Investment Performance Review Period Ending June 30, 2018

### **City of Key West General Employees' Pension Fund**

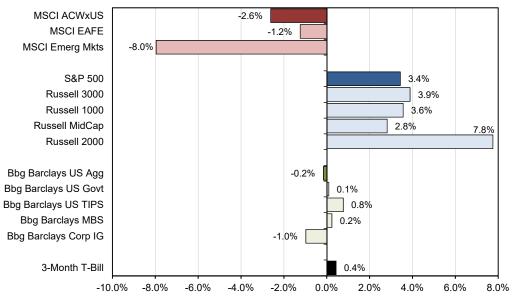


**2nd Quarter 2018 Market Environment** 

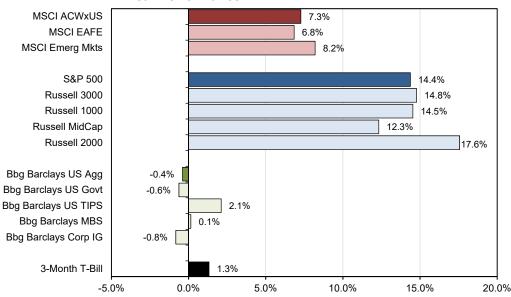


- Market returns were mixed across major equity and fixed income indices for the 2nd quarter of 2018. Broad domestic equity indices had healthy gains as supportive economic and corporate earnings data, helped by a fiscal stimulus tailwind resulting from the Republican Party led tax reform passed in late 2017, continued to push domestic stocks higher. International indices did not fare as well during the period, posting negative returns in US dollar (USD) terms, as markets were hurt by relatively soft economic data, geopolitical concerns and a strengthening USD. Fixed income returns were somewhat flat for the quarter with the various sector segments producing minor gains or losses. Despite the Federal Reserve's (Fed) ongoing tightening of monetary policy and the potential for global trade disruptions resulting from Trump administration protectionist trade policies, economic momentum in the US continued to fuel investor demand for domestic equities. The US stock market represented by the Russell 3000 Index returned 3.9% and 14.8% for the quarter and 1-year period respectively.
- International equity posted negative returns for the quarter with emerging markets stocks falling the greatest degree. The developed market MSCI EAFE Index lost -1.2% as macroeconomic data abroad, while still signaling a continuation in global growth, appeared to slow throughout the quarter. International markets were also affected by investor concerns surrounding ongoing political developments in various countries and continued uncertainty around the outlook for global trade relations. International market returns also faced a currency effect headwind as the USD appreciated against most other currencies during the period. This combination of factors had the greatest influence on emerging market equities with the MSCI Emerging Markets Index posting a sharp decline of -8.0%. One-year returns remain broadly positive with the MSCI EAFE and MSCI Emerging Markets indices returning 6.8% and 8.2% respectively.
- Interest rates on the US Treasury Yield Curve rose across all maturities during the 2nd quarter. The increase in interest rates was most pronounced in short-term maturities resulting in further flattening of the yield curve. The relatively large increase at the short-end of the curve was partially due to the Feds decision to tighten monetary policy by increasing short-term interest rates for the second time this year during their June meeting. Also significant was the change in the Fed's forecasted schedule for interest rate increases, which now projects two potential additional rate increases in 2018, where it had previously forecast just one. The broad market Bloomberg Barclays US Aggregate Index was modestly negative for both the 2nd quarter and the 1-year time period, returning -0.2% and -0.4% respectively. Corporate issues were the worst performing investment grade sector during the quarter, returning -1.0% as credit spreads continued to widen through 2018.

### **Quarter Performance**

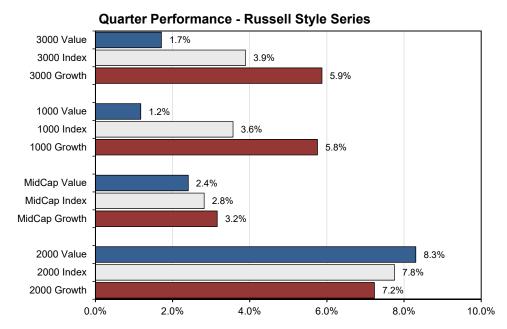


### 1-Year Performance

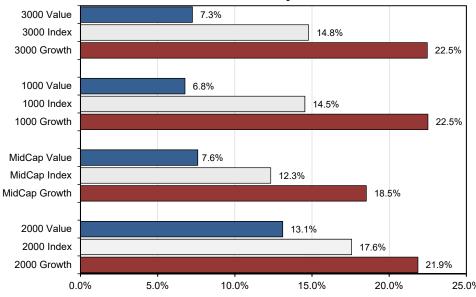




- US equity index returns were positive across the style and capitalization spectrum during the 2nd quarter of 2018. Markets were encouraged by the ongoing strength in US economic data and corporate earnings. Positive data releases in unemployment, retail sales, consumer consumption, GDP and investor sentiment highlighted the continued health of the US economy. Additionally, Q1 2018 corporate earnings announced throughout the period grew at an impressive rate as corporate profits were beneficiaries of the late 2017 Republican Party tax reforms. Returns for the period were tempered by global trade uncertainty as tariffs on steel and aluminum imported from Canada, Mexico and the European Union took effect with the possibility of additional tariffs aimed at China and foreign auto producers being considered. The Trump administration also announced the US withdrawal from the Iran nuclear accord, proposing new sanctions, which could disrupt oil markets in the future, and made progress toward a denuclearization deal with North Korea.
- During the quarter, small cap stocks outperformed mid and large cap equities for style and core indices. This is partially due to the increased tax reform benefit small cap companies will receive relative to large caps. Small cap stocks have historically paid higher taxes relative to large cap companies since they typically generate more of their revenue in the US. More globally oriented large caps also faced a considerable headwind from the recent USD strength. Large cap companies generate more revenue outside of the US and an appreciating USD makes US exports more expensive to foreign consumers. The small cap Russell 2000 Index returned 7.8% during the period, while the large cap Russell 1000 Index returned 3.6%. Small caps also outperformed over the 1-year period with the Russell 2000 returning 17.6% over the trailing year while the Russell 1000 posted a return of 14.5%.
- Style index performance was mixed during the quarter with growth companies outperforming in large- and mid-cap, but value stocks outperforming in the small-cap space. The Russell 2000 Value Index was the best performing style index for the period returning a notable 8.3% for the quarter. Returns over the trailing year continue to show significant outperformance of growth indices relative to their value counterparts with the return of the Russell 1000 Growth Index more than tripling the return of the Russell 1000 Value Index. Growth benchmarks benefitted from larger exposures to more cyclical names within the information technology, consumer discretionary, health care and industrials sectors. They also benefitted from underweights to more defensive sectors such as REITs, utilities and telecom.

