# City of Key West General Employees' Pension Fund

Investment Performance Review June 30, 2016

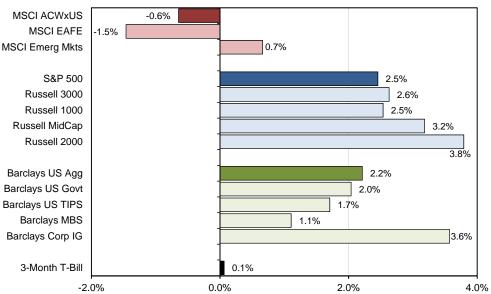


**2nd Quarter 2016 Market Environment** 

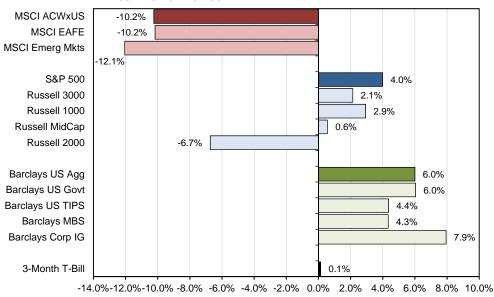


- The 2<sup>nd</sup> quarter of 2016 was very volatile as financial market returns were influenced by central bank policy expectations, rising commodity prices, mixed economic data, and increased global political and economic uncertainty caused by the U.K.'s June vote to discontinue its membership in the European Union (EU). Despite this volatility, asset class results for the period were broadly positive with the exception of international developed market returns. Higher risk assets, such as small cap equities, emerging market stocks, and investment grade and high yield corporate bonds, posted the strongest returns throughout the quarter.
- Led by the small cap Russell 2000's return of 3.8%, U.S. stock market indices were positive for the 2<sup>nd</sup> quarter. In contrast, for the 1-year period, domestic large cap stock indices were the best performers, posting moderate gains, while domestic small cap indices posted negative returns. Broad international equity indices trailed domestic stock indices through both the quarter and prior year. In U.S. Dollar (USD) terms, returns for the MSCI Emerging Markets Index (net) were marginally positive for the quarter returning 0.7% while developed market equities, represented by the MSCI EAFE Index (net), returned -1.5%. Both indices have experienced double digit losses over the 1-year period, returning -12.1% and -10.2% respectively..
- The U.S. Treasury yield curve flattened throughout the 2<sup>nd</sup> quarter with near-term rates staying relatively flat and rates at the medium to long end of the yield curve falling near all-time lows. Despite their low yields, investment grade bonds have outperformed broad domestic and international equity indices over the past twelve months with the Barclays Aggregate Index returning 2.2% for the 2<sup>nd</sup> quarter and 6.0% for the trailing 1-year period. Investment grade corporate bonds outperformed the remaining investment grade sectors for both the quarter and 1-year period with the Barclays U.S. Corporate Investment Grade Index returning 3.6% and 7.9% respectively. Corporate issues experienced tailwinds from their higher durations relative to other areas of the fixed income market, as well as tightening credit spreads.

### **Quarter Performance**



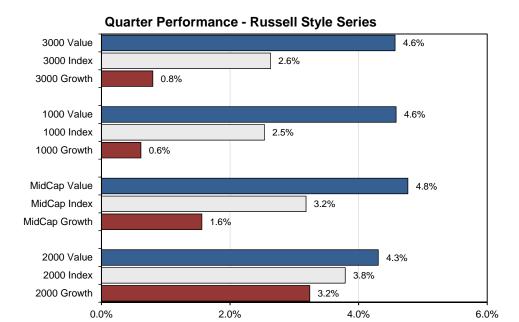
### 1-Year Performance

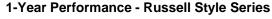


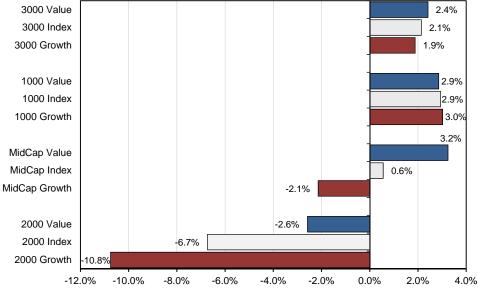


Source: Investment Metrics 2

- U.S. equity index returns were positive across the capitalization spectrum during the 2<sup>nd</sup> quarter. Domestic stock prices increased through April and May, fueled by largely supportive macroeconomic data suggesting that the economic weakness experienced at the beginning of the year had been transitory. The strength in economic data led market participants to consider an increased probability for the U.S. Federal Reserve (Fed) to tighten monetary policy by increasing short-term interest rates as early as June. However, forecasts surrounding the timing of future Fed rate hikes were pushed out after the release of May's non-farm payroll report, which came in much weaker than expected. The possibility of a near-term rate increase became even more remote near the end of the quarter when the U.K. unexpectedly voted to exit the EU, creating political and economic uncertainty throughout global financial markets. Demand for equities remains high as investors struggle to find other sources of portfolio return in the current low interest rate environment.
- Value stocks outperformed growth stocks across the capitalization spectrum for the second straight quarter. This value outperformance was generally due to investors seeking the perceived safety of value stocks given valuation levels and the volatility experienced throughout the period. Value indices were also beneficiaries of rising oil and natural gas prices as value-based benchmarks have higher allocations to the Energy sector. Mid cap value stocks were the best performers across the value spectrum, returning 4.8% during the period, followed by large cap value (4.6%) and small cap value (4.3%) stocks respectively. However, across the growth spectrum, small cap growth stocks (3.2%) were the best performers followed by mid cap growth stocks (1.6%). The Russell 1000 Growth Index, representing large cap stocks, had the weakest performance returning 0.6% for the quarter. Style trends are mixed over the 1-year period. The Russell Midcap Value Index was the best performer (3.2%), and the Russell 2000 Growth Index was the worst performer (-10.8%).
- From a valuation perspective, equity valuations appear stretched relative to historical levels based on their forward Price/Earnings ratios (P/E). The large growth, mid growth, and small value indices have valuation levels close to their respective historical average, while the remaining indices fall between 106% and 114% of their 15-year averages.



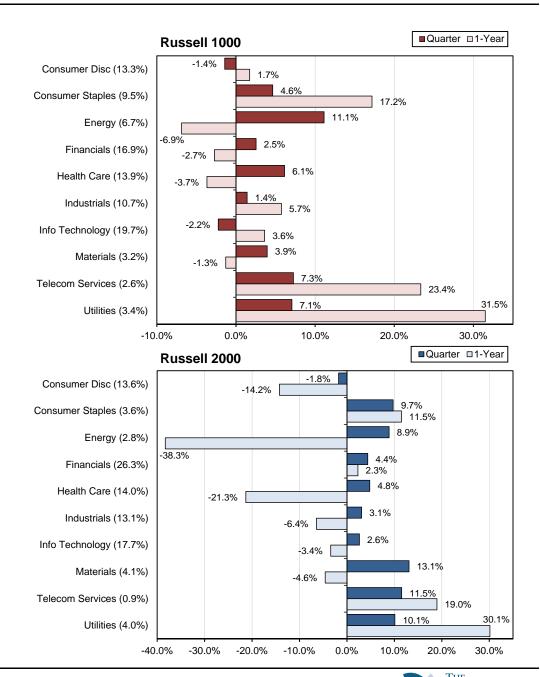






Source: Investment Metrics 3

- Large cap sector performance was generally positive for the 2<sup>nd</sup> guarter with all but two sectors within the Russell 1000 Index posting gains for the period. The Consumer Discretionary and Technology sectors were the quarter's only laggards returning -1.4% and -2.2% respectively. Defensive and interest rate sensitive sectors of the market continue to perform well as investors attempt to proxy dividend income as a substitute for paltry investment grade bond yields due to the persistent low interest rate environment. Utilities, Telecom Services, and Consumer Staples all posted strong quarterly returns. These three sectors are also the only sectors to post double-digit returns over the past year, outperforming all other sectors in the Russell 1000 Index by a considerable margin. The Energy sector was a notable performer during the quarter, returning 11.1% due to increasing oil and natural gas prices. Supply disruptions in Canada and Nigeria, paired with a decrease in production from U.S. shale producers, contributed to reduced global supply, which drove energy prices higher. Despite a favorable quarter, Energy returns over the 1-year period continue to represent the weakest sector with a return of -6.9%. Materials (-1.3%), Health Care (-3.7%) and Financials (-2.7%) also posted negative results over the prior year.
- Similar to large cap sector results, small cap sector performance was largely positive for the quarter. In addition, small cap sector performance generally outpaced corresponding large cap sector results. Performance in large and small cap sectors also had similar observable trends. Higher yielding, defensive sectors and commodity price sensitive industries were the best performers during the 2<sup>nd</sup> quarter. In contrast, over the 1-year period, all Russell 2000 Index sectors underperformed their corresponding Russell 1000 Index sectors with the exception of the Financials sector. The Energy (-38.3%), Health Care (-21.3%), and Consumer Discretionary (-14.2%) sectors were the largest detractors over the 1-year period. Like the large cap index, Consumer Staples (11.5%), Telecom Services (19.0%), and Utilities (30.1%) significantly outperformed other sectors.
- Using the S&P 500 as a proxy, forward P/E ratios for six GICS sectors were below their long-term (20-year) averages at quarter-end. The Technology and Health Care sectors were trading at the largest discount to their long-term average P/E ratios. In contrast, the Energy and Utilities sector valuations were the most extended relative to their historical P/E ratios.





