ TEACHERS Allocation Index	
Value	10.19
Rank	8
× TEACHERS Policy Index	
Value	9.28
Rank	35

Universe	
5th %tile	10.64
25th %tile	9.53
Median	8.74
75th %tile	7.85
95th %tile	6.79

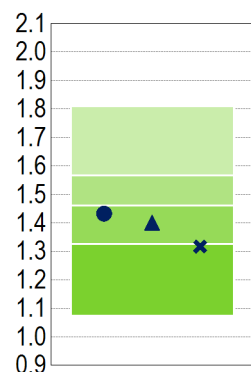
Anlzd Standard Deviation



● OK TEACHERS	
Value	7.50
Rank	99
▲ TEACHERS Allocation Index	
Value	7.08
Rank	95
× TEACHERS Policy Index	
Value	6.84
Rank	93

Universe	
5th %tile	4.65
25th %tile	5.26
Median	5.82
75th %tile	6.36
95th %tile	7.20

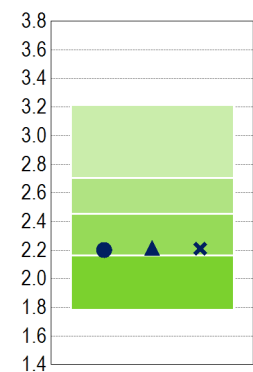
Sharpe Ratio



● OK TEACHERS	
Value	1.43
Rank	57
▲ TEACHERS Allocation Index	
Value	1.40
Rank	64
× TEACHERS Policy Index	
Value	1.32
Rank	76

Universe	
5th %tile	1.81
25th %tile	1.57
Median	1.46
75th %tile	1.33
95th %tile	1.08

Sortino Ratio



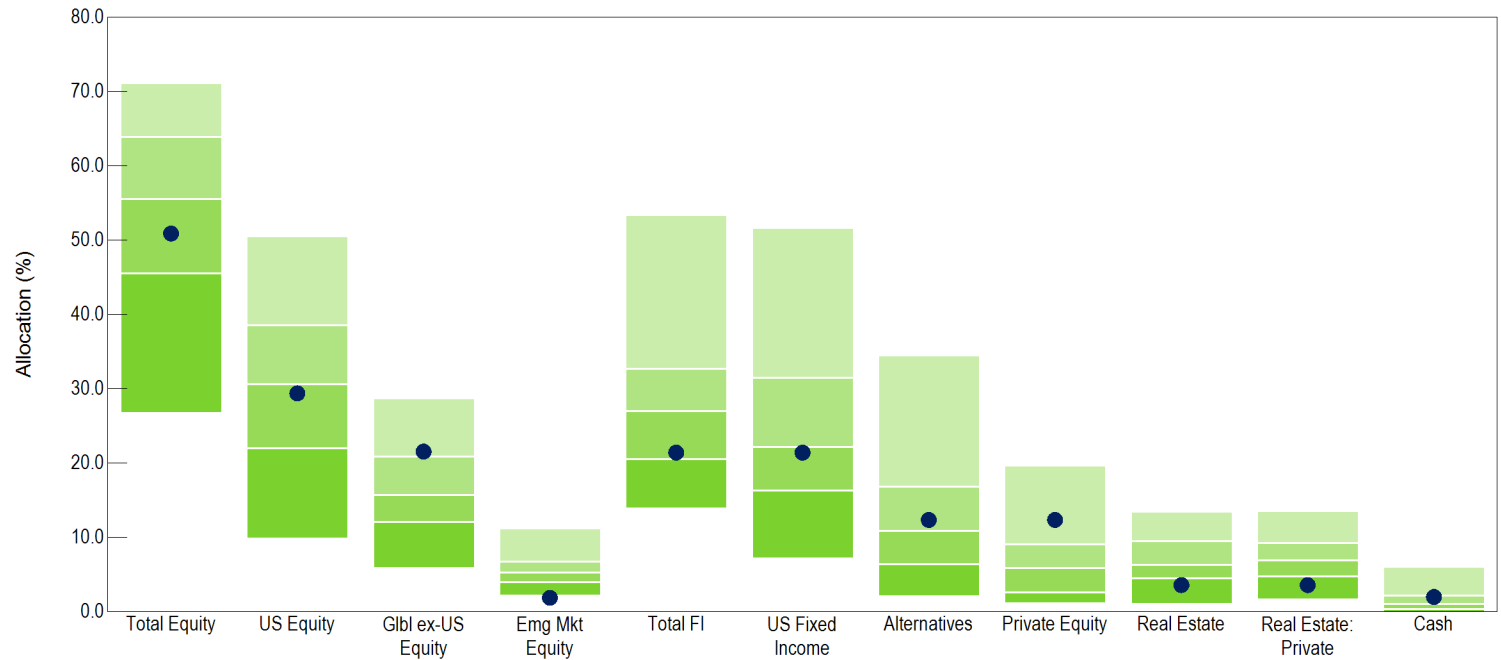
● OK TEACHERS	
Value	2.20
Rank	72
▲ TEACHERS Allocation Index	
Value	2.22
Rank	70
× TEACHERS Policy Index	
Value	2.21
Rank	71

Universe	
5th %tile	3.21
25th %tile	2.71
Median	2.46
75th %tile	2.17
95th %tile	1.79



TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE

Total Plan Allocation vs. InvestorForce Public DB Gross



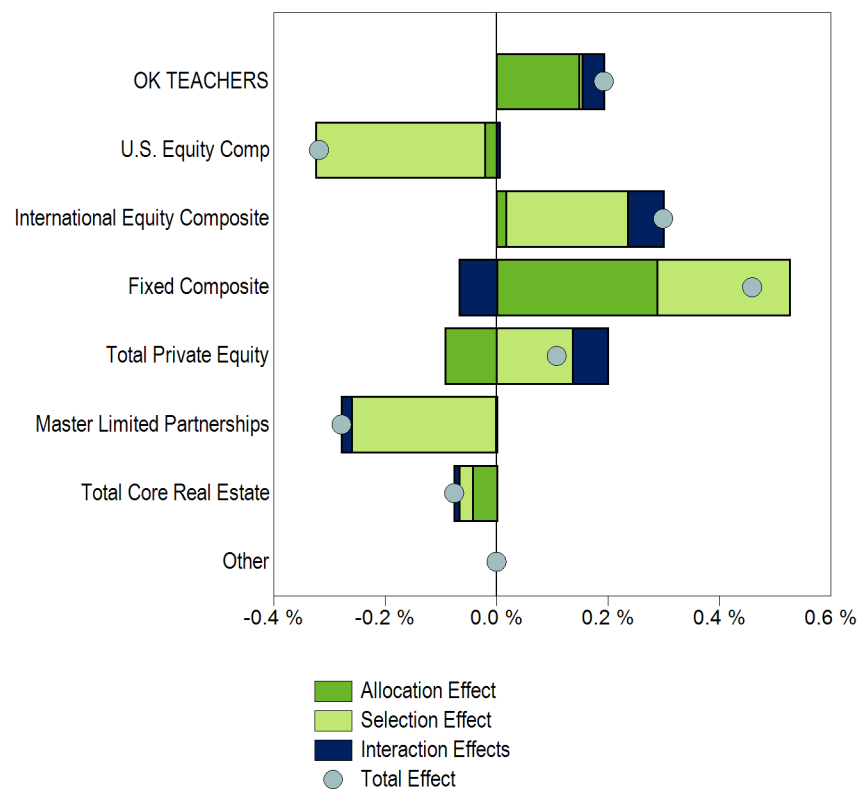
Allocation (Rank)

	Total Equity	US Equity	Gbl ex-US Equity	Emg Mkt Equity	Total FI	US Fixed Income	Alternatives	Private Equity	Real Estate	Real Estate: Private	Cash	
5th Percentile	71.2	50.6	28.7	11.2	53.3	51.7	34.5	19.6	13.4	13.5	6.0	--
25th Percentile	64.0	38.6	20.9	6.8	32.8	31.6	16.9	9.1	9.5	9.3	2.2	--
Median	55.7	30.7	15.8	5.3	27.1	22.3	11.0	5.9	6.4	7.0	1.1	--
75th Percentile	45.6	22.1	12.1	4.1	20.6	16.4	6.5	2.7	4.5	4.8	0.4	--
95th Percentile	26.8	9.9	5.9	2.2	14.0	7.2	2.2	1.2	1.1	1.7	0.0	--
# of Portfolios	241	189	210	106	241	188	147	82	161	94	224	--
● OK TEACHERS	50.9 (65)	29.4 (54)	21.5 (23)	1.8 (98)	21.4 (73)	21.4 (56)	12.3 (44)	12.3 (18)	3.6 (85)	3.6 (89)	2.0 (32)	--



TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects Relative to TEACHERS Policy Index
3 Months Ending December 31, 2017



Attribution Summary							
3 Months Ending December 31, 2017							
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
U.S. Equity Comp	5.9%	6.6%	-0.8%	-0.3%	0.0%	0.0%	-0.3%
International Equity Composite	5.7%	4.2%	1.5%	0.2%	0.2%	0.1%	0.5%
Fixed Composite	1.2%	0.4%	0.8%	0.2%	0.0%	-0.1%	0.1%
Total Private Equity	2.7%	0.0%	2.7%	0.1%	0.0%	0.1%	0.2%
Master Limited Partnerships	1.1%	6.6%	-5.5%	-0.3%	0.0%	0.0%	-0.3%
Total Core Real Estate	1.3%	1.8%	-0.5%	0.0%	0.0%	0.0%	0.0%
Other	3.3%	0.3%	3.0%	--	--	--	--
Total	4.0%	3.8%	0.2%	0.0%	0.2%	0.0%	0.2%

*Other includes cash and transition accounts.

*Total returns shown are calculated as a weighted average of the returns of the composites shown and their respective benchmarks and may differ from returns shown throughout the report.



OK TEACHERS

Performance Attribution		
	Last 3 Mo.	1 Yr
Wtd. Actual Return	4.0%	16.0%
Wtd. Index Return *	3.8%	15.3%
Excess Return	0.2%	0.7%
Selection Effect	0.0%	0.1%
Allocation Effect	0.1%	1.0%
Interaction Effect	0.0%	-0.4%
Returns by Asset Class		
OK TEACHERS	4.0%	16.2%
Total Equity Composite	5.8%	23.9%
U.S. Equity Comp	5.9%	20.6%
Domestic Passive Equity	5.5%	19.9%
International Equity Composite	5.7%	32.0%
International Small Cap Equity	6.2%	32.5%
Fixed Composite	1.2%	6.7%
Total Private Equity	2.7%	13.2%
Master Limited Partnerships	1.1%	-6.2%
Total Core Real Estate	1.3%	6.7%
Other	3.3%	17.3%

*Calculated from benchmark returns and weightings of each component.



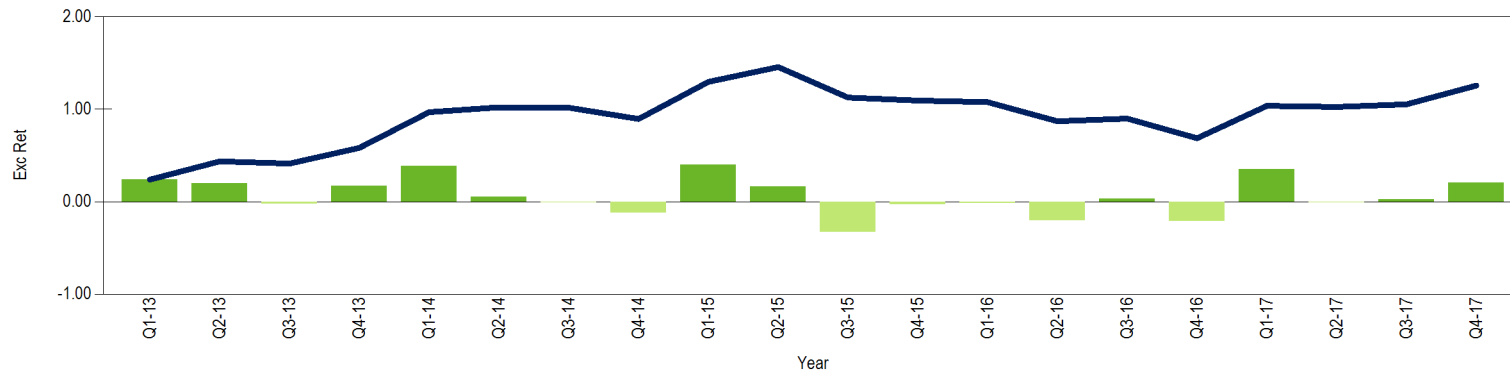
OKLAHOMA PERS



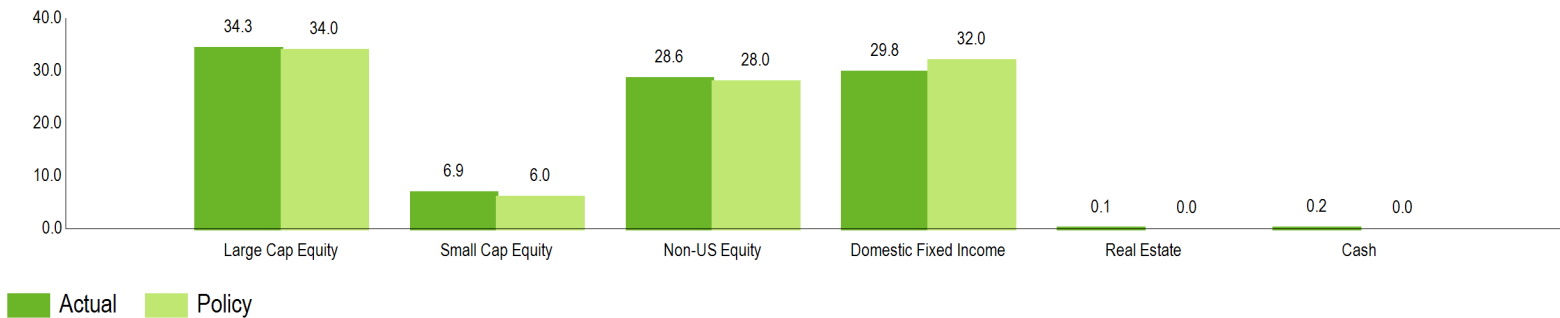
TOTAL FUND PERFORMANCE SUMMARY

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK PERS	\$9,831,231,389	4.3%	8	8.3%	7	17.1%	15	7.8%	34	9.4%	32	6.5%	18
<i>PERS Allocation Index</i>		4.1%	18	8.1%	15	16.5%	23	7.7%	40	9.1%	38	6.3%	26
<i>PERS Policy Index</i>		4.1%	18	8.1%	14	16.9%	19	7.8%	33	9.1%	39	6.1%	41
<i>InvestorForce Public DB Gross Median</i>		3.6%		7.2%		15.1%		7.4%		8.7%		5.9%	

Quarterly and Cumulative Excess Performance

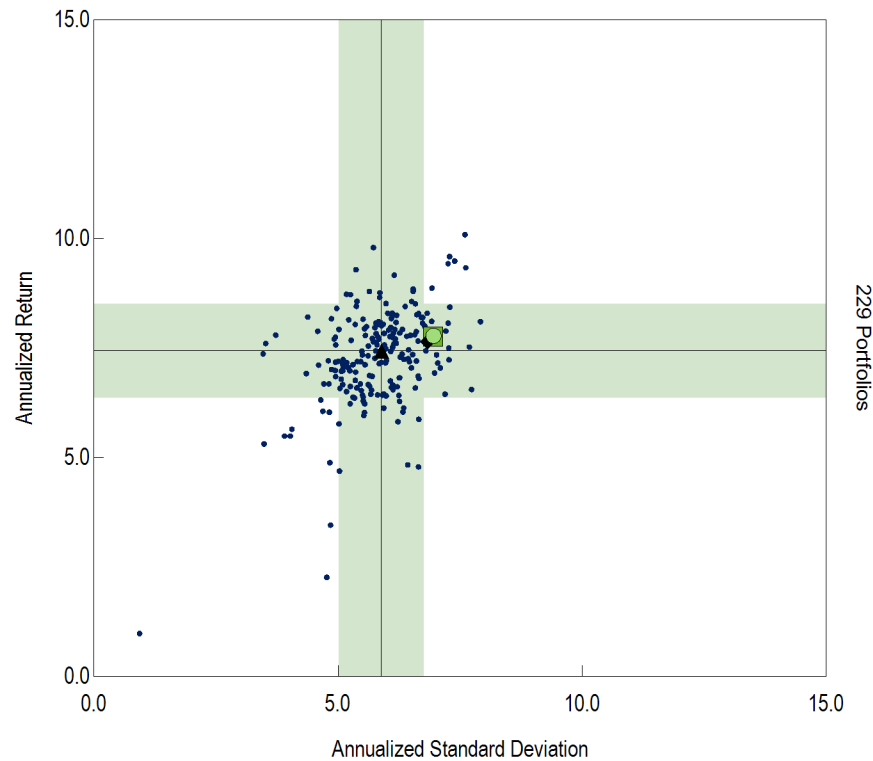


Actual vs Target Allocation (%)



TOTAL FUND RISK/RETURN - 3 YEARS

3 Years Ending December 31, 2017



- OK PERS
- ◆ PERS Allocation Index
- PERS Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Gross

3 Years Ending December 31, 2017

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK PERS	7.76%	34	6.95%	92
PERS Allocation Index	7.65%	40	6.83%	89
PERS Policy Index	7.78%	33	6.96%	92

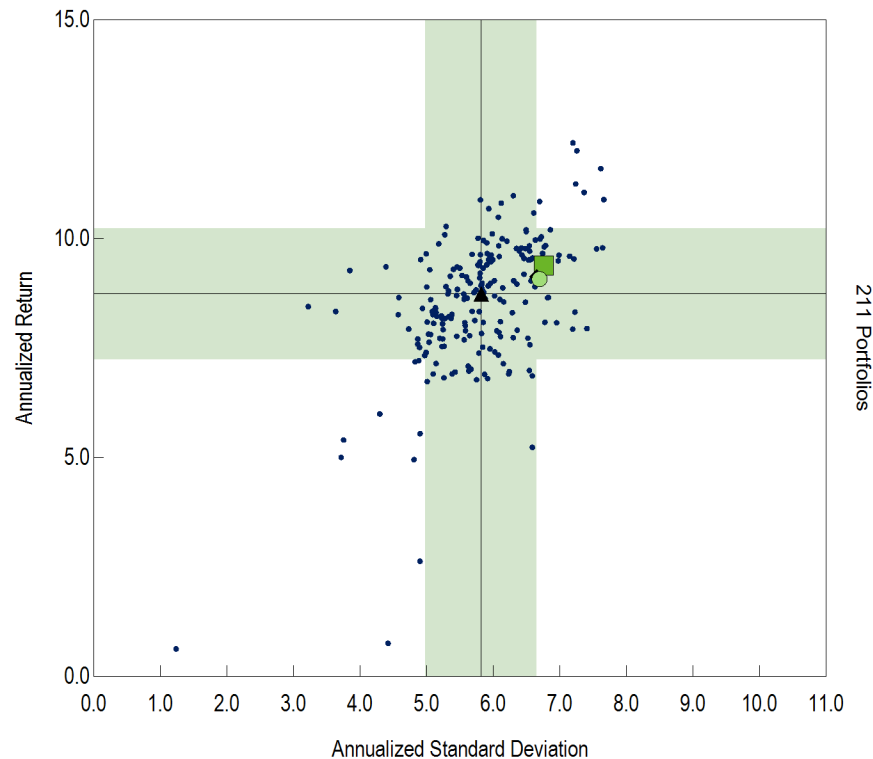
3 Years Ending December 31, 2017

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK PERS	1.06	79	1.50	77
PERS Allocation Index	1.06	79	1.53	74
PERS Policy Index	1.06	79	1.53	73



TOTAL FUND RISK/RETURN - 5 YEARS

5 Years Ending December 31, 2017



- OK PERS
- ◆ PERS Allocation Index
- PERS Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Gross

5 Years Ending December 31, 2017

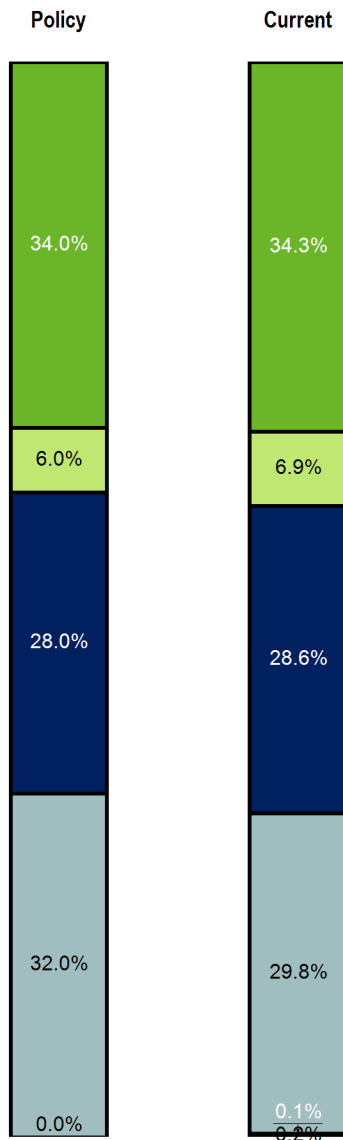
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK PERS	9.40%	32	6.76%	90
PERS Allocation Index	9.14%	38	6.65%	87
PERS Policy Index	9.08%	39	6.69%	88

5 Years Ending December 31, 2017

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK PERS	1.35	71	2.21	71
PERS Allocation Index	1.33	75	2.23	69
PERS Policy Index	1.32	76	2.21	71



TOTAL FUND ASSET ALLOCATION VS. POLICY TARGETS

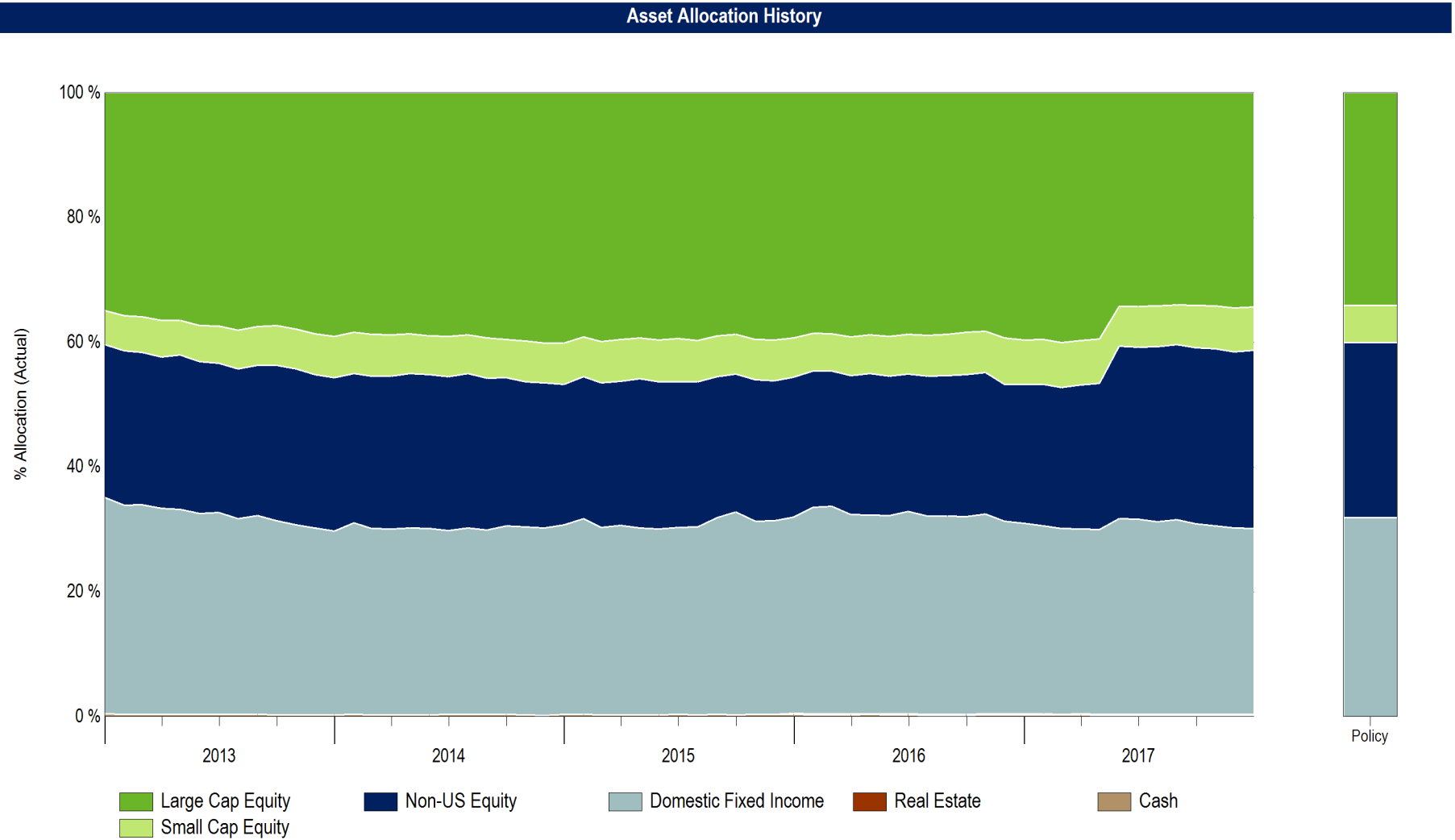


Asset Allocation vs. Target						
	Current	Policy	Current	Difference*	Policy Range	Within Range
Large Cap Equity	\$3,375,251,031	34.0%	34.3%	0.3%	31.2% - 36.8%	Yes
Small Cap Equity	\$681,102,821	6.0%	6.9%	0.9%	3.2% - 8.8%	Yes
Non-US Equity	\$2,811,406,564	28.0%	28.6%	0.6%	25.0% - 31.0%	Yes
Domestic Fixed Income	\$2,932,144,735	32.0%	29.8%	-2.2%	27.5% - 36.5%	Yes
Real Estate	\$12,100,000	0.0%	0.1%	0.1%	0.0% - 5.0%	Yes
Cash	\$19,226,238	0.0%	0.2%	0.2%	0.0% - 5.0%	Yes
Total	\$9,831,231,389	100.0%	100.0%			