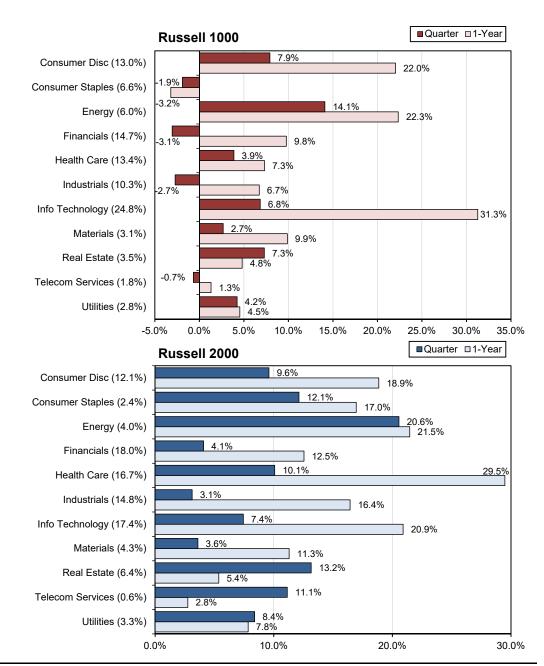


### 1-Year Performance - Russell Style Series





- Sector performance was mixed across large cap sectors for the 2nd quarter of 2018. Seven of eleven sectors had positive returns for the guarter and six of eleven economic sectors outpaced the Russell 1000 Index return. Energy was the best performing sector during the guarter, returning 14.1%, as an OPEC announced increase in crude oil production was overshadowed by supply concerns in Iran, Venezuela and Libya, resulting in considerably higher oil prices. The consumer discretionary sector also performed well on the back of strong retail sales and increased consumer spending, gaining 7.9% for the period. Technology stocks continued their climb, returning 6.8% over the quarter. Technology names now account for nearly 25% of the market cap of the Russell 1000 Index. The largest detractors for the quarter were the financials, industrials and consumer staples sectors which returned -3.1%, -2.7% and -1.9% respectively. Over the trailing 1-year period, technology was the best performing sector by a relatively wide margin returning an impressive 31.3% and the consumer discretionary and energy sectors also posted returns greater than 20%. Ten of eleven large cap economic sectors posted positive returns for the 1-year period with consumer staples being the only sector to post negative performance, returning -3.2%.
- Quarterly results for small cap sectors were higher relative to their large capitalization counterparts. All sectors had positive returns during the period with seven of eleven economic sectors outpacing the Russell 2000 Index return for the guarter. Like the large cap index sector performance, industrials and financials were relative underperformers for the 2nd quarter. Financials were hurt by a flattening yield curve and concerns over global trade weighed on industrials. Quarterly performance on industrials and financials was 3.1% and 4.1% respectively. Energy was the best performing sector in the Russell 2000 as well, returning a notable 20.6%. However, there were several differences, particularly in consumer staples and telecom where there was significant outperformance relative to their large cap counterparts. Small cap sectors beat large cap sectors in those two categorizations by over 10.0% during the guarter. Over the trailing 1-year period, all eleven sectors posted gains. Health care stocks were the best performers within the Russell 2000 for the trailing year returning a solid 29.5%. Energy and technology also posted returns over 20% for the 1-year period.
- Using S&P 500 sector valuations as a proxy for the market, forward P/E ratios for six of the eleven GICS sectors were higher than their long-term averages at quarter-end. Using these historical P/E measures, the utilities, consumer discretionary and real estate sectors appear the most extended. In contrast the telecommunications, technology and health care sectors were trading at a discount to their long-term average P/E ratios.





Top 10 Weighted Stocks						
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector		
Apple Inc	3.53%	10.8%	30.5%	Information Technology		
Microsoft Corp	2.89%	8.5%	45.8%	Information Technology		
Amazon.com Inc	2.68%	17.4%	75.6%	Consumer Discretionary		
Facebook Inc A	1.79%	21.6%	28.7%	Information Technology		
Berkshire Hathaway Inc B	1.40%	-6.4%	10.2%	Financials		
JPMorgan Chase & Co	1.37%	-4.8%	16.5%	Financials		
Exxon Mobil Corp	1.36%	12.0%	6.6%	Energy		
Alphabet Inc C	1.32%	8.1%	22.8%	Information Technology		
Alphabet Inc A	1.31%	8.9%	21.5%	Information Technology		
Johnson & Johnson	1.26%	-4.6%	-5.8%	Health Care		

Top 10 Weighted Stocks						
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector		
Five Below Inc	0.24%	33.2%	97.9%	Consumer Discretionary		
Etsy Inc	0.23%	50.4%	181.3%	Information Technology		
Blackbaud Inc	0.22%	0.8%	20.1%	Information Technology		
LivaNova PLC	0.22%	12.8%	63.1%	Health Care		
Haemonetics Corp	0.22%	22.6%	127.1%	Health Care		
Entegris Inc	0.22%	-2.4%	55.4%	Information Technology		
FibroGen Inc	0.21%	35.5%	93.8%	Health Care		
Idacorp Inc	0.21%	5.2%	10.9%	Utilities		
Medidata Solutions Inc	0.21%	28.3%	3.0%	Health Care		
Loxo Oncology Inc	0.21%	50.4%	116.3%	Health Care		

Top 10 Performing Stocks (by Quarter)						
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector		
Sarepta Therapeutics Inc	0.03%	78.4%	292.1%	Health Care		
Wayfair Inc Class A	0.03%	75.9%	54.5%	Consumer Discretionary		
Chesapeake Energy Corp	0.02%	73.5%	5.4%	Energy		
Whiting Petroleum Corp	0.02%	55.8%	139.2%	Energy		
Twitter Inc	0.12%	50.5%	144.4%	Information Technology		
Advanced Micro Devices Inc	0.05%	49.2%	20.1%	Information Technology		
Exact Sciences Corp	0.03%	48.3%	69.0%	Health Care		
Under Armour Inc C	0.02%	46.9%	4.6%	Consumer Discretionary		
Twilio Inc A	0.02%	46.7%	92.4%	Information Technology		
Weatherford International PLC	0.01%	43.7%	-15.0%	Energy		

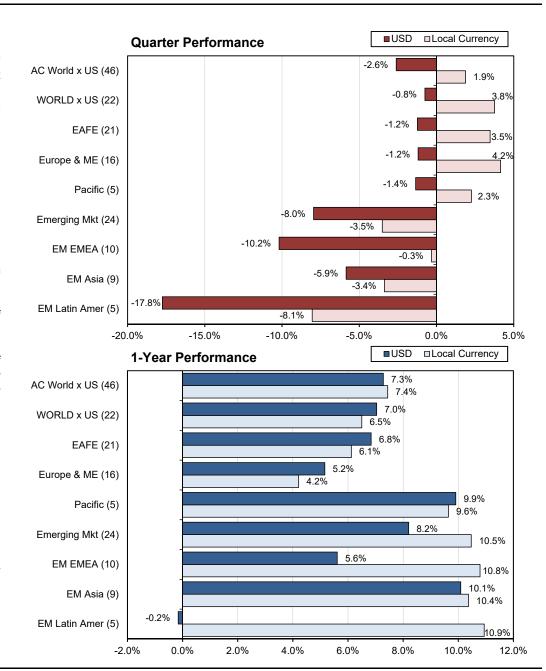
Top 10 Performing Stocks (by Quarter)							
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector			
Turtle Beach Corp	0.01%	746.8%	625.7%	Consumer Discretionary			
Solid Biosciences Inc	0.01%	375.1%	N/A	Health Care			
Tandem Diabetes Care Inc	0.04%	344.0%	175.2%	Health Care			
Intelsat SA	0.03%	343.1%	444.4%	Telecommunication Services			
Evolus Inc	0.01%	210.0%	N/A	Health Care			
California Resources Corp	0.09%	165.0%	431.5%	Energy			
TransEnterix Inc	0.03%	156.5%	514.1%	Health Care			
Penn Virginia Corp	0.05%	142.3%	131.0%	Energy			
Regenxbio Inc	0.09%	140.4%	263.3%	Health Care			
Madrigal Pharmaceuticals Inc	0.07%	139.5%	1620.1%	Health Care			

Bottom 10 Performing Stocks (by Quarter)						
Russell 1000	Weight	Weight 1-Qtr 1-Year Return Return		Sector		
Nektar Therapeutics Inc	0.03%	-54.0%	149.8%	Health Care		
Alkermes PLC	0.02%	-29.0%	-29.0%	Health Care		
CommScope Holding Co Inc	0.02%	-26.9%	-23.2%	Information Technology		
American Airlines Group Inc	0.06%	-26.8%	-23.9%	Industrials		
Arconic Inc	0.03%	-25.9%	-24.1%	Industrials		
Copa Holdings SA Class A	0.01%	-25.9%	-17.0%	Industrials		
First Solar Inc	0.02%	-25.8%	32.0%	Information Technology		
ManpowerGroup Inc	0.02%	-24.4%	-21.5%	Industrials		
Switch Inc Class A	0.00%	-23.3%	N/A	Information Technology		
Skechers USA Inc	0.02%	-22.8%	1.7%	Consumer Discretionary		

Bottom 10 Performing Stocks (by Quarter)						
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector		
Arsanis Inc	0.00%	-84.1%	N/A	Health Care		
Menlo Therapeutics Inc	0.00%	-78.4%	N/A	Health Care		
Jounce Therapeutics Inc	0.01%	-65.7%	-45.4%	Health Care		
Prothena Corp PLC	0.03%	-60.3%	-73.1%	Health Care		
Biglari Holdings Inc	0.01%	-55.1%	-54.1%	Consumer Discretionary		
Catalyst Biosciences Inc	0.01%	-54.8%	151.0%	Health Care		
Recro Pharma Inc	0.00%	-54.4%	-28.6%	Health Care		
scPharmaceuticals Inc	0.00%	-54.4%	N/A	Health Care		
Agenus Inc	0.01%	-51.8%	-41.9%	Health Care		
Syndax Pharmaceuticals Inc	0.00%	-50.7%	-49.7%	Health Care		



