Investment Performance Review Period Ending June 30, 2018

# West Palm Beach Police Pension Plan



### **Table Of Contents**

1	Market Environment	Page 1
2	Compliance Report	Page 10
3	Asset Allocation Compliance	Page 11
4	Asset Allocation Pie Chart	Page 13
5	Asset Allocation & Performance Trailing Periods (gross)	Page 15
6	Asset Allocation & Performance Trailing Periods (net)	Page 17
7	Asset Allocation & Performance Fiscal Year Periods (gross)	Page 21
8	Asset Allocation & Performance Fiscal Year Periods (net)	Page 24
9	Total Fund Composite Returns Based Analysis	Page 26
10	Rhumbline Equity Returns Based Analysis	Page 30
11	Rhumbline R1000 Value Returns Based Analysis	Page 31
12	Rhumbline R1000 Growth Returns Based Analysis	Page 32
13	Rhumbline S&P Mid Cap 400 Returns Based Analysis	Page 33
14	Anchor Equity Returns Based Analysis	Page 34
15	New Amsterdam Equity Returns Based Analysis	Page 38
16	Eagle Equity Returns Based Analysis	Page 42
17	Wellington Equity Returns Based Analysis	Page 46
18	Vanguard Intl Returns Based Analysis	Page 48
19	Oppenheimer Int Equity Returns Based Analysis	Page 50
20	Rhumbline International Eq Returns Based Analysis	Page 54
21	Garcia Hamilton Fixed Inc Returns Based Analysis	Page 56
22	Intercontinental Returns Based Analysis	Page 60
23	JPM Returns Based Analysis	Page 64
24	Benchmark History	Page 66
25	Definitions & Disclosure Pages	Page 68

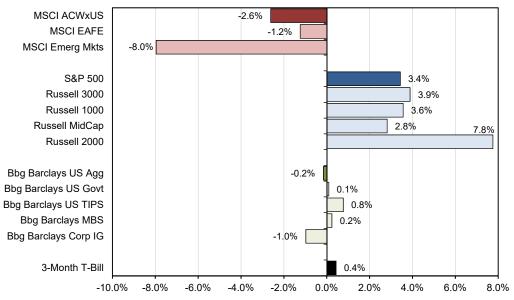


**2nd Quarter 2018 Market Environment** 

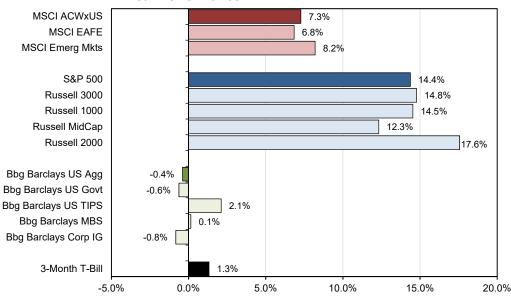


- Market returns were mixed across major equity and fixed income indices for the 2nd quarter of 2018. Broad domestic equity indices had healthy gains as supportive economic and corporate earnings data, helped by a fiscal stimulus tailwind resulting from the Republican Party led tax reform passed in late 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**

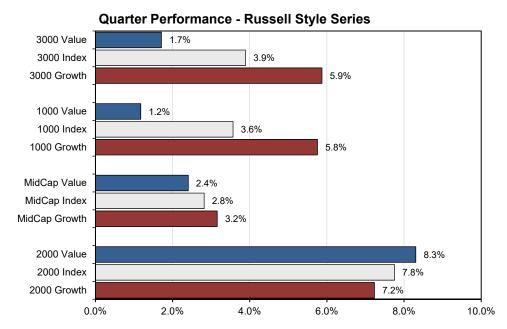


#### 1-Year Performance

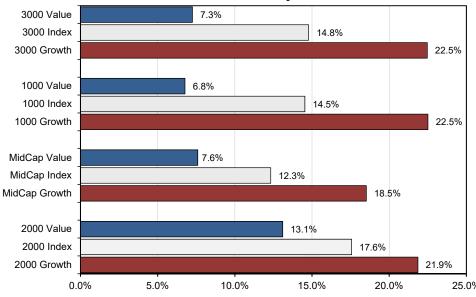




- US equity index returns were positive across the style and capitalization spectrum during the 2nd quarter of 2018. Markets were encouraged by the ongoing strength in US economic data and corporate earnings. Positive data releases in unemployment, retail sales, consumer consumption, GDP and investor 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.

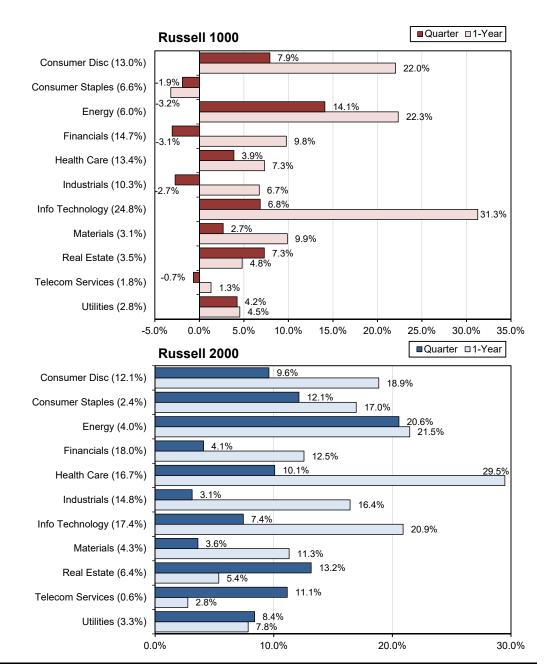


#### 1-Year Performance - Russell Style Series





- 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 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	

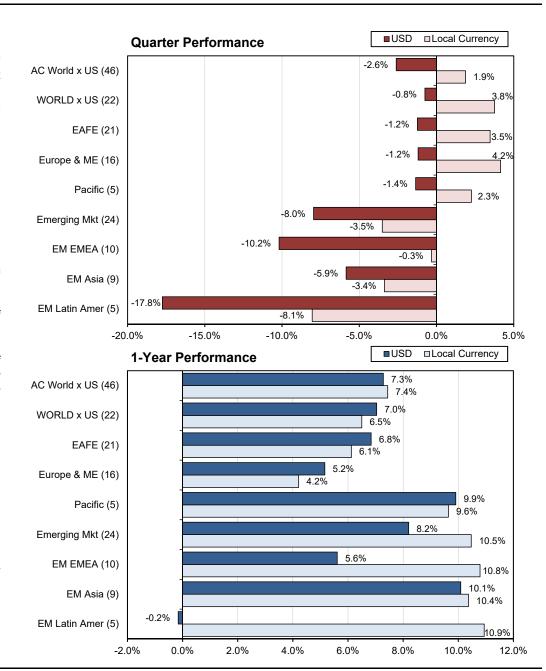
Тор	Top 10 Performing Stocks (by Quarter)						
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector			
Turtle Beach Corp	0.01%	746.8%	625.7%	Consumer Discretionary			
Solid Biosciences Inc	0.01%	375.1%	N/A	Health Care			
Tandem Diabetes Care Inc	0.04%	344.0%	175.2%	Health Care			
Intelsat SA	0.03%	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	1-Qtr Return	1-Year 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%