Top 10 Weighted Stocks								
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector				
Apple Inc	2.58%	-11.7%	-22.2%	Information Technology				
Exxon Mobil Corp	1.91%	13.1%	16.8%	Energy				
Microsoft Corp	1.91%	-6.7%	19.1%	Information Technology				
Johnson & Johnson	1.64%	12.9%	28.2%	Health Care				
General Electric Co	1.43%	-0.2%	22.3%	Industrials				
Amazon.com Inc	1.37%	20.5%	64.9%	Consumer Discretionary				
Berkshire Hathaway Inc B	1.35%	2.1%	6.4%	Financials				
AT&T Inc	1.31%	11.7%	28.4%	Telecommunication Services				
Facebook Inc A	1.26%	0.2%	33.2%	Information Technology				
Verizon Communications Inc	1.12%	4.3%	25.6%	Telecommunication Services				

Top 10 Weighted Stocks								
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector				
Olin Corp	0.25%	44.3%	-3.8%	Materials				
Idacorp Inc	0.25%	9.8%	49.2%	Utilities				
Portland General Electric Co	0.24%	12.6%	37.4%	Utilities				
Gramercy Property Trust	0.24%	9.1%	21.7%	Financials				
Curtiss-Wright Corp	0.23%	11.5%	17.1%	Industrials				
Southwest Gas Corp	0.23%	20.3%	52.1%	Utilities				
Microsemi Corp	0.23%	-14.7%	-6.5%	Information Technology				
Healthcare Realty Trust Inc	0.22%	14.4%	57.2%	Financials				
Medical Properties Trust Inc	0.22%	19.0%	24.8%	Financials				
WGL Holdings Inc	0.22%	-1.5%	34.5%	Utilities				

Top 10 Performing Stocks (by Quarter)								
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector				
LinkedIn Corp Class A	0.11%	65.5%	-8.4%	Information Technology				
Denbury Resources Inc	0.00%	61.7%	-42.6%	Energy				
ONEOK Inc	0.05%	61.7%	29.8%	Energy				
Rice Energy Inc	0.01%	59.8%	11.4%	Energy				
Memorial Resource Development Corp	0.01%	56.0%	-16.3%	Energy				
Southwestern Energy Co	0.02%	55.9%	-44.7%	Energy				
Zillow Group Inc C	0.02%	52.9%	N/A	Information Technology				
Yelp Inc Class A	0.01%	52.7%	-29.4%	Information Technology				
Continental Resources Inc	0.02%	49.1%	6.8%	Energy				
Tahoe Resources Inc	0.02%	48.7%	26.1%	Materials				

Top 10 Performing Stocks (by Quarter)									
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector					
Magnum Hunter Resources Corporation	0.00%	309559.2%	628.6%	Energy					
Ultra Petroleum Corp	0.00%	253.4%	-85.9%	Energy					
Ryerson Holding Corp	0.01%	214.7%	92.3%	Materials					
Clayton Williams Energy Inc	0.01%	207.8%	-58.2%	Energy					
Fairmount Santrol Holdings Inc	0.03%	207.2%	-5.9%	Energy					
Celator Pharmaceuticals Inc	0.06%	173.6%	1247.3%	Health Care					
EZCORP Inc	0.02%	154.5%	1.7%	Financials					
North Atlantic Drilling Ltd	0.00%	146.0%	-43.4%	Energy					
Eclipse Resources Corp	0.01%	131.9%	-36.5%	Energy					
Radio One Inc Class D	0.00%	124.6%	0.6%	Consumer Discretionary					

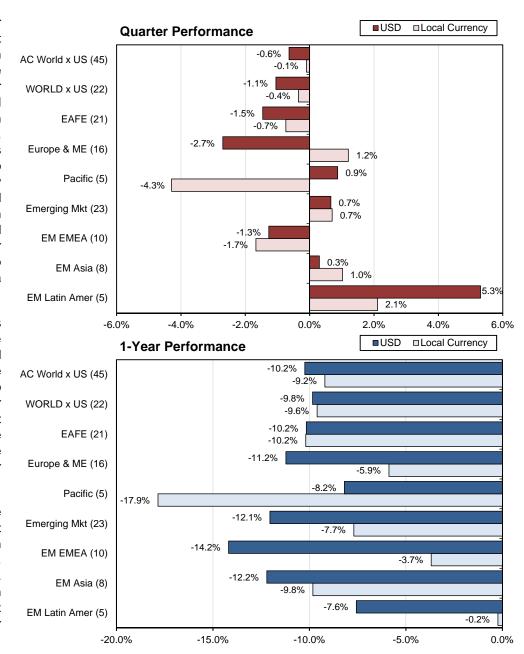
Bottom 10 Performing Stocks (by Quarter)								
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector				
SunEdison Inc	0.00%	-73.8%	-99.5%	Information Technology				
Cobalt International Energy Inc	0.00%	-54.9%	-86.2%	Energy				
Office Depot Inc	0.00%	-53.4%	-61.8%	Consumer Discretionary				
LendingClub Corp	0.00%	-48.2%	-70.8%	Financials				
Endo International PLC	0.02%	-44.6%	-80.4%	Health Care				
Ionis Pharmaceuticals Inc	0.01%	-42.5%	-59.5%	Health Care				
Square Inc A	0.00%	-40.8%	N/A	Information Technology				
CVR Energy Inc	0.00%	-39.1%	-55.9%	Energy				
Fossil Group Inc	0.00%	-35.8%	-58.9%	Consumer Discretionary				
VeriFone Systems Inc	0.01%	-34.3%	-45.4%	Information Technology				

Bottom 10 Performing Stocks (by Quarter)								
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector				
Code Rebel Corp	0.00%	-98.9%	-99.8%	Information Technology				
Energy XXI Ltd	0.00%	-92.8%	-98.3%	Energy				
Seventy Seven Energy Inc	0.00%	-84.1%	-97.9%	Energy				
Fairway Group Holdings Corp A	0.00%	-81.5%	-98.2%	Consumer Staples				
The JG Wentworth Co Class A	0.00%	-79.1%	-97.2%	Financials				
Infinity Pharmaceuticals Inc	0.00%	-74.8%	-87.9%	Health Care				
Mirati Therapeutics Inc	0.00%	-74.5%	-82.7%	Health Care				
TransEnterix Inc	0.01%	-71.3%	-59.3%	Health Care				
Lipocine Inc	0.00%	-70.0%	-64.6%	Health Care				
Chiasma Inc	0.00%	-68.4%	N/A	Health Care				

Source: Morningstar Direct 5



- Similar to domestic equity markets, the 2<sup>nd</sup> guarter was volatile for international stocks as broad developed market indices struggled throughout the quarter. Currency impact on returns was mixed during the quarter with the EM Latin America Index benefiting from a weakening USD, and the Europe and Middle East Index suffering from USD strength. For the 1-year period, returns for developed markets were negative in both USD and local currency. While the quarter began positively as markets pushed higher on the back of better than expected economic data and rising commodity prices, the second half of the quarter saw international markets swoon. Much of this was due to uncertainty leading up to the U.K.'s June 23rd referendum to remain in or move to leave the EU. British voters surprised investors by voting to discontinue membership in the economic bloc. While the terms and aggregate impact of "Brexit" will remain unknown for some time, the reaction to the vote was immediate. The pound sterling fell sharply (-12%), Standard & Poor's downgraded the U.K.'s AAA credit rating, and U.K. Prime Minister David Cameron resigned. While U.K. equity markets initially suffered sharp losses, markets recovered quickly as investors weighted the benefits of a weakened pound on the country's largely foreign earnings base.
- The U.K.'s decision to leave the EU cast a shadow over European equities for the quarter despite the region's generally positive economic data. While the European Central Bank (ECB) has signaled its intent for continued support, the EU faces concerns surrounding "Brexit's" effect on future growth, as well as a political contagion that could lead other members to leave the economic union. Japanese equities fell sharply through the quarter as the Bank of Japan (BoJ) bucked market expectations when they did not announce an extension to its negative interest rate policy or asset purchase program. The subsequent "Brexit" decision led to a sharp appreciation in the yen, raising additional concerns around future earnings growth potential for Japanese equities.
- Broad emerging market indices were modestly positive throughout the quarter, outperforming developed markets. Latin America was the best performing region on both a USD and local currency basis as the region benefitted from political tailwinds in Brazil and rising commodity prices. Russia, India, and the Philippines were also notable positive performers. Emerging European countries were laggards relative to emerging peers in Asia and Latin America. Performance for the MSCI Emerging Markets Index (net) remains negative in both local (-7.7%) and USD (-12.1%) terms over the trailing 1-year period.