- Broad international equity returns were mixed for the quarter. Many developed markets were positive in local currency terms, but negative in USD terms whereas emerging markets posted negative returns in both local currency and USD. Performance was largely driven by the same catalysts as the US equity markets with global macroeconomic data remaining generally positive, but returns being tempered by global trade tensions and ongoing political uncertainty. A strengthening USD caused by relatively strong US economic fundamentals and the continued divergence in global monetary policy hurt US investors in international markets. The MSCI ACWI ex US Index gained 1.9% in local currency terms, but lost -2.6% in USD terms during the second quarter. Returns over the 1-year period remain positive in both local currency and USD terms with the MSCI ACWI ex US returning 7.4% and 7.3% respectively.
- Second quarter results for developed market international indices were generally positive in local currency terms with the MSCI EAFE Index returning 3.5%. However, an appreciating USD pushed returns for US investors into negative territory, with the index returning -1.2% in USD terms. Developed markets were pushed higher by broadly positive, but slowing, global economic and earnings data despite several significant political events in Europe during the quarter. There was considerable volatility surrounding the formation of a coalition government in Italy which called into question Italy's future as part of the European Union. Spain also had a change in leadership after a political fundraising scandal led to a vote of no-confidence in Prime Minister Rajoy, forcing him to step down. World markets also reacted to the implementation of new tariffs on US imports of steel and aluminum and the possibility of new tariffs in the future, including tariffs on auto imports, which would negatively affect producers in Europe and Japan. The MSCI EAFE Index returned 6.1% and 6.8% for the last twelve months in local currency and USD terms respectively.
- Emerging markets trailed developed markets for the 2nd quarter, posting losses in local currency terms that were then intensified by the strengthening USD. The MSCI Emerging Markets Index returned -3.5% and -8.0% in local currency and USD terms respectively. The main factors affecting emerging markets were the threat of continued protectionist trade policies from the US creating uncertainty for export focused economies and rising US interest rates coupled with an appreciating USD. Many emerging market countries and companies issue debt denominated in USD and the combination of higher interest rates and a relatively weaker local currency can put stress on the balance sheets of these borrowers, especially those heavily dependent on external capital. One year returns for the MSCI Emerging Market Index were 10.5% in local currency terms and 8.2% in USD terms.





MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	12.4%	-2.6%	10.9%
Consumer Staples	11.3%	0.4%	3.1%
Energy	6.1%	11.2%	35.8%
Financials	19.8%	-6.2%	-0.5%
Health Care	10.7%	1.9%	1.7%
Industrials	14.3%	-2.2%	7.3%
Information Technology	6.8%	-0.2%	15.0%
Materials	8.2%	0.7%	16.7%
Real Estate	3.5%	-0.4%	7.8%
Telecommunication Services	3.6%	-4.8%	-6.3%
Utilities	3.3%	0.5%	5.2%
Total	100.0%	-1.2%	6.8%

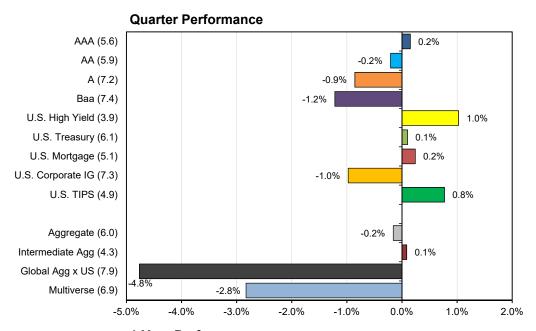
MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	11.2%	-3.5%	8.4%
Consumer Staples	9.7%	-0.7%	2.9%
Energy	7.4%	7.3%	27.5%
Financials	21.9%	-7.3%	1.7%
Health Care	8.1%	1.4%	3.2%
Industrials	11.7%	-2.7%	5.9%
Information Technology	11.9%	-2.9%	15.5%
Materials	8.2%	-0.4%	16.1%
Real Estate	3.2%	-3.0%	6.9%
Telecommunication Services	3.7%	-6.0%	-6.3%
Utilities	3.0%	-1.5%	3.8%
Total	100.0%	-2.6%	7.3%

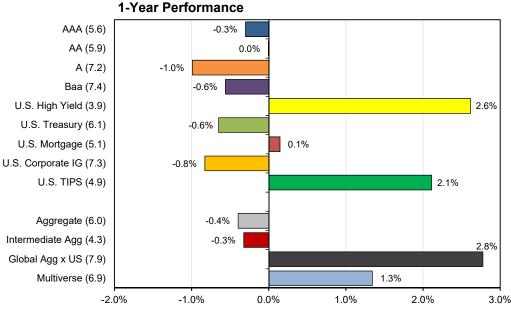
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	9.8%	-7.1%	-0.2%
Consumer Staples	6.7%	-6.2%	3.3%
Energy	7.2%	-4.7%	24.9%
Financials	22.8%	-12.7%	5.5%
Health Care	3.2%	-5.0%	22.4%
Industrials	5.2%	-11.2%	-5.9%
Information Technology	27.9%	-5.1%	15.2%
Materials	7.6%	-5.5%	14.0%
Real Estate	3.0%	-11.2%	5.6%
Telecommunication Services	4.3%	-9.7%	-7.5%
Utilities	2.4%	-8.1%	2.2%
Total	100.0%	-8.0%	8.2%

	MSCI-EAFE	MSCI-ACWIXUS	Quarter	1- Year
Country	Weight	Weight	Return	Return
Japan	24.0%	16.4%	-2.8%	10.5%
United Kingdom	18.0%	12.3%	3.0%	10.0%
France	11.0%	7.5%	-0.5%	9.9%
Germany	9.5%	6.5%	-4.0%	2.6%
Switzerland	7.8%	5.3%	-2.7%	-3.4%
Australia	7.0%	4.8%	5.2%	8.7%
Hong Kong	3.6%	2.5%	-1.2%	9.2%
Netherlands	3.6%	2.5%	-1.8%	9.2%
Spain	3.1%	2.1%	-4.4%	-3.6%
Sweden	2.6%	1.8%	-3.7%	-4.6%
Italy	2.4%	1.7%	-7.3%	8.4%
Denmark	1.7%	1.1%	-7.0%	0.9%
Singapore	1.3%	0.9%	-7.5%	7.9%
Belgium	1.1%	0.7%	-6.0%	1.7%
Finland	1.0%	0.7%	1.3%	10.4%
Norway	0.7%	0.5%	2.3%	27.1%
Ireland	0.6%	0.4%	2.0%	5.3%
Israel	0.5%	0.4%	10.9%	-4.6%
Austria	0.2%	0.2%	-10.6%	8.9%
New Zealand	0.2%	0.2%	5.8%	1.7%
Portugal	0.2%	0.1%	1.2%	15.8%
Total EAFE Countries	100.0%	68.4%	-1.2%	6.8%
Canada		6.6%	4.7%	9.1%
Total Developed Countries		75.0%	-0.8%	7.0%
China		8.2%	-3.5%	21.2%
Korea		3.7%	-9.2%	3.4%
Taiwan		2.9%	-6.3%	3.9%
India		2.2%	-0.6%	6.5%
South Africa		1.6%	-11.9%	6.4%
Brazil		1.5%	-26.4%	-0.3%
Russia		0.9%	-6.0%	26.0%
Mexico		0.7%	-3.6%	-9.3%
Malaysia		0.6%	-11.4%	5.6%
Thailand		0.5%	-15.0%	12.0%
Indonesia		0.5%	-12.5%	-13.1%
Chile		0.3%	-11.5%	12.5%
Poland		0.3%	-11.6%	-6.2%
Philippines		0.2%	-11.2%	-13.9%
Qatar		0.2%	3.5%	3.5%
Turkey		0.2%	-25.9%	-26.3%
United Arab Emirates		0.2%	-4.4%	-6.0%
Colombia		0.1%	6.7%	20.1%
Peru		0.1%	-3.2%	30.7%
Greece		0.1%	-2.2%	-9.2%
Hungary		0.1%	-14.4%	-0.6%
Czech Republic		0.0%	-5.4%	19.4%
Egypt		0.0%	-8.1%	1.9%
Pakistan		0.0%	-20.8%	-30.3%
Total Emerging Countries		25.0%	-8.0%	8.2%
Total ACWIXUS Countries		100.0%	-2.6%	7.3%
Total Activities		100.070	-2.0 /0	1.570