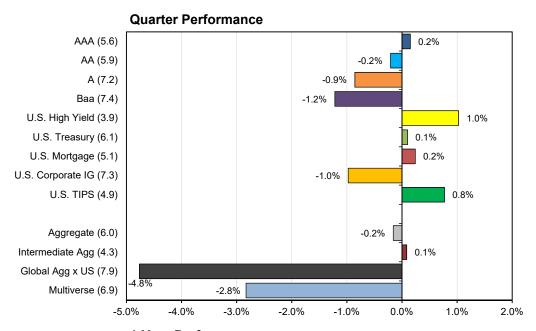
MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	11.2%	-3.5%	8.4%
Consumer Staples	9.7%	-0.7%	2.9%
Energy	7.4%	7.3%	27.5%
Financials	21.9%	-7.3%	1.7%
Health Care	8.1%	1.4%	3.2%
Industrials	11.7%	-2.7%	5.9%
Information Technology	11.9%	-2.9%	15.5%
Materials	8.2%	-0.4%	16.1%
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%

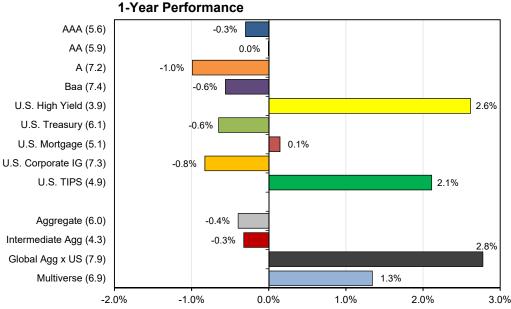
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	9.8%	-7.1%	-0.2%
Consumer Staples	6.7%	-6.2%	3.3%
Energy	7.2%	-4.7%	24.9%
Financials	22.8%	-12.7%	5.5%
Health Care	3.2%	-5.0%	22.4%
Industrials	5.2%	-11.2%	-5.9%
Information Technology	27.9%	-5.1%	15.2%
Materials	7.6%	-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.

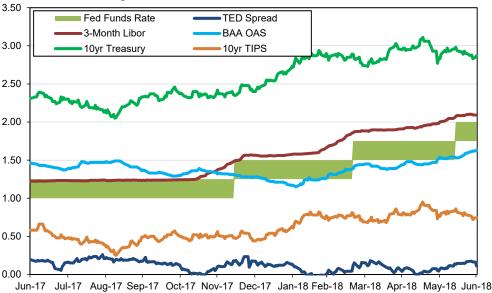




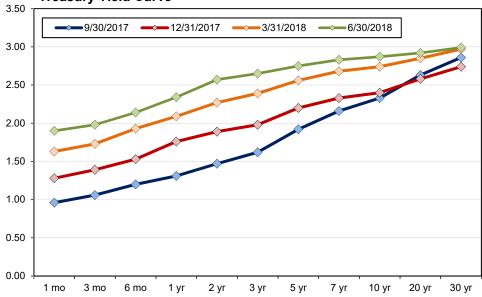


- Relative to their domestic counterparts, global fixed income indices underperformed during the guarter. The relatively high duration of these indices acted as a headwind to performance in the current guarter as interest rates increased. The returns of these indices are also significantly influenced 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**



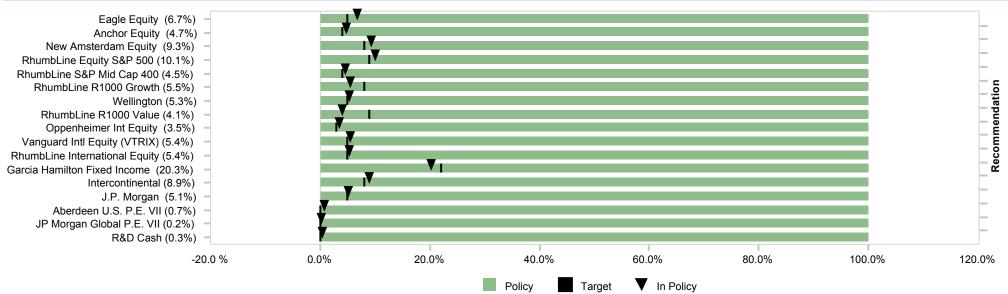


Total Fund Compliance:	Yes	No
The total plan return (net) equaled or exceeded the total plan benchmark over the trailing three year period.		•
The total plan return (net) equaled or exceeded the total plan benchmark over the trailing five year period.		•
The three year return ranks in the top 40% of its peers.	•	
The five year return ranks in the top 40% of its peers.	•	
The five year standard deviation is less than the total fund index standard deviation.		•
Equity Compliance:	Yes	No
The total equity return (net) equaled or exceeded the benchmark over the trailing three year period.		•
The total equity return (net) equaled or exceeded the benchmark over the trailing five year period.		•
The amount invested in any one issuing company is less than 5% of the Fund's total assets.	•	
The aggregate investment in any one company less than 5% of the outstanding stock of the company.	•	
The amount invested in common stocks and convertible bonds is less than or equal to 70% of the Total Fund's total assets at market value.	•	
Fixed Income Compliance:	Yes	No
The total fixed income return (net) equaled or exceeded the benchmark over the trailing three year period.	•	
The total fixed income return (net) equaled or exceeded the benchmark over the trailing five year period.	•	
The minimum quality rating of the domestic bond investments is BBB from Standard & Poor's or BAA from Moody's.	•	



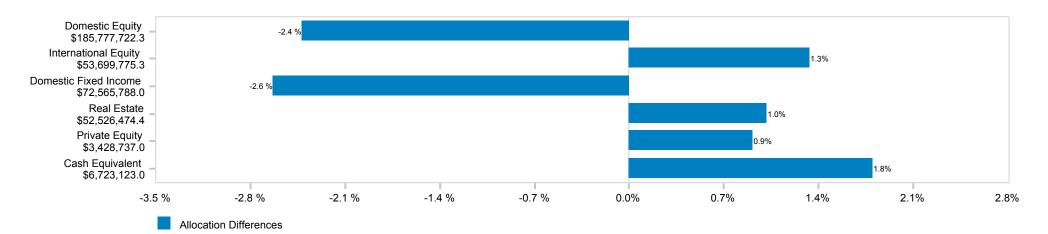
	Asset				
	Allocation	Current Allocation (%)	Target Allocation (%)	Differences (%)	Target Rebal. (\$000)
Total Fund Composite	374,721,620	100.0	100.0	0.0	-
Eagle Equity	25,029,698	6.7	5.0	1.7	-6,293,617
Anchor Equity	17,558,472	4.7	4.0	0.7	-2,569,607
New Amsterdam Equity	34,666,563	9.3	8.0	1.3	-4,688,833
RhumbLine Equity S&P 500	37,912,728	10.1	9.0	1.1	-4,187,782
RhumbLine S&P Mid Cap 400	16,845,403	4.5	4.0	0.5	-1,856,538
RhumbLine R1000 Growth	20,742,534	5.5	8.0	-2.5	9,235,195
Wellington	19,683,981	5.3	5.0	0.3	-947,900
RhumbLine R1000 Value	15,328,200	4.1	9.0	-4.9	18,396,746
Oppenheimer Int Equity	13,214,513	3.5	3.0	0.5	-1,972,865
Vanguard Intl Equity (VTRIX)	20,289,401	5.4	5.0	0.4	-1,553,320
RhumbLine International Equity	20,195,884	5.4	5.0	0.4	-1,459,803
Garcia Hamilton Fixed Income	76,051,344	20.3	22.0	-1.7	6,387,412
Intercontinental	33,366,119	8.9	8.0	0.9	-3,388,389
J.P. Morgan	19,160,355	5.1	5.0	0.1	-424,274
Aberdeen U.S. P.E. VII	2,681,143	0.7	0.0	0.7	-2,681,143
JP Morgan Global P.E. VII	747,594	0.2	0.0	0.2	-747,594
R&D Cash	1,247,688	0.3	0.0	0.3	-1,247,688