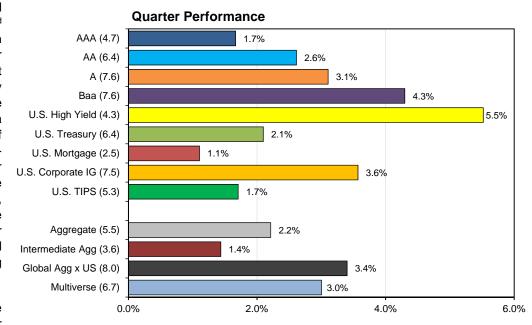


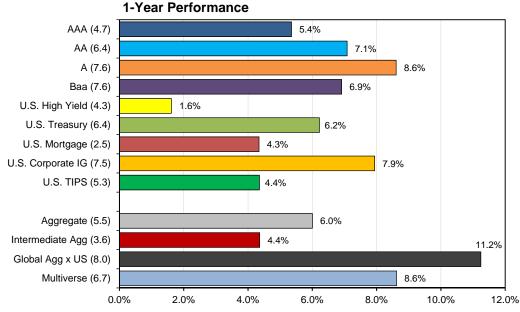
MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	12.1%	-8.4%	-17.7%
Consumer Staples	13.3%	2.9%	10.1%
Energy	5.2%	11.3%	-2.4%
Financials	22.3%	-6.6%	-23.2%
Health Care	12.4%	4.7%	-2.2%
Industrials	13.3%	-1.5%	-5.4%
Information Technology	5.4%	-2.7%	-8.0%
Materials	6.9%	1.2%	-15.7%
Telecommunication Services	5.2%	-0.3%	-3.7%
Utilities	3.9%	1.6%	-0.2%
Total	100.0%	-1.5%	-10.2%
MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	11.3%	-6.9%	-15.9%
Consumer Staples	11.6%	2.8%	7.5%
Energy	6.9%	8.1%	-5.7%
Financials	24.4%	-4.3%	-19.9%
Health Care	9.4%	4.3%	-6.5%
Industrials	11.3%	-1.8%	-7.2%
Information Technology	9.0%	0.1%	-5.3%
Materials	7.1%	3.1%	-12.1%
Telecommunication Services	5.3%	-0.2%	-6.9%
Utilities	3.6%	1.5%	-2.0%
Total	100.0%	-0.6%	-10.2%
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	10.5%	-1.4%	-10.5%
Consumer Staples	8.5%	4.2%	-3.6%
Energy	7.5%	1.9%	-12.7%
Financials	26.1%	0.3%	-17.8%
Health Care	2.7%	0.4%	-7.5%
Industrials	6.2%	-3.3%	-19.0%
Information Technology	22.5%	2.5%	-4.0%
Materials	6.3%	-0.8%	-9.5%
Telecommunication Services	6.6%	-0.1%	-15.6%
Utilities	3.2%	0.5%	-10.0%
Total	100.0%	0.7%	-12.1%

	MSCI-EAFE	MSCI-ACWIXUS	Quarter	1- Year
Country	Weight	Weight	Return	Return
Japan	23.3%	16.4%	1.0%	-8.9%
United Kingdom	19.6%	13.8%	-0.7%	-12.1%
France	9.6%	6.8%	-4.3%	-8.9%
Switzerland	9.3%	6.6%	2.0%	-8.5%
Germany	8.7%	6.1%	-5.6%	-11.6%
Australia	7.3%	5.1%	0.5%	-4.5%
Hong Kong	3.3%	2.3%	0.9%	-10.8%
Netherlands	3.2%	2.2%	-5.1%	-7.8%
Spain	2.9%	2.1%	-7.7%	-23.3%
Sweden	2.8%	2.0%	-5.4%	-12.2%
Denmark	2.0%	1.4%	-0.6%	2.5%
Italy	2.0%	1.4%	-10.5%	-26.1%
Belgium	1.5%	1.1%	2.3%	4.5%
Singapore	1.4%	1.0%	0.4%	-11.5%
Finland	1.0%	0.7%	-2.1%	-3.9%
Israel	0.8%	0.6%	-3.8%	-11.1%
Norway	0.6%	0.5%	2.4%	-16.2%
Ireland	0.5%	0.3%	-9.9%	-10.5%
New Zealand	0.2%	0.1%	5.9%	29.7%
Austria	0.2%	0.1%	-10.0%	-12.9%
Portugal	0.2%	0.1%	-2.8%	-7.5%
Total EAFE Countries	100.0%	70.6%	-1.5%	-10.2%
Canada	100.070	6.8%	3.4%	-6.3%
Total Developed Countries		77.4%	-1.1%	-9.8%
China		5.8%	0.1%	-23.4%
Korea		3.3%	-1.2%	-3.5%
Taiwan		2.7%	0.7%	-8.8%
India		1.9%	3.7%	-6.5%
South Africa		1.7%	1.6%	-15.9%
Brazil		1.6%	13.9%	-6.0%
Mexico		0.9%	-7.0%	-12.2%
Russia		0.9%	4.1%	-1.6%
Malaysia		0.7%	-5.9%	-6.0%
Indonesia		0.6%	4.1%	6.0%
Thailand		0.5%	2.8%	-7.1%
Philippines		0.4%	5.8%	1.0%
Turkey		0.4%	-7.9%	-10.1%
Chile		0.3%	1.9%	-10.1%
Poland		0.3%	-17.5%	-1.7%
Qatar		0.3%	-4.9%	-27.0%
United Arab Emirates		0.2%	0.1%	-17.2%
Colombia		0.2%	2.9%	-14.9%
Peru		0.1%	18.2%	8.3%
			-14.0%	-60.8%
Greece		0.1%		
Hungary		0.1%	-4.7%	20.5%
Czech Republic		0.0%	-6.1%	-18.3%
Egypt		0.0%	0.9%	-23.8%
Total Emerging Countries		22.6%	0.7%	-12.1%
Total ACWIxUS Countries		100.0%	-0.6%	-10.2%



- Despite being investors' least favorite asset class for some time, fixed income indices continued their strong 2016 performance through the 2<sup>nd</sup> quarter of the year. Early quarter headwinds triggered by hawkish comments from Federal Reserve Chair Janet Yellen implying a summer interest rate hike dissipated as weaker economic data created doubts that the economy was robust enough to warrant further monetary policy tightening. Expectations for a near-term increase of the Fed Funds Rate shrank further after the U.K.'s vote to leave the EU. This news caused a swift flight to quality, pushing interest rates lower through the second half of the quarter. While near-term rates had little room to move lower, longterm rates fell to near historic lows. This curve flattening helped longer duration indices such as the Barclays U.S. Corporate Investment Grade Index and the Barclays Global Aggregate ex U.S. Index to outperform, returning 3.6% and 3.4% respectively. Fixed income performance for the 1-year period was also positive across the country, credit, and sector spectrums with international bond indices, such as the Barclays Global Aggregate ex U.S. (11.2%) and the Barclays Multiverse (8.6%), generating the highest returns
- U.S. investment grade bond indices posted gains for the quarter with the broad market Barclays Aggregate Index posting a return of 2.2%. Higher duration index sectors within the Aggregate outperformed lower duration sectors with investment grade corporates (3.6%) and Treasury securities (2.1%) posting the largest gains. Hurt by its relatively low duration, the Barclays U.S. Mortgage Index performed the worst for the second quarter in a row, returning 1.1%. Over the 1-year period, the Aggregate has returned an expectation defying 6.0%. Similar to the quarterly results, investment grade corporates and Treasuries outperformed mortgages for the period.
- Lower credit quality issues outperformed higher quality securities during the 2<sup>nd</sup> quarter. Baa rated securities returned 4.3% versus a return of 1.7% for AAA issues due to higher average durations and the compression of interest rate credit spreads throughout the quarter. Driven by this spread compression, high yield bonds were the best performers with the Barclays U.S. High Yield Index returning 5.5%. Despite its strong start to 2016, the Barclays U.S. High Yield Index is only marginally positive over the last 12 months with a return of 1.6%.