- Broad fixed income benchmarks had mixed results during the 2nd quarter. Interest rates rose across all maturities on the US Treasury Yield Curve. Early in the guarter, rates rose as positive economic data and signs of higher inflation increased investor expectations for another Fed interest rate hike. However, volatility caused by ongoing geopolitical developments later in the quarter led to an increase in risk aversion and demand for relatively safe assets, driving rates lower through the rest of the quarter. Interest rates on the 10-year Treasury reached a near-term high of 3.11% in mid-May before falling to end the guarter at 2.87%. As expected, the Federal Open Market Committee (FOMC), decided to increase short-term interest rates by 25 basis points at their June meeting. This is the second rate hike of 2018. The current Fed Funds Rate target range sits at 1.75%-2.00%. The FOMC also updated their forecast for future rate increases, now expecting two potential additional hikes in 2018 and three in 2019. The yield curve continued to flatten through the quarter as short-term yields rose at a greater rate than longer-term yields. The difference in yields between the 2-year and 10-year Treasury now sits at just 0.3%. The Fed is also continuing to reduce the size of its balance sheet by slowing its pace of reinvestment as the securities it holds mature. The Bloomberg Barclays US Aggregate Index was relatively flat during the quarter, falling -0.2%. It was also negative for the 1-year period returning -0.4%.
- Within investment grade credit, higher quality corporate issues outperformed lower quality issues for the quarter as credit spreads widened and investors looked for safety amid increased financial market volatility. On an absolute basis, without negating the duration differences in the sub-indices, AAA rated credit was the best performing investment grade credit quality segment returning 0.2% for the quarter. High yield debt outperformed relative to investment grade credit, returning 1.0%, as spreads widened to a lesser degree for these issues and the index benefitted from its lower duration. Part of the reason for the increased spread widening for investment grade issues relative to high yield issues was continued selling pressure from companies repatriating foreign cash reserves in response to the new tax code and lower demand from foreign investors due to increased hedging costs and a stronger USD.
- Of the Bloomberg Barclays US Aggregate Index's three broad sectors, US mortgage backed securities (MBS) were the best performing investment grade sector through the quarter, narrowly outperforming US Treasuries. Corporate credit underperformed as credit spreads widened and investors reacted to market volatility by moving into higher quality issues. Higher durations relative to other index sectors also acted as a headwind to these issues. The Bloomberg Barclays US Corporate IG Index returned -1.0%. While TIPS were also positive, it is important to note these Treasury issues are not part of the Bloomberg Barclays US Aggregate Index.

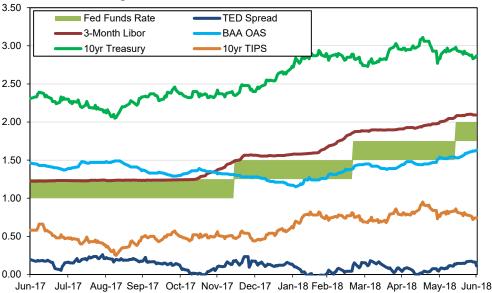




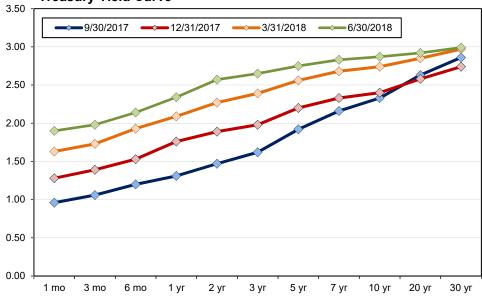


- Relative to their domestic counterparts, global fixed income indices underperformed during the guarter. The relatively high duration of these indices acted as a headwind to performance in the current guarter as interest rates increased. The returns of these indices are also significantly influenced by fluctuations in their currency denomination relative to the USD. During the 2nd quarter the USD strengthened against most other currencies, negatively impacting the returns on global bond indices. The return on global bonds, as represented by the Bloomberg Barclays Global Aggregate ex US Index, was -4.8% for the guarter. However, when viewed over the trailing year, global issues have outperformed domestic securities, returning 2.8%. As the global economy continues to recover, several international central banks have started to move toward less accommodative postures. Notably, the ECB, is planning to slow its monthly bond purchase program in September, reducing new purchases to 15 billion euro per month from 30 billion euro per month, as well as forecasting an end to the program by the end of the year assuming the eurozone recovery continues to flourish. However, they have indicated a continuation of reinvestment in maturing securities and would likely not raise interest rates from current levels until summer 2019. In contrast, the Bank of Japan will continue current stimulus programs and the Bank of England backed away from a telegraphed interest rate hike after disappointing economic data led them to lower their forecasts for future growth.
- Much of the index performance detailed in the bar graphs on the previous page is visible on a time series basis by reviewing the line graphs to the right. The '1-Year Trailing Market Rates' chart illustrates that the 10-year Treasury yield (green line) rose significantly during the first half of the 2nd quarter, rising to a near-term high of 3.11% before falling to 2.87% to end the period. The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-Treasury issues. This line illustrates a steady increase in credit spreads through the first two quarters of 2018. This increase is equivalent to an interest rate increase on corporate bonds, which produces an additional headwind for corporate bond index returns. These credit spreads have widened by about 17 basis points over the last 3-months. The green band across the graph illustrates the gradual increase in the Federal Funds Rate (three in the last twelve months) due to the continued unwinding of accommodative US monetary policy.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four calendar quarters. As mentioned, the yield curve continues to flatten as yields on shorter-term maturities have risen more than interest rates on the long end of the curve. The upward momentum of interest rates as well as a general flattening of the yield curve are clearly visible over both the 2nd quarter and the last twelve months.

### 1-Year Trailing Market Rates



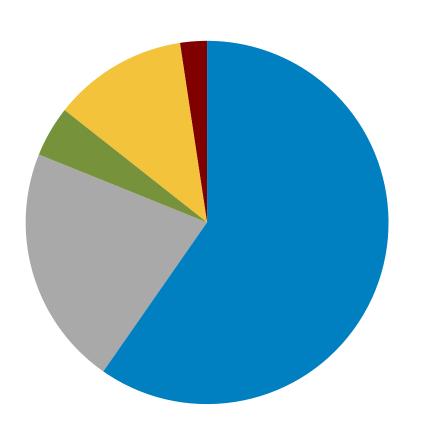
### **Treasury Yield Curve**

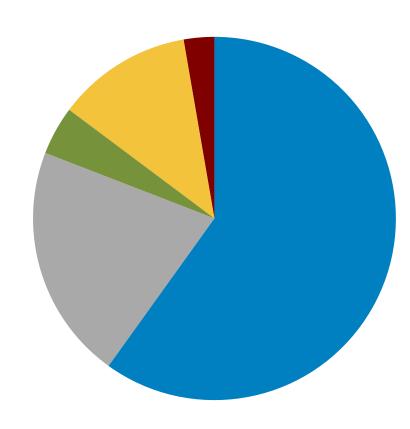




Asset Allocation By Segment as of March 31, 2018 : \$54,576,477

Asset Allocation By Segment as of June 30, 2018 : \$55,273,229



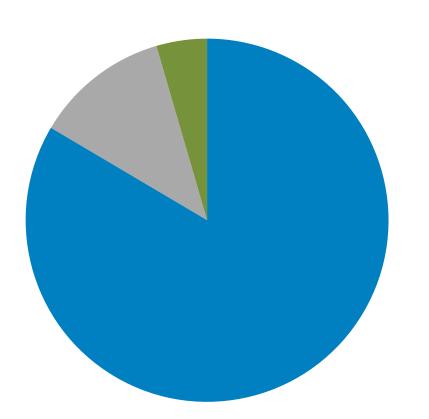


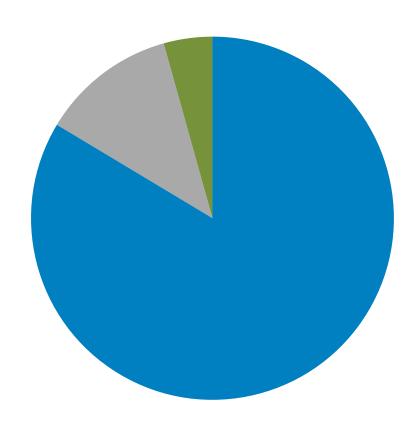
ocation	Allocation					
Segments	Market Value	Allocation	Segments	Market Value	Allocation	
■ Equity	32,575,474	59.7	■ Equity	33,117,151	59.9	
Domestic Fixed Income	11,688,342	21.4	Domestic Fixed Income	11,583,591	21.0	
■ Global Fixed Income	2,462,116	4.5	Global Fixed Income	2,398,855	4.3	
Real Estate	6,546,953	12.0	Real Estate	6,665,395	12.1	
Cash Equivalent	1,303,592	2.4	Cash Equivalent	1,508,237	2.7	