*Difference between Policy and Current Allocation



TOTAL FUND ASSET ALLOCATION HISTORY



TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
OK PERS	9,831,231,389	100.0	4.3	8	8.3	7	17.1	15	7.8	34	9.4	32	6.5	18
<i>PERS Allocation Index</i>			4.1	18	8.1	15	16.5	23	7.7	40	9.1	38	6.3	26
Over/Under			0.2		0.2		0.6		0.1		0.3		0.2	
<i>PERS Policy Index</i>			4.1	18	8.1	14	16.9	19	7.8	33	9.1	39	6.1	41
<i>InvestorForce Public DB Gross Median</i>			3.6		7.2		15.1		7.4		8.7		5.9	
Domestic Equity Composite	4,056,353,852	41.3	6.4	39	11.8	37	21.3	41	11.0	45	15.7	43	8.7	65
<i>Domestic Equity Benchmark</i>			6.2	45	11.1	47	20.8	45	11.1	43	15.6	46	8.6	66
Over/Under			0.2		0.7		0.5		-0.1		0.1		0.1	
<i>eV All US Equity Gross Median</i>			5.9		10.8		19.5		10.7		15.3		9.3	
Aronson Johnson & Ortiz	300,609,376	3.1	7.4	23	12.5	21	16.5	62	8.7	73	14.4	59	7.9	58
<i>Russell 1000 Value</i>			5.3	74	8.6	79	13.7	87	8.7	74	14.0	66	7.1	82
Over/Under			2.1		3.9		2.8		0.0		0.4		0.8	
<i>eV US Large Cap Value Equity Gross Median</i>			6.2		10.8		17.2		9.7		14.6		8.2	
Mellon	562,048,563	5.7	5.8	77	11.6	54	22.2	49	9.7	77	15.4	55	8.6	66
<i>Russell 1000</i>			6.6	59	11.4	59	21.7	55	11.2	41	15.7	46	8.6	65
Over/Under			-0.8		0.2		0.5		-1.5		-0.3		0.0	
State Street Enhanced Index	563,148,714	5.7	6.8	50	11.4	56	22.2	49	11.7	28	16.1	35	8.4	68
<i>Russell 1000</i>			6.6	59	11.4	59	21.7	55	11.2	41	15.7	46	8.6	65
Over/Under			0.2		0.0		0.5		0.5		0.4		-0.2	
Blackrock Russell 1000	1,628,970,249	16.6	6.6	59	11.3	60	21.7	55	11.3	40	15.7	46	--	--
<i>Russell 1000</i>			6.6	59	11.4	59	21.7	55	11.2	41	15.7	46	8.6	65
Over/Under			0.0		-0.1		0.0		0.1		0.0			
<i>eV US Large Cap Core Equity Gross Median</i>			6.8		11.7		22.1		10.9		15.6		8.9	
UBS Global Asset Mgmt	223,193,862	2.3	6.4	26	9.9	71	20.2	73	8.1	85	15.2	63	9.6	52
<i>Russell 2000 Growth</i>			4.6	58	11.1	53	22.2	62	10.3	64	15.2	63	9.2	61
Over/Under			1.8		-1.2		-2.0		-2.2		0.0		0.4	
<i>eV US Small Cap Growth Equity Gross Median</i>			4.9		11.3		24.3		11.6		15.8		9.8	

Domestic Equity Benchmark is 86.4% Russell 1000 and 13.6% Russell 2000.



TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Barrow Hanley	224,223,401	2.3	4.2	32	14.7	6	18.0	10	12.2	23	16.5	16	12.9	5
<i>Russell 2000 Value</i>			<u>2.0</u>	81	<u>7.3</u>	77	<u>7.8</u>	75	<u>9.5</u>	69	<u>13.0</u>	78	<u>8.2</u>	88
Over/Under			2.2		7.4		10.2		2.7		3.5		4.7	
DePrince Race & Zollo	233,685,558	2.4	7.6	3	13.8	8	13.9	28	11.3	36	14.1	63	--	--
<i>Russell 2000 Value</i>			<u>2.0</u>	81	<u>7.3</u>	77	<u>7.8</u>	75	<u>9.5</u>	69	<u>13.0</u>	78	<u>8.2</u>	88
Over/Under			5.6		6.5		6.1		1.8		1.1			
<i>eV US Small Cap Value Equity Gross Median</i>			3.7		9.2		11.2		10.5		14.6		10.1	
Westfield	320,474,129	3.3	5.9	78	12.3	61	--	--	--	--	--	--	--	--
<i>Russell 1000 Growth</i>			<u>7.9</u>	24	<u>14.2</u>	27	<u>30.2</u>	42	<u>13.8</u>	27	<u>17.3</u>	34	<u>10.0</u>	37
Over/Under			-2.0		-1.9									
<i>eV US Large Cap Growth Equity Gross Median</i>			7.0		12.7		28.8		12.3		16.7		9.6	
Domestic Fixed Income Composite	2,932,144,735	29.8	0.8	30	1.7	43	4.5	42	2.6	55	2.4	55	4.8	42
<i>BBgBarc US Aggregate TR</i>			<u>0.4</u>	54	<u>1.2</u>	59	<u>3.5</u>	59	<u>2.2</u>	65	<u>2.1</u>	63	<u>4.0</u>	61
Over/Under			0.4		0.5		1.0		0.4		0.3		0.8	
<i>eV All US Fixed Inc Gross Median</i>			0.5		1.5		4.0		2.8		2.6		4.5	
Blackrock	1,428,895,763	14.5	0.4	77	1.3	74	3.8	68	2.6	58	2.4	58	4.2	84
<i>BBgBarc US Aggregate TR</i>			<u>0.4</u>	75	<u>1.2</u>	76	<u>3.5</u>	79	<u>2.2</u>	90	<u>2.1</u>	85	<u>4.0</u>	92
Over/Under			0.0		0.1		0.3		0.4		0.3		0.2	
Met West	863,897,808	8.8	0.5	60	1.4	60	3.8	64	2.5	72	2.6	45	5.4	9
<i>BBgBarc US Aggregate TR</i>			<u>0.4</u>	75	<u>1.2</u>	76	<u>3.5</u>	79	<u>2.2</u>	90	<u>2.1</u>	85	<u>4.0</u>	92
Over/Under			0.1		0.2		0.3		0.3		0.5		1.4	
<i>eV US Core Fixed Inc Gross Median</i>			0.5		1.5		4.0		2.7		2.5		4.6	
Hoisington	330,353,767	3.4	3.5	12	4.1	86	11.1	69	2.9	97	4.1	91	7.6	79
<i>BBgBarc Treasury Long Term</i>			<u>2.4</u>	88	<u>3.0</u>	95	<u>8.5</u>	93	<u>2.8</u>	99	<u>3.5</u>	98	<u>6.6</u>	94
Over/Under			1.1		1.1		2.6		0.1		0.6		1.0	
<i>eV US Long Duration Fixed Inc Gross Median</i>			3.0		4.8		11.7		5.2		5.1		8.3	
Blackrock TIPS	308,997,397	3.1	1.3	1	2.2	1	3.3	13	2.3	29	0.3	99	--	--
<i>BBgBarc US TIPS TR</i>			<u>1.3</u>	1	<u>2.1</u>	1	<u>3.0</u>	23	<u>2.0</u>	60	<u>0.1</u>	99	<u>3.5</u>	83
Over/Under			0.0		0.1		0.3		0.3		0.2			
<i>eV US Interm Duration Fixed Inc Gross Median</i>			0.0		0.7		2.6		2.1		1.8		3.9	



TOTAL FUND PERFORMANCE DETAIL

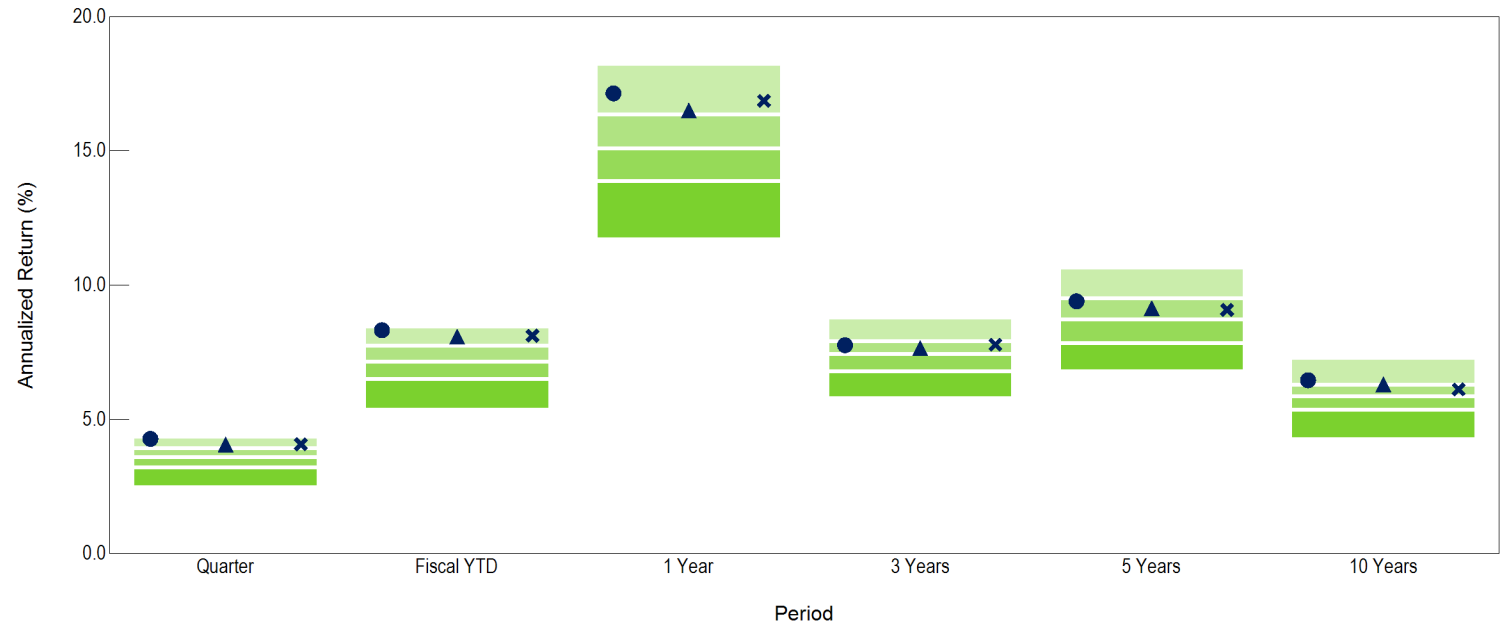
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
International Equity Composite	2,811,406,564	28.6	4.9	57	10.9	68	27.5	73	8.5	74	7.5	84	2.4	84
MSCI ACWI ex USA			<u>5.0</u>	52	<u>11.5</u>	57	<u>27.2</u>	75	<u>7.8</u>	83	<u>6.8</u>	90	<u>1.8</u>	93
Over/Under			-0.1		-0.6		0.3		0.7		0.7		0.6	
eV All ACWI ex-US Equity Gross Median			5.0		11.9		30.6		9.9		9.2		4.1	
Baillie Gifford	352,739,145	3.6	4.9	77	10.2	88	32.2	76	11.1	52	--	--	--	--
MSCI ACWI ex USA Growth			<u>5.8</u>	42	<u>12.5</u>	63	<u>32.0</u>	77	<u>9.3</u>	85	<u>8.0</u>	99	<u>2.4</u>	86
Over/Under			-0.9		-2.3		0.2		1.8					
eV ACWI ex-US All Cap Growth Eq Gross Median			5.5		13.3		35.2		11.2		10.4		4.7	
Blackrock ACWI Ex US	1,482,314,270	15.1	5.0	51	11.6	56	27.5	73	8.1	79	7.1	87	--	--
MSCI ACWI ex USA			<u>5.0</u>	52	<u>11.5</u>	57	<u>27.2</u>	75	<u>7.8</u>	83	<u>6.8</u>	90	<u>1.8</u>	93
Over/Under			0.0		0.1		0.3		0.3		0.3			
eV All ACWI ex-US Equity Gross Median			5.0		11.9		30.6		9.9		9.2		4.1	
Blackrock ACWI Ex US Growth	351,981,148	3.6	5.7	43	11.9	67	30.2	91	9.1	89	7.7	99	--	--
MSCI ACWI ex USA Growth			<u>5.8</u>	42	<u>12.5</u>	63	<u>32.0</u>	77	<u>9.3</u>	85	<u>8.0</u>	99	<u>2.4</u>	86
Over/Under			-0.1		-0.6		-1.8		-0.2		-0.3			
eV ACWI ex-US All Cap Growth Eq Gross Median			5.5		13.3		35.2		11.2		10.4		4.7	
Mondrian	624,372,001	6.4	4.1	73	9.1	86	22.7	93	7.0	90	7.2	86	2.5	84
MSCI ACWI ex USA Value			<u>4.2</u>	70	<u>10.5</u>	72	<u>22.7</u>	93	<u>6.3</u>	96	<u>5.6</u>	97	<u>1.2</u>	97
Over/Under			-0.1		-1.4		0.0		0.7		1.6		1.3	
eV All ACWI ex-US Equity Gross Median			5.0		11.9		30.6		9.9		9.2		4.1	
Real Estate	12,100,000	0.1	1.5	--	-2.8	--	-2.1	--	--	--	--	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			-0.6		-6.8		-9.7							
Grand Centre	12,100,000	0.1	1.5	--	-2.8	--	-2.1	--	--	--	--	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			-0.6		-6.8		-9.7							

New Policy Index effective as of November 1, 2013 consist of 38% Large Cap Equity, 6% Small Cap Equity, 24% International Equity, and 32% Domestic Fixed Income.



TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

OK PERS vs. InvestorForce Public DB Gross

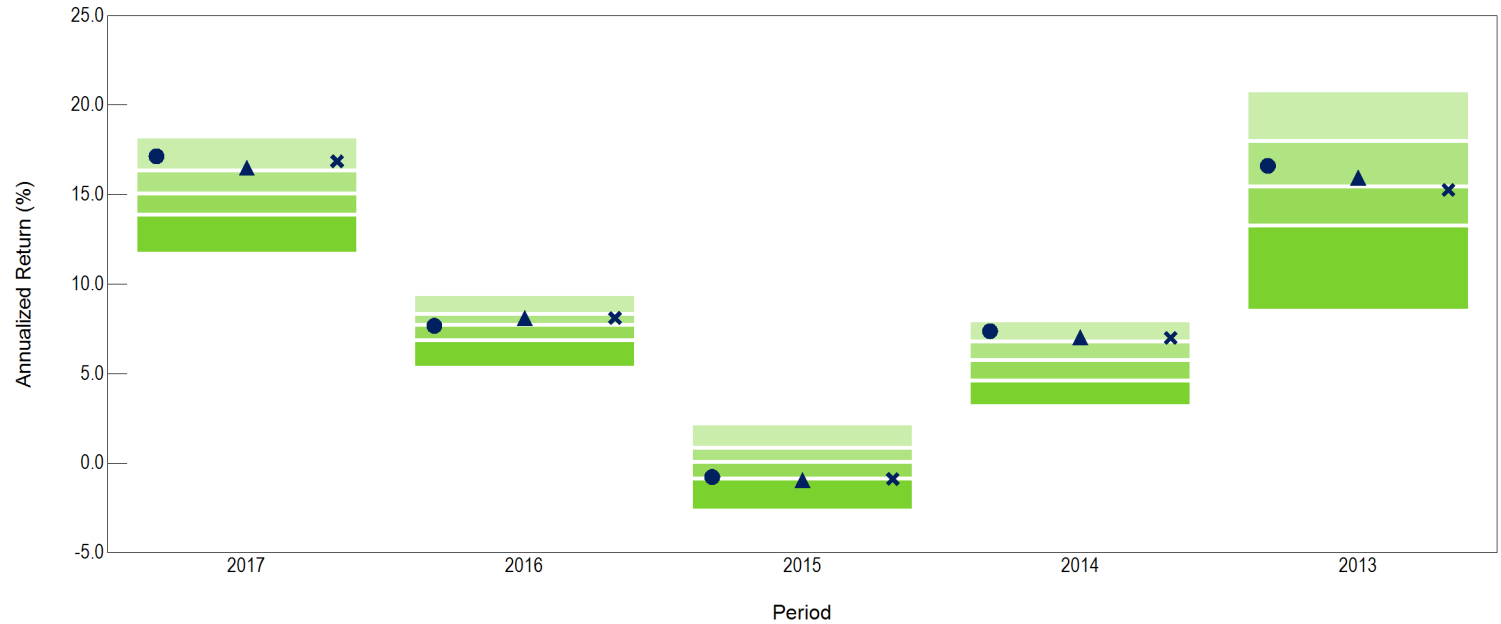


	Return (Rank)											
5th Percentile	4.4		8.4		18.2		8.8		10.6		7.3	
25th Percentile	3.9		7.8		16.4		7.9		9.5		6.3	
Median	3.6		7.2		15.1		7.4		8.7		5.9	
75th Percentile	3.2		6.5		13.9		6.8		7.9		5.4	
95th Percentile	2.5		5.4		11.7		5.8		6.8		4.3	
# of Portfolios	252		251		251		229		211		167	
● OK PERS	4.3	(8)	8.3	(7)	17.1	(15)	7.8	(34)	9.4	(32)	6.5	(18)
▲ PERS Allocation Index	4.1	(18)	8.1	(15)	16.5	(23)	7.7	(40)	9.1	(38)	6.3	(26)
× PERS Policy Index	4.1	(18)	8.1	(14)	16.9	(19)	7.8	(33)	9.1	(39)	6.1	(40)



TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

OK PERS vs. InvestorForce Public DB Gross



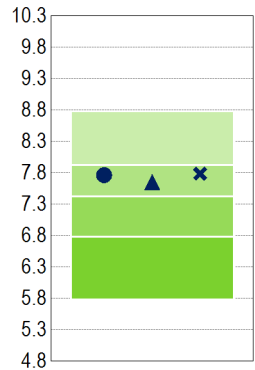
	Return (Rank)									
5th Percentile	18.2		9.4		2.2		8.0		20.8	
25th Percentile	16.4		8.4		0.9		6.8		18.0	
Median	15.1		7.7		0.1		5.8		15.5	
75th Percentile	13.9		6.9		-0.9		4.6		13.3	
95th Percentile	11.7		5.3		-2.6		3.2		8.5	
# of Portfolios	251		305		316		248		231	
● OK PERS	17.1	(15)	7.7	(52)	-0.8	(73)	7.4	(15)	16.6	(40)
▲ PERS Allocation Index	16.5	(23)	8.1	(34)	-0.9	(77)	7.0	(21)	15.9	(48)
× PERS Policy Index	16.9	(19)	8.1	(34)	-0.9	(76)	7.0	(21)	15.3	(53)



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

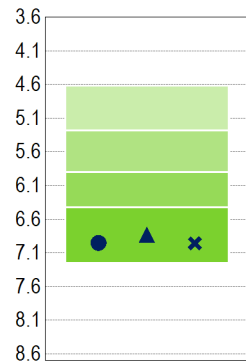
OK PERS vs. InvestorForce Public DB Gross 3 Years

Anlzd Return



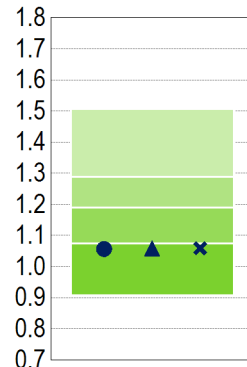
● OK PERS	
Value	7.76
Rank	34
▲ PERS Allocation Index	
Value	7.65
Rank	40
✕ PERS Policy Index	
Value	7.78
Rank	33
Universe	
5th %tile	8.79
25th %tile	7.93
Median	7.44
75th %tile	6.79
95th %tile	5.79

Anlzd Standard Deviation



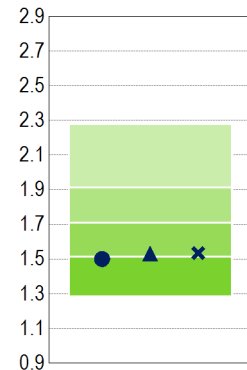
● OK PERS	
Value	6.95
Rank	92
▲ PERS Allocation Index	
Value	6.83
Rank	89
✕ PERS Policy Index	
Value	6.96
Rank	92
Universe	
5th %tile	4.62
25th %tile	5.27
Median	5.89
75th %tile	6.41
95th %tile	7.24

Sharpe Ratio



● OK PERS	
Value	1.06
Rank	79
▲ PERS Allocation Index	
Value	1.06
Rank	79
✕ PERS Policy Index	
Value	1.06
Rank	79
Universe	
5th %tile	1.51
25th %tile	1.29
Median	1.19
75th %tile	1.08
95th %tile	0.91

Sortino Ratio



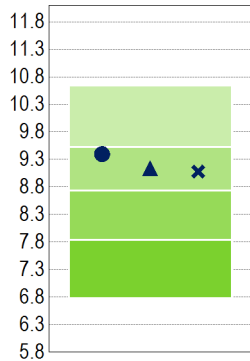
● OK PERS	
Value	1.50
Rank	77
▲ PERS Allocation Index	
Value	1.53
Rank	74
✕ PERS Policy Index	
Value	1.53
Rank	73
Universe	
5th %tile	2.28
25th %tile	1.92
Median	1.71
75th %tile	1.52
95th %tile	1.29



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

OK PERS vs. InvestorForce Public DB Gross 5 Years

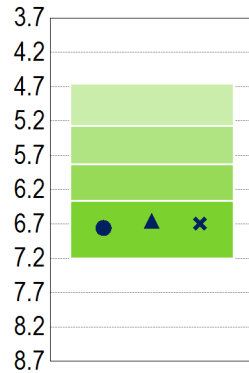
Anlzd Return



● OK PERS	
Value	9.40
Rank	32
▲ PERS Allocation Index	
Value	9.14
Rank	38
× PERS Policy Index	
Value	9.08
Rank	39

Universe	
5th %tile	10.64
25th %tile	9.53
Median	8.74
75th %tile	7.85
95th %tile	6.79