#### **Executive Summary**





	Asset Allocation \$	Current Allocation (%)	Target Allocation (%)	Differences (%)	Target Rebal. (\$000)
Domestic Equity	185,777,722	49.6	52.0	-2.4	9,077,520
nternational Equity	53,699,775	14.3	13.0	1.3	-4,985,965
Domestic Fixed Income	72,565,788	19.4	22.0	-2.6	9,872,968
Real Estate	52,526,474	14.0	13.0	1.0	-3,812,664
Private Equity	3,428,737	0.9	0.0	0.9	-3,428,737
Cash Equivalent	6,723,123	1.8	0.0	1.8	-6,723,123
otal Fund	374,721,620	100.0	100.0	0.0	-

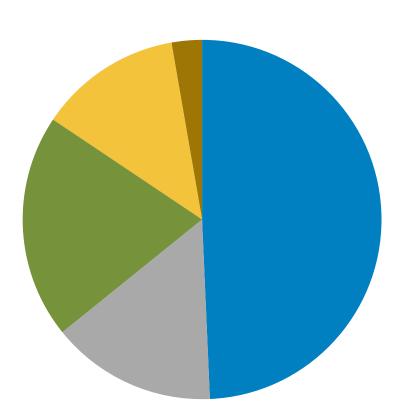


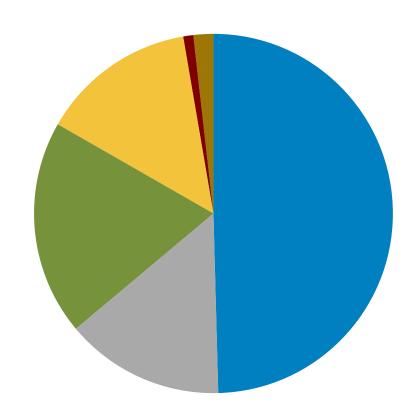




Asset Allocation By Segment as of March 31, 2018 : \$369,819,856

Asset Allocation By Segment as of June 30, 2018 : \$374,721,620



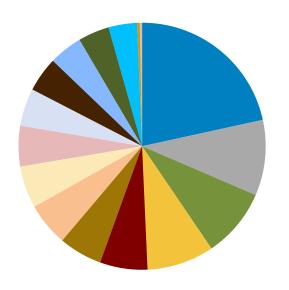


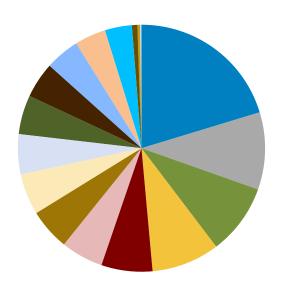
cation					
Segments	Market Value	Allocation	Segments	Market Value	Allocation
■ Domestic Equity	182,341,038	49.3	■ Domestic Equity	185,777,722	49.6
International Equity	55,093,872	14.9	International Equity	53,699,775	14.3
■ Domestic Fixed Income	74,653,492	20.2	Domestic Fixed Income	72,565,788	19.4
Real Estate	47,613,127	12.9	Real Estate	52,526,474	14.0
■ Private Equity	-	0.0	Private Equity	3,428,737	0.9
Cash Equivalent	10,118,328	2.7	Cash Equivalent	6,723,123	1.8



Asset Allocation By Manager as of March 31, 2018 : \$369,819,856

Asset Allocation By Manager as of June 30, 2018 : \$374,721,620





location			Allocation		
	Market Value	Allocation		Market Value	Allocation
Garcia Hamilton Fixed Income	79,733,168	21.6	■ Garcia Hamilton Fixed Income	76,051,344	20.3
■ RhumbLine Equity S&P 500	36,657,417	9.9	■ RhumbLine Equity S&P 500	37,912,728	10.1
New Amsterdam Equity	33,428,759	9.0	New Amsterdam Equity	34,666,563	9.3
Intercontinental	32,492,188	8.8	Intercontinental	33,366,119	8.9
■ Eagle Equity	22,980,789	6.2	Eagle Equity	25,029,698	6.7
Vanguard Intl Equity (VTRIX)	20,961,130	5.7	RhumbLine R1000 Growth	20,742,534	5.5
RhumbLine R1000 Value	20,957,009	5.7	Vanguard Intl Equity (VTRIX)	20,289,401	5.4
RhumbLine International Equity	20,384,899	5.5	RhumbLine International Equity	20,195,884	5.4
RhumbLine R1000 Growth	19,613,091	5.3	Wellington	19,683,981	5.3
Wellington	18,227,416	4.9	J.P. Morgan	19,160,355	5.1
Anchor Equity	16,901,995	4.6	Anchor Equity	17,558,472	4.7
RhumbLine S&P Mid Cap 400	16,156,298	4.4	RhumbLine S&P Mid Cap 400	16,845,403	4.5
J.P. Morgan	15,120,939	4.1	RhumbLine R1000 Value	15,328,200	4.1
Oppenheimer Int Equity	13,747,866	3.7	Oppenheimer Int Equity	13,214,513	3.5
R&D Cash	1,356,525	0.4	Aberdeen U.S. P.E. VII	2,681,143	0.7
RhumbLine Fixed Income	1,100,368	0.3	R&D Cash	1,247,688	0.3
Aberdeen U.S. P.E. VII	-	0.0	JP Morgan Global P.E. VII	747,594	0.2
JP Morgan Global P.E. VII	-	0.0	RhumbLine Fixed Income	-	0.0