Asset Allocation By Manager as of March 31, 2018 : \$54,576,477

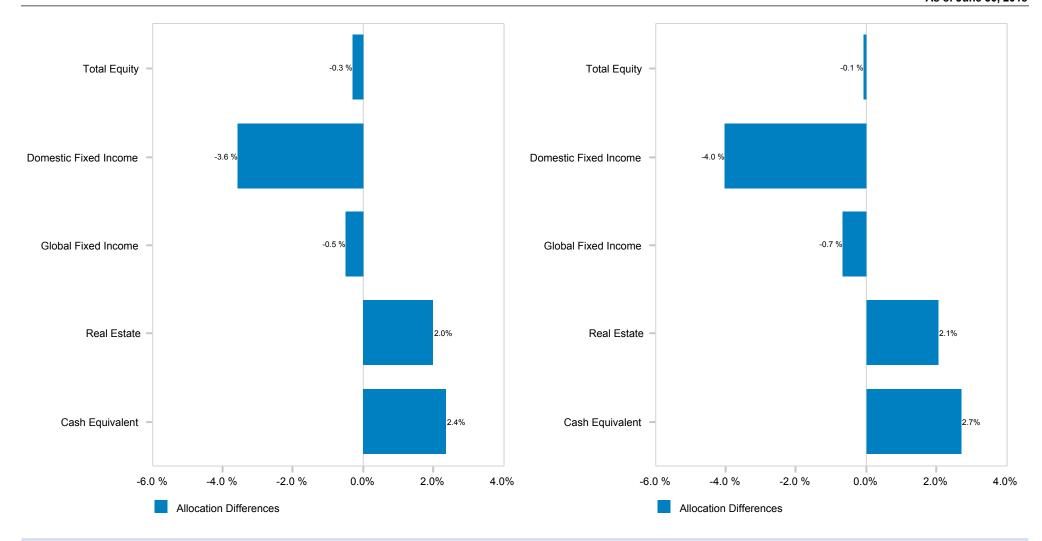
Asset Allocation By Manager as of June 30, 2018 : \$55,273,229





Allocation	Allocation				
	Market Value	Allocation		Market Value	Allocation
Highland Capital	45,567,408	83.5	■ Highland Capital	46,208,979	83.6
American Core Realty Fund	6,546,953	12.0	American Core Realty Fund	6,665,395	12.1
Templeton Global	2,462,116	4.5	Templeton Global	2,398,855	4.3

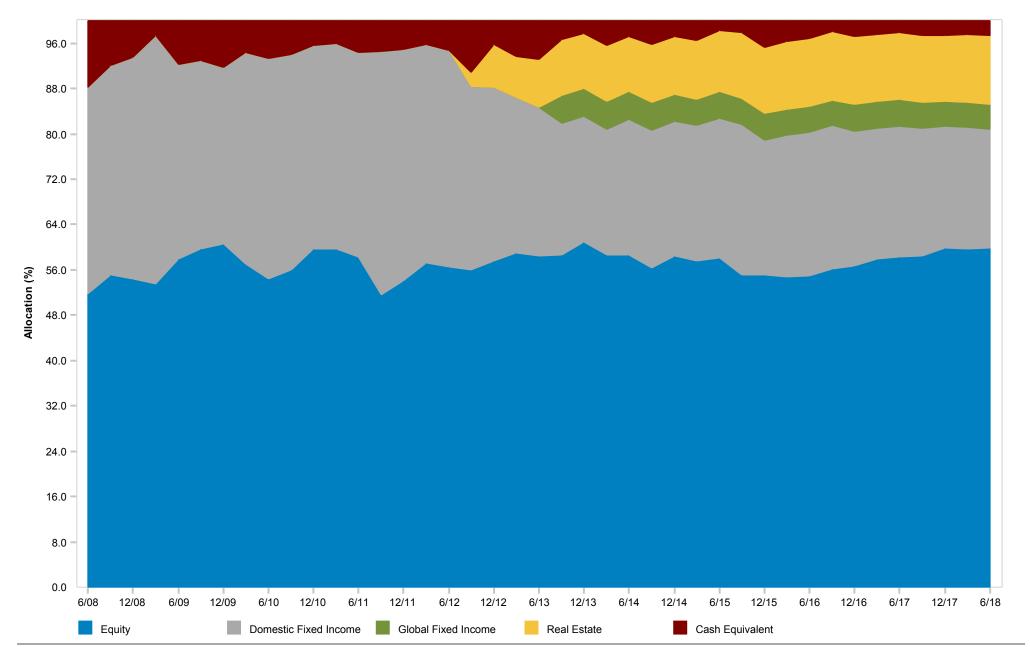




	As of Mar	ch 31, 2018			As of June 30, 2018					
	Market Value \$	Allocation (%)	Target (%)		Market Value \$	Allocation (%)	Target (%)			
Total Equity	32,575,474	59.7	60.0	Total Equity	33,117,151	59.9	60.0			
Domestic Fixed Income	11,688,342	21.4	25.0	Domestic Fixed Income	11,583,591	21.0	25.0			
Global Fixed Income	2,462,116	4.5	5.0	Global Fixed Income	2,398,855	4.3	5.0			
Real Estate	6,546,953	12.0	10.0	Real Estate	6,665,395	12.1	10.0			
Cash Equivalent	1,303,592	2.4	0.0	Cash Equivalent	1,508,237	2.7	0.0			
Total Fund	54,576,477	100.0	100.0	Total Fund	55,273,229	100.0	100.0			



### **Historical Asset Allocation by Segment**





Financial Reconciliation Qua	Financial Reconciliation Quarter to Date											
	Market Value 04/01/2018	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 06/30/2018			
Highland Capital	45,567,408	-	397,545	-714,803	-	-41,192	275,419	724,602	46,208,979			
Templeton Global	2,462,116	-	-	-	-	-	30,322	-93,583	2,398,855			
American Core Realty Fund	6,546,953	-	-	-	-18,380	-	64,822	72,000	6,665,395			
Mutual Fund Cash	-	-	-	-	-	-	-	-	-			
Total Fund	54,576,477	-	397,545	-714,803	-18,380	-41,192	370,564	703,019	55,273,229			

Financial Reconciliation Fisc	al Year to Date								
	Market Value 10/01/2017	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 06/30/2018
Highland Capital	44,922,120	-	1,274,247	-2,482,765	-91,281	-148,127	770,460	1,964,324	46,208,979
Templeton Global	2,473,920	-	-	-	-	-	79,306	-154,372	2,398,855
American Core Realty Fund	6,330,038	-	-	-	-54,142	-	205,666	183,833	6,665,395
Mutual Fund Cash	-	-	-	-	-	-	-	-	-
Total Fund	53,726,079	-	1,274,247	-2,482,765	-145,423	-148,127	1,055,433	1,993,786	55,273,229



Comparative Performance Trailing Returns												
	QT	R	FYTI		TD 1 YR		3 Y	'R 5		R	Inception	Inception Date
Total Fund (Net)	1.94		5.46		9.23		6.79		8.02		6.82	01/01/1998
Total Fund Policy	1.39		4.97		8.62		7.69		8.60		6.56	
Total Fund (Gross)	1.98	(20)	5.74	(20)	9.65	(21)	7.26	(35)	8.52	(33)	7.22 (13)	01/01/1998
Total Fund Policy	1.39	(42)	4.97	(45)	8.62	(48)	7.69	(19)	8.60	(31)	6.56 (56)	
All Public Plans-Total Fund Median	1.24		4.78		8.54		6.90		8.15		6.61	
Highland Capital Equity (Gross)	3.22	(65)	9.33	(60)	15.34	(38)	9.68	(63)	11.59	(67)	8.53 (62)	01/01/1998
Total Equity Policy	2.31	(71)	7.66	(80)	13.04	(69)	10.10	(62)	11.58	(67)	6.71 (100)	
IM U.S. All Cap Core Equity (SA+CF) Median	3.79		9.94		14.86		10.90		12.74		8.75	
Highland Capital Fixed (Gross)	-0.38	(96)	-1.27	(86)	-0.30	(72)	2.52	(22)	2.58	(57)	4.59 (98)	01/01/1998
Total Fixed Policy	-0.16	(72)	-1.23	(79)	-0.40	(82)	1.72	(86)	2.24	(89)	4.83 (85)	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-0.09		-0.96		-0.02		2.09		2.66		5.19	
Templeton Global	-2.57	(53)	-3.03	(94)	-1.88	(99)	1.23	(89)	N/A		1.87 (40)	08/01/2013
FTSE World Government Bond Index	-3.35	(65)	0.09	(17)	1.90	(17)	2.81	(29)	1.11	(76)	0.85 (78)	
IM Global Fixed Income (MF) Median	-2.21		-0.95		0.44		2.27		1.76		1.69	
American Core Realty Fund	2.09	(55)	6.17	(73)	8.17	(73)	8.75	(82)	10.54	(82)	10.68 (82)	07/01/2012
NCREIF Fund Index-Open End Diversified Core (EW)	2.10	(54)	6.56	(59)	8.57	(65)	9.61	(64)	11.11	(60)	11.23 (65)	
IM U.S. Open End Private Real Estate (SA+CF) Median	2.15		7.12		9.12		10.09		11.57		11.78	