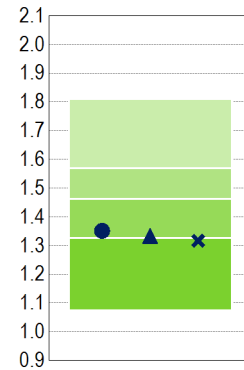
Anlzd Standard Deviation



● OK PERS	
Value	6.76
Rank	90
▲ PERS Allocation Index	
Value	6.65
Rank	87
× PERS Policy Index	
Value	6.69
Rank	88

Universe	
5th %tile	4.65
25th %tile	5.26
Median	5.82
75th %tile	6.36
95th %tile	7.20

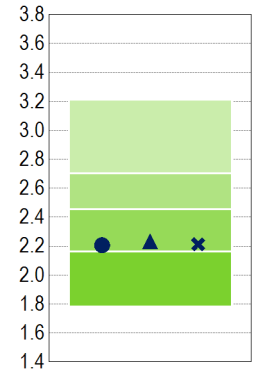
Sharpe Ratio



● OK PERS	
Value	1.35
Rank	71
▲ PERS Allocation Index	
Value	1.33
Rank	75
× PERS Policy Index	
Value	1.32
Rank	76

Universe	
5th %tile	1.81
25th %tile	1.57
Median	1.46
75th %tile	1.33
95th %tile	1.08

Sortino Ratio



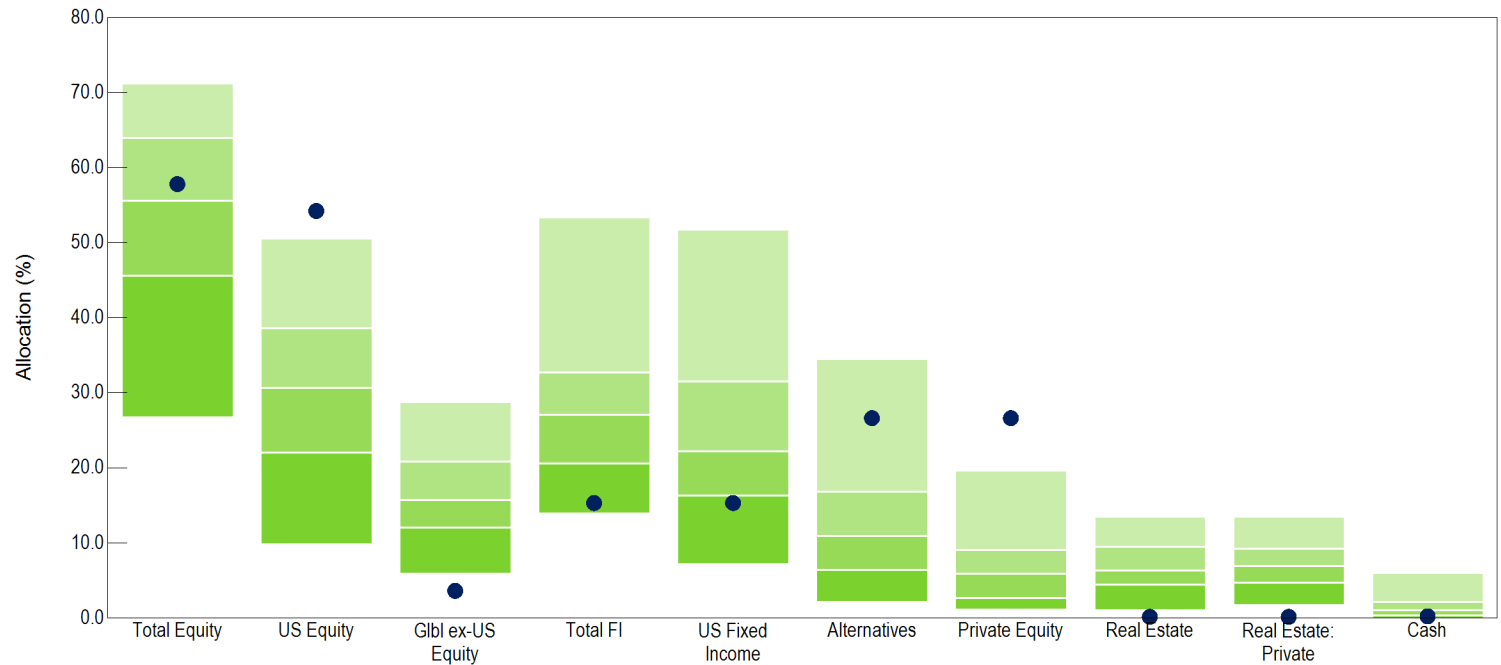
● OK PERS	
Value	2.21
Rank	71
▲ PERS Allocation Index	
Value	2.23
Rank	69
× PERS Policy Index	
Value	2.17
Rank	71

Universe	
5th %tile	3.21
25th %tile	2.71
Median	2.46
75th %tile	2.17
95th %tile	1.79



TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE

Total Plan Allocation vs. InvestorForce Public DB Gross

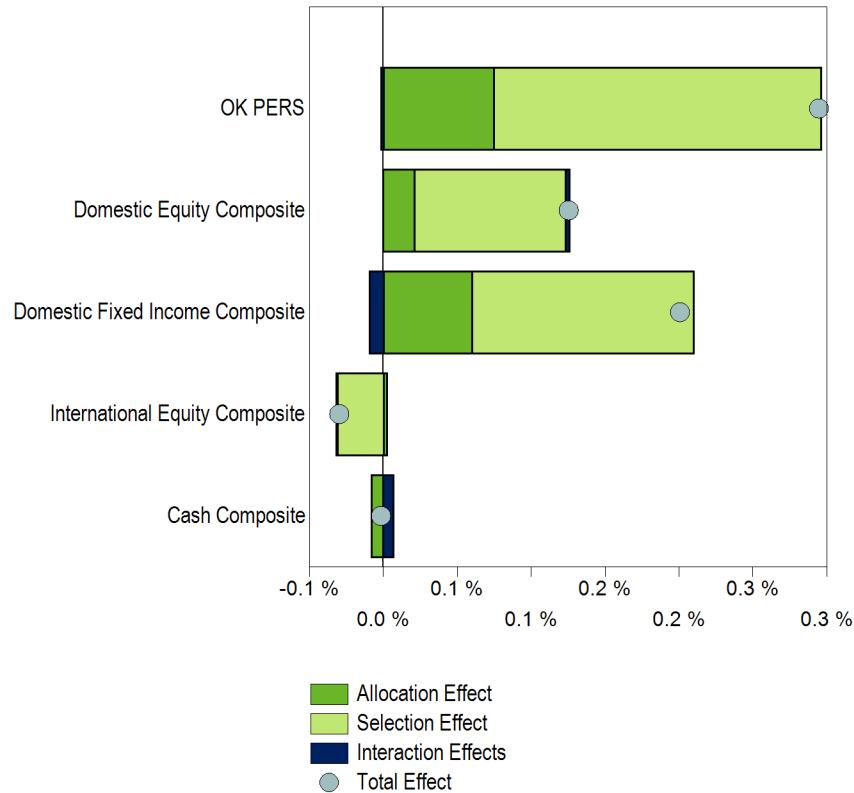


	Allocation (Rank)																			
5th Percentile	71.2	50.6	28.7	53.3	51.7	34.5	19.6	13.4	13.5	6.0	-	-	-	-	-	-	-	-	-	-
25th Percentile	64.0	38.6	20.9	32.8	31.6	16.9	9.1	9.5	9.3	2.2	-	-	-	-	-	-	-	-	-	-
Median	55.7	30.7	15.8	27.1	22.3	11.0	5.9	6.4	7.0	1.1	-	-	-	-	-	-	-	-	-	-
75th Percentile	45.6	22.1	12.1	20.6	16.4	6.5	2.7	4.5	4.8	0.4	-	-	-	-	-	-	-	-	-	-
95th Percentile	26.8	9.9	5.9	14.0	7.2	2.2	1.2	1.1	1.7	0.0	-	-	-	-	-	-	-	-	-	-
# of Portfolios	241	189	210	241	188	147	82	161	94	224	-	-	-	-	-	-	-	-	-	-
● OK PERS	57.8	(45)	54.2	(4)	3.6	(99)	15.3	(92)	15.3	(81)	26.6	(10)	26.6	(4)	0.1	(99)	0.1	(99)	0.2	(85)



TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects Relative to PERS Policy Index
3 Months Ending December 31, 2017



Attribution Summary
3 Months Ending December 31, 2017

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Domestic Equity Composite	6.4%	6.2%	0.3%	0.1%	0.0%	0.0%	0.1%
Domestic Fixed Income Composite	0.8%	0.4%	0.5%	0.1%	0.1%	0.0%	0.2%
International Equity Composite	4.9%	5.0%	-0.1%	0.0%	0.0%	0.0%	0.0%
Cash Composite	3.2%	0.3%	2.9%	0.0%	0.0%	0.0%	0.0%
Total	4.3%	4.0%	0.3%	0.2%	0.1%	0.0%	0.3%

*Target return show is a weighted average of the composites shown and their respective benchmarks and may differ from returns shown throughout the report.



TOTAL FUND ATTRIBUTION ANALYSIS

Performance Attribution		
	Last 3 Mo.	1 Yr
Wtd. Actual Return	4.3%	17.1%
Wtd. Index Return *	4.0%	16.5%
Excess Return	0.3%	0.6%
Selection Effect	0.2%	0.6%
Allocation Effect	0.1%	0.1%
Interaction Effect	0.0%	0.0%
Asset Class Returns		
OK PERS	4.3%	17.1%
Domestic Equity Composite	6.4%	21.3%
Domestic Fixed Income Composite	0.8%	4.5%
International Equity Composite	4.9%	27.5%
Cash Composite	3.2%	9.7%
Z TERMINATED - R/E Composite		
Real Estate	1.5%	-2.1%

*Calculated from benchmark returns and weightings of each component.

Z TERMINATED represents Composite that fully liquidated.



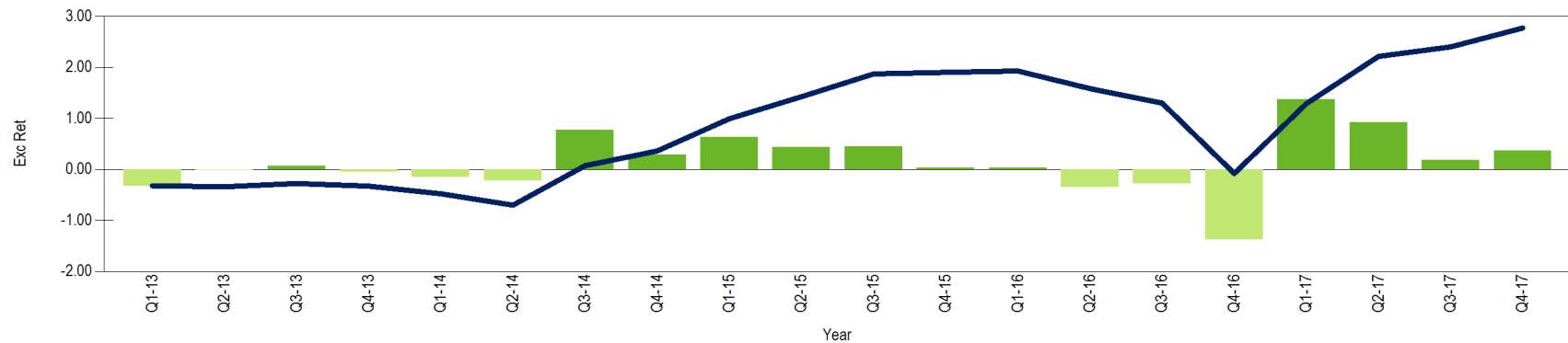
OKLAHOMA FIREFIGHTERS



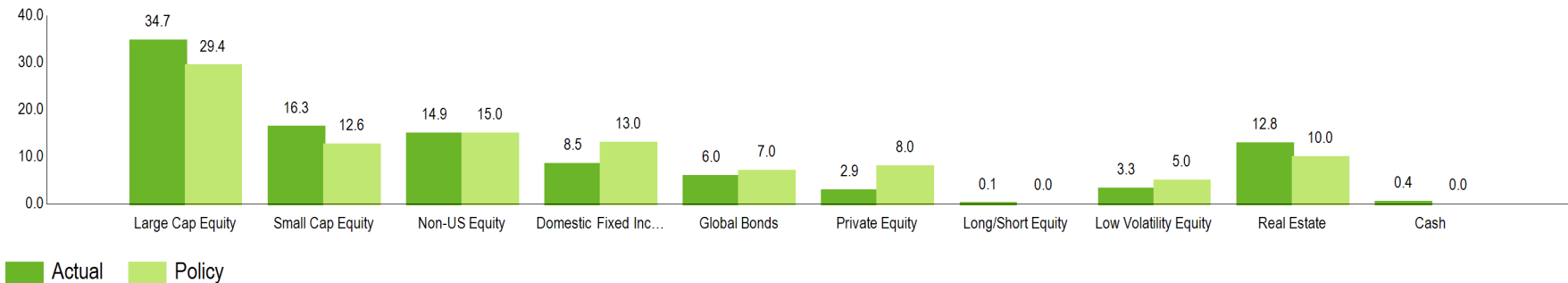
TOTAL FUND PERFORMANCE SUMMARY

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK FIREFIGHTERS	\$2,661,183,414	4.4%	5	8.5%	4	18.7%	4	9.2%	4	11.0%	3	6.4%	19
<i>FIREFIGHTERS Allocation Index</i>		4.0%	22	7.9%	19	15.5%	42	8.3%	11	10.4%	6	6.4%	22
<i>FIREFIGHTERS Policy Index</i>		4.1%	16	7.7%	27	16.4%	25	8.7%	6	10.8%	4	7.1%	7
<i>InvestorForce Public DB Gross Median</i>		3.6%		7.2%		15.1%		7.4%		8.7%		5.9%	

Quarterly and Cumulative Excess Performance

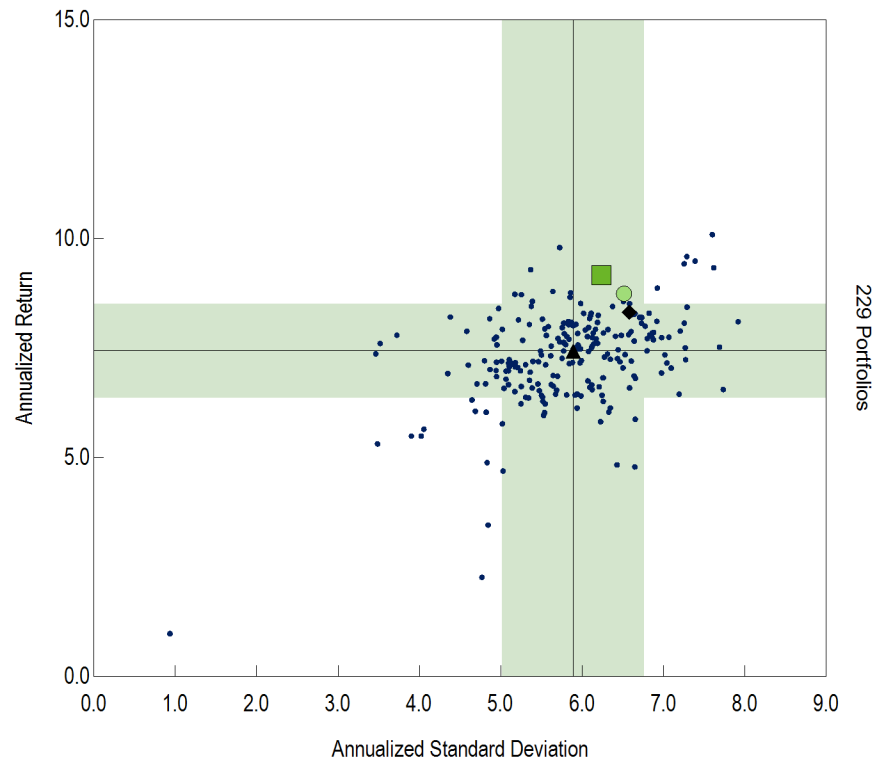


Actual vs Target Allocation (%)



TOTAL FUND RISK/RETURN - 3 YEARS

3 Years Ending December 31, 2017



- OK FIREFIGHTERS
- ◆ FIREFIGHTERS Allocation Index
- FIREFIGHTERS Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Gross

3 Years Ending December 31, 2017

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK FIREFIGHTERS	9.17%	4	6.24%	70
FIREFIGHTERS Allocation Index	8.32%	11	6.58%	81
FIREFIGHTERS Policy Index	8.75%	6	6.52%	79

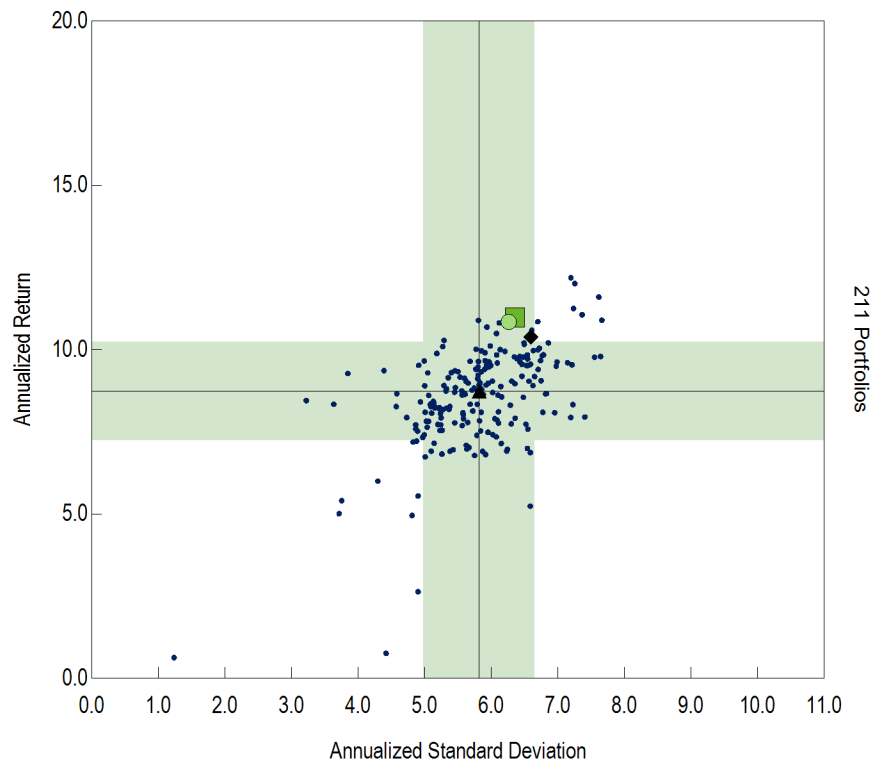
3 Years Ending December 31, 2017

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK FIREFIGHTERS	1.40	12	1.98	22
FIREFIGHTERS Allocation Index	1.20	48	1.61	65
FIREFIGHTERS Policy Index	1.28	30	1.87	31



TOTAL FUND RISK/RETURN - 5 YEARS

5 Years Ending December 31, 2017



- OK FIREFIGHTERS
- ◆ FIREFIGHTERS Allocation Index
- FIREFIGHTERS Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Gross

211 Portfolios

5 Years Ending December 31, 2017

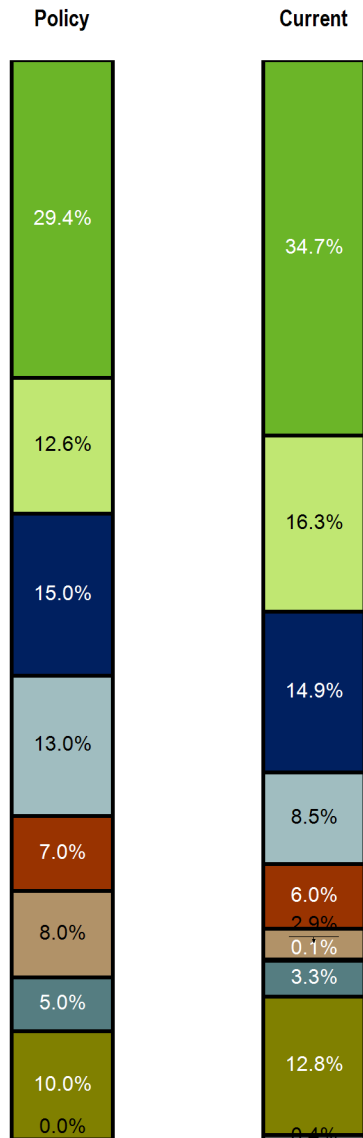
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK FIREFIGHTERS	10.99%	3	6.35%	75
FIREFIGHTERS Allocation Index	10.38%	6	6.59%	85
FIREFIGHTERS Policy Index	10.85%	4	6.26%	73

5 Years Ending December 31, 2017

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK FIREFIGHTERS	1.69	9	2.85	18
FIREFIGHTERS Allocation Index	1.53	34	2.40	56
FIREFIGHTERS Policy Index	1.69	9	2.85	18



TOTAL PLAN ASSET ALLOCATION VS. POLICY TARGETS

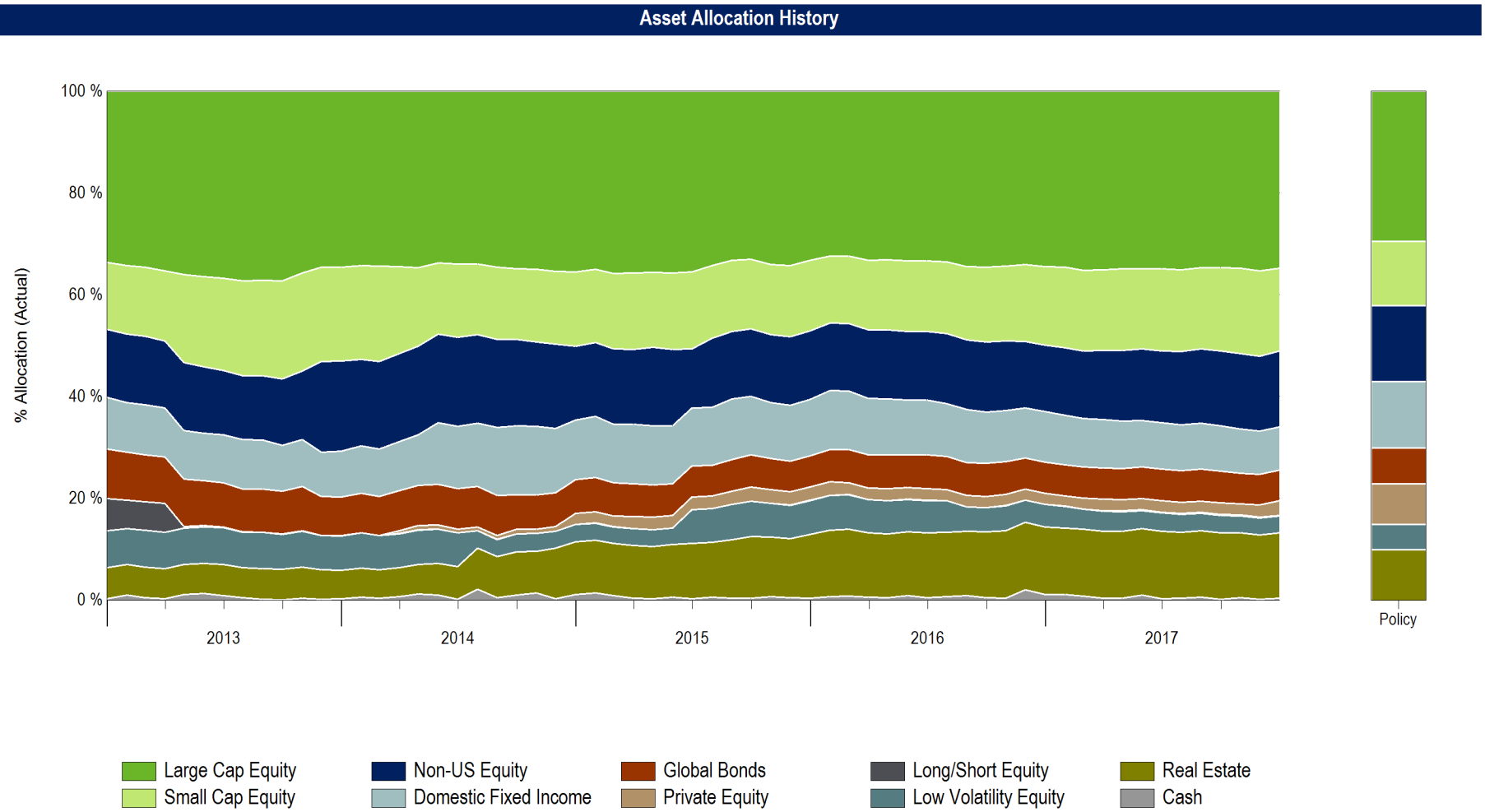


Asset Allocation vs. Target						
	Current	Policy	Current Difference*	Policy Range	Within Range	
Large Cap Equity	\$924,362,498	29.4%	34.7%	5.3%	24.4% - 34.4%	No
Small Cap Equity	\$435,081,872	12.6%	16.3%	3.7%	7.6% - 17.6%	Yes
Non-US Equity	\$396,476,255	15.0%	14.9%	-0.1%	10.0% - 20.0%	Yes
Domestic Fixed Income	\$226,613,879	13.0%	8.5%	-4.5%	0.0% - 28.0%	Yes
Global Bonds	\$159,092,372	7.0%	6.0%	-1.0%	2.0% - 12.0%	Yes
Private Equity	\$76,295,265	8.0%	2.9%	-5.1%	0.0% - 13.0%	Yes
Long/Short Equity	\$3,329,051	--	0.1%	0.1%	--	No
Low Volatility Equity	\$87,718,328	5.0%	3.3%	-1.7%	0.0% - 10.0%	Yes
Real Estate	\$341,670,243	10.0%	12.8%	2.8%	5.0% - 15.0%	Yes
Cash	\$10,543,652	0.0%	0.4%	0.4%	0.0% - 5.0%	Yes
Total	\$2,661,183,414	100.0%	100.0%			