	A 11	41							D f		(0/ )				
		ocation							Pertor	mance	(%)				
	Market Value \$	%	Q.	TR	FY	TD	1	YR	3 '	YR	5	YR	Ince	ption	Inception Date
Total Fund Composite	374,721,620	100.0	2.55	(7)	6.37	(11)	10.37	(10)	7.56	(24)	8.94	(19)	6.36	(20)	10/01/2007
Total Fund Policy Index			2.27	(12)	5.80	(19)	9.57	(21)	7.93	(13)	9.12	(15)	6.55	(13)	
All Public Plans-Total Fund Median			1.24		4.78		8.52		6.90		8.14		5.82		
Total Equity Composite	241,467,377	64.4	3.14		7.76		12.85		8.68		10.37		6.34		10/01/2007
Total Equity Policy Index	, ,		3.05		8.24		13.56		10.12		11.85		7.04		
Total Domestic Equity	187,767,578	50.1													
RhumbLine Equity S&P 500	37,912,728	10.1	3.42	(42)	9.44	(48)	14.33	(49)	11.89	(38)	N/A		11.89	(38)	07/01/2015
S&P 500 Index			3.43	(41)	9.47	(47)	14.37	(48)	11.93	(37)	13.42	(46)	11.93	(37)	
IM U.S. Large Cap Equity (SA+CF) Median			3.00		9.22		14.13		11.12		13.30		11.12		
RhumbLine R1000 Value	15,328,200	4.1	1.17	(64)	3.53	(85)	6.75	(87)	N/A		N/A		7.82	(87)	06/01/2017
Russell 1000 Value Index			1.18	(64)	3.54	(85)	6.77	(87)	8.26	(72)	10.34	(76)	7.84	(87)	
IM U.S. Large Cap Value Equity (SA+CF) Median			1.68		5.99		10.28		9.33		11.47		11.23		
RhumbLine R1000 Growth	20,742,534	5.5	5.76	(41)	15.65	(44)	22.47	(43)	N/A		N/A		21.98	(44)	04/01/2017
Russell 1000 Growth Index			5.76	(41)	15.69	(44)	22.51	(43)	14.98	(27)	16.36	(40)	22.01	(44)	
IM U.S. Large Cap Growth Equity (SA+CF) Median			5.24		14.82		21.56		13.45		15.62		21.10		
RhumbLine S&P Mid Cap 400	16,845,403	4.5	4.27	(30)	9.93	(50)	13.48	(56)	N/A		N/A		15.74	(51)	10/01/2016
S&P MidCap 400 Index			4.29	(28)	9.96	(49)	13.50	(55)	10.89	(38)	12.69	(54)	15.78	(50)	
IM U.S. Mid Cap Equity (SA+CF) Median			3.19		9.92		13.84		10.10		12.79		15.76		
Anchor Equity	17,558,472	4.7	4.02	(22)	7.97	(31)	10.69	(40)	9.58	(42)	10.77	(77)	7.86	(81)	10/01/2007
Russell Midcap Value Index			2.41	(44)	5.34	(61)	7.60	(77)	8.80	(63)	11.27	(62)	7.80	(82)	
IM U.S. Mid Cap Value Equity (SA+CF) Median			2.29		6.12		9.37		9.11		11.96		8.89		
New Amsterdam Equity	34,666,563	9.3	3.82	(55)	4.27	(90)	9.63	(82)	7.37	(86)	N/A		10.89	(59)	10/01/2014
Russell 2500 Index			5.71	(26)	10.98	(42)	16.24	(40)	10.30	(51)	12.29	(53)	11.45	(53)	
IM U.S. SMID Cap Equity (SA+CF) Median			4.16		9.55		14.70		10.35		12.38		11.52		
Eagle Equity	25,029,698	6.7	9.12	(45)	19.53	(40)	24.80	(48)	13.47	(35)	14.37	(54)	12.56	(66)	07/01/2011
Russell 2000 Growth Index			7.23	(73)	14.73	(66)	21.86	(65)	10.60	(72)	13.65	(68)	12.50	(67)	
IM U.S. Small Cap Growth Equity (SA+CF) Median			8.79		17.22		24.48		12.34		14.63		13.36		
Wellington	19,683,981	5.3	8.22	(16)	7.16	(53)	11.19	(72)	N/A		N/A		12.24	(93)	04/01/2016
Russell 2000 Value Index			8.30	(15)	7.60	(48)	13.10	(51)	11.22	(42)	11.18	(69)	18.78	(29)	
IM U.S. Small Cap Value Equity (SA+CF) Median			5.61		7.42		13.14		10.58		12.19		17.34		



	Allo	cation							Perfor	mance	(%)				
	Market Value \$	%	QT	ΓR	FY	/TD	1	YR	3	YR	5	YR	Ince	ption	Inception Date
Total International Equity	53,699,798	14.3													
Vanguard Intl Equity (VTRIX)  MSCI EAFE Value  IM International Large Cap Value Equity (MF) Median	20,289,401	5.4	-3.20 -2.33 -2.76	(74) (10)	0.90 -1.01 -1.43	(8) (30)	7.69 4.87 4.35	(10) (35)	4.53 3.90 3.22	(1) (11)	6.10 5.95 4.91	(6) (7)	6.10 5.95 4.91	(6) (7)	07/01/2013
Oppenheimer Int Equity MSCI Emerging Markets Index IM Emerging Markets Equity (SA+CF) Median	13,214,513	3.5	-3.88 -7.86 -8.22	(4) (44)	4.53 0.51 -0.31	(8) (38)	13.48 8.59 7.29	(11) (39)	8.46 5.98 6.19	(24) (58)	6.81 5.39 5.88	(38) (58)	5.52 3.02 4.10	(31) (75)	01/01/2013
RhumbLine International Equity  MSCI EAFE Index  IM International Equity (SA+CF) Median	20,195,884	5.4	-0.93 -0.97 -2.53	(26) (26)	1.35 1.81 1.63	(53) (48)	6.90 7.37 8.23	(64) (58)	N/A 5.41 6.44	(68)	N/A 6.93 7.69	(63)	12.54 12.94 15.25	(74) (70)	02/01/2016
Total Fixed Income Composite	76,051,344	20.3	0.55		0.20		0.68		2.12		2.89		4.33		10/01/2007
Fixed Income Index	, ,		0.09		-1.04		-0.32		1.27		1.83		3.49		
Garcia Hamilton Fixed Income Fixed Income Index IM U.S. Intermediate Duration (SA+CF) Median	76,051,344	20.3	0.54 0.09 0.12	(1) (59)	0.21 -1.04 -0.75	(3) (81)	0.68 -0.32 -0.03	(8) (81)	2.18 1.27 1.53	(11) (81)	2.92 1.83 1.97	(4) (69)	4.79 3.49 3.79	(5) (80)	10/01/2007
Total Real Estate	52,526,474	14.0													
Intercontinental Real Estate Policy IM U.S. Private Real Estate (SA+CF) Median	33,366,119	8.9	2.89 1.81 2.15	(18) (78)	8.67 5.40 7.12	(9) (100)	11.44 7.19 9.12	(1) (96)	12.63 8.25 10.09	(17) (89)	13.28 9.77 11.57	(26) (88)	13.48 11.02 13.15	(38) (89)	07/01/2010
J.P. Morgan Real Estate Policy IM U.S. Private Real Estate (SA+CF) Median	19,160,355	5.1	3.24 1.81 2.15	(9) (78)	8.02 5.40 7.12	(27) (100)	11.40 7.19 9.12	(1) (96)	11.86 8.25 10.09	(28) (89)	N/A N/A 11.57		13.66 9.41 11.21	(19) (88)	07/01/2014
R&D Cash	1,247,688	0.3													