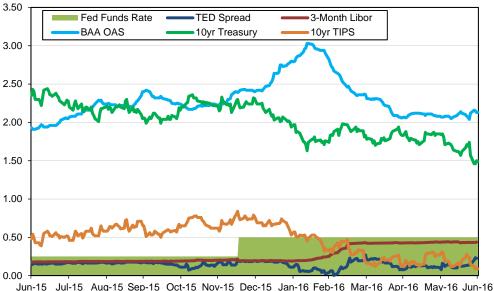




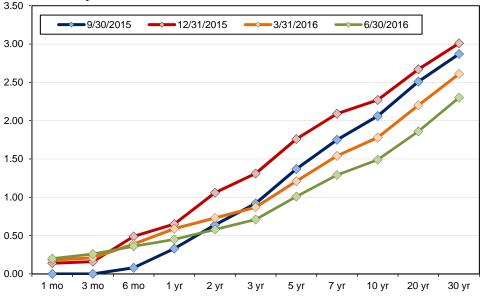
Source: Barclays Capital Live 8

- U.S. TIPS finished the 2<sup>nd</sup> quarter with a 1.7% return. The relatively strong return can be attributed to the longer end of the TIPS yield curve shifting lowering during the period as headline CPI (1.1%) remains largely in check. The TIPS return for the 1-year period is a solid 4.4%.
- In USD terms, international fixed income indices posted the largest gains for both the quarter and 1-year periods. Despite the relatively low interest rates in international markets, with several government issues having negative yields, the Barclays Global Aggregate ex U.S. returned 3.4% for the quarter as the index benefitted from its higher average duration and mixed currency impact. The index's 11.2% return over the 1-year period also outpaced domestic bond returns.
- Much of the index performance detailed in the bar graphs on the previous page is visible on a time series basis by reviewing the line graphs to the right. The '1-Year Trailing Market Rates' chart illustrates that the 10-year Treasury yield (green line) fell over the quarter and is now at a 12-month low. The blue line illustrates changes in the BAA OAS (Option Adjusted Spread), which quantifies the additional yield premium that investors require to purchase and hold non-Treasury issues. When credit spreads widen (tighten), it is equivalent to interest rate increases (decreases) on corporate bond returns. After falling below 2.0% early in 2015, this spread rose throughout the remainder of the calendar year. While there was upside momentum in credit spreads early in 2016, they have narrowed by close to 1% since their high on February 11th. Despite an uptick from "Brexit" during June, this spread compression has benefited corporate bond returns. The lower graph provides a snapshot of the U.S. Treasury vield curve at each of the last four calendar quarters. Treasury issues greater than two years ended the 2<sup>nd</sup> quarter at their lowest levels in the past 12-months while short-term rates are at the high end of their 12-month range.
- The Fed has stated future rate increases would be implemented at a measured pace and with an ongoing assessment of current economic data. Despite this domestic policy assertion, geopolitical events and non-U.S. stimulus programs are likely to keep demand for U.S. Treasury issues elevated and exert downward pressure on how high domestic interest rates will rise in the short-term.





**Treasury Yield Curve** 





### **Our Mission**

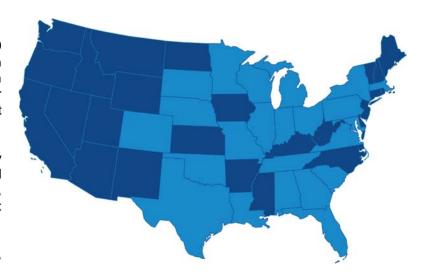
To represent the sole interest of our clients by redefining independence.

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# **Investment Consulting Services**

The Bogdahn Group has one line of business: investment consulting. We strive to simplify investment and fiduciary decisions for our clients by providing governance, monitoring and risk oversight, education, strategic implementation, and superior investment options. The Bogdahn Group delivers customized services to meet each client's unique needs.

Since no two clients' needs are the same and continuously evolve over time, we strive to maintain an ongoing understanding of each client's constraints and objectives to deliver ongoing value-added services. Our core services represent a strong foundation for client relationships.

# **Traditional Consulting Services**

- Investment policy statement development
- Strategic asset allocation
- Manager / Strategy Evaluation
- Investment Manager Due Diligence
- · Investment Manager Searches
- Performance measurement & reporting
- · Quarterly Economic Summary
- Attribution analysis
- Client Education
- Spending policy review and development
- Vendor search & fee negotiations
- Distribution and management of open RFPs where required
- Custodian Evaluation
- Interpretation and assistance in asset/liability reports

# **Defined Contribution Consulting Services**

- Design, Distribute, Collect and Evaluate RFP responses for Recordkeeping and Administration Services
- Facilitate the Vendor Selection Process and Interviews
- Assist with provider scope of work definition, negotiation of fees and contracts
- Investment Policy Development and Review
- Manager/Strategy Evaluation
- Plan Level Fee Analysis
- Board/Investment Committee Education
- Fund Evaluation and Recommendations
- Review Employee Education Strategy for fit with Demographics and Plan Goals
- Provide Guidance for Defined Contribution Strategies and Investment Decisions

# **Client Service Support**

The Bogdahn Group's resources include dedicated teams comprised of:

- 34 Investment Consultants
- 8 Research Analysts
- 7 Internal Consultants
- 11 Performance Measurement Analysts
- 3 Information Technology Experts

The Bogdahn Group also has a dedicated management team consisting of professionals in compliance, finance, operations, and consulting services further supporting each department and ultimately each client.

### SERVICE MODEL



### **Investment Databases**

Our firm utilizes some of the most robust and deep databases that are available to investment consultants. These include Bloomberg, InvestmentMetrics PARis, eVestment Alliance, Zephyr StyleADVISOR, Morningstar Direct, etc.

### **Retirement Plans**

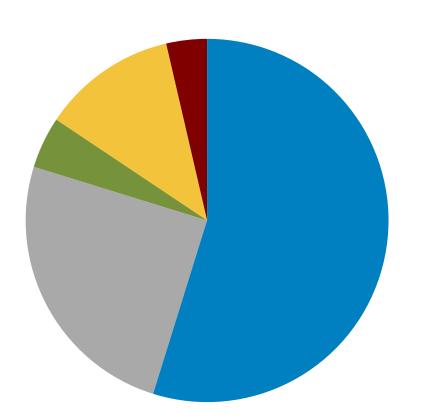
- Public Funds - - Taft-Hartley - - Corporations -

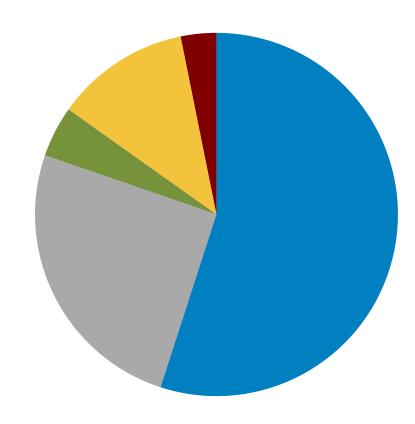
**Endowment & Foundations** 



Asset Allocation By Segment as of March 31, 2016 : \$48,372,606

Asset Allocation By Segment as of June 30, 2016 : \$48,803,795



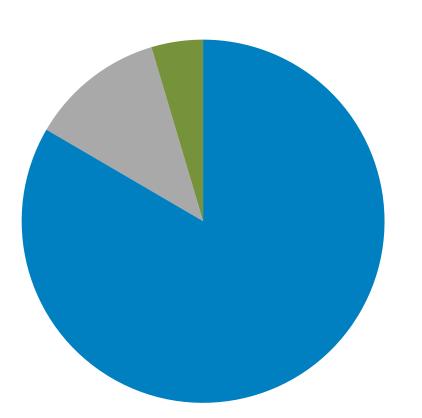


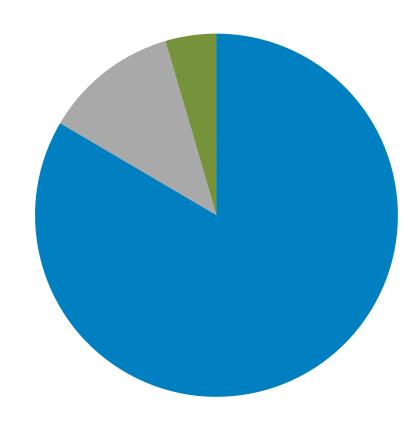
ocation			Allocation		
Segments	Market Value	Allocation	Segments	Market Value	Allocation
■ Equity	26,513,494	54.8	■ Equity	26,836,130	55.0
Domestic Fixed Income	12,075,653	25.0	Domestic Fixed Income	12,343,290	25.3
■ Global Fixed Income	2,222,375	4.6	Global Fixed Income	2,214,167	4.5
Real Estate	5,804,812	12.0	Real Estate	5,861,664	12.0
Cash Equivalent	1,756,272	3.6	Cash Equivalent	1,548,545	3.2