*Difference between Policy and Current Allocation



TOTAL PLAN ASSET ALLOCATION HISTORY



TOTAL PLAN PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
OK FIREFIGHTERS	2,661,183,414	100.0	4.4	5	8.5	4	18.7	4	9.2	4	11.0	3	6.4	19
<i>FIREFIGHTERS Allocation Index</i>			4.0	22	7.9	19	15.5	42	8.3	11	10.4	6	6.4	22
Over/Under			0.4		0.6		3.2		0.9		0.6		0.0	
<i>FIREFIGHTERS Policy Index</i>			4.1	16	7.7	27	16.4	25	8.7	6	10.8	4	7.1	7
<i>InvestorForce Public DB Gross Median</i>			3.6		7.2		15.1		7.4		8.7		5.9	
Domestic Equity Composite	1,362,773,421	51.2	6.2	45	10.9	49	22.7	33	11.1	43	15.5	48	8.5	69
<i>Russell 3000</i>			6.3	42	11.2	46	21.1	43	11.1	43	15.6	46	8.6	67
Over/Under			-0.1		-0.3		1.6		0.0		-0.1		-0.1	
<i>eV All US Equity Gross Median</i>			5.9		10.8		19.5		10.7		15.3		9.3	
Large Cap Equity Composite	924,362,498	34.7	6.3	42	11.4	43	23.3	30	11.1	43	15.8	40	8.4	72
<i>Russell 1000</i>			6.6	36	11.4	43	21.7	39	11.2	40	15.7	43	8.6	67
Over/Under			-0.3		0.0		1.6		-0.1		0.1		-0.2	
<i>eV All US Equity Gross Median</i>			5.9		10.8		19.5		10.7		15.3		9.3	
Aronson	91,698,623	3.4	7.6	19	12.7	19	16.9	57	8.7	73	14.5	57	7.9	60
<i>Russell 1000 Value</i>			5.3	74	8.6	79	13.7	87	8.7	74	14.0	66	7.1	82
Over/Under			2.3		4.1		3.2		0.0		0.5		0.8	
SSgA Equity Index	184,944,235	6.9	6.7	58	11.4	56	21.8	53	11.5	34	15.8	44	8.6	66
<i>S&P 500</i>			6.6	58	11.4	56	21.8	54	11.4	36	15.8	45	8.5	67
Over/Under			0.1		0.0		0.0		0.1		0.0		0.1	
SSgA EQ Wtd S&P	186,259,901	7.0	6.3	65	10.1	77	18.8	82	10.2	70	15.8	45	10.2	10
<i>S&P 500</i>			6.6	58	11.4	56	21.8	54	11.4	36	15.8	45	8.5	67
Over/Under			-0.3		-1.3		-3.0		-1.2		0.0		1.7	
Intech	181,110,723	6.8	5.3	85	11.2	62	23.9	29	11.3	40	16.1	35	8.8	55
<i>S&P 500</i>			6.6	58	11.4	56	21.8	54	11.4	36	15.8	45	8.5	67
Over/Under			-1.3		-0.2		2.1		-0.1		0.3		0.3	
<i>eV US Large Cap Core Equity Gross Median</i>			6.8		11.7		22.1		10.9		15.6		8.9	



TOTAL PLAN PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Fred Alger Management	177,841,403	6.7	6.9	55	12.8	50	32.2	30	12.8	46	17.6	26	--	--
<i>Russell 1000 Growth</i>			<u>7.9</u>	24	<u>14.2</u>	27	<u>30.2</u>	42	<u>13.8</u>	27	<u>17.3</u>	34	<u>10.0</u>	37
Over/Under			-1.0		-1.4		2.0		-1.0		0.3			
<i>eV US Large Cap Growth Equity Gross Median</i>			7.0		12.7		28.8		12.3		16.7		9.6	
Beutel Goodman Company	102,507,612	3.9	5.6	--	9.6	--	22.4	--	--	--	--	--	--	--
<i>Russell 1000 Value</i>			<u>5.3</u>	--	<u>8.6</u>	--	<u>13.7</u>	--	<u>8.7</u>	--	<u>14.0</u>	--	<u>7.1</u>	--
Over/Under			0.3		1.0		8.7							
Herndon Capital - Liquidating	0	0.0												
Small Cap Equity Composite	390,260,302	14.7	5.5	24	11.3	30	21.4	25	11.2	45	15.2	50	9.5	65
<i>Russell 2000</i>			<u>3.3</u>	68	<u>9.2</u>	59	<u>14.6</u>	53	<u>10.0</u>	65	<u>14.1</u>	70	<u>8.7</u>	77
Over/Under			2.2		2.1		6.8		1.2		1.1		0.8	
<i>eV US Small Cap Equity Gross Median</i>			4.0		9.9		15.1		10.8		15.2		10.0	
Earnest Partner	83,217,237	3.1	6.2	10	13.6	9	24.0	3	13.1	14	16.1	20	9.7	62
<i>Russell 2000 Value</i>			<u>2.0</u>	81	<u>7.3</u>	77	<u>7.8</u>	75	<u>9.5</u>	69	<u>13.0</u>	78	<u>8.2</u>	88
Over/Under			4.2		6.3		16.2		3.6		3.1		1.5	
River Road	74,698,252	2.8	3.3	63	5.1	90	12.9	39	13.1	14	14.1	63	8.6	84
<i>Russell 2000 Value</i>			<u>2.0</u>	81	<u>7.3</u>	77	<u>7.8</u>	75	<u>9.5</u>	69	<u>13.0</u>	78	<u>8.2</u>	88
Over/Under			1.3		-2.2		5.1		3.6		1.1		0.4	
<i>eV US Small Cap Value Equity Gross Median</i>			3.7		9.2		11.2		10.5		14.6		10.1	
Lord Abbet	72,509,577	2.7	7.8	10	15.7	9	31.0	16	5.9	94	14.4	72	--	--
<i>Russell 2000 Growth</i>			<u>4.6</u>	58	<u>11.1</u>	53	<u>22.2</u>	62	<u>10.3</u>	64	<u>15.2</u>	63	<u>9.2</u>	61
Over/Under			3.2		4.6		8.8		-4.4		-0.8			
Delaware Small Growth	83,051,408	3.1	5.6	38	12.5	34	22.6	58	13.1	29	16.2	48	--	--
<i>Russell 2500 Growth</i>			<u>6.3</u>	27	<u>12.5</u>	34	<u>24.5</u>	50	<u>10.9</u>	58	<u>15.5</u>	59	<u>9.6</u>	52
Over/Under			-0.7		0.0		-1.9		2.2		0.7			
<i>eV US Small Cap Growth Equity Gross Median</i>			4.9		11.3		24.3		11.6		15.8		9.8	
SSgA Russell Small Cap	76,783,828	2.9	4.9	32	10.1	47	18.2	36	10.0	65	--	--	--	--
<i>Russell 2000</i>			<u>3.3</u>	68	<u>9.2</u>	59	<u>14.6</u>	53	<u>10.0</u>	65	<u>14.1</u>	70	<u>8.7</u>	77
Over/Under			1.6		0.9		3.6		0.0					
<i>eV US Small Cap Equity Gross Median</i>			4.0		9.9		15.1		10.8		15.2		10.0	
Tortoise Direct Opportunities	44,821,570	1.7	11.3	--	-1.1	--	15.8	--	--	--	--	--	--	--
<i>Alerian MLP Index</i>			<u>-0.9</u>	--	<u>-4.0</u>	--	<u>-6.5</u>	--	<u>-9.3</u>	--	<u>-0.1</u>	--	<u>6.0</u>	--
Over/Under			12.2		2.9		22.3							



TOTAL PLAN PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Long/Short Equity Composite	3,329,051	0.1												
Azul Holdco - Liquidating	3,329,051	0.1												
International Equity Composite	340,048,505	12.8	5.9	31	14.1	27	36.0	23	11.4	35	8.5	69	1.1	97
MSCI ACWI ex USA			<u>5.0</u>	52	<u>11.5</u>	57	<u>27.2</u>	75	<u>7.8</u>	83	<u>6.8</u>	90	<u>1.8</u>	93
Over/Under			0.9		2.6		8.8		3.6		1.7		-0.7	
eV All ACWI ex-US Equity Gross Median			5.0		11.9		30.6		9.9		9.2		4.1	
Chautauqua	125,458,945	4.7	5.9	29	17.0	10	37.1	20	12.8	22	10.8	26	--	--
MSCI EAFE			<u>4.2</u>	70	<u>9.9</u>	83	<u>25.0</u>	86	<u>7.8</u>	83	<u>7.9</u>	79	<u>1.9</u>	92
Over/Under			1.7		7.1		12.1		5.0		2.9			
eV All ACWI ex-US Equity Gross Median			5.0		11.9		30.6		9.9		9.2		4.1	
WCM	129,905,978	4.9	5.6	35	11.2	65	33.9	32	13.2	15	12.6	14	--	--
MSCI EAFE			<u>4.2</u>	70	<u>9.9</u>	83	<u>25.0</u>	86	<u>7.8</u>	83	<u>7.9</u>	79	<u>1.9</u>	92
Over/Under			1.4		1.3		8.9		5.4		4.7			
eV All ACWI ex-US Equity Gross Median			5.0		11.9		30.6		9.9		9.2		4.1	
Emerging Markets Equity Composite	84,588,702	3.2	6.1	77	14.4	62	37.7	49	6.4	93	4.0	87	--	--
MSCI Emerging Markets			<u>7.4</u>	41	<u>15.9</u>	44	<u>37.3</u>	53	<u>9.1</u>	70	<u>4.3</u>	82	<u>1.7</u>	87
Over/Under			-1.3		-1.5		0.4		-2.7		-0.3			
eV Emg Mkts Equity Gross Median			7.1		15.5		37.6		10.2		6.0		3.2	
Wasatch	24,782,947	0.9	7.2	49	14.6	62	37.0	57	6.5	93	3.6	90	--	--
MSCI Emerging Markets			<u>7.4</u>	41	<u>15.9</u>	44	<u>37.3</u>	53	<u>9.1</u>	70	<u>4.3</u>	82	<u>1.7</u>	87
Over/Under			-0.2		-1.3		-0.3		-2.6		-0.7			
eV Emg Mkts Equity Gross Median			7.1		15.5		37.6		10.2		6.0		3.2	
ClariVest Emerging Market Equity	59,805,755	2.2	5.6	84	14.3	63	38.1	47	6.4	93	4.1	86	--	--
MSCI Emerging Markets			<u>7.4</u>	41	<u>15.9</u>	44	<u>37.3</u>	53	<u>9.1</u>	70	<u>4.3</u>	82	<u>1.7</u>	87
Over/Under			-1.8		-1.6		0.8		-2.7		-0.2			
eV Emg Mkts Equity Gross Median			7.1		15.5		37.6		10.2		6.0		3.2	
Thornburg - Liquidating	62,558	0.0												
Fixed Income Composite	385,706,252	14.5	0.1	71	2.1	35	7.3	21	3.1	43	2.6	50	4.9	39
BBgBarc US Aggregate TR			<u>0.4</u>	54	<u>1.2</u>	59	<u>3.5</u>	59	<u>2.2</u>	65	<u>2.1</u>	63	<u>4.0</u>	61
Over/Under			-0.3		0.9		3.8		0.9		0.5		0.9	
eV All US Fixed Inc Gross Median			0.5		1.5		4.0		2.8		2.6		4.5	



TOTAL PLAN PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Core Bonds Composite	128,391,076	4.8	0.6	24	1.4	60	3.8	67	2.6	59	2.3	68	--	--
BBgBarc US Aggregate TR			<u>0.4</u>	75	<u>1.2</u>	76	<u>3.5</u>	79	<u>2.2</u>	90	<u>2.1</u>	85	<u>4.0</u>	92
Over/Under			0.2		0.2		0.3		0.4		0.2			
eV US Core Fixed Inc Gross Median			0.5		1.5		4.0		2.7		2.5		4.6	
SSgA NL Fixed Income	45,093,198	1.7	0.4	74	1.2	75	3.6	77	2.3	87	2.1	86	--	--
BBgBarc US Aggregate TR			<u>0.4</u>	75	<u>1.2</u>	76	<u>3.5</u>	79	<u>2.2</u>	90	<u>2.1</u>	85	<u>4.0</u>	92
Over/Under			0.0		0.0		0.1		0.1		0.0			
eV US Core Fixed Inc Gross Median			0.5		1.5		4.0		2.7		2.5		4.6	
Orleans Capital Management	27,345,377	1.0	0.5	44	1.6	27	4.1	48	2.8	40	--	--	--	--
BBgBarc US Aggregate TR			<u>0.4</u>	75	<u>1.2</u>	76	<u>3.5</u>	79	<u>2.2</u>	90	<u>2.1</u>	85	<u>4.0</u>	92
Over/Under			0.1		0.4		0.6		0.6					
eV US Core Fixed Inc Gross Median			0.5		1.5		4.0		2.7		2.5		4.6	
Garcia Hamilton Associates	55,952,501	2.1	0.9	7	1.4	60	3.8	66	2.7	43	--	--	--	--
BBgBarc US Aggregate TR			<u>0.4</u>	75	<u>1.2</u>	76	<u>3.5</u>	79	<u>2.2</u>	90	<u>2.1</u>	85	<u>4.0</u>	92
Over/Under			0.5		0.2		0.3		0.5					
eV US Core Fixed Inc Gross Median			0.5		1.5		4.0		2.7		2.5		4.6	
Intermediate Bonds Composite	44,217,852	1.7	-0.1	83	0.6	71	2.3	79	1.8	79	1.7	71	--	--
BBgBarc US Govt/Credit Int TR			<u>-0.2</u>	92	<u>0.4</u>	93	<u>2.1</u>	87	<u>1.8</u>	84	<u>1.5</u>	86	<u>3.3</u>	93
Over/Under			0.1		0.2		0.2		0.0		0.2			
eV US Interm Duration Fixed Inc Gross Median			0.0		0.7		2.6		2.1		1.8		3.9	
SSgA Barclays Intermediate	44,217,852	1.7	-0.1	83	0.6	71	2.3	79	1.8	79	1.7	71	3.6	78
BBgBarc US Govt/Credit Int TR			<u>-0.2</u>	92	<u>0.4</u>	93	<u>2.1</u>	87	<u>1.8</u>	84	<u>1.5</u>	86	<u>3.3</u>	93
Over/Under			0.1		0.2		0.2		0.0		0.2		0.3	
eV US Interm Duration Fixed Inc Gross Median			0.0		0.7		2.6		2.1		1.8		3.9	
Garrison Middle Market Funding	17,417,752	0.7	2.9	1	3.5	1	0.7	99	2.4	95	--	--	--	--
Credit Suisse Leveraged Loans			<u>1.2</u>	4	<u>2.2</u>	10	<u>4.2</u>	86	<u>4.5</u>	5	<u>4.3</u>	5	<u>4.6</u>	91
Over/Under			1.7		1.3		-3.5		-2.1					
eV US Core Plus Fixed Inc Gross Median			0.6		1.8		5.0		3.3		3.1		5.3	
Medley Opportunity Fund II	28,319,571	1.1	-2.1	99	-0.2	99	3.5	90	4.9	41	--	--	--	--
Credit Suisse Leveraged Loans			<u>1.2</u>	60	<u>2.2</u>	66	<u>4.2</u>	60	<u>4.5</u>	71	<u>4.3</u>	61	<u>4.6</u>	85
Over/Under			-3.3		-2.4		-0.7		0.4					
eV Float-Rate Bank Loan Gross Median			1.2		2.4		4.4		4.8		4.5		5.2	



TOTAL PLAN PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
PIMCO Corporate Opp Fund II	8,267,627	0.3	5.3	1	7.5	1	18.0	1	--	--	--	--	--	--
BBgBarc US High Yield TR			<u>0.5</u>	83	<u>2.5</u>	67	<u>7.5</u>	23	<u>6.4</u>	1	<u>5.8</u>	1	<u>8.0</u>	1
Over/Under			4.8		5.0		10.5							
eV US Corporate Fixed Inc Gross Median			1.2		2.7		6.9		4.4		4.0		6.4	
Global Fixed Composite	159,092,372	6.0	-0.3	96	3.1	47	13.3	12	3.2	51	2.6	53	--	--
Citi WGBI			<u>1.0</u>	49	<u>2.9</u>	53	<u>7.5</u>	59	<u>1.7</u>	84	<u>0.1</u>	91	<u>2.7</u>	92
Over/Under			-1.3		0.2		5.8		1.5		2.5			
eV All Global Fixed Inc Gross Median			1.0		3.0		8.0		3.3		2.8		4.3	
Brandywine	159,092,372	6.0	-0.3	96	3.1	47	13.3	12	3.2	51	2.6	53	--	--
Citi WGBI			<u>1.0</u>	49	<u>2.9</u>	53	<u>7.5</u>	59	<u>1.7</u>	84	<u>0.1</u>	91	<u>2.7</u>	92
Over/Under			-1.3		0.2		5.8		1.5		2.5			
eV All Global Fixed Inc Gross Median			1.0		3.0		8.0		3.3		2.8		4.3	
Real Estate Composite	341,670,243	12.8	2.2	--	3.7	--	8.0	--	10.8	--	11.5	--	--	--
NCREIF Property Index			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			0.4		0.2		1.0		1.4		1.3			
JP Morgan RE	150,644,290	5.7	1.8	--	3.6	--	7.2	--	10.2	--	11.5	--	5.6	--
NCREIF Property Index			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			0.0		0.1		0.2		0.8		1.3		-0.5	
Portfolio Advisors RE III	4,579,298	0.2	1.5	--	2.7	--	1.7	--	12.7	--	13.2	--	--	--
NCREIF Property Index			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			-0.3		-0.8		-5.3		3.3		3.0			
Realty Associates IX Corp	737,079	0.0	-1.2	--	-1.3	--	-1.4	--	7.5	--	10.2	--	--	--
NCREIF Property Index			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			-3.0		-4.8		-8.4		-1.9		0.0			
Portfolio Advisors RE IV	4,147,587	0.2	4.2	--	8.2	--	10.5	--	13.7	--	14.2	--	--	--
NCREIF Property Index			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			2.4		4.7		3.5		4.3		4.0			
Angelo Gordon Net Lease Realty III LP	18,069,820	0.7	0.0	--	2.1	--	6.7	--	5.4	--	--	--	--	--
NCREIF Property Index			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			-1.8		-1.4		-0.3		-4.0					



TOTAL PLAN PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Mesirow	26,007,201	1.0	1.1	--	2.2	--	9.3	--	8.2	--	--	--	--	--
NCREIF Property Index			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			-0.7		-1.3		2.3		-1.2					
Dune Real Estate Fund III	23,787,712	0.9	4.3	--	8.7	--	17.2	--	14.9	--	--	--	--	--
NCREIF Property Index			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			2.5		5.2		10.2		5.5					
OK FF Portfolio Advisors	16,357,998	0.6	-0.1	--	-0.6	--	0.0	--	4.7	--	--	--	--	--
NCREIF Property Index			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			-1.9		-4.1		-7.0		-4.7					
Landmark RE VII	18,218,679	0.7	4.5	--	4.8	--	10.0	--	27.5	--	--	--	--	--
NCREIF Property Index			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			2.7		1.3		3.0		18.1					
JP Morgan Special Situation Property	60,691,021	2.3	1.9	--	5.1	--	9.6	--	13.5	--	--	--	--	--
NCREIF Property Index			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			0.1		1.6		2.6		4.1					
Hall Capital III	11,346,876	0.4	0.0	--	1.1	--	15.0	--	-3.2	--	--	--	--	--
NCREIF Property Index			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			-1.8		-2.4		8.0		-12.6					
Portfolio Advisors RE VI	7,082,683	0.3	26.2	--	4.1	--	--	--	--	--	--	--	--	--
NCREIF Property Index			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.0</u>	--	<u>9.4</u>	--	<u>10.2</u>	--	<u>6.1</u>	--
Over/Under			24.4		0.6									