	Allo	ocation				Performance	(%)		
	Market Value \$	%	QTR	FYTD	1 YR	3 YR	5 YR	Inception	Inception Date
Total Fund Composite	374,721,620	100.0	2.45	6.09	9.96	7.07	8.43	5.96	10/01/2007
Total Fund Policy Index			2.27	5.80	9.57	7.93	9.12	6.55	
Total Equity Composite	241,467,377	64.4	3.06	7.54	12.52	8.25	9.85	5.90	10/01/2007
Total Equity Policy Index			3.05	8.24	13.56	10.12	11.85	7.04	
Total Domestic Equity	187,767,578	50.1							
RhumbLine Equity S&P 500	37,912,728	10.1	3.41	9.40	14.28	11.86	N/A	11.86	07/01/2015
S&P 500 Index			3.43	9.47	14.37	11.93	13.42	11.93	
RhumbLine R1000 Value	15,328,200	4.1	1.16	3.50	6.71	N/A	N/A	7.78	06/01/2017
Russell 1000 Value Index			1.18	3.54	6.77	8.26	10.34	7.84	
RhumbLine R1000 Growth	20,742,534	5.5	5.75	15.63	22.43	N/A	N/A	21.93	04/01/2017
Russell 1000 Growth Index			5.76	15.69	22.51	14.98	16.36	22.01	
RhumbLine S&P Mid Cap 400	16,845,403	4.5	4.25	9.89	13.42	N/A	N/A	15.69	10/01/2016
S&P MidCap 400 Index			4.29	9.96	13.50	10.89	12.69	15.78	
Anchor Equity	17,558,472	4.7	3.90	7.58	10.15	9.05	10.19	7.38	10/01/2007
Russell Midcap Value Index			2.41	5.34	7.60	8.80	11.27	7.80	
New Amsterdam Equity	34,666,563	9.3	3.71	3.96	9.19	6.92	N/A	10.44	10/01/2014
Russell 2500 Index			5.71	10.98	16.24	10.30	12.29	11.45	
Eagle Equity	25,029,698	6.7	8.93	18.89	23.67	12.64	13.52	11.75	07/01/2011
Russell 2000 Growth Index			7.23	14.73	21.86	10.60	13.65	12.50	
Wellington	19,683,981	5.3	7.99	6.47	10.21	N/A	N/A	11.37	04/01/2016
Russell 2000 Value Index			8.30	7.60	13.10	11.22	11.18	18.78	



	Allo	cation				Performance(	(%)		
	Market Value \$	%	QTR	FYTD	1 YR	3 YR	5 YR	Inception	Inception Date
Total International Equity	53,699,798	14.3							
Vanguard Intl Equity (VTRIX)  MSCI EAFE Value	20,289,401	5.4	-3.20 -2.33	0.90 -1.01	7.69 4.87	4.53 3.90	6.10 5.95	6.10 5.95	07/01/2013
Oppenheimer Int Equity  MSCI Emerging Markets Index	13,214,513	3.5	-4.09 -7.86	3.89 0.51	12.36 8.59	7.61 5.98	5.90 5.39	4.71 3.02	01/01/2013
RhumbLine International Equity  MSCI EAFE Index	20,195,884	5.4	-0.94 -0.97	1.31 1.81	6.84 7.37	N/A 5.41	N/A 6.93	12.49 12.94	02/01/2016
Total Fixed Income Composite	76,051,344	20.3	0.49	0.05	0.48	1.93	2.69	4.16	10/01/2007
Fixed Income Index			0.09	-1.04	-0.32	1.27	1.83	3.49	
Garcia Hamilton Fixed Income Fixed Income Index	76,051,344	20.3	0.49 0.09	0.06 -1.04	0.48 -0.32	1.97 1.27	2.72 1.83	4.61 3.49	10/01/2007
Total Real Estate	52,526,474	14.0							
Intercontinental Real Estate Policy	33,366,119	8.9	2.69 1.81	7.85 5.40	10.38 7.19	10.84 8.25	11.32 9.77	12.18 11.02	07/01/2010
J.P. Morgan Real Estate Policy	19,160,355	5.1	2.90 1.81	6.83 5.40	9.75 7.19	10.15 8.25	N/A N/A	12.13 9.41	07/01/2014
R&D Cash	1,247,688	0.3							



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## Comparative Performance - IRR Private Equity As of June 30, 2018

Comparative Performance - IRF	र						
	QTR	FYTD	1 YR	3 YR	5 YR	Inception	Inception Date
Aberdeen U.S. P.E. VII	N/A	N/A	N/A	N/A	N/A	0.00	05/16/2018
JP Morgan Global P.E. VII	N/A	N/A	N/A	N/A	N/A	0.00	05/18/2018



	Allo	cation					Perforn	nance(%)				
	Market Value \$	%	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To	Oct-2011 To	Oct-2010 To Sep-2011	Oct-2009 To Sep-2010	Oct-2008 To Sep-2009	Oct-2007 To Sep-2008
Total Fund Composite	374,721,620	100.0	14.01 (16)	8.77 (73)	0.69 (24)		13.75 (28)	18.42 (38)	0.22 (51)	10.94 (25)		-12.97 (52
Total Fund Policy Index			13.01 (33)	10.75 (17)	0.71 (23)	10.14 (51)	14.75 (15)	19.53 (18)	1.38 (25)	10.58 (32)	1.45 (53)	-13.64 (60
All Public Plans-Total Fund Median			12.18	9.66	-0.53	10.18	12.50	17.96	0.29	9.87	1.75	-12.88
Total Equity Composite	241,467,377	64.4	18.47	9.85	-1.34	10.82	18.19	22.91	-0.26	13.84	-2.87	-21.15
Total Equity Policy Index			18.97	14.06	-2.21	13.29	22.52	27.50	-0.83	11.21	-4.75	-22.19
Total Domestic Equity	187,767,578	50.1										
361 Capital (BRC Equity)	-	0.0	N/A	4.57 (97)	0.14 (19)	20.33 (26)	N/A	N/A	N/A	N/A	N/A	N/A
Russell 1000 Value Index			15.12 (77)	16.19 (26)	-4.42 (65)	18.89 (42)	22.30 (61)	30.92 (26)	-1.89 (62)	8.90 (55)	-10.62 (84)	-23.56 (74
IM U.S. Large Cap Value Equity (SA+CF) Median			17.95	13.16	-3.27	18.38	23.76	28.21	-0.98	9.31	-5.91	-20.53
RhumbLine Equity S&P 500	37,912,728	10.1	18.55 (58)	15.40 (25)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P 500 Index			, ,	15.43 (24)	-0.61 (57)	19.73 (37)	19.34 (70)	30.20 (38)	1.14 (45)	10.16 (50)	-6.91 (65)	-21.98 (64
IM U.S. Large Cap Equity (SA+CF) Median			18.87	13.20	-0.31	18.80	21.10	29.15	0.76	10.13	-5.50	-20.80
RhumbLine R1000 Value	15,328,200	4.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 1000 Value Index			15.12 (77)	16.19 (26)	-4.42 (65)	18.89 (42)	22.30 (61)	30.92 (26)	-1.89 (62)	8.90 (55)	-10.62 (84)	-23.56 (74
IM U.S. Large Cap Value Equity (SA+CF) Median			17.95	13.16	-3.27	18.38	23.76	28.21	-0.98	9.31	-5.91	-20.53
RhumbLine R1000 Growth	20,742,534	5.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 1000 Growth Index			21.94 (37)	13.76 (22)	3.17 (55)	19.15 (40)	19.27 (64)	29.19 (39)	3.78 (30)	12.65 (35)	-1.85 (37)	-20.88 (55
IM U.S. Large Cap Growth Equity (SA+CF) Median			20.81	11.64	3.61	18.15	20.25	27.65	1.37	11.27	-3.01	-20.23
Garcia Hamilton Equity	-	0.0	N/A	11.91 (49)	1.41 (73)	17.12 (62)	12.80 (99)	27.13 (56)	2.94 (37)	11.51 (47)	-5.16 (66)	-16.58 (25)
Russell 1000 Growth Index			21.94 (37)	13.76 (22)	3.17 (55)	19.15 (40)	19.27 (64)	29.19 (39)	3.78 (30)	12.65 (35)	-1.85 (37)	-20.88 (55
IM U.S. Large Cap Growth Equity (SA+CF) Median			20.81	11.64	3.61	18.15	20.25	27.65	1.37	11.27	-3.01	-20.23
RhumbLine S&P Mid Cap 400	16,845,403	4.5	17.49 (55)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P MidCap 400 Index			17.52 (54)	15.33 (28)	1.40 (54)	11.82 (67)	27.68 (56)	28.54 (41)	-1.28 (58)	17.78 (41)	-3.11 (56)	-16.68 (22
IM U.S. Mid Cap Equity (SA+CF) Median			17.59	11.66	1.49	13.49	28.06	27.30	-0.64	16.78	-2.72	-20.70
Anchor Equity	17,558,472	4.7	14.45 (81)	12.76 (68)	4.71 (7)	9.97 (91)	16.82 (100)	21.94 (95)	-1.20 (50)	16.15 (43)	-0.66 (36)	-13.46 (14)
Russell Midcap Value Index			13.37 (84)	17.26 (26)	-2.07 (58)	17.46 (26)	27.77 (61)	29.28 (47)	-2.36 (58)	16.93 (30)	-7.12 (89)	-20.50 (56)
IM U.S. Mid Cap Value Equity (SA+CF) Median			17.10	15.01	-1.23	15.70	28.85	28.68	-1.29	15.49	-2.79	-19.91
Oak Ridge Equity	-	0.0	N/A	N/A	3.41 (44)	7.64 (84)	25.96 (64)	22.03 (76)	N/A	N/A	N/A	N/A
Russell Midcap Growth Index			17.82 (60)	11.24 (28)	1.45 (69)	14.43 (27)	27.54 (48)	26.69 (42)	0.80 (53)	18.27 (51)	-0.40 (44)	-24.65 (63)
IM U.S. Mid Cap Growth Equity (SA+CF) Median			18.78	8.38	2.98	11.43	27.31	26.18	1.20	18.31	-1.59	-22.68