	Oct-2 To Sep-2	)	Oct-20 To Sep-2		Oct-2 To Sep-2	)	Oct-2 To Sep-2	)	Oct-2012 To Sep-2013	Oct-2 To Sep-2	)	Oct-2 To Sep-2	)	Oct-2 To Sep-2	0
Total Fund (Net)	12.52		7.49		1.11		10.06		12.76	14.76		-1.76		8.90	
Total Fund Policy	11.87		11.23		0.03		11.18		10.98	18.44		2.01		9.17	
Total Fund (Gross)	13.13	(30)	7.99	(85)	1.48	(13)	10.65	(40)	13.18 (38)	15.22	(86)	-1.21	(82)	9.23	(71)
Total Fund Policy	11.87	(56)	11.23	(9)	0.03	(37)	11.18	(28)	10.98 (77)	18.44	(38)	2.01	(17)	9.17	(72)
All Public Plans-Total Fund Median	12.18		9.66		-0.53		10.18		12.50	17.96		0.29		9.87	
Highland Capital Equity (Gross)	20.57	(30)	9.30	(72)	-0.41	(50)	14.17	(71)	23.16 (62)	23.08	(80)	-6.76	(98)	10.14	(61)
Total Equity Policy	19.14	(47)	13.68	(38)	-3.37	(81)	15.61	(61)	20.14 (83)	27.76	(48)	-0.40	(64)		(75)
IM U.S. All Cap Core Equity (SA+CF) Median	18.74		11.49		-0.51		16.29		24.50	27.38		1.04		11.05	
Highland Capital Fixed (Gross)	0.85	(38)	7.00	(10)	2.18	(88)	3.95	(81)	-2.75 (100)	7.18	(40)	5.29	(47)	8.31	(81)
Total Fixed Policy	0.07	(86)	5.19	(80)	2.94	(59)	3.85	(88)	-1.86 (89)	5.28	(87)	5.23	(53)	8.00	(90)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	0.63		5.66		3.02		4.50		-1.24	6.66		5.26		9.27	
Templeton Global	13.17	(1)	0.68	(100)	-7.69	(91)	6.34	(11)	N/A	N/A		N/A		N/A	
FTSE World Government Bond Index	-2.69	(94)	9.71	(19)	-3.83	(49)	-0.07	(96)	-4.60 (82)	3.29	(96)	4.61	(8)	4.99	(88)
IM Global Fixed Income (MF) Median	1.02		7.39		-3.89		3.37		-1.81	7.17		1.74		7.68	
American Core Realty Fund	7.52	(67)	9.04	(97)	13.98	(69)	12.49	(64)	12.27 (70)	N/A		N/A		N/A	
NCREIF Fund Index-Open End Diversified Core (EW)	7.81	(60)	10.62	(69)	14.71	(62)	12.39	(68)	12.47 (67)	11.77	(66)	18.03	(44)	6.14	(55)
IM U.S. Open End Private Real Estate (SA+CF) Median	8.29		11.32		15.45		12.78		13.18	12.90		16.96		6.43	



### Plan Sponsor Peer Group Analysis - All Public Plans-Total Fund 16.00 28.00 14.00 24.00 12.00 20.00 0 0 10.00 16.00 0 0 0 8.00 12.00 0 0 Return 0 0 Return 0 0 0 0 8.00 6.00 0 4.00 4.00 0 2.00 0.00 0 0.00 -4.00 -2.00 -8.00 Oct-2016 Oct-2015 Oct-2014 Oct-2013 Oct-2012 Oct-2011 To To To To To To QTR **FYTD** 1 YR 2 YR 3 YR 4 YR 5 YR Sep-2017 Sep-2016 Sep-2015 Sep-2014 Sep-2013 Sep-2012 9.65 (21) Total Fund 1.98 (20) 5.74 (20) 10.74 (39) 7.26 (35) 6.86 (18) 8.52 (33) Total Fund 13.13 (30) 7.99 (85) 1.48 (13) 10.65 (40) 13.18 (38) Total Fund Policy 1.39 (42) 4.97 (45) 8.62 (48) 10.17 (56) 7.69 (19) 6.76 (21) 8.60 (31) Total Fund Policy 11.87 (56) 11.23 (9) 0.03 (37) 11.18 (28) 10.98 (77) 18.44 (38) Median 1.24 4.78 8.54 10.34 6.90 6.01 8.15 Median 12.18 9.66 -0.53 10.18 12.50 17.96 **Comparative Performance** 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr Ending Ending Ending **Ending Ending** Ending Mar-2018 Dec-2017 Sep-2017 Jun-2017 Mar-2017 Dec-2016 Total Fund -0.62 (75) 4.34 (13) 3.70 (29) 2.22 (89) 4.15 (67) 2.47 (5) **Total Fund Policy** -0.41 (61) 3.96 (34)3.48 (46)2.93 (54)4.24 (62)0.76 (53)All Public Plans-Total Fund Median 3.74 3.45 2.98 4.40 0.85 -0.28



### 3 Yr Rolling Under/Over Performance - 5 Years 15.0 Over Performance Total Fund (%) 0.0 0.0 Under Performance 3.0 6.0 9.0 12.0 15.0 3.0 Total Fund Policy (%) Over Performance Under Performance Earliest Date X Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.0 50.0 75.0 100.0 3/14 9/14 3/15 9/15 3/16 9/16 3/17 9/17 6/18 9/13

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul><li>Total Fund</li></ul>	20	6 (30%)	8 (40%)	3 (15%)	3 (15%)
<ul><li>Total Fund Policy</li></ul>	20	11 (55%)	6 (30%)	3 (15%)	0 (0%)

### Peer Group Scattergram - 3 Years 7.83 $\bigcirc$ § 7.56 7.29

<u>م</u> 7.02 –									
6.75									
5.94	6.00	6.06	6.12	6.18	6.24	6.30	6.36	6.42	
			Risk (Sta	ndard Deviation	on %)				
			Return				ndard iation		
<ul><li>Total Fun</li></ul>	nd		7.26			6	.04		
<ul><li>Total Fun</li></ul>	<ul> <li>Total Fund Policy</li> </ul>		7.69			6.14			

6.90

8.80 (% 8.60 8.40 8.20	-	0	•				
8.00							
	5.8	5.9	Ris	6.0 sk (Standard D	6.1 eviation %)	6.2	6.3

	Return	Deviation
<ul><li>Total Fund</li></ul>	8.52	5.94
<ul> <li>Total Fund Policy</li> </ul>	8.60	5.90
Median	8.12	6.24

<b>Historical Statistics</b>	- 3 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.26	96.06	98.35	-0.13	-0.33	1.09	0.96	3.68
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	1.14	1.00	3.54