TOTAL PLAN PERFORMANCE DETAIL

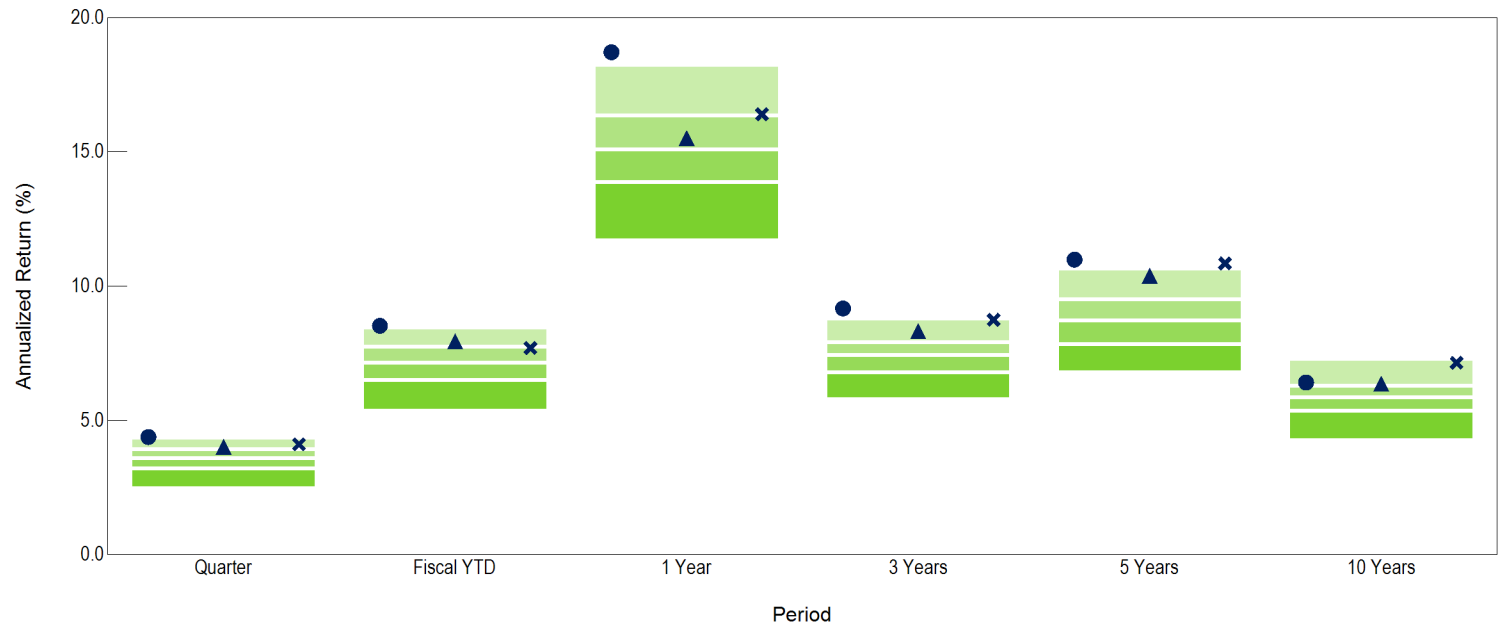
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Hedge Fund Composite	144,146,078	5.4	1.4	--	3.7	--	10.2	--	2.8	--	4.0	--	3.0	--
HFRI FOF: Conservative Index			<u>1.1</u>	--	<u>2.5</u>	--	<u>4.1</u>	--	<u>2.1</u>	--	<u>3.4</u>	--	<u>0.9</u>	--
Over/Under			0.3		1.2		6.1		0.7		0.6		2.1	
Private Advisors	8,611,178	0.3	-6.3	--	-5.1	--	-1.4	--	-0.2	--	2.2	--	2.1	--
HFRI Fund of Funds Composite Index			<u>2.0</u>	--	<u>4.4</u>	--	<u>7.7</u>	--	<u>2.6</u>	--	<u>4.0</u>	--	<u>1.1</u>	--
Over/Under			-8.3		-9.5		-9.1		-2.8		-1.8		1.0	
Permal	79,107,150	3.0	0.8	--	2.4	--	7.3	--	--	--	--	--	--	--
HFRI Fund of Funds Composite Index			<u>2.0</u>	--	<u>4.4</u>	--	<u>7.7</u>	--	<u>2.6</u>	--	<u>4.0</u>	--	<u>1.1</u>	--
Over/Under			-1.2		-2.0		-0.4							
Allianz Global Investors DMAP	56,427,750	2.1	3.5	--	7.2	--	17.0	--	--	--	--	--	--	--
Russell 2500 Growth			<u>6.3</u>	--	<u>12.5</u>	--	<u>24.5</u>	--	<u>10.9</u>	--	<u>15.5</u>	--	<u>9.6</u>	--
Over/Under			-2.8		-5.3		-7.5							
Private Equity Composite	76,295,265	2.9	4.3	--	9.4	--	19.1	--	11.8	--	--	--	--	--
Cambridge Associates US All PE			<u>0.0</u>	--	<u>3.8</u>	--	<u>11.7</u>	--	<u>10.1</u>	--	<u>12.5</u>	--	<u>9.2</u>	--
Over/Under			4.3		5.6		7.4		1.7					
Pomona Captial Fund VIII	12,600,146	0.5	7.3	--	13.4	--	21.2	--	14.7	--	--	--	--	--
Cambridge Associates US All PE			<u>0.0</u>	--	<u>3.8</u>	--	<u>11.7</u>	--	<u>10.1</u>	--	<u>12.5</u>	--	<u>9.2</u>	--
Over/Under			7.3		9.6		9.5		4.6					
Ardian	26,636,649	1.0	4.1	--	8.8	--	16.6	--	11.7	--	--	--	--	--
Cambridge Associates US All PE			<u>0.0</u>	--	<u>3.8</u>	--	<u>11.7</u>	--	<u>10.1</u>	--	<u>12.5</u>	--	<u>9.2</u>	--
Over/Under			4.1		5.0		4.9		1.6					
Dynamics Global Secondaries IV	20,354,434	0.8	0.0	--	7.1	--	28.5	--	9.4	--	--	--	--	--
Cambridge Associates US All PE			<u>0.0</u>	--	<u>3.8</u>	--	<u>11.7</u>	--	<u>10.1</u>	--	<u>12.5</u>	--	<u>9.2</u>	--
Over/Under			0.0		3.3		16.8		-0.7					
AESF VI	16,704,035	0.6	9.6	--	9.6	--	--	--	--	--	--	--	--	--
Cambridge Associates US All PE			<u>0.0</u>	--	<u>3.8</u>	--	<u>11.7</u>	--	<u>10.1</u>	--	<u>12.5</u>	--	<u>9.2</u>	--
Over/Under			9.6		5.8									

Performance Numbers are shown gross of fees.



TOTAL PLAN RETURN SUMMARY VS. PEER UNIVERSE

OK FIREFIGHTERS vs. InvestorForce Public DB Gross

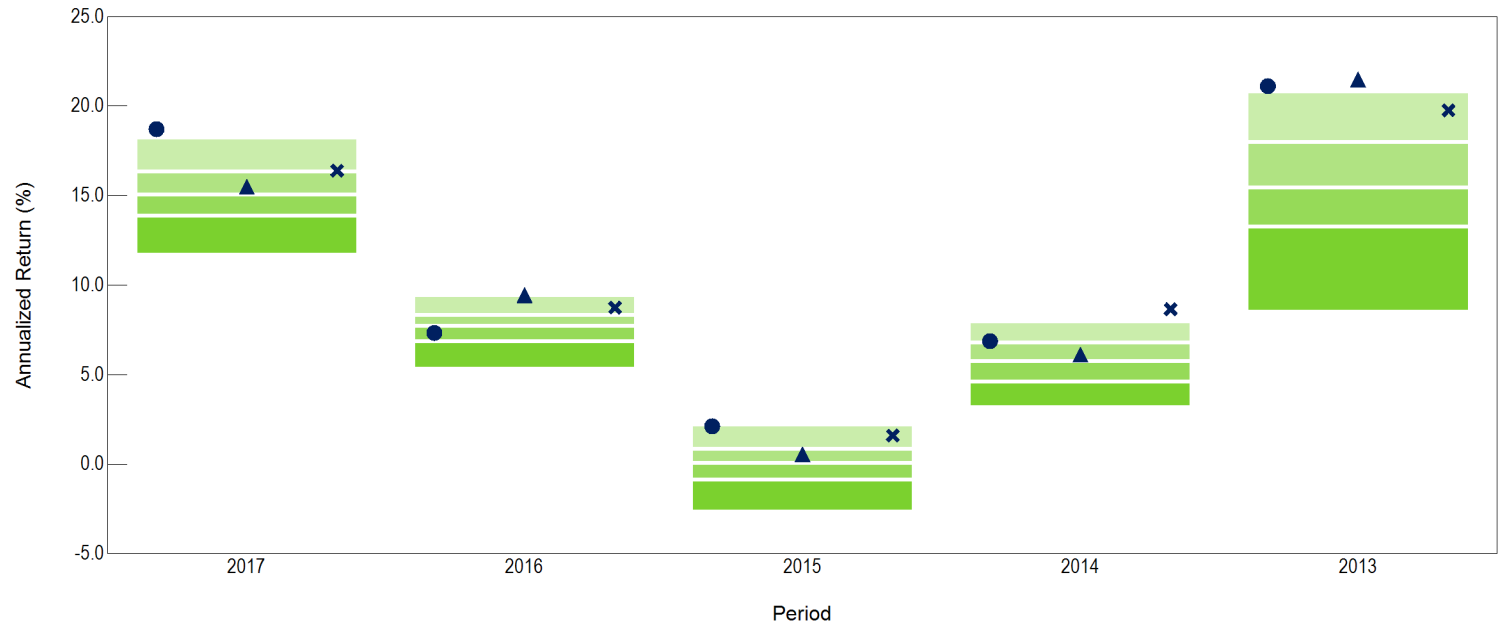


	Return (Rank)											
5th Percentile	4.4		8.4		18.2		8.8		10.6		7.3	
25th Percentile	3.9		7.8		16.4		7.9		9.5		6.3	
Median	3.6		7.2		15.1		7.4		8.7		5.9	
75th Percentile	3.2		6.5		13.9		6.8		7.9		5.4	
95th Percentile	2.5		5.4		11.7		5.8		6.8		4.3	
# of Portfolios	252		251		251		229		211		167	
● OK FIREFIGHTERS	4.4	(5)	8.5	(4)	18.7	(4)	9.2	(4)	11.0	(3)	6.4	(19)
▲ FIREFIIGHTERS Allocation Index	4.0	(22)	7.9	(19)	15.5	(42)	8.3	(11)	10.4	(6)	6.4	(22)
× FIREFIIGHTERS Policy Index	4.1	(16)	7.7	(27)	16.4	(25)	8.7	(6)	10.8	(4)	7.1	(7)



TOTAL PLAN RETURN SUMMARY VS. PEER UNIVERSE

OK FIREFIGHTERS vs. InvestorForce Public DB Gross



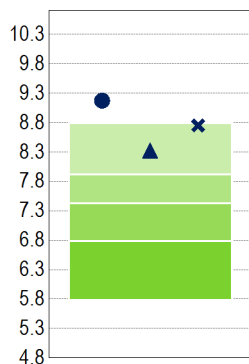
	Return (Rank)									
5th Percentile	18.2		9.4		2.2		8.0		20.8	
25th Percentile	16.4		8.4		0.9		6.8		18.0	
Median	15.1		7.7		0.1		5.8		15.5	
75th Percentile	13.9		6.9		-0.9		4.6		13.3	
95th Percentile	11.7		5.3		-2.6		3.2		8.5	
# of Portfolios	251		305		316		248		231	
● OK FIREFIGHTERS	18.7	(4)	7.3	(61)	2.1	(6)	6.9	(24)	21.1	(3)
▲ FIREFIGHTERS Allocation Index	15.5	(42)	9.4	(5)	0.5	(35)	6.1	(40)	21.5	(3)
× FIREFIGHTERS Policy Index	16.4	(25)	8.7	(15)	1.6	(10)	8.7	(3)	19.8	(12)



TOTAL PLAN RISK STATISTICS VS. PEER UNIVERSE

OK FIREFIGHTERS vs. InvestorForce Public DB Gross 3 Years

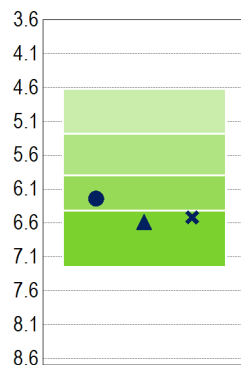
Anlzd Return



● OK FIREFIGHTERS	
Value	9.17
Rank	4
▲ FIREFIGHTERS Allocation Index	
Value	8.32
Rank	11
× FIREFIGHTERS Policy Index	
Value	8.75
Rank	6

Universe	
5th %tile	8.79
25th %tile	7.93
Median	7.44
75th %tile	6.79
95th %tile	5.79

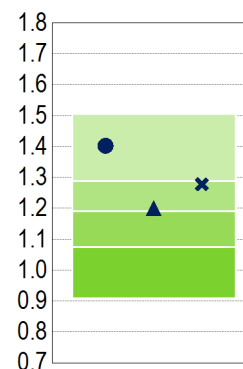
Anlzd Standard Deviation



● OK FIREFIGHTERS	
Value	6.24
Rank	70
▲ FIREFIGHTERS Allocation Index	
Value	6.58
Rank	81
× FIREFIGHTERS Policy Index	
Value	6.52
Rank	79

Universe	
5th %tile	4.62
25th %tile	5.27
Median	5.89
75th %tile	6.41
95th %tile	7.24

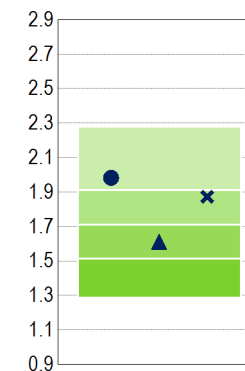
Sharpe Ratio



● OK FIREFIGHTERS	
Value	1.40
Rank	12
▲ FIREFIGHTERS Allocation Index	
Value	1.20
Rank	48
× FIREFIGHTERS Policy Index	
Value	1.28
Rank	30

Universe	
5th %tile	1.51
25th %tile	1.29
Median	1.19
75th %tile	1.08
95th %tile	0.91

Sortino Ratio



● OK FIREFIGHTERS	
Value	1.98
Rank	22
▲ FIREFIGHTERS Allocation Index	
Value	1.61
Rank	65
× FIREFIGHTERS Policy Index	
Value	1.87
Rank	31

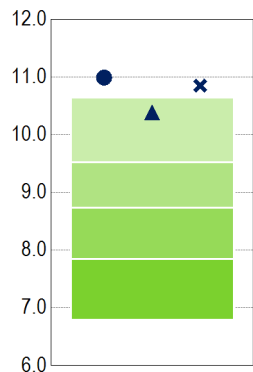
Universe	
5th %tile	2.28
25th %tile	1.92
Median	1.71
75th %tile	1.52
95th %tile	1.29



TOTAL PLAN RISK STATISTICS VS. PEER UNIVERSE

OK FIREFIGHTERS vs. InvestorForce Public DB Gross 5 Years

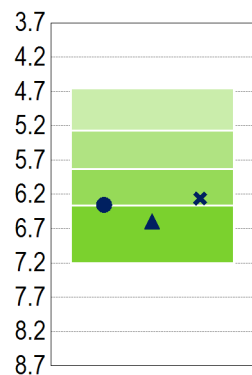
Anlzd Return



● OK FIREFIGHTERS	
Value	10.99
Rank	3
▲ FIREFIGHTERS Allocation Index	
Value	10.38
Rank	6
× FIREFIGHTERS Policy Index	
Value	10.85
Rank	4

Universe	
5th %tile	10.64
25th %tile	9.53
Median	8.74
75th %tile	7.85
95th %tile	6.79

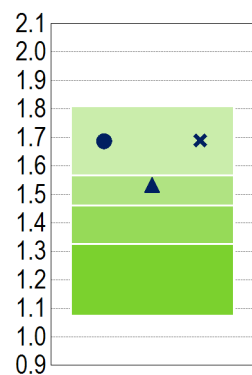
Anlzd Standard Deviation



● OK FIREFIGHTERS	
Value	6.35
Rank	75
▲ FIREFIGHTERS Allocation Ir	
Value	6.59
Rank	85
× FIREFIGHTERS Policy Index	
Value	6.26
Rank	73

Universe	
5th %tile	4.65
25th %tile	5.26
Median	5.82
75th %tile	6.36
95th %tile	7.20

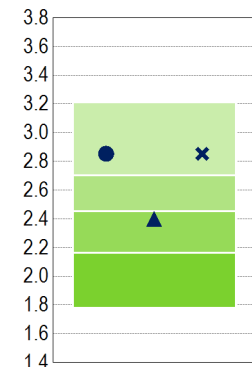
Sharpe Ratio



● OK FIREFIGHTERS	
Value	1.69
Rank	9
▲ FIREFIGHTERS Allocation Ir	
Value	1.53
Rank	34
× FIREFIGHTERS Policy Index	
Value	1.69
Rank	9

Universe	
5th %tile	1.81
25th %tile	1.57
Median	1.46
75th %tile	1.33
95th %tile	1.08

Sortino Ratio



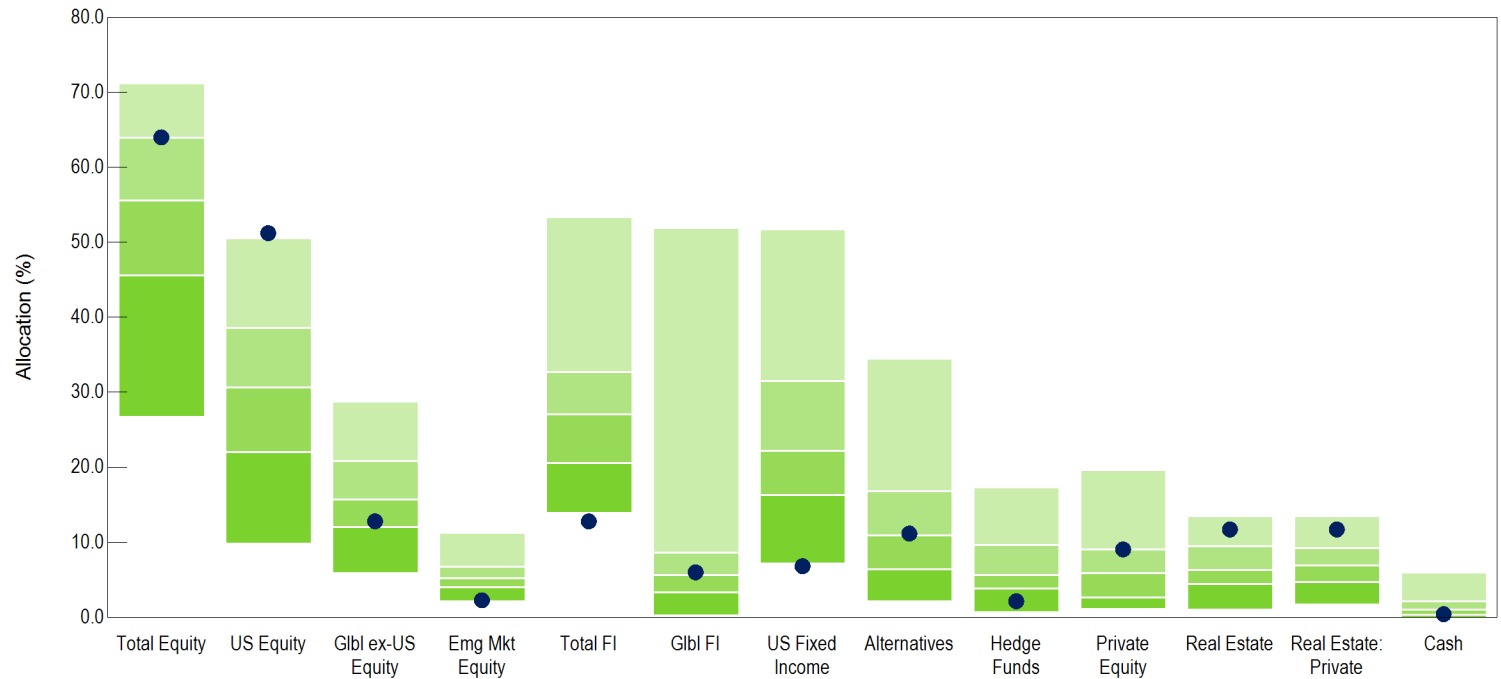
● OK FIREFIGHTERS	
Value	2.85
Rank	18
▲ FIREFIGHTERS Allocation Index	
Value	2.40
Rank	56
× FIREFIGHTERS Policy Index	
Value	2.85
Rank	18

Universe	
5th %tile	3.21
25th %tile	2.71
Median	2.46
75th %tile	2.17
95th %tile	1.79



TOTAL PLAN ALLOCATIONS VS. PEER UNIVERSE

Total Plan Allocation vs. InvestorForce Public DB Gross

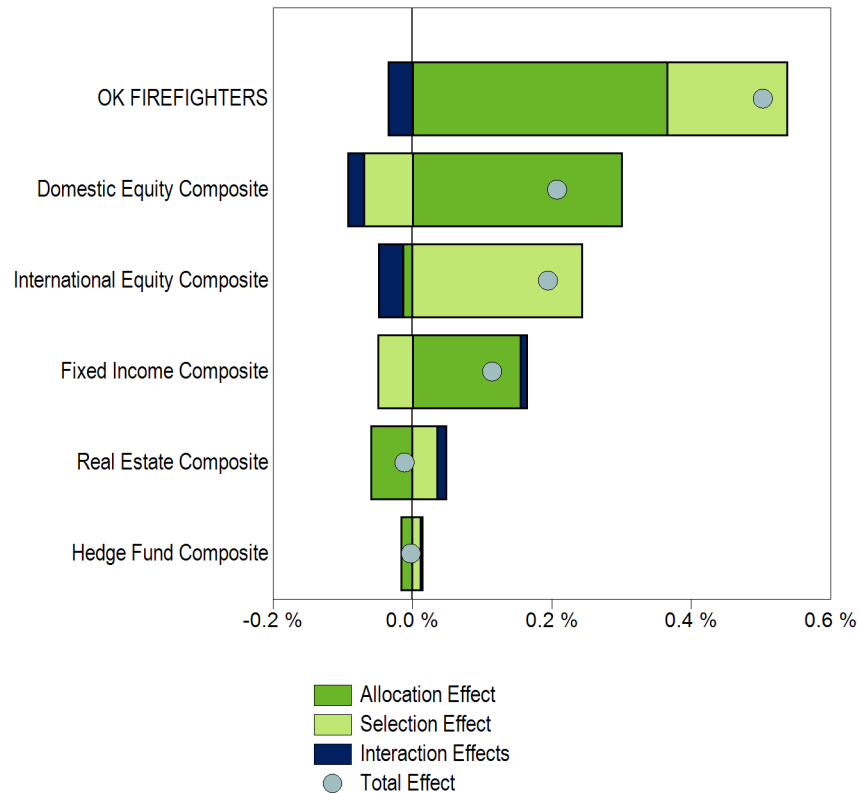


	Allocation (Rank)													
5th Percentile	71.2	50.6	28.7	11.2	53.3	51.9	51.7	34.5	17.3	19.6	13.4	13.5	6.0	--
25th Percentile	64.0	38.6	20.9	6.8	32.8	8.7	31.6	16.9	9.7	9.1	9.5	9.3	2.2	--
Median	55.7	30.7	15.8	5.3	27.1	5.7	22.3	11.0	5.7	5.9	6.4	7.0	1.1	--
75th Percentile	45.6	22.1	12.1	4.1	20.6	3.4	16.4	6.5	3.9	2.7	4.5	4.8	0.4	--
95th Percentile	26.8	9.9	5.9	2.2	14.0	0.4	7.2	2.2	0.7	1.2	1.1	1.7	0.0	--
# of Portfolios	241	189	210	106	241	30	188	147	66	82	161	94	224	--
● OK FIREFIGHTERS	64.0 (26)	51.2 (5)	12.8 (72)	2.2 (95)	12.8 (98)	6.0 (45)	6.8 (97)	11.2 (49)	2.1 (85)	9.0 (26)	11.7 (8)	11.7 (9)	0.4 (76)	--



TOTAL PLAN ATTRIBUTION ANALYSIS

**Attribution Effects Relative to FIREFIGHTERS Policy Index
3 Months Ending December 31, 2017**



Attribution Summary 3 Months Ending December 31, 2017							
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Domestic Equity Composite	6.2%	6.3%	-0.2%	-0.1%	0.3%	0.0%	0.2%
International Equity Composite	5.9%	4.2%	1.6%	0.2%	0.0%	0.0%	0.2%
Fixed Income Composite	0.1%	0.4%	-0.2%	0.0%	0.2%	0.0%	0.1%
Real Estate Composite	2.2%	1.8%	0.4%	0.0%	-0.1%	0.0%	0.0%
Hedge Fund Composite	1.4%	1.1%	0.2%	0.0%	0.0%	0.0%	0.0%
Total	4.4%	3.6%	0.8%	0.2%	0.4%	0.0%	0.5%

*Total returns shown are weighted averages of the returns of the composites shown and their respective benchmarks and may differ from returns shown throughout the report.



TOTAL PLAN ATTRIBUTION ANALYSIS

Performance Attribution		
	Last 3 Mo.	1 Yr
Wtd. Actual Return	4.4%	18.8%
Wtd. Index Return *	4.3%	15.6%
Excess Return	0.1%	3.2%
Selection Effect	0.1%	3.2%
Allocation Effect	0.0%	0.0%
Interaction Effect	0.0%	0.0%
Asset Class Returns		
OK FIREFIGHTERS	4.4%	18.7%
Domestic Equity Composite	6.2%	22.7%
Large Cap Equity Composite	6.3%	23.3%
Small Cap Equity Composite	5.5%	21.4%
Long/Short Equity Composite	-13.2%	295.8%
International Equity Composite	5.9%	36.0%
Emerging Markets Equity Composite	6.1%	37.7%
Fixed Income Composite	0.1%	7.3%
Domestic Fixed Income	0.5%	3.5%
Core Bonds Composite	0.6%	3.8%
Intermediate Bonds Composite	-0.1%	2.3%
Global Fixed Composite	-0.3%	13.3%
Real Estate Composite	2.2%	8.0%
Hedge Fund Composite	1.4%	10.2%
Private Equity Composite	4.3%	19.1%

*Calculated from benchmark returns and weightings of each component.