	Allo	cation					Perforn	nance(%)				
	Market Value \$	%	Oct-2016 To Sep-2017	То	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	То	То	Oct-2010 To Sep-2011	Oct-2009 To Sep-2010	Oct-2008 To Sep-2009	Oct-2007 To Sep-2008
New Amsterdam Equity	34,666,563	9.3	20.50 (34)	8.71 (75)	7.88 (9)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2500 Index			17.79 (63)	14.44 (35)	0.38 (57)	8.97 (61)	29.79 (53)	30.93 (38)	-2.22 (63)	15.92 (55)	-5.68 (67)	-17.99 (39)
IM U.S. SMID Cap Equity (SA+CF) Median			18.95	12.55	0.97	10.31	30.01	29.21	-0.95	16.23	-3.08	-19.36
Eagle Equity	25,029,698	6.7	22.28 (40)	12.20 (46)	4.68 (44)	2.33 (63)	33.00 (59)	28.41 (66)	N/A	N/A	N/A	N/A
Russell 2000 Growth Index			20.98 (59)	12.12 (46)	4.04 (50)	3.79 (54)	33.07 (58)	31.18 (49)	-1.12 (67)	14.79 (54)	-6.32 (62)	-17.07 (16)
IM U.S. Small Cap Growth Equity (SA+CF) Median			21.53	11.41	3.76	4.18	33.99	30.76	1.03	15.30	-3.95	-22.65
Wellington	19,683,981	5.3	14.79 (88)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2000 Value Index			20.55 (50)	18.81 (25)	-1.60 (67)	4.13 (80)	27.04 (82)	32.63 (41)	-5.99 (74)	11.84 (76)	-12.61 (86)	-12.25 (30)
IM U.S. Small Cap Value Equity (SA+CF) Median			20.49	15.68	0.75	6.96	30.97	31.11	-2.83	14.99	-4.15	-15.49
Total International Equity	53,699,798	14.3										
Vanguard Intl Equity (VTRIX)	20,289,401	5.4	20.63 (63)	8.41 (3)	-13.91 (98)	5.83 (32)	N/A	N/A	N/A	N/A	N/A	N/A
MSCI EAFE Value			23.22 (1)	4.16 (21)	-12.18 (89)	6.18 (25)	24.91(3)	13.34 (58)	-9.46 (16)	-1.15 (78)	8.06 (8)	-32.11 (52)
IM International Large Cap Value Equity (MF) Median			21.18	2.83	-10.22	3.73	21.53	13.74	-11.24	0.30	-1.66	-31.96
Oppenheimer Int Equity	13,214,513	3.5	23.04 (48)	19.28 (35)	-22.23 (89)	6.91 (46)	N/A	N/A	N/A	N/A	N/A	N/A
MSCI Emerging Markets Index			22.91 (48)	17.21 (51)	-18.98 (68)	4.66 (69)	1.33 (75)	17.34 (57)	-15.89 (57)	20.54 (60)	19.44 (51)	-33.01 (52)
IM Emerging Markets Equity (SA+CF) Median			22.67	17.25	-17.33	6.48	4.41	18.03	-15.02	22.25	19.52	-32.85
RhumbLine International Equity	20,195,884	5.4	19.24 (64)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI EAFE Index			19.65 (61)	7.06 (76)	-8.27 (50)	4.70 (63)	24.29 (33)	14.33 (72)	-8.94 (45)	3.71 (80)	3.80 (65)	-30.13 (49)
IM International Equity (SA+CF) Median			21.07	11.59	-8.27	5.80	20.27	17.31	-9.59	9.60	7.06	-30.33
Total Fixed Income Composite	76,051,344	20.3	0.60	3.79	3.98	4.78	1.03	9.04	2.41	7.99	10.50	2.82
Fixed Income Index	70,001,011	20.0	0.25	3.57	2.95	2.74	-0.71	4.31	3.59	8.16	10.56	3.65
Garcia Hamilton Fixed Income	76,051,344	20.3	0.69 (51)	3.84 (59)	3.98 (5)	4.78 (10)	1.03 (8)	9.04 (7)	2.61 (86)	8.23 (51)	13.95 (15)	3.89 (39)
Fixed Income Index	-,,		0.25 (87)	3.57 (73)	2.95 (32)	2.74 (58)	-0.71 (77)	4.31 (84)	3.59 (52)	8.16 (54)	10.56 (70)	3.65 (43)
IM U.S. Intermediate Duration (SA+CF) Median			0.69	3.90	2.70	2.88	-0.27	5.56	3.60	8.25	11.51	3.26
RhumbLine Fixed Income	_	0.0	-0.06 (93)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Barc. U.S. Aggregate Index			0.07 (86)	5.19 (80)	2.94 (59)	3.96 (81)	-1.68 (80)	5.16 (91)	5.26 (49)	8.16 (87)	10.56 (82)	3.65 (32)
IM U.S. Broad Market Core Fixed Income (SA+CF) Mediar	1		0.63	5.66	3.02	4.50	-1.24	6.66	5.26	9.27	12.29	2.54