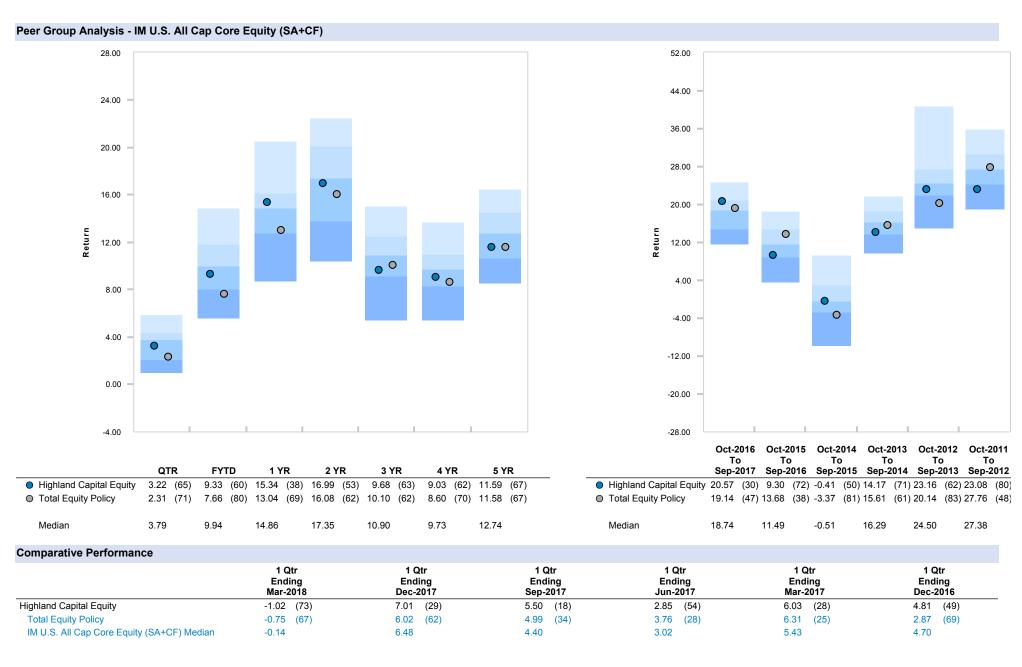
6.34

Peer Group Scattergram - 5 Years

Historical Statistics	- 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.34	98.97	98.57	0.08	-0.05	1.34	0.98	3.32
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	1.37	1.00	3.15



\_\_ Median





# 3 Yr Rolling Under/Over Performance - 5 Years Over Performance 15.0 0.0 10.0 10.0 15.0 10.0 15.0 10.0 15.0 10.0 15.0 10

## 3 Yr Rolling Percentile Ranking - 5 Years 25.0 25.0 75.0 9/13 3/14 9/14 3/15 9/15 3/16 9/16 3/17 9/17 6/18

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul> <li>Highland Capital Equity</li> </ul>	20	0 (0%)	0 (0%)	11 (55%)	9 (45%)	
<ul> <li>Total Equity Policy</li> </ul>	20	0 (0%)	0 (0%)	14 (70%)	6 (30%)	

### Peer Group Scattergram - 3 Years 11.20 10.80 10.40 10.00 9.60 9.20 10.16 10.24 10.32 10.40 10.48 10.56 10.64 Risk (Standard Deviation %)

X Latest Date

Earliest Date

Pee	er Group Scat	tergram - 5 Years				
	12.92					
(%	12.54 -					
	12.16 -					
Return	11.78 -					
	11.40			1		
	9.60	9.80	10.00	10.20	10.40	10.60
			Risk (Standard I	Deviation %)		

	Return	Standard Deviation
<ul> <li>Highland Capital Equity</li> </ul>	9.68	10.28
<ul> <li>Total Equity Policy</li> </ul>	10.10	10.22
Median	10.90	10.55

	Return	Standard Deviation	
<ul> <li>Highland Capital Equity</li> </ul>	11.59	10.07	
<ul> <li>Total Equity Policy</li> </ul>	11.58	9.84	
Median	12.74	10.44	

Historical Statistics - 3	Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Highland Capital Equity	1.63	101.02	106.49	-0.30	-0.23	0.89	0.99	6.36
Total Equity Policy	0.00	100.00	100.00	0.00	N/A	0.93	1.00	6.19

<b>Historical Statistics - 5</b>	Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Highland Capital Equity	1.92	101.50	103.15	-0.02	0.02	1.10	1.00	5.80
Total Equity Policy	0.00	100.00	100.00	0.00	N/A	1.13	1.00	5.57



### Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF) 5.07 12.00 4.28 10.00 3.49 8.00 0 2.70 0 6.00 0 0 1.91 0 0 4.00 00 Return 1.12 0 2.00 0.33 0 0 0.00 0 -0.46 0 -2.00 00 -1.25 -4.00 -2.04 -2.83 -6.00 Oct-2016 Oct-2015 Oct-2014 Oct-2013 Oct-2012 Oct-2011 To To To Τo To To QTR **FYTD** 1 YR 2 YR 3 YR 4 YR 5 YR Sep-2017 Sep-2016 Sep-2015 Sep-2014 Sep-2013 Sep-2012 -1.27 (86) 0.23 (46) 2.52 (22) Highland Fixed -0.38 (96) -0.30 (72) 2.17 (42) 2.58 (57) Highland Fixed 0.85 (38) 7.00 (10) 2.18 (88) 3.95 (81) -2.75 (100) 7.18 (40) 3.85 (88) -1.86 (89) Total Fixed Policy -0.16 (72) -1.23 (79) -0.40 (82) -0.36 (85) 1.72 (86) 1.75 (85) 2.24 (89) Total Fixed Policy 0.07 (86) 5.19 (80) 2.94 (59) 5.28 (87) Median -0.09 -0.96 -0.02 0.14 2.09 2.03 2.66 Median 0.63 5.66 3.02 4.50 -1.24 6.66 **Comparative Performance** 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr **Ending Ending Ending Ending** Ending **Ending** Mar-2018 Dec-2017 Sep-2017 Jun-2017 Mar-2017 Dec-2016 Highland Fixed -1.45 (66) 0.57 (35) 0.98 (37) 1.78 (14) 1.00 (43) -2.84 (60) **Total Fixed Policy** -1.46 (67) 0.39 (80)0.85 (77) 1.45 (76)0.82 (78)-2.98 (76)IM U.S. Broad Market Core Fixed Income (SA+CF) Median 1.54 0.94 -2.80 -1.380.51 0.93



### 3 Yr Rolling Under/Over Performance - 5 Years 6.0 Over 4.5 4.5 1.5 1.5 Performance 0.09 $\times$ Under Performance 0.0 3.0 6.0 0.0 1.5 4.5 Total Fixed Policy (%) Over Performance Under Performance

### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.0 50.0 75.0 0 0 0 0 100.0 3/14 3/15 9/15 3/16 9/16 3/17 9/17 6/18 9/13

		Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
_	<ul><li>Highland Fixed</li></ul>	20	2 (10%)	5 (25%)	6 (30%)	7 (35%)	
	<ul> <li>Total Fixed Policy</li> </ul>	20	0 (0%)	0 (0%)	0 (0%)	20 (100%)	

### Peer Group Scattergram - 3 Years 2.70 2.43 2.16 1.89 1.62 1.35 2.48 2.56 2.64 2.72 2.80 2.88 2.96 3.04 Risk (Standard Deviation %)

X Latest Date

Peer Group So	attergram	- 5 Years					
2.80							
§ 2.60 –							
2.40 = 2.20 =							
2.20		0					
2.00		- 1	-	-		1	
2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95
			Risk (Standard I	Deviation %)			

Deviation	
<ul><li>Highland Fixed</li><li>2.52</li><li>2.97</li></ul>	
<ul><li>Total Fixed Policy</li><li>1.72</li><li>2.61</li></ul>	
Median 2.09 2.58	

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Highland Fixed	1.05	125.76	112.35	0.68	0.76	0.63	1.07	1.88
Total Fixed Policy	0.00	100.00	100.00	0.00	N/A	0.42	1.00	1.77

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Highland Fixed	0.87	110.47	106.54	0.29	0.39	0.76	1.02	1.71
Total Fixed Policy	0.00	100.00	100.00	0.00	N/A	0.69	1.00	1.62