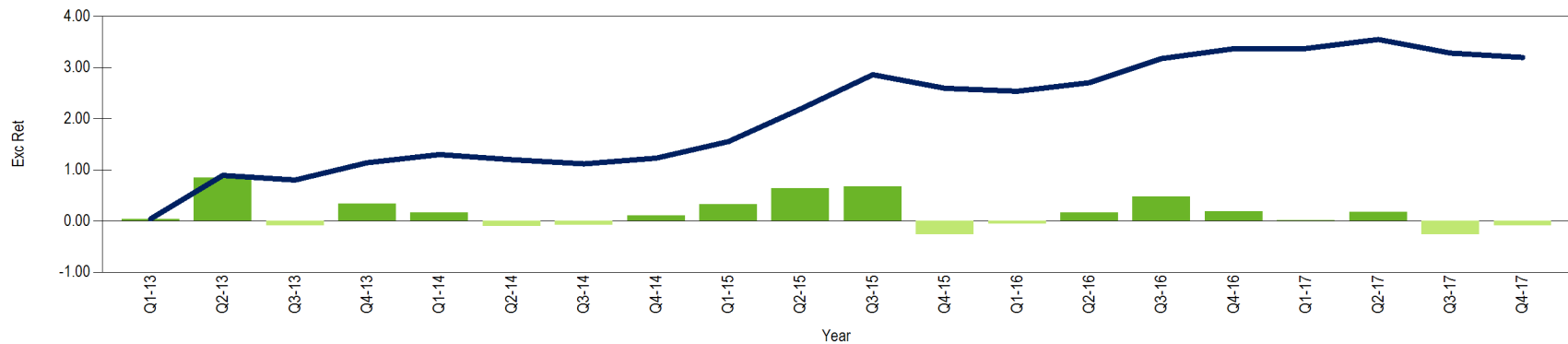
OKLAHOMA POLICE



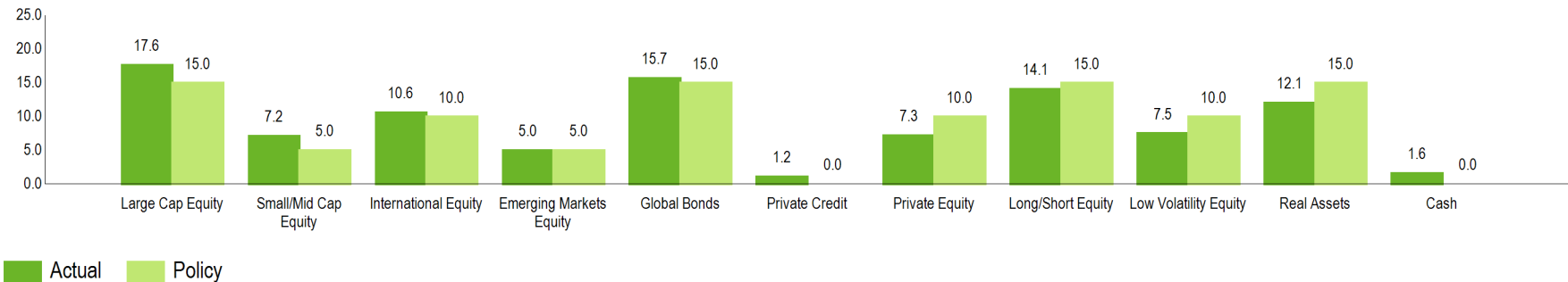
TOTAL FUND PERFORMANCE SUMMARY

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK POLICE	\$2,508,222,307	3.3%	74	6.4%	81	13.2%	87	7.1%	65	8.4%	57	5.4%	75
<i>POLICE Allocation Index</i>		3.3%	68	6.7%	67	13.4%	86	6.4%	88	7.7%	79	5.3%	77
<i>POLICE Policy Index</i>		3.8%	33	7.5%	33	15.5%	43	6.6%	80	7.8%	78	5.5%	70
<i>InvestorForce Public DB Gross Median</i>		3.6%		7.2%		15.1%		7.4%		8.7%		5.9%	

Quarterly and Cumulative Excess Performance

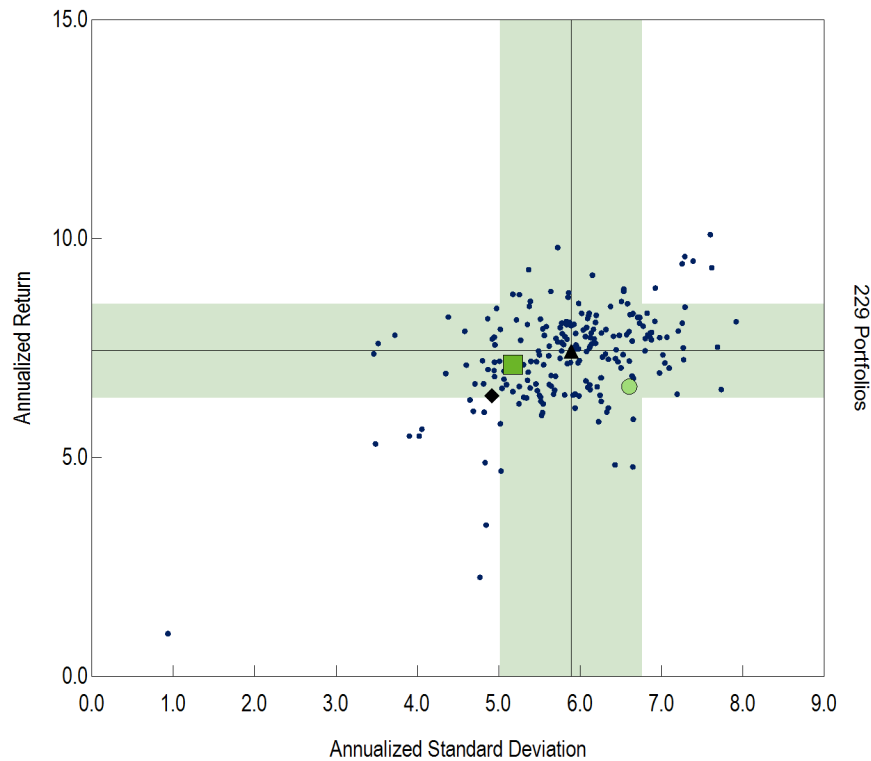


Actual vs Target Allocation (%)



TOTAL FUND RISK/RETURN - 3 YEARS

3 Years Ending December 31, 2017



- OK POLICE
- ◆ POLICE Allocation Index
- POLICE Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Gross

3 Years Ending December 31, 2017

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK POLICE	7.12%	65	5.17%	21
POLICE Allocation Index	6.42%	88	4.91%	11
POLICE Policy Index	6.63%	80	6.61%	82

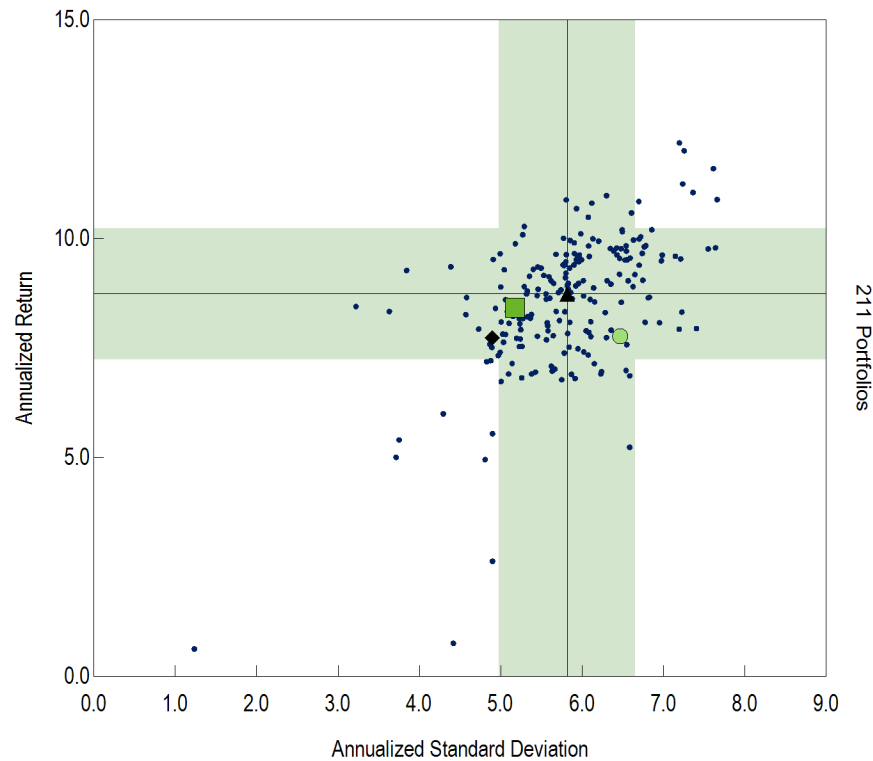
3 Years Ending December 31, 2017

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK POLICE	1.29	25	1.91	26
POLICE Allocation Index	1.22	44	1.60	65
POLICE Policy Index	0.94	93	1.49	78



TOTAL FUND RISK/RETURN - 5 YEARS

5 Years Ending December 31, 2017



- OK POLICE
- ◆ POLICE Allocation Index
- POLICE Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Gross

5 Years Ending December 31, 2017

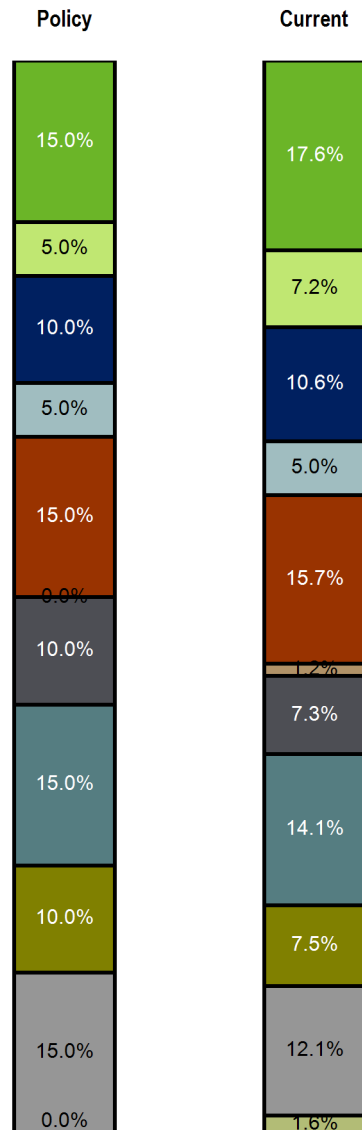
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK POLICE	8.43%	57	5.17%	21
POLICE Allocation Index	7.74%	79	4.89%	9
POLICE Policy Index	7.77%	78	6.47%	78

5 Years Ending December 31, 2017

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK POLICE	1.58	24	2.83	19
POLICE Allocation Index	1.53	36	2.36	58
POLICE Policy Index	1.16	91	2.09	79



TOTAL FUND ASSET ALLOCATION VS. POLICY TARGETS



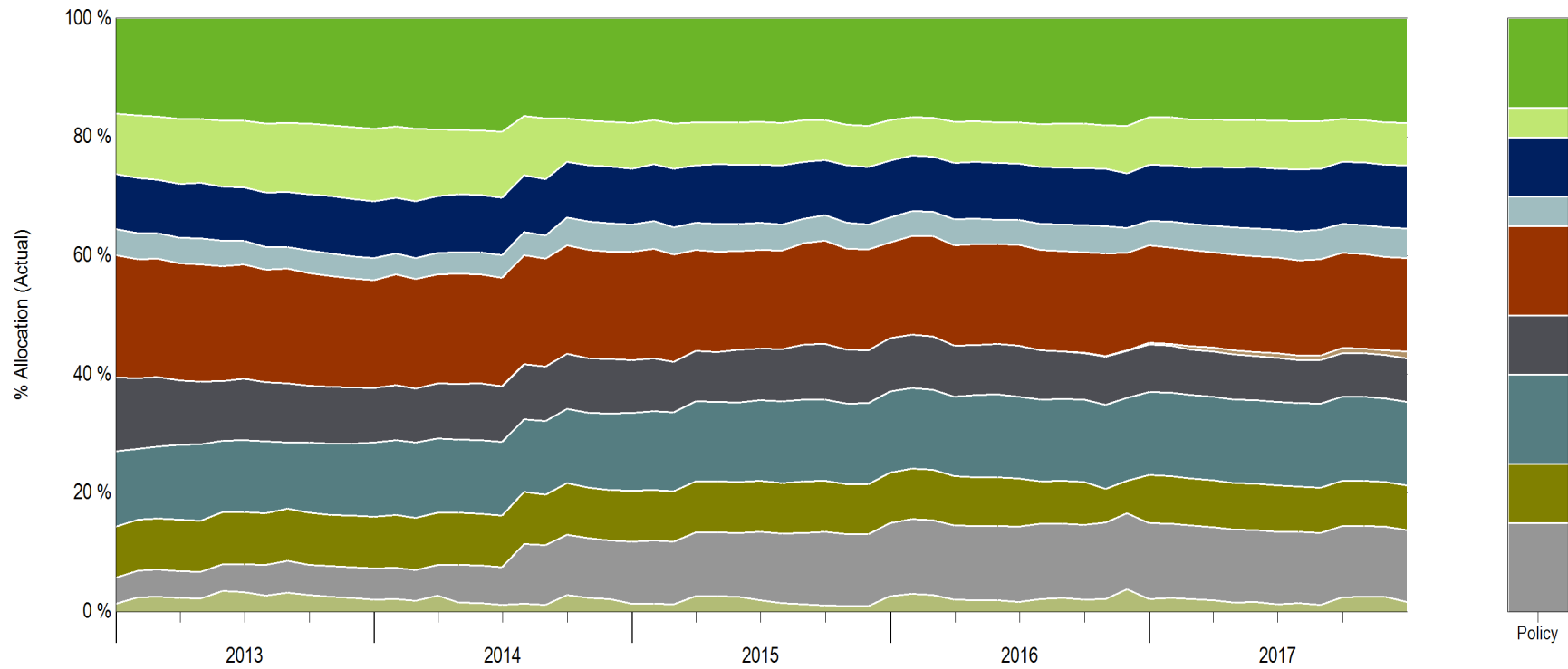
Asset Allocation vs. Target							
	Current	Policy	Current	Difference*	Policy Range	Within Range	
Large Cap Equity	\$442,457,970	15.0%	17.6%	2.6%	10.0% - 20.0%	Yes	
Small/Mid Cap Equity	\$180,089,290	5.0%	7.2%	2.2%	0.0% - 15.0%	Yes	
International Equity	\$266,959,279	10.0%	10.6%	0.6%	5.0% - 15.0%	Yes	
Emerging Markets Equity	\$125,681,823	5.0%	5.0%	0.0%	0.0% - 10.0%	Yes	
Global Bonds	\$394,485,613	15.0%	15.7%	0.7%	10.0% - 20.0%	Yes	
Private Credit	\$28,914,057	0.0%	1.2%	1.2%	0.0% - 5.0%	Yes	
Private Equity	\$182,605,964	10.0%	7.3%	-2.7%	5.0% - 15.0%	Yes	
Long/Short Equity	\$353,598,088	15.0%	14.1%	-0.9%	10.0% - 20.0%	Yes	
Low Volatility Equity	\$189,031,120	10.0%	7.5%	-2.5%	5.0% - 15.0%	Yes	
Real Assets	\$303,250,638	15.0%	12.1%	-2.9%	0.0% - 30.0%	Yes	
Cash	\$41,148,465	0.0%	1.6%	1.6%	0.0% - 5.0%	Yes	
Total	\$2,508,222,307	100.0%	100.0%				

*Difference between Policy and Current Allocation



TOTAL FUND ASSET ALLOCATION HISTORY

Asset Allocation History



- Large Cap Equity
- Emerging Markets Equity
- Private Credit
- Long/Short Equity
- Real Assets
- Small/Mid Cap Equity
- Global Bonds
- Private Equity
- Low Volatility Equity
- Cash
- International Equity



TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
OK POLICE	2,508,222,307	100.0	3.3	74	6.4	81	13.2	87	7.1	65	8.4	57	5.4	75
<i>POLICE Allocation Index</i>			<u>3.3</u>	68	<u>6.7</u>	67	<u>13.4</u>	86	<u>6.4</u>	88	<u>7.7</u>	79	<u>5.3</u>	77
Over/Under			0.0		-0.3		-0.2		0.7		0.7		0.1	
<i>POLICE Policy Index</i>			3.8	33	7.5	33	15.5	43	6.6	80	7.8	78	5.5	70
<i>InvestorForce Public DB Gross Median</i>			3.6		7.2		15.1		7.4		8.7		5.9	
Equity Composite	1,015,188,362	40.5	5.1	59	9.9	64	22.2	61	10.3	42	12.4	44	6.3	46
<i>Russell 3000</i>			<u>6.3</u>	25	<u>11.2</u>	46	<u>21.1</u>	66	<u>11.1</u>	30	<u>15.6</u>	10	<u>8.6</u>	11
Over/Under			-1.2		-1.3		1.1		-0.8		-3.2		-2.3	
<i>eV All Global Equity Gross Median</i>			5.4		10.9		23.5		9.9		12.1		6.0	
Domestic Equity Composite	622,547,260	24.8	5.5	58	9.6	67	18.9	53	11.1	44	15.0	57	8.8	61
<i>S&P 500</i>			<u>6.6</u>	35	<u>11.4</u>	42	<u>21.8</u>	37	<u>11.4</u>	37	<u>15.8</u>	40	<u>8.5</u>	70
Over/Under			-1.1		-1.8		-2.9		-0.3		-0.8		0.3	
<i>eV All US Equity Gross Median</i>			5.9		10.8		19.5		10.7		15.3		9.3	
<i>Northern Trust Russell 1000 Index Fund</i>	442,457,970	17.6	6.6	59	11.3	61	21.6	56	11.2	41	15.7	46	8.6	64
<i>Russell 1000</i>			<u>6.6</u>	59	<u>11.4</u>	59	<u>21.7</u>	55	<u>11.2</u>	41	<u>15.7</u>	46	<u>8.6</u>	65
Over/Under			0.0		-0.1		-0.1		0.0		0.0		0.0	
<i>eV US Large Cap Core Equity Gross Median</i>			6.8		11.7		22.1		10.9		15.6		8.9	
<i>Boston Partners</i>	92,101,520	3.7	4.9	48	7.5	72	12.2	63	10.8	32	14.1	55	10.8	21
<i>Russell 2500 Value</i>			<u>4.3</u>	60	<u>8.2</u>	63	<u>10.4</u>	79	<u>9.3</u>	62	<u>13.3</u>	72	<u>8.8</u>	73
Over/Under			0.6		-0.7		1.8		1.5		0.8		2.0	
<i>eV US Small-Mid Cap Value Equity Gross Median</i>			4.8		9.3		13.7		9.6		14.4		9.9	
<i>Cortina Small Cap Growth</i>	87,987,770	3.5	1.0	98	4.0	99	15.3	91	10.6	60	--	--	--	--
<i>Russell 2000 Growth</i>			<u>4.6</u>	58	<u>11.1</u>	53	<u>22.2</u>	62	<u>10.3</u>	64	<u>15.2</u>	63	<u>9.2</u>	61
Over/Under			-3.6		-7.1		-6.9		0.3					
<i>eV US Small Cap Growth Equity Gross Median</i>			4.9		11.3		24.3		11.6		15.8		9.8	

Northern Trust Russell 1000 Index fund was Mellon Capital Passive Index fund before 10/30/2014.



TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
International Equity Composite	392,641,102	15.7	4.4	64	10.5	72	28.1	66	9.0	65	7.5	82	1.1	98
MSCI ACWI ex USA			<u>5.0</u>	52	<u>11.5</u>	57	<u>27.2</u>	75	<u>7.8</u>	83	<u>6.8</u>	90	<u>1.8</u>	93
Over/Under			-0.6		-1.0		0.9		1.2		0.7		-0.7	
eV All ACWI ex-US Equity Gross Median			5.0		11.9		30.6		9.9		9.2		4.1	
Mondrian Int'l Value	143,574,572	5.7	3.4	71	9.1	65	22.3	79	7.3	74	8.5	60	2.5	64
MSCI ACWI ex USA			<u>5.0</u>	34	<u>11.5</u>	34	<u>27.2</u>	42	<u>7.8</u>	67	<u>6.8</u>	84	<u>1.8</u>	86
Over/Under			-1.6		-2.4		-4.9		-0.5		1.7		0.7	
eV ACWI ex-US Value Equity Gross Median			4.3		10.5		26.0		9.5		9.0		3.0	
Baring Focused Intl Equity	123,384,707	4.9	5.4	41	10.9	68	29.4	58	11.8	31	8.6	65	--	--
MSCI ACWI ex USA			<u>5.0</u>	52	<u>11.5</u>	57	<u>27.2</u>	75	<u>7.8</u>	83	<u>6.8</u>	90	<u>1.8</u>	93
Over/Under			0.4		-0.6		2.2		4.0		1.8			
eV All ACWI ex-US Equity Gross Median			5.0		11.9		30.6		9.9		9.2		4.1	
Wasatch EM Small Cap	38,720,102	1.5	7.6	52	15.5	46	39.0	41	7.4	87	4.3	97	--	--
MSCI Emerging Markets Small Cap			<u>9.2</u>	26	<u>15.4</u>	47	<u>33.8</u>	78	<u>8.4</u>	77	<u>5.4</u>	80	<u>2.8</u>	99
Over/Under			-1.6		0.1		5.2		-1.0		-1.1			
eV Emg Mkts Small Cap Equity Gross Median			7.7		15.0		36.6		10.6		8.2		6.1	
AB EM Strategic Core Equity	86,961,721	3.5	3.4	--	10.3	--	32.0	--	--	--	--	--	--	--
MSCI Emerging Markets			<u>7.4</u>	--	<u>15.9</u>	--	<u>37.3</u>	--	<u>9.1</u>	--	<u>4.3</u>	--	<u>1.7</u>	--
Over/Under			-4.0		-5.6		-5.3							
Fixed Income Composite	394,485,613	15.7	0.9	61	2.5	66	6.6	68	3.8	42	3.2	43	5.1	38
BBgBarc US Aggregate TR			<u>0.4</u>	85	<u>1.2</u>	91	<u>3.5</u>	90	<u>2.2</u>	74	<u>2.1</u>	59	<u>4.0</u>	58
Over/Under			0.5		1.3		3.1		1.6		1.1		1.1	
eV All Global Fixed Inc Gross Median			1.0		3.0		8.0		3.3		2.8		4.3	
Oaktree	123,392,080	4.9	0.8	30	2.7	21	7.2	21	6.1	10	5.8	10	7.0	17
BBgBarc US Aggregate TR			<u>0.4</u>	54	<u>1.2</u>	59	<u>3.5</u>	59	<u>2.2</u>	65	<u>2.1</u>	63	<u>4.0</u>	61
Over/Under			0.4		1.5		3.7		3.9		3.7		3.0	
Agincourt	172,704,414	6.9	0.7	37	1.6	45	4.2	47	2.8	50	2.6	51	4.5	49
BBgBarc US Aggregate TR			<u>0.4</u>	54	<u>1.2</u>	59	<u>3.5</u>	59	<u>2.2</u>	65	<u>2.1</u>	63	<u>4.0</u>	61
Over/Under			0.3		0.4		0.7		0.6		0.5		0.5	
eV All US Fixed Inc Gross Median			0.5		1.5		4.0		2.8		2.6		4.5	
Loomis Sayles	98,389,119	3.9	1.3	35	3.8	27	10.1	27	3.1	55	1.1	75	--	--
Citi WGBI			<u>1.0</u>	49	<u>2.9</u>	53	<u>7.5</u>	59	<u>1.7</u>	84	<u>0.1</u>	91	<u>2.7</u>	92
Over/Under			0.3		0.9		2.6		1.4		1.0			
eV All Global Fixed Inc Gross Median			1.0		3.0		8.0		3.3		2.8		4.3	



TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Long/Short	353,598,088	14.1	2.4	59	5.6	59	12.1	54	5.1	59	7.6	56	--	--
HFRI FOF: Strategic Index			<u>2.7</u>	55	<u>5.6</u>	59	<u>11.5</u>	56	<u>3.5</u>	75	<u>4.8</u>	80	<u>1.1</u>	93
Over/Under			-0.3		0.0		0.6		1.6		2.8			
eV Alt Fundamental - Long/Short Equity Median			3.0		6.7		13.2		6.2		8.4		5.8	
Grosvenor	353,598,088	14.1	2.4	59	5.6	59	12.1	54	5.1	59	7.6	56	3.5	79
HFRI FOF: Strategic Index			<u>2.7</u>	55	<u>5.6</u>	59	<u>11.5</u>	56	<u>3.5</u>	75	<u>4.8</u>	80	<u>1.1</u>	93
Over/Under			-0.3		0.0		0.6		1.6		2.8		2.4	
eV Alt Fundamental - Long/Short Equity Median			3.0		6.7		13.2		6.2		8.4		5.8	
Total Real Assets	303,250,638	12.1	3.3	--	4.9	--	6.6	--	6.4	--	7.9	--	--	--
Total Core Real Estate	162,760,658	6.5	2.0	--	3.9	--	8.0	--	11.0	--	12.1	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			-0.1		-0.1		0.4		0.6		0.6			
Columbus Square	4,524,586	0.2	-0.3	--	1.6	--	8.8	--	14.5	--	15.6	--	15.7	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			-2.4		-2.4		1.2		4.1		4.1		10.7	
JP Morgan	119,487,823	4.8	1.8	--	3.6	--	7.2	--	10.2	--	11.5	--	5.6	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			-0.3		-0.4		-0.4		-0.2		0.0		0.6	
Blackstone Property Partners	38,748,249	1.5	2.9	--	5.2	--	10.5	--	11.5	--	--	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			0.8		1.2		2.9		1.1		--		--	
Private Real Estate	57,848,164	2.3	3.9	--	3.7	--	9.1	--	10.9	--	11.7	--	--	--
Siguler Guff Distressed RE	6,931,463	0.3	6.0	--	23.6	--	26.9	--	19.2	--	20.2	--	--	--
TA Associates Realty X	13,662,127	0.5	5.6	--	9.7	--	14.6	--	10.6	--	--	--	--	--
Cerberus Real Estate Fund III	16,137,716	0.6	2.2	--	-3.2	--	1.3	--	10.6	--	--	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			0.1		-7.2		-6.3		0.2		--		--	
Hall Capital Fund III	5,736,530	0.2	1.1	--	-16.8	--	21.1	--	-2.4	--	--	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			-1.0		-20.8		13.5		-12.8		--		--	

*The Private Real Estate returns are time weighted.