	Alloc	ation					Perform	nance(%)				
	Market Value \$	%	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013	То	Oct-2010 To Sep-2011	Oct-2009 To Sep-2010	Oct-2008 To Sep-2009	Oct-2007 To Sep-2008
Total Real Estate	52,526,474	14.0										
Intercontinental Real Estate Policy	33,366,119	8.9	11.64 (15) 6.89 (73)	12.98 (34) 9.22 (94)	` ,	15.12 (32) 11.26 (91)	` ,	14.24 (43) 11.00 (75)	19.17 (40) 16.10 (66)	N/A N/A	N/A N/A	N/A N/A
IM U.S. Private Real Estate (SA+CF) Median			8.30	11.57	15.79	13.12	13.35	13.10	17.30	6.39	-35.27	4.80
J.P. Morgan	19,160,355	5.1	9.93 (25)	12.10 (41)	20.93 (17)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Real Estate Policy			6.89 (73)	9.22 (94)	13.48 (78)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Private Real Estate (SA+CF) Median			8.30	11.57	15.79	13.12	13.35	13.10	17.30	6.39	-35.27	4.80
R&D Cash	1,247,688	0.3										



	Allo	cation					Perforn	nance(%)				
	Market Value \$	%	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	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	Oct-2008 To Sep-2009	Oct-2007 To Sep-2008
Total Fund Composite	374,721,620	100.0	13.44	8.22	0.21	8.99	13.26	17.90	-0.17	10.59	2.07	-12.97
Total Fund Policy Index			13.01	10.75	0.71	10.14	14.75	19.53	1.38	10.58	1.45	-13.64
Total Equity Composite	241,467,377	64.4	18.05	9.29	-1.87	10.14	17.61	22.25	-0.74	13.42	-3.23	-21.15
Total Equity Policy Index			18.97	14.06	-2.21	13.29	22.52	27.50	-0.83	11.21	-4.75	-22.19
Total Domestic Equity	187,767,578	50.1										
361 Capital (BRC Equity)	-	0.0	N/A	4.06	-0.35	19.81	N/A	N/A	N/A	N/A	N/A	N/A
Russell 1000 Value Index			15.12	16.19	-4.42	18.89	22.30	30.92	-1.89	8.90	-10.62	-23.56
RhumbLine Equity S&P 500	37,912,728	10.1	18.49	15.39	N/A							
S&P 500 Index			18.61	15.43	-0.61	19.73	19.34	30.20	1.14	10.16	-6.91	-21.98
RhumbLine R1000 Value	15,328,200	4.1	N/A									
Russell 1000 Value Index			15.12	16.19	-4.42	18.89	22.30	30.92	-1.89	8.90	-10.62	-23.56
RhumbLine R1000 Growth	20,742,534	5.5	N/A									
Russell 1000 Growth Index			21.94	13.76	3.17	19.15	19.27	29.19	3.78	12.65	-1.85	-20.88
Garcia Hamilton Equity	-	0.0	N/A	11.27	1.16	16.51	12.25	26.52	2.43	10.96	-5.51	-16.58
Russell 1000 Growth Index			21.94	13.76	3.17	19.15	19.27	29.19	3.78	12.65	-1.85	-20.88
RhumbLine S&P Mid Cap 400	16,845,403	4.5	17.44	N/A								
S&P MidCap 400 Index			17.52	15.33	1.40	11.82	27.68	28.54	-1.28	17.78	-3.11	-16.68
Anchor Equity	17,558,472	4.7	13.91	12.21	4.07	9.33	16.27	21.37	-1.66	15.62	-1.04	-13.46
Russell Midcap Value Index			13.37	17.26	-2.07	17.46	27.77	29.28	-2.36	16.93	-7.12	-20.50
Oak Ridge Equity	-	0.0	N/A	N/A	2.81	6.99	25.22	21.33	N/A	N/A	N/A	N/A
Russell Midcap Growth Index			17.82	11.24	1.45	14.43	27.54	26.69	0.80	18.27	-0.40	-24.65
New Amsterdam Equity	34,666,563	9.3	20.00	8.25	7.46	N/A						
Russell 2500 Index			17.79	14.44	0.38	8.97	29.79	30.93	-2.22	15.92	-5.68	-17.99
Eagle Equity	25,029,698	6.7	21.37	11.38	3.90	1.53	32.03	27.38	N/A	N/A	N/A	N/A
Russell 2000 Growth Index			20.98	12.12	4.04	3.79	33.07	31.18	-1.12	14.79	-6.32	-17.07
Wellington	19,683,981	5.3	13.78	N/A								
Russell 2000 Value Index			20.55	18.81	-1.60	4.13	27.04	32.63	-5.99	11.84	-12.61	-12.25

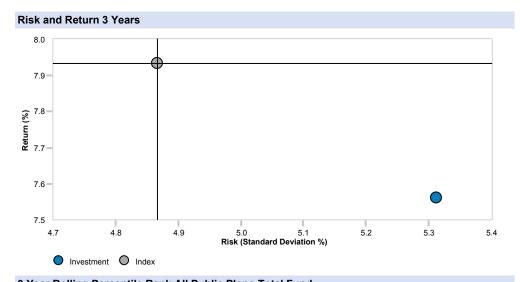


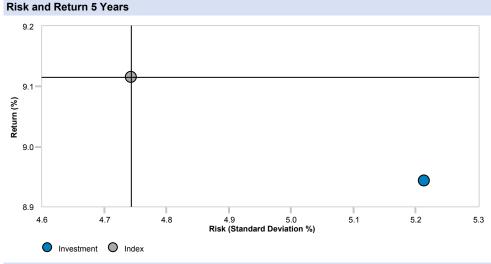
	Allo	cation					Perforn	nance(%)				
	Market Value \$	%	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013	Oct-2011 To Sep-2012	Oct-2010 To Sep-2011	Oct-2009 To Sep-2010	Oct-2008 To Sep-2009	Oct-2007 To Sep-2008
Total International Equity	53,699,798	14.3										
Vanguard Intl Equity (VTRIX)  MSCI EAFE Value	20,289,401	5.4	20.63 23.22	8.41 4.16	-13.91 -12.18	5.83 6.18	N/A 24.91	N/A 13.34	N/A -9.46	N/A -1.15	N/A 8.06	N/A -32.11
Oppenheimer Int Equity MSCI Emerging Markets Index	13,214,513	3.5	21.80 22.91	18.73 17.21	-22.95 -18.98	5.83 4.66	N/A 1.33	N/A 17.34	N/A -15.89	N/A 20.54	N/A 19.44	N/A -33.01
RhumbLine International Equity  MSCI EAFE Index	20,195,884	5.4	19.18 19.65	N/A 7.06	N/A -8.27	N/A 4.70	N/A 24.29	N/A 14.33	N/A -8.94	N/A 3.71	N/A 3.80	N/A -30.13
Total Fixed Income Composite Fixed Income Index	76,051,344	20.3	<b>0.40</b> 0.25	<b>3.60</b> 3.57	<b>3.78</b> 2.95	<b>4.57</b> 2.74	<b>0.83</b> -0.71	<b>8.83</b> 4.31	<b>2.21</b> 3.59	<b>7.83</b> 8.16	<b>10.35</b> 10.56	<b>2.82</b> 3.65
Garcia Hamilton Fixed Income Fixed Income Index	76,051,344	20.3	0.49 0.25	3.64 3.57	3.78 2.95	4.57 2.74	0.83	8.83 4.31	2.39 3.59	8.01 8.16	13.79 10.56	3.89 3.65
RhumbLine Fixed Income Blmbg. Barc. U.S. Aggregate Indo	- ex	0.0	-0.24 0.07	N/A 5.19	N/A 2.94	N/A 3.96	N/A -1.68	N/A 5.16	N/A 5.26	N/A 8.16	N/A 10.56	N/A 3.65
Total Real Estate	52,526,474	14.0										
Intercontinental Real Estate Policy	33,366,119	8.9	9.59 6.89	10.71 9.22	12.18 13.48	12.68 11.26	13.98 11.00	13.96 11.00	19.17 16.10	N/A N/A	N/A N/A	N/A N/A
J.P. Morgan Real Estate Policy	19,160,355	5.1	8.21 6.89	10.36 9.22	19.53 13.48	N/A N/A						
R&D Cash	1,247,688	0.3										