Asset Allocation By Manager as of March 31, 2016 : \$48,372,606

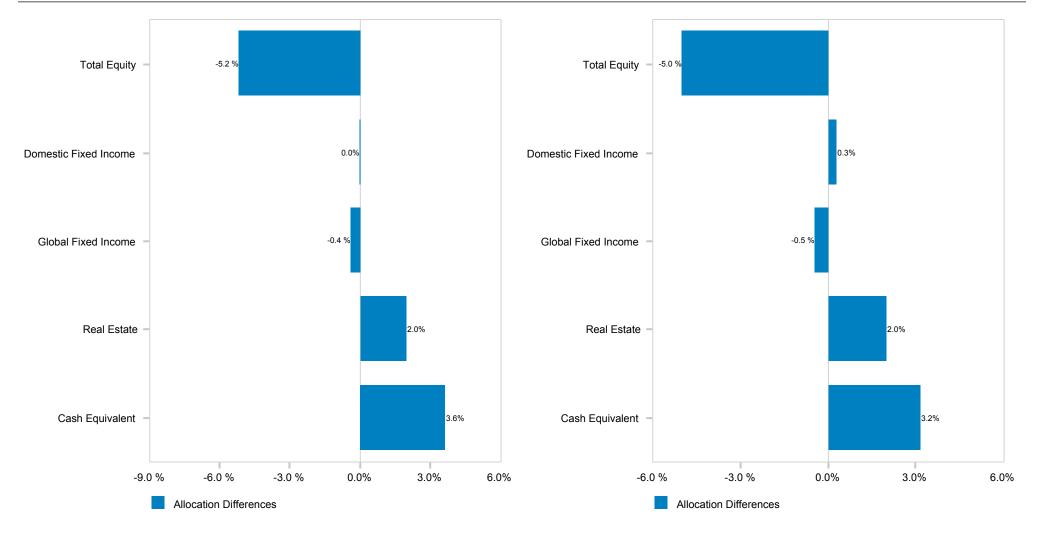
Asset Allocation By Manager as of June 30, 2016 : \$48,803,795





Allocation					
	Market Value	Allocation		Market Value	Allocation
■ Highland Capital	40,345,419	83.4	■ Highland Capital	40,727,965	83.5
American Core Realty Fund	5,804,812	12.0	American Core Realty Fund	5,861,664	12.0
Templeton Global	2,222,375	4.6	Templeton Global	2,214,167	4.5

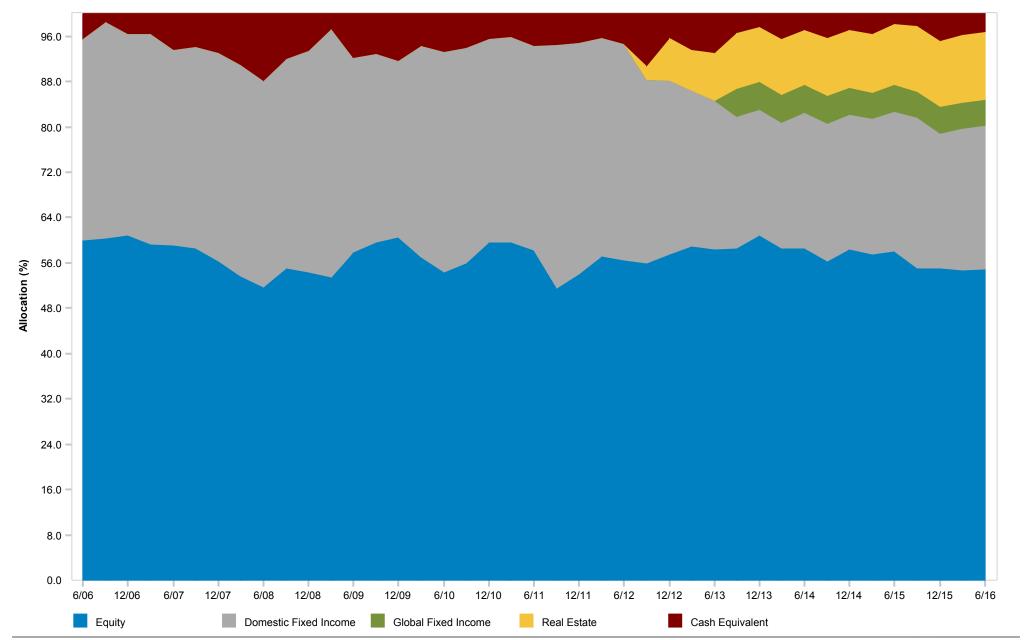




	As of Ma	rch 31, 2016			As of June 30, 2016			
	Market Value \$	Allocation (%)	Target (%)		Market Value \$	Allocation (%)	Target (%)	
Total Equity	26,513,494	54.8	60.0	Total Equity	26,836,130	55.0	60.0	
Domestic Fixed Income	12,075,653	25.0	25.0	Domestic Fixed Income	12,343,290	25.3	25.0	
Global Fixed Income	2,222,375	4.6	5.0	Global Fixed Income	2,214,167	4.5	5.0	
Real Estate	5,804,812	12.0	10.0	Real Estate	5,861,664	12.0	10.0	
Cash Equivalent	1,756,272	3.6	0.0	Cash Equivalent	1,548,545	3.2	0.0	
Total Fund	48,372,606	100.0	100.0	Total Fund	48,803,795	100.0	100.0	



# **Historical Asset Allocation by Segment**





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Financial Reconciliation Qua	arter to Date								
	Market Value 04/01/2016	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 06/30/2016
Highland Capital	40,345,419	-200	429,045	-632,831	-	-33,912	270,427	350,017	40,727,965
Templeton Global	2,222,375	-	-	-	-	-	14,992	-23,200	2,214,167
American Core Realty Fund	5,804,812	-	-	-	-16,170	-	87,005	-13,983	5,861,664
Mutual Fund Cash	-	200	-	-	-	-200	-	-	-
Total Fund	48,372,606	-	429,045	-632,831	-16,170	-34,112	372,423	312,834	48,803,795

Financial Reconciliation Fisc	al Year to Date								
	Market Value 10/01/2015	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 06/30/2016
Highland Capital	39,524,089	-595	1,172,265	-1,811,415	-121,946	-99,389	714,922	1,350,035	40,727,965
Templeton Global	2,171,312	-	-	-	-	-	52,378	-9,523	2,214,167
American Core Realty Fund	5,519,795	-	-	-	-47,867	-	254,720	135,016	5,861,664
Mutual Fund Cash	-	595	-	-	-	-595	-	-	-
Total Fund	47,215,196	-	1,172,265	-1,811,415	-169,813	-99,984	1,022,020	1,475,527	48,803,795



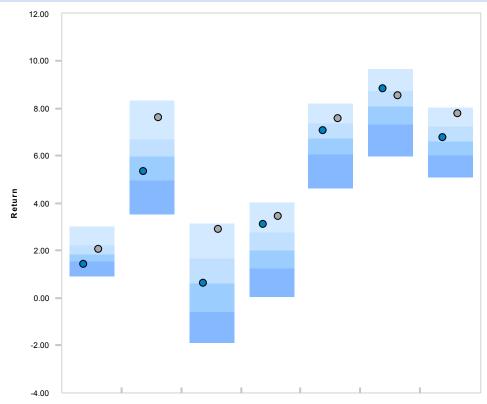
	QT	R	FY	ΓD	1 YR	3 Y	R	5 Y	'R	Inception	Inception Date
Total Fund (Net)	1.39		4.97		0.23	6.58		6.31		6.46	01/01/1998
Total Fund Policy	2.08		7.61		2.89	7.57		7.78		6.18	
Total Fund (Gross)	1.42	(82)	5.34	(67)	0.62 (51)	7.07	(37)	6.77	(45)	6.85 (12)	01/01/1998
Total Fund Policy	2.08	(35)	7.61	(8)	2.89 (7)	7.57	(18)	7.78	(9)	6.18 (46)	
All Public Plans-Total Fund Median	1.87		5.96		0.65	6.75		6.63		6.07	
Highland Capital Equity (Gross)	0.97	(67)	5.27	(62)	-3.59 (60)	8.13	(63)	7.64	(89)	7.65 (73)	01/01/1998
Total Equity Policy	1.88	(53)	8.22	(36)	-0.95 (47)	8.68	(59)	9.63	(61)	5.74 (100)	
IM U.S. All Cap Core Equity (SA+CF) Median	2.03		6.47		-1.29	9.63		10.07		8.16	
Highland Capital Fixed (Gross)	3.01	(4)	6.05	(4)	7.26 (3)	4.18	(69)	4.24	(43)	5.07 (99)	01/01/1998
Total Fixed Policy	2.21	(69)	4.71	(67)	6.00 (62)	4.01	(85)	3.74	(91)	5.41 (85)	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	2.32		4.98		6.14	4.34		4.14		5.72	
Templeton Global	-0.37	(100)	1.97	(95)	-4.26 (100)	N/A		N/A		0.37 (85)	08/01/2013
Citigroup World Government Bond Index	3.41	(9)	9.39	(3)	11.26 (1)	2.65	(37)	1.18	(69)	2.25 (42)	
IM Global Fixed Income (MF) Median	2.39		5.41		4.71	2.16		2.04		2.02	
American Core Realty Fund	1.26	(100)	7.08	(95)	10.64 (100)	12.39	(82)	N/A		12.14 (84)	07/01/2012
NCREIF Fund Index-Open End Diversified Core (EW)	2.18	(72)	8.33	(47)	12.26 (73)	13.02	(63)	12.68	(68)	12.72 (74)	
IM U.S. Open End Private Real Estate (SA+CF) Median	2.54		8.24		12.63	13.41		13.35		13.44	