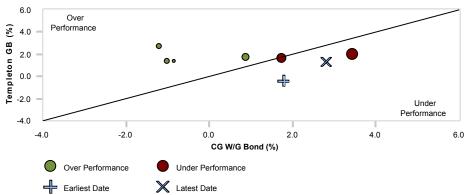


Earliest Date

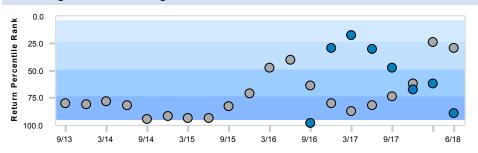
### Plan Sponsor Peer Group Analysis - IM Global Fixed Income (MF) 6.00 20.00 16.00 4.00 0 12.00 2.00 0 0 0 8.00 0 0.00 0 Return Return 4.00 0 -2.00 0 0.00 0 0 0 -4.00 0 -4.00 0 -6.00 -8.00 -12.00 -8.00 Oct-2013 Oct-2016 Oct-2015 Oct-2014 Oct-2012 Oct-2011 To To To To To To QTR **FYTD** 1 YR 2 YR 3 YR 4 YR 5 YR Sep-2017 Sep-2016 Sep-2015 Sep-2014 Sep-2013 Sep-2012 0.51 (52) ● Templeton GB -2.57 (53) -3.03 (94) -1.88 (99) 4.09 (5) 1.23 (89) N/A ● Templeton GB 13.17 (1) 0.68 (100) -7.69 (91) 6.34 (11) N/A N/A CG W/G Bond -3.35 (65) 0.09 (17) 1.90 (17) -1.16 (92) 2.81 (29) -0.28 (73) 1.11 (76) CG W/G Bond -2.69 (94) 9.71 (19) -3.83 (49) -0.07 (96) -4.60 (82) 3.29 (96) Median -2.21 -0.95 0.44 0.83 2.27 0.56 1.76 Median 1.02 7.39 -3.89 3.37 -1.81 7.17 **Comparative Performance** 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr **Ending** Ending **Ending Ending** Ending **Ending** Mar-2018 Dec-2017 Sep-2017 Jun-2017 Mar-2017 Dec-2016 Templeton GB 1.36 (31) -1.81 (100) 1.19 (71) -1.30 (100) 4.65 (4) 8.28 (1) CG W/G Bond 2.50 (5) 1.04 (19) 1.81 (29)2.89 (20)1.55 (65)-8.53 (97)IM Global Fixed Income (MF) Median 0.74 0.67 2.27 1.95 -4.37 1.59



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

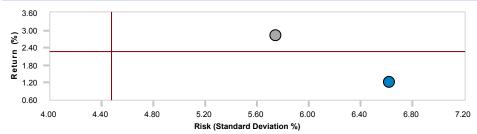


### 3 Yr Rolling Percentile Ranking - 5 Years



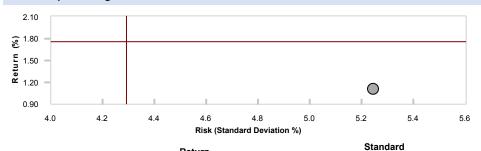
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul><li>Templeton GB</li></ul>	8	1 (13%)	3 (38%)	2 (25%)	2 (25%)	
CG W/G Bond	20	1 (5%)	3 (15%)	4 (20%)	12 (60%)	

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<ul><li>Templeton GB</li></ul>	1.23	6.62
<ul><li>CG W/G Bond</li></ul>	2.81	5.75
Median	2.27	4.47

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<ul><li>Templeton GB</li></ul>	N/A	N/A
<ul><li>CG W/G Bond</li></ul>	1.11	5.25
Median	1.76	4.29

### **Historical Statistics - 3 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Templeton GB	9.76	-27.23	-62.27	2.28	-0.15	0.12	-0.28	4.14
CG W/G Bond	0.00	100.00	100.00	0.00	N/A	0.40	1.00	4.02

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Templeton GB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CG W/G Bond	0.00	100.00	100.00	0.00	N/A	0.16	1.00	3.78



### Plan Sponsor Peer Group Analysis - IM U.S. Open End Private Real Estate (SA+CF) 20.00 29.00 26.00 17.00 23.00 14.00 20.00 0 11.00 0 17.00 Return Return 0 0 00 0 0 14.00 8.00 0 00 00 00 0 11.00 0 5.00 8.00 00 00 2.00 5.00 2.00 -1.00 Oct-2016 Oct-2015 Oct-2014 Oct-2013 Oct-2012 Oct-2011 To To To To To QTR **FYTD** 1 YR 2 YR 3 YR 4 YR 5 YR Sep-2017 Sep-2016 Sep-2015 Sep-2014 Sep-2013 Sep-2012 American Core Realty 2.09 (55) 6.17 (73) 8.17 (73) 7.82 (82) 8.75 (82) 10.04 (68) 10.54 (82) American Core Realty 9.04 (97) 13.98 (69) 12.49 (64) 12.27 (70) NCREIF ODCE 2.10 (54) 6.56 (59) 8.57 (65) 8.35 (54) 9.61 (64) 10.82 (55) 11.11 (60) NCREIF ODCE 7.81 (60) 10.62 (69) 14.71 (62) 12.39 (68) 12.47 (67) 11.77 (66) Median 2.15 7.12 9.12 8.84 10.09 11.21 11.57 Median 8.29 11.32 15.45 12.78 13.18 12.90 **Comparative Performance** 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr **Ending Ending** Ending Ending **Ending** Ending Mar-2018 Dec-2017 Sep-2017 Jun-2017 Mar-2017 Dec-2016 American Core Realty 2.23 (46) 1.73 (89) 1.88 (44)1.97 (40) 2.27 (30) 1.20 (81) NCREIF ODCE 2.15 (57) (44)1.71 (69)1.83 (53)2.16 (57) 2.17 (59) 1.89

1.75

1.91

2.25

2.22



2.26

1.91

IM U.S. Open End Private Real Estate (SA+CF) Median

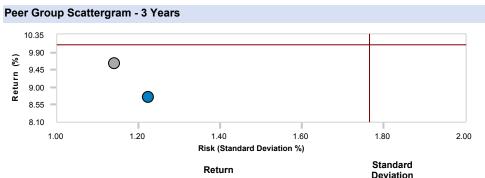
## 3 Yr Rolling Under/Over Performance - 5 Years 16.0 Over Performance 10.0 10.0 10.0 10.0 NCREIF ODCE (%)

Earliest Date

Under Performance

X Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.0 50.0 75.0 100.0 3/16 6/18 9/13 3/14 3/15 9/15 9/16 9/17 5-25 25-Median Median-75 75-95 **Total Period** Count Count Count Count American Core Realty 13 0 (0%) 0 (0%) 2 (15%) 11 (85%) NCREIF ODCE 20 0 (0%) 0 (0%) 19 (95%) 1 (5%)



<u>د</u> 11.20 –	0		
10.85			
10.50			
10.15			
1.2	1.4	1.6	1.8
	Ris	k (Standard Deviation %)	
	F	leturn	Standard Deviation
<ul> <li>American Core Re</li> </ul>	alty	10.54	1.68
<ul><li>NCREIF ODCE</li></ul>		11.11	1.34

11.57

Peer Group Scattergram - 5 Years

11.90

\_\_ Median

	Return	Deviation	
<ul> <li>American Core Realty</li> </ul>	8.75	1.22	
<ul><li>NCREIF ODCE</li></ul>	9.61	1.14	
Median	10.09	1.77	
Historical Statistics 2 Vegrs			

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
American Core Realty	0.91	91.31	N/A	0.09	-0.89	2.15	0.90	0.00
NCREIF ODCE	0.00	100.00	N/A	0.00	N/A	2.19	1.00	0.00

Historical Statistics -	5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
American Core Realty	1.09	95.06	N/A	-0.02 -0.49 2.18		2.18	0.95	0.00
NCREIF ODCE	0.00	100.00	N/A	0.00	N/A	2.25	1.00	0.00



2.0

1.81

Total Fund Compliance:									Yes	No	N/A
Equity Compliance:									Yes	No	N/A
Fixed Income Compliance:									Yes	No	N/A
Manager Compliance:											
	Yes No N/	A Ye	s No N	/A \	res No	N/A	Yes I	No N	/A Y	es No	o N/A



Total Fund Policy	
Allocation Mandate	Weight (%)
Dec-1975	
S&P 500 Index	50.00
ICE BofAML Govt/ Corp Master	50.00
Oct-2004	
S&P 500 Index	50.00
ICE BofAML US Domestic Master	40.00
MSCI EAFE Index	10.00
Jan-2014	
Russell 3000 Index	45.00
MSCI AC World ex USA	15.00
Blmbg. Barc. U.S. Aggregate Index	25.00
FTSE World Government Bond Index	5.00
NCREIF Fund Index-Open End Diversified Core (EW)	10.00

Total Equity Policy		
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		
ICE BofAML Govt/ Corp Master	100.00	
Oct-2004		
ICE BofAML US Domestic Master	100.00	
Jan-2014		
Blmbg. Barc. U.S. Aggregate Index	100.00	



Act	ive	Re	tu	rn

- 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.

### **Public Market Equivalent (PME)**

- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.

### 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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