TOTAL FUND PERFORMANCE DETAIL

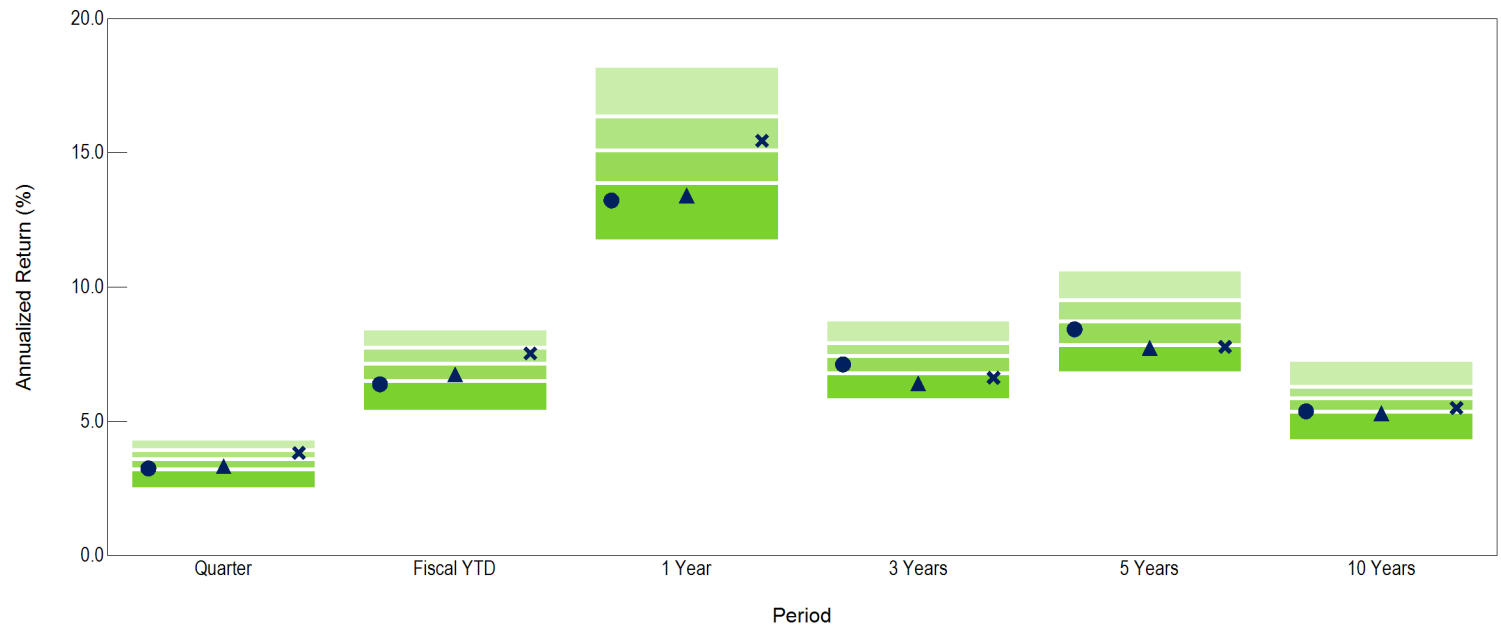
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Siguler Guff Distressed RE II	7,984,941	0.3	6.8	--	13.6	--	12.1	--	5.6	--	--	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			4.7		9.6		4.5		-4.8					
Cerberus Real Estate Partners IV	4,588,763	0.2	-2.8	--	-8.6	--	-63.1	--	--	--	--	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under			-4.9		-12.6		-70.7							
Siguler Guff Dist. Real Estate Opp. II B	2,806,624	0.1	--	--	--	--	--	--	--	--	--	--	--	--
NCREIF ODCE			<u>2.1</u>	--	<u>4.0</u>	--	<u>7.6</u>	--	<u>10.4</u>	--	<u>11.5</u>	--	<u>5.0</u>	--
Over/Under														
Mt Lucas Peak	30,460,282	1.2	4.5	--	3.6	--	-1.5	--	1.0	--	8.5	--	3.4	--
Gresham Tap Fund	52,181,534	2.1	6.1	--	10.3	--	4.6	--	-4.8	--	--	--	--	--
Total Low Volatility Strategies	189,031,120	7.5	1.3	--	1.6	--	3.7	--	1.0	--	4.0	--	--	--
HFRI FOF: Conservative Index			<u>1.1</u>	--	<u>2.5</u>	--	<u>4.1</u>	--	<u>2.1</u>	--	<u>3.4</u>	--	<u>0.9</u>	--
Over/Under			0.2		-0.9		-0.4		-1.1		0.6			
PAAMCO	128,211,710	5.1	1.1	70	1.5	89	4.6	77	1.3	80	4.2	69	2.3	73
HFRI FOF: Conservative Index			<u>1.1</u>	69	<u>2.5</u>	76	<u>4.1</u>	83	<u>2.1</u>	63	<u>3.4</u>	75	<u>0.9</u>	92
Over/Under			0.0		-1.0		0.5		-0.8		0.8		1.4	
eV Alt Fund of Funds - All Single Strategy Median			1.7		4.5		8.6		2.9		5.4		3.0	
Wellington Global Total Return	60,819,410	2.4	1.6	55	1.7	88	1.8	92	--	--	--	--	--	--
HFRI FOF Conservative (1 Mo Lag)			<u>1.0</u>	73	<u>1.8</u>	87	<u>4.4</u>	82	<u>2.1</u>	64	<u>3.5</u>	75	<u>0.9</u>	92
Over/Under			0.6		-0.1		-2.6							
eV Alt Fund of Funds - All Single Strategy Median			1.7		4.5		8.6		2.9		5.4		3.0	
Private Credit	28,914,057	1.2	3.4	--	7.5	--	12.8	--	--	--	--	--	--	--
Cambridge Associates US All PE			<u>0.0</u>	--	<u>3.8</u>	--	<u>11.7</u>	--	<u>10.1</u>	--	<u>12.5</u>	--	<u>9.2</u>	--
Over/Under			3.4		3.7		1.1							
LBC IV	15,820,269	0.6	3.4	--	7.4	--	12.2	--	--	--	--	--	--	--
Cambridge Associates US All PE			<u>0.0</u>	--	<u>3.8</u>	--	<u>11.7</u>	--	<u>10.1</u>	--	<u>12.5</u>	--	<u>9.2</u>	--
Over/Under			3.4		3.6		0.5							

*Returns are gross of manager fees.



TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

OK POLICE vs. InvestorForce Public DB Gross

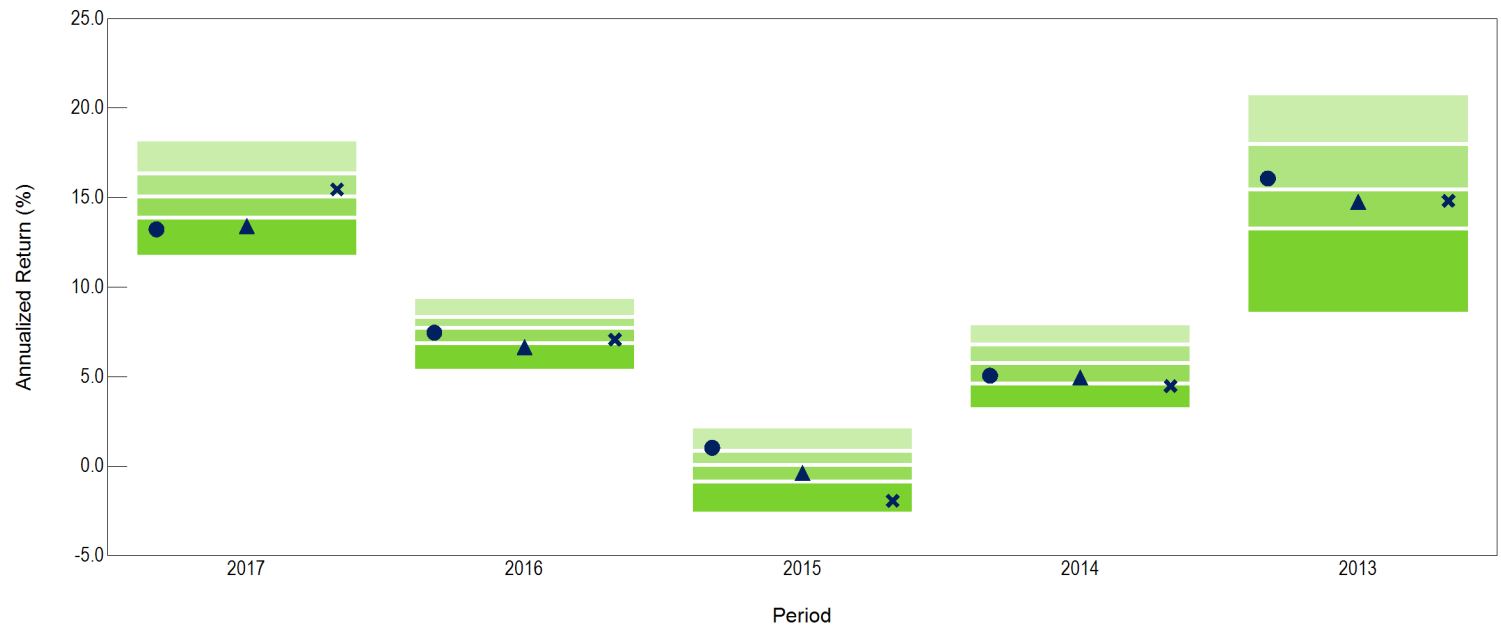


	Return (Rank)											
5th Percentile	4.4		8.4		18.2		8.8		10.6		7.3	
25th Percentile	3.9		7.8		16.4		7.9		9.5		6.3	
Median	3.6		7.2		15.1		7.4		8.7		5.9	
75th Percentile	3.2		6.5		13.9		6.8		7.9		5.4	
95th Percentile	2.5		5.4		11.7		5.8		6.8		4.3	
# of Portfolios	252		251		251		229		211		167	
● OK POLICE	3.3	(74)	6.4	(81)	13.2	(87)	7.1	(65)	8.4	(57)	5.4	(75)
▲ POLICE Allocation Index	3.3	(68)	6.7	(67)	13.4	(86)	6.4	(88)	7.7	(79)	5.3	(77)
× POLICE Policy Index	3.8	(33)	7.5	(33)	15.5	(43)	6.6	(80)	7.8	(78)	5.5	(70)



TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

OK POLICE vs. InvestorForce Public DB Gross



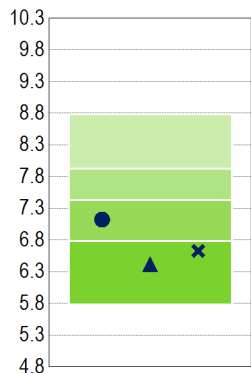
	Return (Rank)									
5th Percentile	18.2		9.4		2.2		8.0		20.8	
25th Percentile	16.4		8.4		0.9		6.8		18.0	
Median	15.1		7.7		0.1		5.8		15.5	
75th Percentile	13.9		6.9		-0.9		4.6		13.3	
95th Percentile	11.7		5.3		-2.6		3.2		8.5	
# of Portfolios	251		305		316		248		231	
● OK POLICE	13.2	(87)	7.5	(57)	1.0	(21)	5.1	(68)	16.1	(46)
▲ POLICE Allocation Index	13.4	(86)	6.7	(80)	-0.4	(63)	5.0	(70)	14.8	(59)
× POLICE Policy Index	15.5	(43)	7.1	(70)	-1.9	(89)	4.5	(79)	14.8	(59)



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

OK POLICE vs. InvestorForce Public DB Gross 3 Years

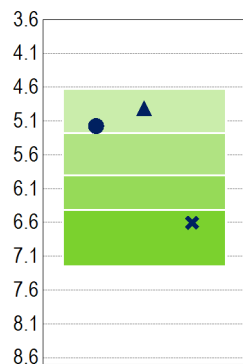
Anlzd Return



● OK POLICE	
Value	7.12
Rank	65
▲ POLICE Allocation Index	
Value	6.42
Rank	88
× POLICE Policy Index	
Value	6.63
Rank	80

Universe	
5th %tile	8.79
25th %tile	7.93
Median	7.44
75th %tile	6.79
95th %tile	5.79

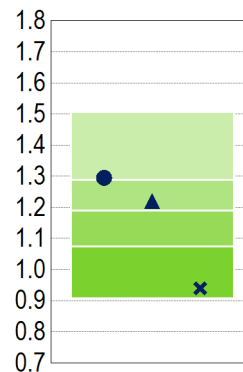
Anlzd Standard Deviation



● OK POLICE	
Value	5.17
Rank	21
▲ POLICE Allocation Index	
Value	4.91
Rank	11
× POLICE Policy Index	
Value	6.61
Rank	82

Universe	
5th %tile	4.62
25th %tile	5.27
Median	5.89
75th %tile	6.41
95th %tile	7.24

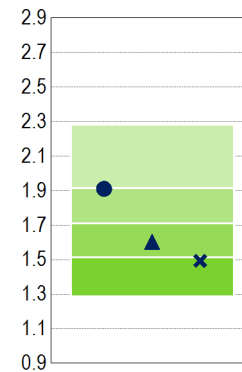
Sharpe Ratio



● OK POLICE	
Value	1.29
Rank	25
▲ POLICE Allocation Index	
Value	1.22
Rank	44
× POLICE Policy Index	
Value	0.94
Rank	93

Universe	
5th %tile	1.51
25th %tile	1.29
Median	1.19
75th %tile	1.08
95th %tile	0.91

Sortino Ratio



● OK POLICE	
Value	1.91
Rank	26
▲ POLICE Allocation Index	
Value	1.60
Rank	65
× POLICE Policy Index	
Value	1.49
Rank	78

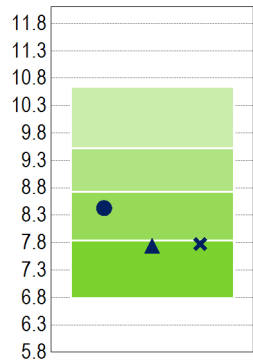
Universe	
5th %tile	2.28
25th %tile	1.92
Median	1.71
75th %tile	1.52
95th %tile	1.29



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

OK POLICE vs. InvestorForce Public DB Gross 5 Years

Anlzd Return

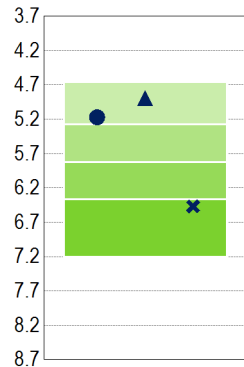


- OK POLICE
 - Value 8.43
 - Rank 57
- ▲ POLICE Allocation Index
 - Value 7.74
 - Rank 79
- × POLICE Policy Index
 - Value 7.77
 - Rank 78

Universe

5th %tile	10.64
25th %tile	9.53
Median	8.74
75th %tile	7.85
95th %tile	6.79

Anlzd Standard Deviation

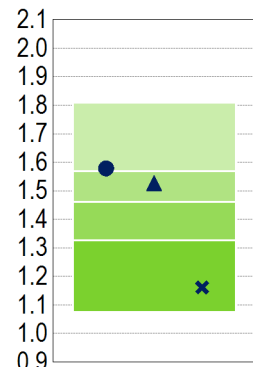


- OK POLICE
 - Value 5.17
 - Rank 21
- ▲ POLICE Allocation Index
 - Value 4.89
 - Rank 9
- × POLICE Policy Index
 - Value 6.47
 - Rank 78

Universe

5th %tile	4.65
25th %tile	5.26
Median	5.82
75th %tile	6.36
95th %tile	7.20

Sharpe Ratio

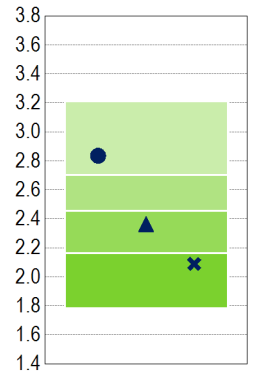


- OK POLICE
 - Value 1.58
 - Rank 24
- ▲ POLICE Allocation Index
 - Value 1.53
 - Rank 36
- × POLICE Policy Index
 - Value 1.16
 - Rank 91

Universe

5th %tile	1.81
25th %tile	1.57
Median	1.46
75th %tile	1.33
95th %tile	1.08

Sortino Ratio



- OK POLICE
 - Value 2.83
 - Rank 19
- ▲ POLICE Allocation Index
 - Value 2.36
 - Rank 58
- × POLICE Policy Index
 - Value 2.09
 - Rank 79

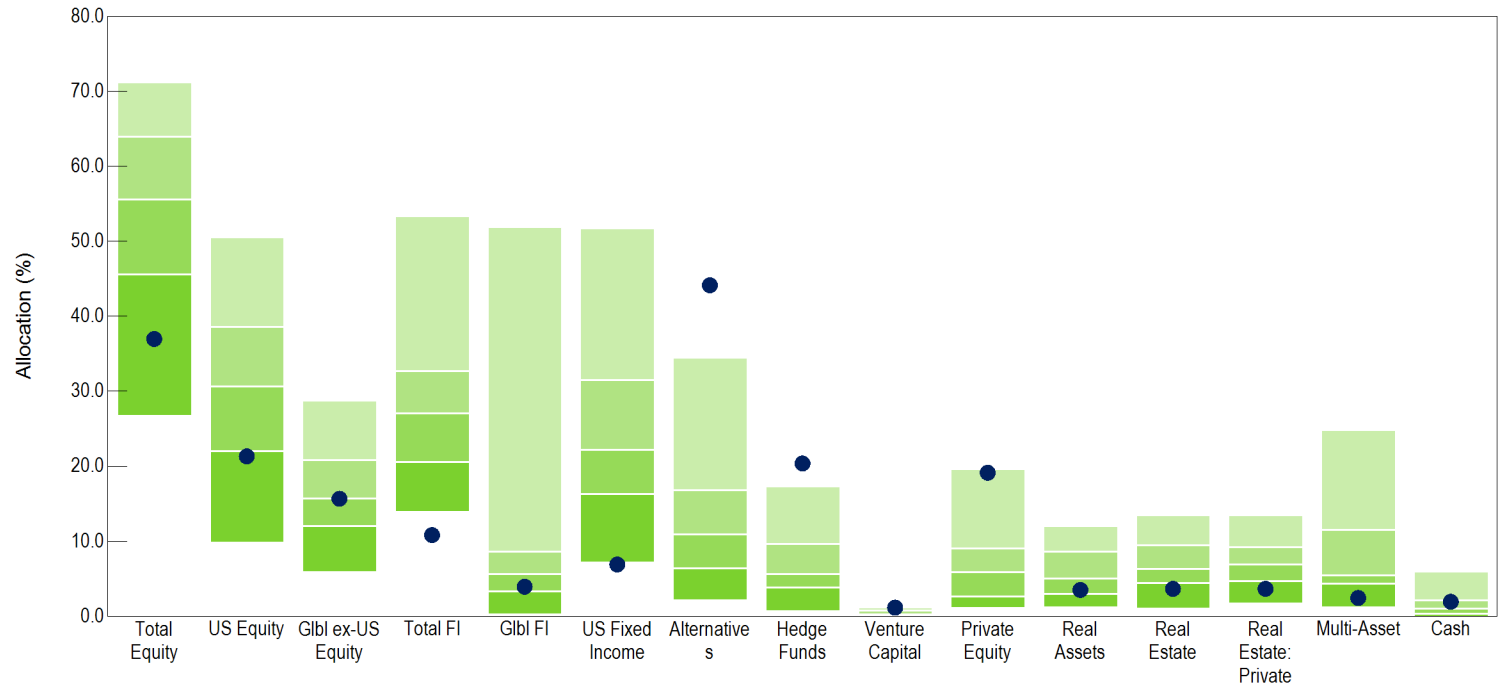
Universe

5th %tile	3.21
25th %tile	2.71
Median	2.46
75th %tile	2.17
95th %tile	1.79



TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE

Total Plan Allocation vs. InvestorForce Public DB Gross

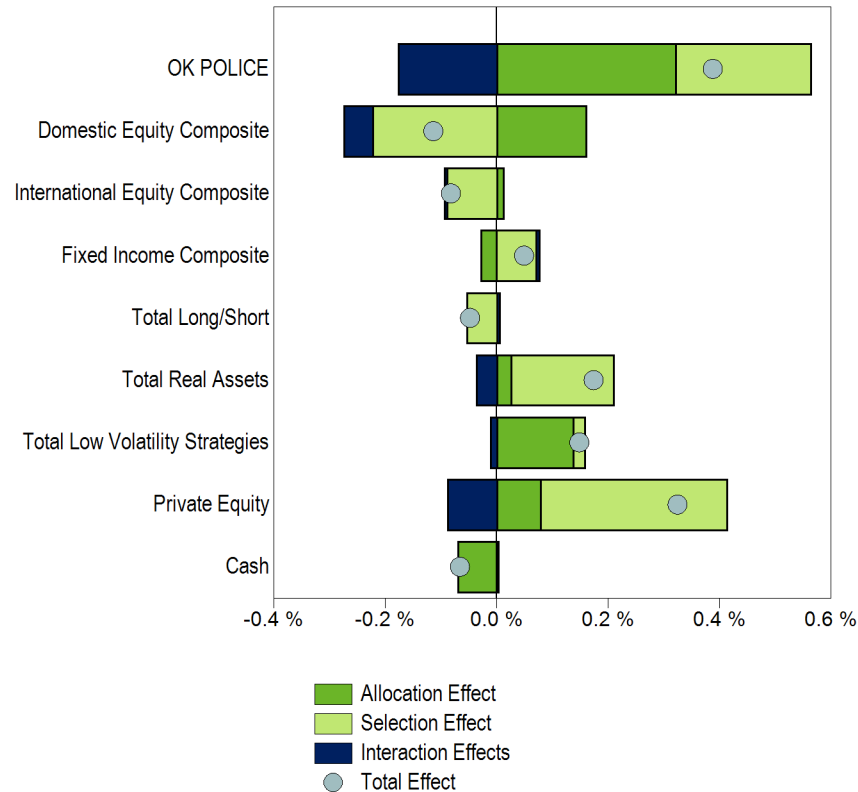


	Allocation (Rank)															
5th Percentile	71.2	50.6	28.7	53.3	51.9	51.7	34.5	17.3	1.1	19.6	12.0	13.4	13.5	24.9	6.0	--
25th Percentile	64.0	38.6	20.9	32.8	8.7	31.6	16.9	9.7	0.8	9.1	8.7	9.5	9.3	11.6	2.2	--
Median	55.7	30.7	15.8	27.1	5.7	22.3	11.0	5.7	0.3	5.9	5.1	6.4	7.0	5.5	1.1	--
75th Percentile	45.6	22.1	12.1	20.6	3.4	16.4	6.5	3.9	0.2	2.7	3.1	4.5	4.8	4.4	0.4	--
95th Percentile	26.8	9.9	5.9	14.0	0.4	7.2	2.2	0.7	0.1	1.2	1.3	1.1	1.7	1.3	0.0	--
# of Portfolios	241	189	210	241	30	188	147	66	23	82	52	161	94	76	224	--
● OK POLICE	37.0 (90)	21.3 (78)	15.7 (52)	10.8 (98)	3.9 (66)	6.9 (96)	44.1 (3)	20.4 (4)	1.1 (5)	19.1 (7)	3.5 (73)	3.6 (84)	3.6 (88)	2.4 (91)	1.9 (33)	--



TOTAL FUND ATTRIBUTION ANALYSIS

**Attribution Effects Relative to POLICE Policy Index
3 Months Ending December 31, 2017**



**Attribution Summary
3 Months Ending December 31, 2017**

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Domestic Equity Composite	5.5%	6.6%	-1.1%	-0.2%	0.2%	-0.1%	-0.1%
International Equity Composite	4.4%	5.0%	-0.6%	-0.1%	0.0%	0.0%	-0.1%
Fixed Income Composite	0.9%	0.4%	0.5%	0.1%	0.0%	0.0%	0.0%
Total Long/Short	2.4%	2.7%	-0.4%	-0.1%	0.0%	0.0%	0.0%
Total Real Assets	3.3%	2.1%	1.2%	0.2%	0.0%	0.0%	0.2%
Total Low Volatility Strategies	1.3%	1.1%	0.1%	0.0%	0.1%	0.0%	0.1%
Private Equity	3.3%	0.0%	3.3%	0.3%	0.1%	-0.1%	0.3%
Cash	0.4%	0.3%	0.1%	0.0%	-0.1%	0.0%	-0.1%
Total	3.3%	3.0%	0.2%	0.2%	0.3%	-0.2%	0.4%

*Total returns shown are weighted averages of the composites shown and their respective benchmarks and may differ from returns shown throughout the report.