	Oct-2 To Sep-2	)	Oct-2 To Sep-2	)	Oct-2012 To Sep-2013	Oct-2 To Sep-2	, ס	Oct-2 To Sep-2	)	Oct-2 To Sep-2	)	Oct-2 To Sep-2	)	Oct-2 To Sep-2	)
Total Fund (Net)	1.11		10.06		12.76	14.76		-1.76		8.90		7.81		-10.85	
Total Fund Policy	0.03		11.18		10.98	18.44		2.01		9.17		1.86		-13.00	
Total Fund (Gross)	1.48	(10)	10.65	(39)	13.18 (39)	15.22	(86)	-1.21	(81)	9.23	(71)	8.14	(4)	-10.67	(14)
Total Fund Policy	0.03	(35)	11.18	(26)	10.98 (78)	18.44	(37)	2.01	(15)	9.17	(73)	1.86	(48)	-13.00	(51)
All Public Plans-Total Fund Median	-0.53		10.17		12.51	17.97		0.17		9.91		1.62		-12.93	
Highland Capital Equity (Gross)	-0.41	(44)	14.17	(68)	23.16 (61)	23.08	(78)	-6.76	(99)	10.14	(61)	4.38	(10)	-18.18	(33)
Total Equity Policy	-3.37	(79)	15.61	(59)	20.14 (84)	27.76	(48)	-0.40	(62)	9.23	(77)	-5.31	(44)	-23.20	(80)
IM U.S. All Cap Core Equity (SA+CF) Median	-1.31		16.14		24.14	27.52		1.01		10.90		-5.85		-20.69	
Highland Capital Fixed (Gross)	2.18	(88)	3.95	(81)	-2.75 (100)	7.18	(39)	5.29	(46)	8.31	(81)	12.15	(54)	-1.02	(79)
Total Fixed Policy	2.94	(59)	3.85	(88)	-1.86 (89)	5.28	(87)	5.23	(53)	8.00	(90)	10.60	(81)	4.17	(20)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	3.02		4.50		-1.24	6.60		5.25		9.24		12.28		2.54	
Templeton Global	-7.69	(91)	6.34	(12)	N/A	N/A		N/A		N/A		N/A		N/A	
Citigroup World Government Bond Index	-3.83	(52)	-0.07	(97)	-4.60 (85)	3.29	(97)	4.61	(8)	4.99	(95)	13.78	(51)	5.90	(6)
IM Global Fixed Income (MF) Median	-3.75		3.53		-1.52	7.19		1.61		7.82		13.86		-1.53	
American Core Realty Fund	13.98	(68)	12.49	(66)	12.27 (72)	N/A		N/A		N/A		N/A		N/A	
NCREIF Fund Index-Open End Diversified Core (EW)	14.71	(64)	12.39	(70)	12.47 (69)	11.77	(66)	18.03	(41)	6.14	(52)	-36.09	(54)	3.73	(46)
IM U.S. Open End Private Real Estate (SA+CF) Median	15.93		12.90		13.22	12.90		16.62		6.39		-34.80		3.23	



# Plan Sponsor Peer Group Analysis - All Public Plans-Total Fund 12.00



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR	
<ul><li>Total Fund</li></ul>	1.42 (82)	5.34 (67)	0.62 (51)	3.13 (18)	7.07 (37)	8.83 (23)	6.77 (45)	
<ul><li>Total Fund Policy</li></ul>	2.08 (35)	7.61 (8)	2.89 (7)	3.46 (11)	7.57 (18)	8.55 (33)	7.78 (9)	
Median	1.87	5.96	0.65	2.02	6.75	8.10	6.63	

	24.00	-												
	20.00	-							(					
	16.00	-							•					
Return	12.00	-			•	)		)						
R	8.00	-											0 (	
	4.00	-									(	<b>1</b>		
	0.00	-									0			
	-4.00	-												
	-8.00	L												
			Oct-2 To Sep-2	0	Oct-2 To Sep-2	0	Oct-2 To Sep-2	)	Oct-2 To Sep-2	0	Oct-2 To Sep-2	0	Oct-2 To Sep-2	)
Total F	und		1.48	(10)	10.65	(39)	13.18	(39)	15.22	(86)	-1.21	(81)	9.23	(71)

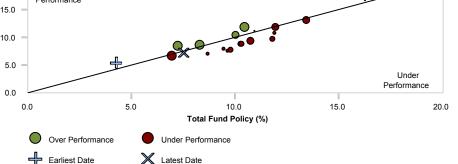
28.00

● Total Fund       1.48       (10)       10.65       (39)       13.18       (39)       15.22       (86)       -1.21       (81)       9.23       (71)         ● Total Fund Policy       0.03       (35)       11.18       (26)       10.98       (78)       18.44       (37)       2.01       (15)       9.17       (73)         Median       -0.53       10.17       12.51       17.97       0.17       9.91		10 Sep-2015	10 Sep-2014	10 Sep-2013	10 Sep-2012	10 Sep-2011	10 Sep-2010
	<ul><li>Total Fund</li></ul>	1.48 (10)	10.65 (39)	13.18 (39)	15.22 (86)	-1.21 (81)	9.23 (71)
Median -0.53 10.17 12.51 17.97 0.17 9.91	<ul><li>Total Fund Policy</li></ul>	0.03 (35)	11.18 (26)	10.98 (78)	18.44 (37)	2.01 (15)	9.17 (73)
	Median	-0.53	10.17	12.51	17.97	0.17	9.91

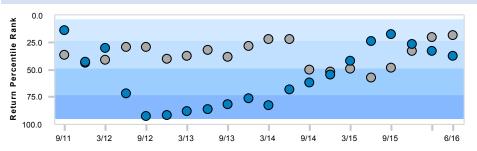
	1 Qtr Ending Mar-2016	1 Qtr Ending Dec-2015	1 Qtr Ending Sep-2015	1 Qtr Ending Jun-2015	1 Qtr Ending Mar-2015	1 Qtr Ending Dec-2014
Total Fund	0.74 (67)	3.11 (40)	-4.49 (28)	0.33 (22)	3.17 (8)	2.66 (33)
Total Fund Policy	1.85 (12)	3.50 (18)	-4.38 (25)	0.09 (35)	2.04 (81)	2.44 (42)
All Public Plans-Total Fund Median	1.03	2.87	-5.04	-0.13	2.43	2.28



# 3 Yr Rolling Under/Over Performance - 5 Years 20.0 Over Performance **Lotal Fund** (%) 15.0 **Lotal Fund** (%) 10.0 5.0

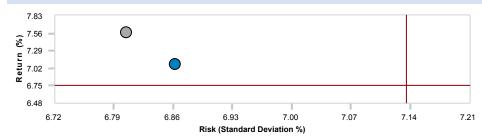


# 3 Yr Rolling Percentile Ranking - 5 Years



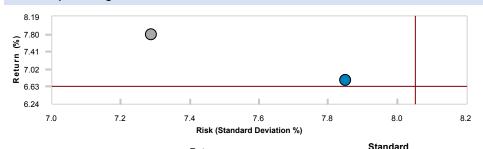
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul><li>Total Fund</li></ul>	20	3 (15%)	6 (30%)	4 (20%)	7 (35%)
<ul><li>Total Fund Policy</li></ul>	20	4 (20%)	14 (70%)	2 (10%)	0 (0%)

# Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<ul><li>Total Fund</li></ul>	7.07	6.86
<ul> <li>Total Fund Policy</li> </ul>	7.57	6.80
Median	6.75	7.14

# Peer Group Scattergram - 5 Years



	Return	Deviation
<ul><li>Total Fund</li></ul>	6.77	7.85
<ul> <li>Total Fund Policy</li> </ul>	7.78	7.29
Median	6.63	8.05

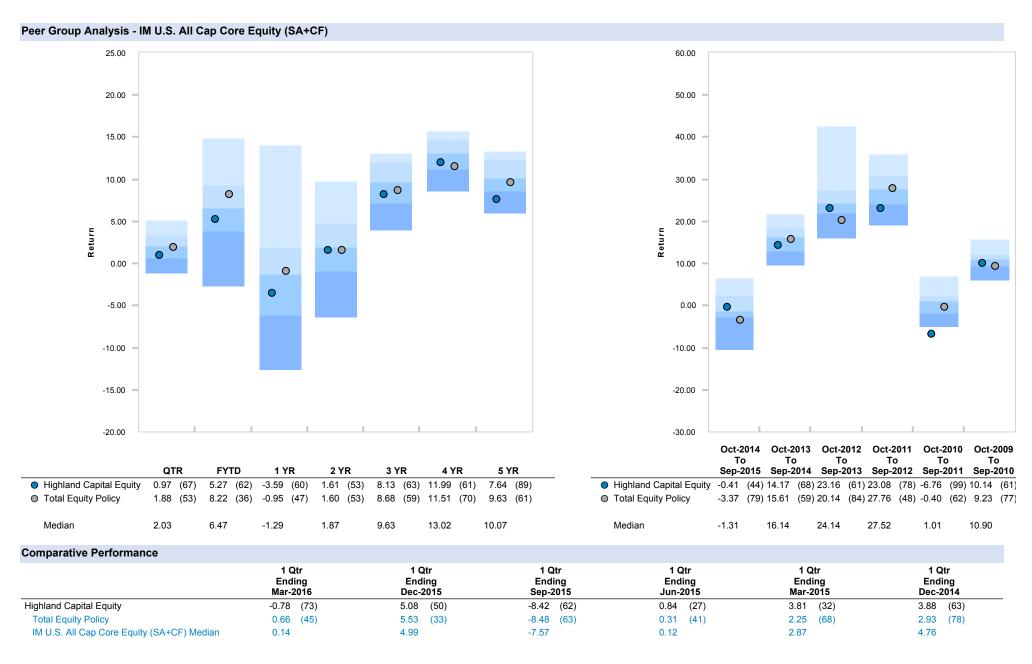
# **Historical Statistics - 3 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.44	96.34	99.38	-0.36	-0.32	1.02	0.99	3.92
<b>Total Fund Policy</b>	0.00	100.00	100.00	0.00	N/A	1.10	1.00	3.64

### **Historical Statistics - 5 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	2.21	98.12	109.75	-1.17	-0.41	0.87	1.03	4.67
<b>Total Fund Policy</b>	0.00	100.00	100.00	0.00	N/A	1.06	1.00	4.10







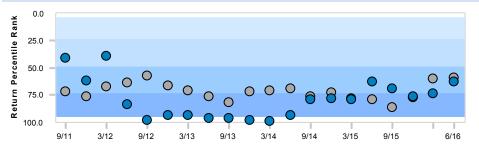
# 3 Yr Rolling Under/Over Performance - 5 Years Over Performance 10.0 1

Under Performance

X Latest Date

# 3 Yr Rolling Percentile Ranking - 5 Years

Peer Group Scattergram - 5 Years

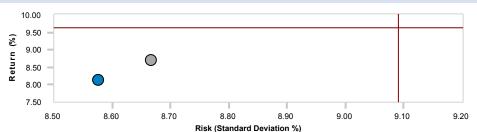


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul> <li>Highland Capital Equity</li> </ul>	20	0 (0%)	2 (10%)	5 (25%)	13 (65%)	
<ul> <li>Total Equity Policy</li> </ul>	20	0 (0%)	0 (0%)	12 (60%)	8 (40%)	

# Peer Group Scattergram - 3 Years

Earliest Date

Over Performance



	10.53							
Return (%)	9.72 -		0					
	8.91 —							
	8.10 —							
	7.29 -							
	6.48							
	11.	97	12.54	13.11	13.6	68 14.25	14.82	15.39

Risk (Standard Deviation %)

	Return	Standard Deviation
<ul><li>Highland Capital Equity</li></ul>	8.13	8.58
<ul> <li>Total Equity Policy</li> </ul>	8.68	8.67
Median	9.63	9.09

	Return	Standard Deviation
<ul><li>Highland Capital Equity</li></ul>	7.64	14.98
<ul> <li>Total Equity Policy</li> </ul>	9.63	12.56
Median	10.07	13.69

# **Historical Statistics - 3 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Highland Capital Equity	2.10	99.40	103.17	-0.45	-0.24	0.73	1.00	6.92
Total Equity Policy	0.00	100.00	100.00	0.00	N/A	0.78	1.00	6.64

### **Historical Statistics - 5 Years**

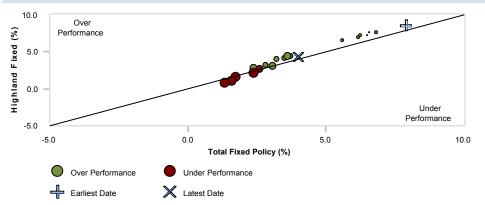
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Highland Capital Equity	4.01	102.09	116.74	-2.62	-0.40	0.59	1.10	8.95
Total Equity Policy	0.00	100.00	100.00	0.00	N/A	0.80	1.00	7.47



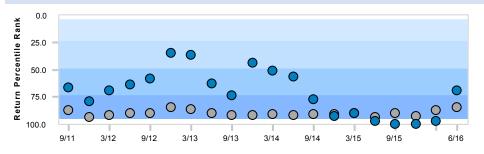
#### Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF) 8.36 17.00 7.52 14.00 6.68 11.00 0 5.84 00 8.00 5.00 Return Return 0 0 0 0 5.00 00 0 4.16 0 0 0 2.00 3.32 -1.00 2.48 0 0 -4.00 1.64 0.80 -7.00 Oct-2014 Oct-2013 Oct-2012 Oct-2011 Oct-2010 Oct-2009 To To To Τo To To QTR **FYTD** 1 YR 2 YR 3 YR 4 YR 5 YR Sep-2015 Sep-2014 Sep-2013 Sep-2012 Sep-2011 Sep-2010 7.26 (3) Highland Fixed 3.01 (4) 6.05 (4) 4.15 (47) 4.18 (69) 2.96 (78) 4.24 (43) Highland Fixed 2.18 (88) 3.95 (81) -2.75 (100) 7.18 (39) 5.29 Total Fixed Policy 2.21 (69) 4.71 (67) 6.00 (62) 3.91 (70) 4.01 (85) 2.79 (95) 3.74 (91) Total Fixed Policy 2.94 (59) 3.85 (88) 5.23 (53) -1.86 (89) 5.28 (87) 8.00 (90) Median 2.32 4.98 6.14 4.11 4.34 3.30 4.14 Median 3.02 4.50 -1.24 6.60 5.25 9.24 **Comparative Performance** 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr **Ending Ending Ending Ending** Ending **Ending** Mar-2016 Dec-2015 Sep-2015 Jun-2015 Mar-2015 Dec-2014 Highland Fixed 3.57 (2) -0.60 (75) 1.13 (52) -2.10 (99) 1.79 (39) 1.39 (86) **Total Fixed Policy** 3.03 (51) -0.57 (72) 1.23 (40)-1.68 (72) 1.61 (75)1.79 (39)IM U.S. Broad Market Core Fixed Income (SA+CF) Median -0.45 1.14 1.74 1.74 3.03 -1.60



# 3 Yr Rolling Under/Over Performance - 5 Years

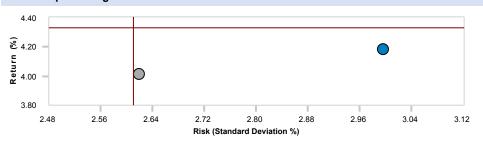


# 3 Yr Rolling Percentile Ranking - 5 Years



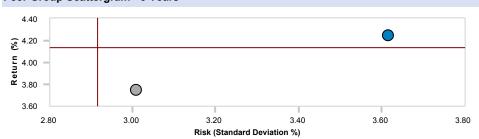
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul><li>Highland Fixed</li></ul>	20	0 (0%)	3 (15%)	9 (45%)	8 (40%)
<ul> <li>Total Fixed Policy</li> </ul>	20	0 (0%)	0 (0%)	0 (0%)	20 (100%)

# Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<ul><li>Highland Fixed</li></ul>	4.18	3.00
<ul> <li>Total Fixed Policy</li> </ul>	4.01	2.62
Median	4.34	2.61

# Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<ul><li>Highland Fixed</li></ul>	4.24	3.62
<ul> <li>Total Fixed Policy</li> </ul>	3.74	3.01
Median	4.14	2.91

# **Historical Statistics - 3 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Highland Fixed	1.08	108.11	115.50	0.06	0.16	1.40	1.03	1.37
<b>Total Fixed Policy</b>	0.00	100.00	100.00	0.00	N/A	1.48	1.00	1.14

### **Historical Statistics - 5 Years**

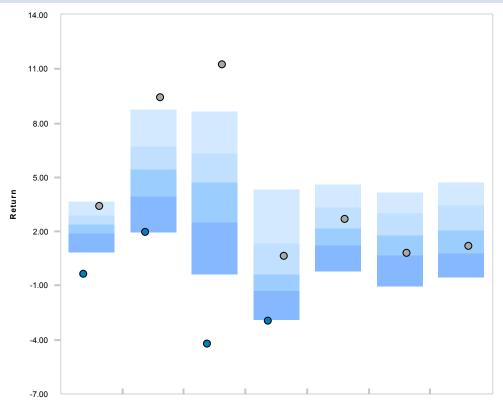
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Highland Fixed	1.15	115.70	119.51	0.10	0.43	1.25	1.11	1.79
<b>Total Fixed Policy</b>	0.00	100.00	100.00	0.00	N/A	1.30	1.00	1.49