TOTAL FUND ATTRIBUTION ANALYSIS

Performance Attribution		
	Last 3 Mo.	1 Yr
Wtd. Actual Return	3.3%	13.2%
Wtd. Index Return *	3.0%	13.4%
Excess Return	0.2%	-0.2%
Selection Effect	0.2%	-0.3%
Allocation Effect	0.3%	0.8%
Interaction Effect	-0.2%	0.0%
Asset Class Returns		
OK POLICE	3.3%	13.2%
Equity Composite	5.1%	22.2%
Domestic Equity Composite	5.5%	18.9%
International Equity Composite	4.4%	28.1%
Fixed Income Composite	0.9%	6.6%
Total Long/Short	2.4%	12.1%
Total Real Assets	3.3%	6.6%
Total Core Real Estate	2.0%	8.0%
Private Real Estate	3.9%	9.1%
Total Low Volatility Strategies	1.3%	3.7%
Private Credit	3.4%	12.8%
Private Equity	3.3%	9.5%
Cash	0.4%	1.6%

*Calculated from benchmark returns and weightings of each component.



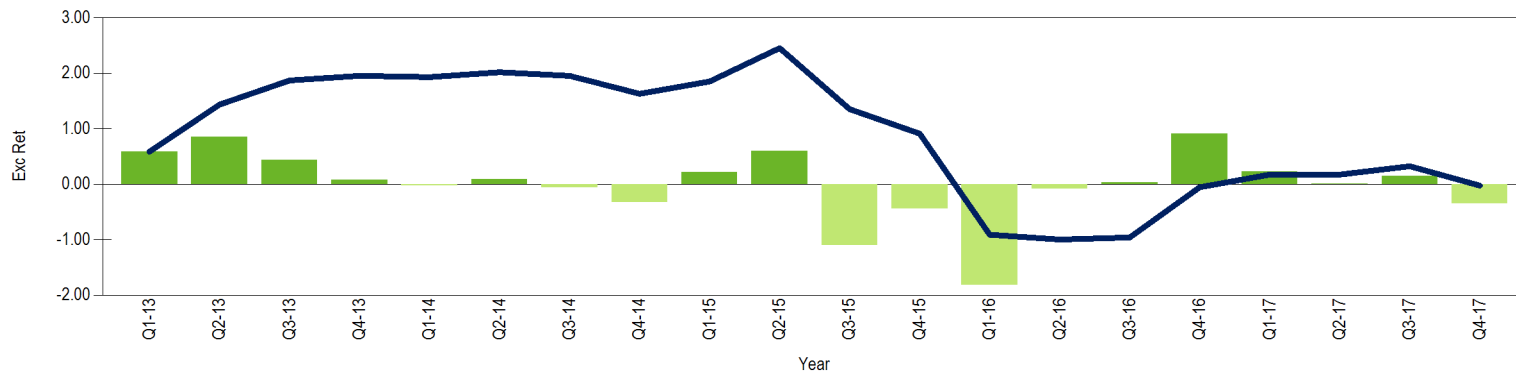
OKLAHOMA LAW



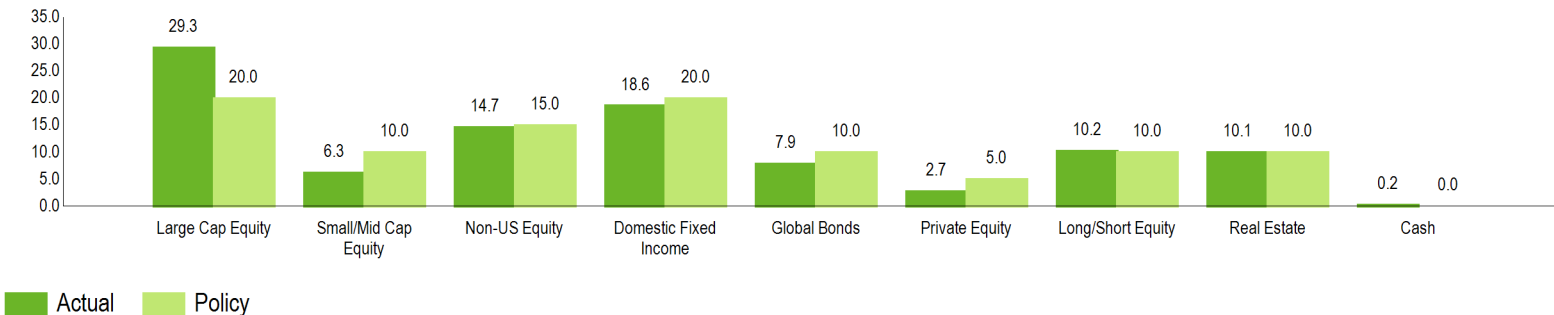
TOTAL FUND PERFORMANCE SUMMARY

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK LAW	\$989,496,003	3.4%	67	7.2%	50	14.7%	59	7.0%	71	8.8%	48	5.9%	49
<i>LAW Allocation Index</i>		3.7%	42	7.4%	41	14.6%	60	7.6%	42	8.8%	47	6.0%	45
<i>LAW Policy Index</i>		3.3%	71	6.7%	67	13.4%	86	7.6%	44	9.4%	32	6.3%	30
<i>InvestorForce Public DB Gross Median</i>		3.6%		7.2%		15.1%		7.4%		8.7%		5.9%	

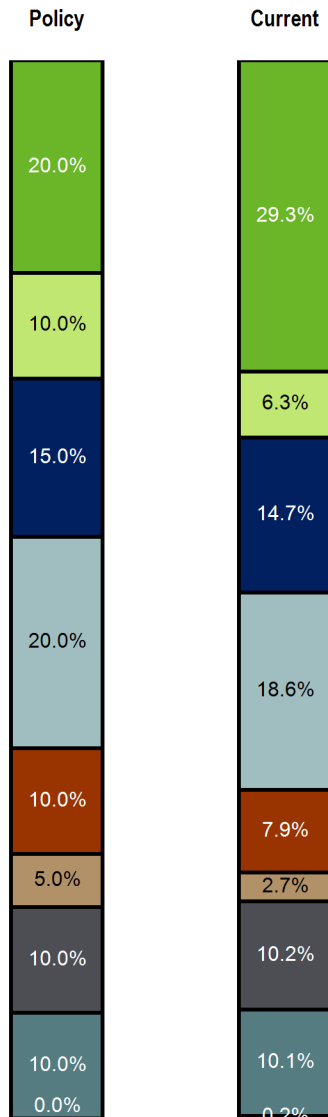
Quarterly and Cumulative Excess Performance



Actual vs Target Allocation (%)



TOTAL FUND ASSET ALLOCATION VS. POLICY TARGETS



Asset Allocation vs. Target							
	Current	Policy	Current	Difference*	Policy Range	Within Range	
Large Cap Equity	\$290,262,340	20.0%	29.3%	9.3%	15.0% - 25.0%	No	
Small/Mid Cap Equity	\$61,962,627	10.0%	6.3%	-3.7%	5.0% - 15.0%	Yes	
Non-US Equity	\$145,208,646	15.0%	14.7%	-0.3%	5.0% - 15.0%	Yes	
Domestic Fixed Income	\$184,349,442	20.0%	18.6%	-1.4%	15.0% - 25.0%	Yes	
Global Bonds	\$77,688,938	10.0%	7.9%	-2.1%	5.0% - 15.0%	Yes	
Private Equity	\$26,967,262	5.0%	2.7%	-2.3%	0.0% - 5.0%	Yes	
Long/Short Equity	\$101,074,974	10.0%	10.2%	0.2%	5.0% - 15.0%	Yes	
Real Estate	\$99,640,500	10.0%	10.1%	0.1%	2.0% - 12.0%	Yes	
Cash	\$2,341,274	0.0%	0.2%	0.2%	0.0% - 5.0%	Yes	
Total	\$989,496,003	100.0%	100.0%				



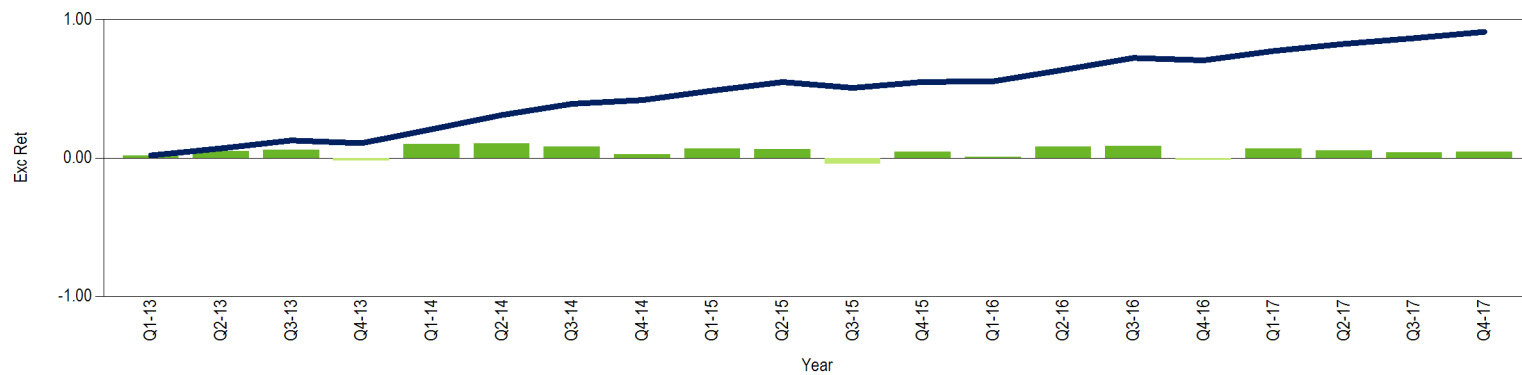
OKLAHOMA JUDGES



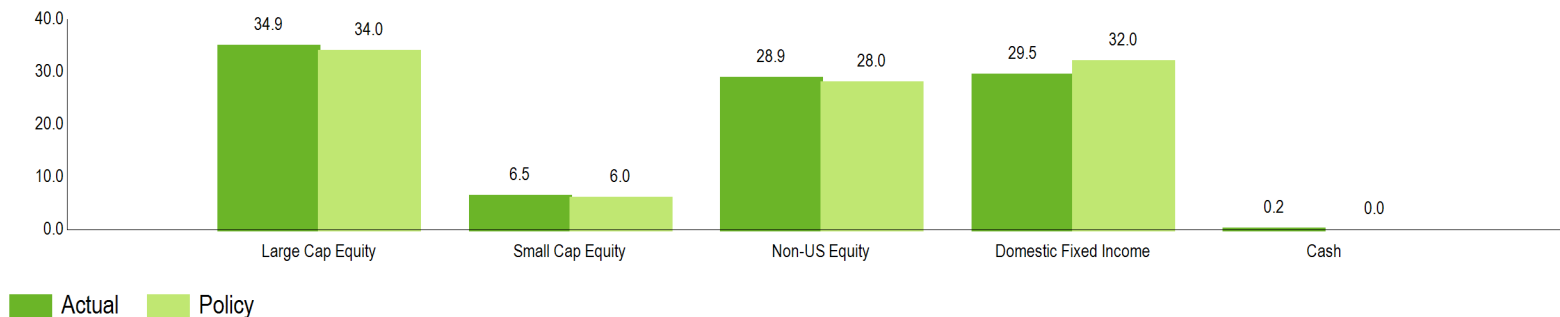
TOTAL FUND PERFORMANCE SUMMARY

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK JUDGES	\$342,057,723	4.2%	14	8.2%	8	16.9%	19	7.7%	38	9.2%	37	6.3%	23
<i>JUDGES Allocation Index</i>		4.1%	15	8.2%	12	16.7%	21	7.5%	45	9.0%	42	6.1%	43
<i>JUDGES Policy Index</i>		4.1%	18	8.1%	14	16.9%	19	7.8%	33	9.1%	39	6.1%	43
<i>InvestorForce Public DB Gross Median</i>		3.6%		7.2%		15.1%		7.4%		8.7%		5.9%	

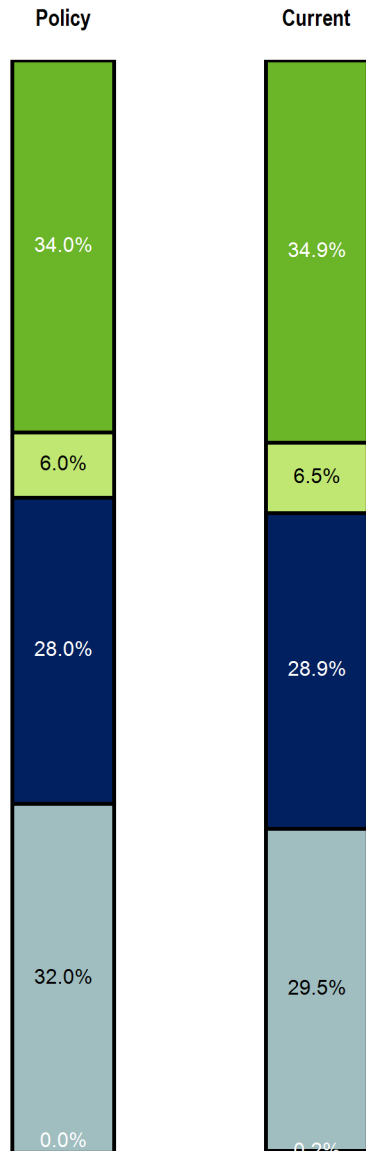
Quarterly and Cumulative Excess Performance



Actual vs Target Allocation (%)



TOTAL FUND ASSET ALLOCATION VS. POLICY TARGETS



Asset Allocation vs. Target						
	Current	Policy	Current Difference*	Policy Range	Within Range	
Large Cap Equity	\$119,507,515	34.0%	34.9%	0.9%	31.2% - 36.8%	Yes
Small Cap Equity	\$22,109,472	6.0%	6.5%	0.5%	3.2% - 8.8%	Yes
Non-US Equity	\$98,802,807	28.0%	28.9%	0.9%	25.0% - 31.0%	Yes
Domestic Fixed Income	\$100,896,243	32.0%	29.5%	-2.5%	27.5% - 36.5%	Yes
Cash	\$741,686	0.0%	0.2%	0.2%	0.0% - 5.0%	Yes
Total	\$342,057,723	100.0%	100.0%			

*Difference between Policy and Current Allocation



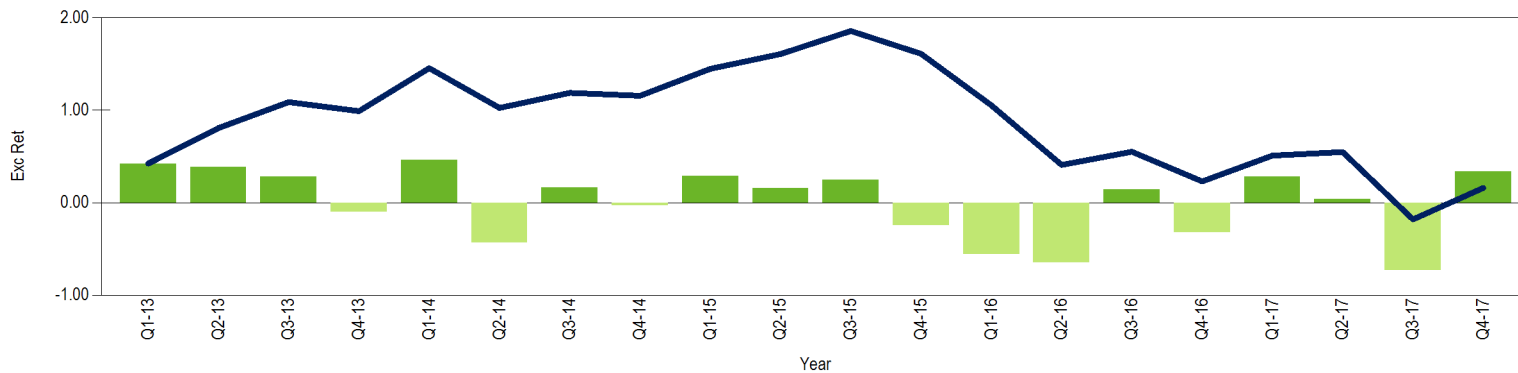
OKLAHOMA WILDLIFE



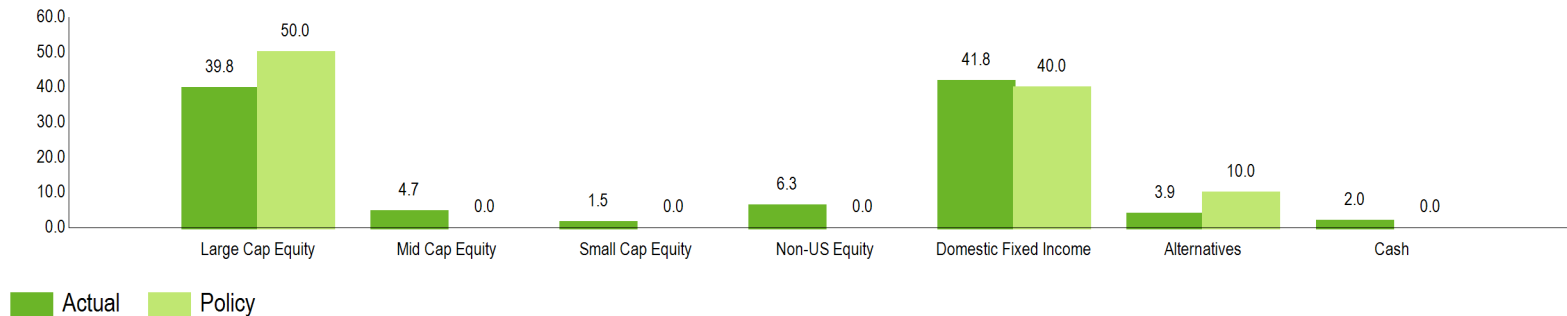
TOTAL FUND PERFORMANCE SUMMARY

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK WILDLIFE	\$114,420,713	3.9%	28	6.7%	72	14.3%	67	6.9%	73	8.7%	50	5.4%	72
<i>WILDLIFE Allocation Index</i>		3.6%	53	7.1%	54	14.4%	66	7.2%	58	8.7%	51	6.0%	46
<i>WILDLIFE Policy Index</i>		3.6%	49	6.6%	74	12.8%	89	6.9%	73	9.1%	39	6.6%	14
<i>InvestorForce Public DB Gross Median</i>		3.6%		7.2%		15.1%		7.4%		8.7%		5.9%	

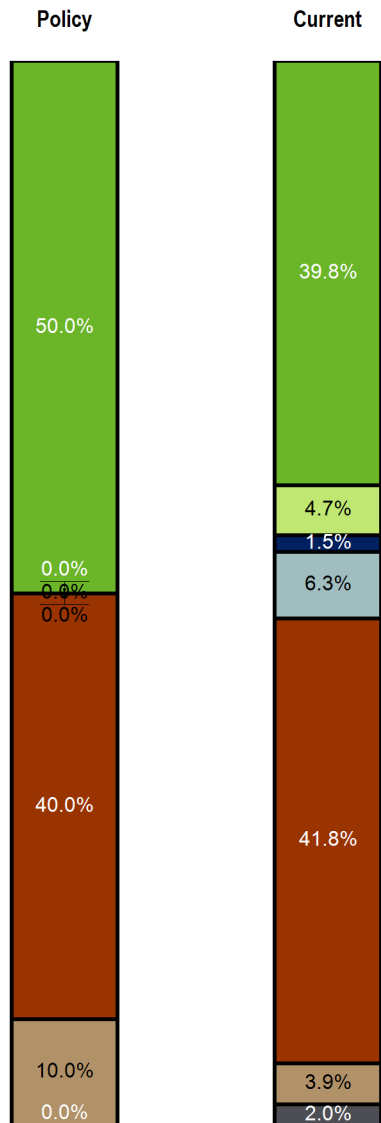
Quarterly and Cumulative Excess Performance



Actual vs Target Allocation (%)



TOTAL FUND ASSET ALLOCATION VS. POLICY TARGETS



Asset Allocation vs. Target						
	Current	Policy	Current	Difference*	Policy Range	Within Range
Large Cap Equity	\$45,553,411	50.0%	39.8%	-10.2%	40.0% - 65.0%	No
Mid Cap Equity	\$5,409,324	0.0%	4.7%	4.7%	0.0% - 10.0%	Yes
Small Cap Equity	\$1,740,990	0.0%	1.5%	1.5%	0.0% - 10.0%	Yes
Non-US Equity	\$7,169,965	0.0%	6.3%	6.3%	0.0% - 15.0%	Yes
Domestic Fixed Income	\$47,852,343	40.0%	41.8%	1.8%	35.0% - 55.0%	Yes
Alternatives	\$4,424,043	10.0%	3.9%	-6.1%	0.0% - 10.0%	Yes
Cash	\$2,270,637	0.0%	2.0%	2.0%	0.0% - 5.0%	Yes
Total	\$114,420,713	100.0%	100.0%			

*Difference between Policy and Current Allocation



Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.