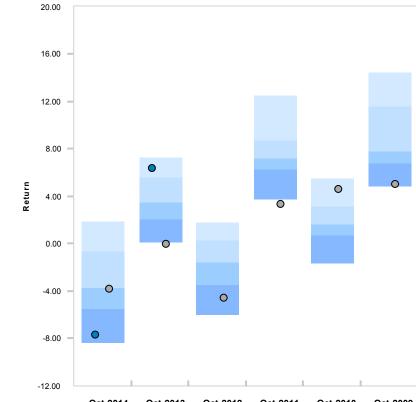


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# Plan Sponsor Peer Group Analysis - IM Global Fixed Income (MF)





	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR	
<ul><li>Templeton GB</li></ul>	-0.37 (100)	1.97 (95)	-4.26 (100)	-2.95 (96)	N/A	N/A	N/A	
CG W/G Bond	3.41 (9)	9.39 (3)	11.26 (1)	0.61 (34)	2.65 (37)	0.81 (73)	1.18 (69)	
Median	2.39	5.41	4.71	-0.35	2.16	1.81	2.04	

	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013	Oct-2011 To Sep-2012	Oct-2010 To Sep-2011	Oct-2009 To Sep-2010
<ul><li>Templeton GB</li></ul>	-7.69 (91)	6.34 (12)	N/A	N/A	N/A	N/A
CG W/G Bond	-3.83 (52)	-0.07 (97)	-4.60 (85)	3.29 (97)	4.61 (8)	4.99 (95)
Median	-3.75	3.53	-1.52	7.19	1.61	7.82

Comparative Performance						
	1 Qtr Ending Mar-2016	1 Qtr Ending Dec-2015	1 Qtr Ending Sep-2015	1 Qtr Ending Jun-2015	1 Qtr Ending Mar-2015	1 Qtr Ending Dec-2014
Templeton GB	0.09 (100)	2.26 (1)	-6.11 (100)	-0.27 (11)	0.22 (45)	-1.63 (75)
CG W/G Bond	7.09 (4)	-1.23 (77)	1.71 (1)	-1.55 (41)	-2.51 (100)	-1.49 (71)
IM Global Fixed Income (MF) Median	3.15	-0.75	-0.35	-1.91	0.08	-1.04



#### Plan Sponsor Peer Group Analysis - IM U.S. Open End Private Real Estate (SA+CF) 26.00 35.00 23.00 30.00 20.00 25.00 17.00 20.00 0 00 14.00 15.00 0 0 0 0 00 00 0 0 11.00 10.00 0 0 8.00 5.00 5.00 0.00 2.00 -5.00 -1.00 -10.00 -4.00 -15.00 Oct-2014 Oct-2013 Oct-2012 Oct-2011 Oct-2010 Oct-2009 Τo To To To To QTR **FYTD** 1 YR 2 YR 3 YR 4 YR 5 YR Sep-2015 Sep-2014 Sep-2013 Sep-2012 Sep-2011 Sep-2010 • American Core Realty Fund 1.26 (100) 7.08 (95) 10.64 (100) 12.31 (73) 12.39 (83) 12.14 (84) American Core Realty Fund 13.98 (68) 12.49 (66) 12.27 (72) N/A NCREIF ODCE 8.33 (50) 12.26 (74) 13.38 (62) 13.02 (65) 12.72 (74) 12.68 (70) NCREIF ODCE 14.71 (64) 12.39 (70) 12.47 (69) 11.77 (66) 18.03 (41) 6.14 (52) 2.18 (74) Median 2.54 8.26 12.64 13.53 13.52 13.44 13.37 Median 15.93 12.90 13.22 12.90 16.62 6.39 **Comparative Performance** 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr **Ending Ending** Ending Ending **Ending** Ending Mar-2016 Dec-2015 Sep-2015 Jun-2015 Mar-2015 Dec-2014 American Core Realty Fund 2.63 (53) 3.03 (78) 3.33 (73) 3.75 (49) 4.46 (23) 1.80 (94) NCREIF ODCE 3.43 (57) 3.63 (49)3.92 (42)3.40 (57)(66)2.50 (60)3.02 IM U.S. Open End Private Real Estate (SA+CF) Median 3.55 3.45 2.64 3.57 3.56 3.72



# 3 Yr Rolling Under/Over Performance - 5 Years Over Performance 13.0 12.0 12.5 13.0 NCREIF ODCE (%)

X Latest Date

# 3 Yr Rolling Percentile Ranking - 5 Years 10.0 25.0 50.0 9/11 3/12 9/12 3/13 9/13 3/14 9/14 3/15 9/15 6/16

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul> <li>American Core Realty Fund</li> </ul>	5	0 (0%)	0 (0%)	0 (0%)	5 (100%)
O NCREIF ODCE	20	0 (0%)	2 (10%)	16 (80%)	2 (10%)

# Peer Group Scattergram - 3 Years 14.06 13.68 13.30 12.92 12.54 12.16 0.80 1.00 1.20 1.40 Risk (Standard Deviation %)

Earliest Date

Under Performance

Peer Gr	oup Sc	attergram - 5 Yo	ears				
13.50							
§ 13.20	-						
12.90 12.60	_	$\circ$					
	0.8	1.0	1.2	1.4	1.6	1.8	2.0
			Risk (S	tandard Deviation	%)		

	Return	Standard Deviation
<ul> <li>American Core Realty Fund</li> </ul>	12.39	1.62
<ul><li>NCREIF ODCE</li></ul>	13.02	1.00
Median	13.52	1.62

	Return	Standard Deviation	
<ul><li>American Core Realty Fund</li></ul>	N/A	N/A	
<ul><li>NCREIF ODCE</li></ul>	12.68	0.96	
Median	13.37	1.71	

Historical Statistics - 3 Years											
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk			
American Core Realty Fund	1.21	95.42	N/A	-0.07	-0.47	2.32	0.96	0.00			
NCREIF ODCE	0.00	100.00	N/A	0.00	N/A	2.40	1.00	0.00			
Historical Statistics - 5 Ye	ars										

Historical Statistics - 5 fe	ars							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
American Core Realty Fund	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF ODCE	0.00	100.00	N/A	0.00	N/A	2.40	1.00	0.00



Fixed Income Compliance: Yes No N/A	Total Fund Compliance:									Ye	s No	) N	I/A
Fixed Income Compliance:  Yes No N/A  Manager Compliance:													
Fixed Income Compliance:  Yes No N/A  Manager Compliance:													
Fixed Income Compliance:  Yes No N/A  Manager Compliance:													
Fixed Income Compliance:  Yes No N/A  Manager Compliance:													
Manager Compliance:	Equity Compliance:									Ye	s No	) N	I/A
Manager Compliance:													
Manager Compliance:													
Manager Compliance:													
Manager Compliance:													
	Fixed Income Compliance:									Ye	s No	) N	I/A
Yes No N/A	Manager Compliance:												
		Yes No	N/A	Yes No	N/A	Yes N	lo N	/A Y	es No	N/A	Yes	No	N/A



Total Fund Policy		
Allocation Mandate	Weight (%)	
Dec-1975		
S&P 500 Index	50.00	
BofA Merrill Lynch Gov't/ Corp Master	50.00	
Oct-2004		
S&P 500 Index	50.00	
BofA Merrill Lynch US Domestic Master	40.00	
MSCI EAFE Index	10.00	
Jan-2014		
Russell 3000 Index	45.00	
MSCI AC World ex USA	15.00	
Barclays Aggregate Index	25.00	
Citigroup World Government Bond Index	5.00	
NCREIF Fund Index-Open End Diversified Core (EW)	10.00	

Total Equity Policy	144 1 1 4 (0/)	
Allocation Mandate	Weight (%)	
Jan-1998		
S&P 500 Index	100.00	
Oct-2004		
S&P 500 Index	85.00	
MSCI EAFE Index	15.00	
Jan-2014		
Russell 3000 Index	75.00	
MSCI AC World ex USA	25.00	

Total Fixed Income Policy		
Allocation Mandate	Weight (%)	
Jan-1998		
BofA Merrill Lynch Gov't/ Corp Master	100.00	
Oct-2004		
BofA Merrill Lynch US Domestic Master	100.00	
Jan-2014		
Barclavs Aggregate Index	100.00	



**Active Return** 

- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.

Alpha

- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.

Beta

- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.

Consistency

- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.

Distributed to Paid In (DPI)

- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.

**Down Market Capture** 

- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance

Downside Risk

- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.

**Excess Return** 

- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.

**Excess Risk** 

- A measure of the standard deviation of a portfolio's performance relative to the risk free return.

Information Ratio

- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.

R-Squared

- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.

Return

- Compounded rate of return for the period.

**Sharpe Ratio** 

- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.

Standard Deviation

- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.

Total Value to Paid In (TVPI)

- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life

**Tracking Error** 

- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.

**Treynor Ratio** 

- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.

**Up Market Capture** 

- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.



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# Orlando

4901 Vineland Road, Suite 600 Orlando, Florida 32811

866.240.7932

Chicago Cleveland Detroit Pittsburgh Tulsa