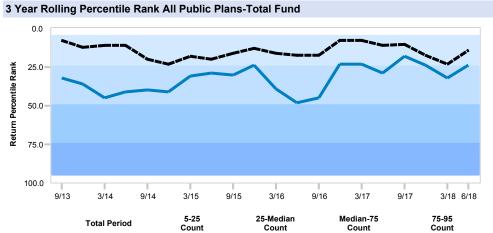


Historical Stati	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	7.56	5.31	1.30	98.32	10	109.24	2
Index	7.93	4.87	1.49	100.00	10	100.00	2

<b>Historical Stati</b>	Historical Statistics 5 Years										
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters				
Investment	8.94	5.21	1.61	100.71	17	116.17	3				
Index	9.12	4.74	1.80	100.00	17	100.00	3				







14 (70%)

0 (0%)

0 (0%)

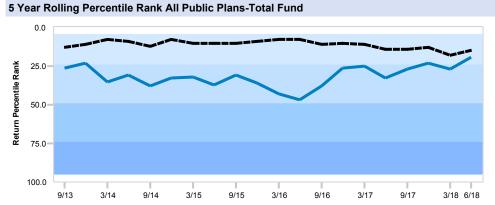
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6 (30%)

20 (100%)



	Total Period	5-2 Cou		25-Me Cou		Media Cou		75- Cou		
Investment	20	4	(20%)	16	(80%)	0	(0%)	0	(0%)	
Index	20	20	(100%)	0	(0%)	0	(0%)	0	(0%)	

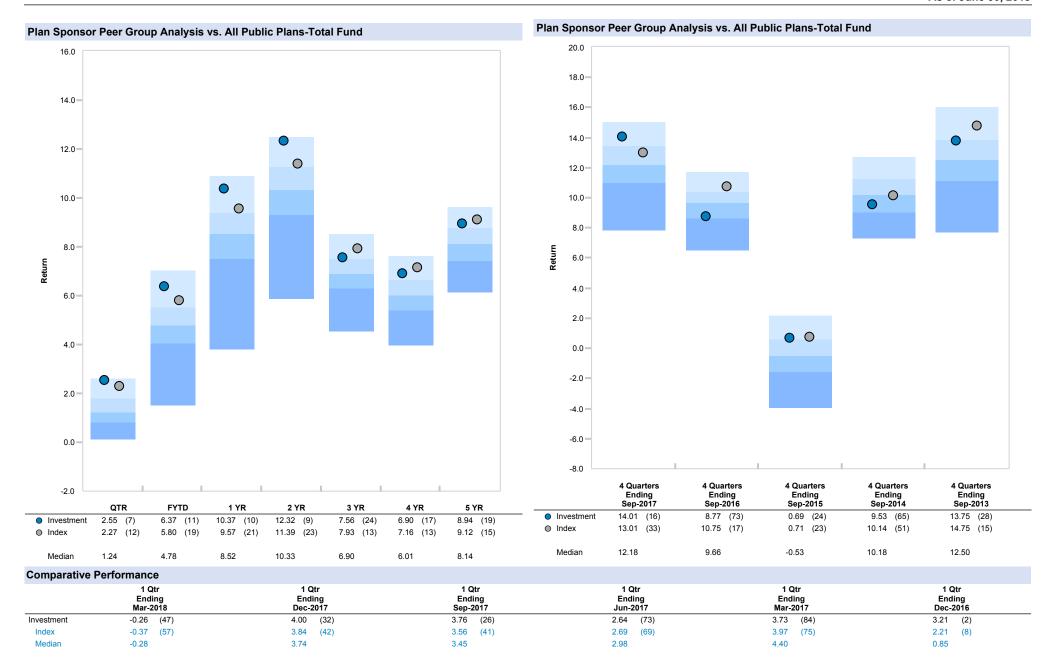


Investment

\_\_ Index

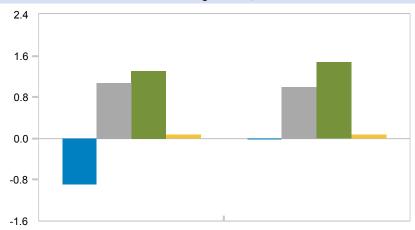
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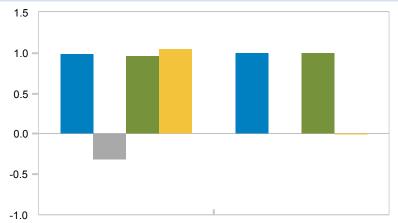


#### Risk / Reward Historical Statistics 3 Years Ending June 30, 2018



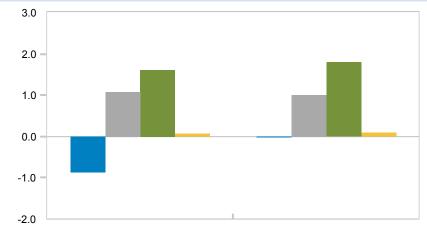
	Total Fund Composite	Total Fund Policy Index
■ Alpha	-0.89	0.00
■ Beta	1.07	1.00
Sharpe Ratio	1.30	1.49
Trevnor Ratio	0.06	0.07

#### Benchmark Relative Historical Statistics 3 Years Ending June 30, 2018



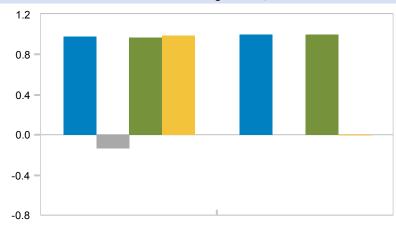
	<b>Total Fund Composite</b>	<b>Total Fund Policy Index</b>
Actual Correlation	0.98	1.00
Information Ratio	-0.31	N/A
R-Squared	0.97	1.00
Tracking Error	1.04	0.00

#### Risk / Reward Historical Statistics 5 Years Ending June 30, 2018



	<b>Total Fund Composite</b>	Total Fund Policy Index
Alpha	-0.87	0.00
■ Beta	1.08	1.00
Sharpe Ratio	1.61	1.80
Treynor Ratio	0.08	0.09

#### Benchmark Relative Historical Statistics 5 Years Ending June 30, 2018



	Total Fund Composite	Total Fund Policy Index
Actual Correlation	0.98	1.00
Information Ratio	-0.14	N/A
R-Squared	0.97	1.00
Tracking Error	0.99	0.00

Benchmark: Total Fund Policy Index

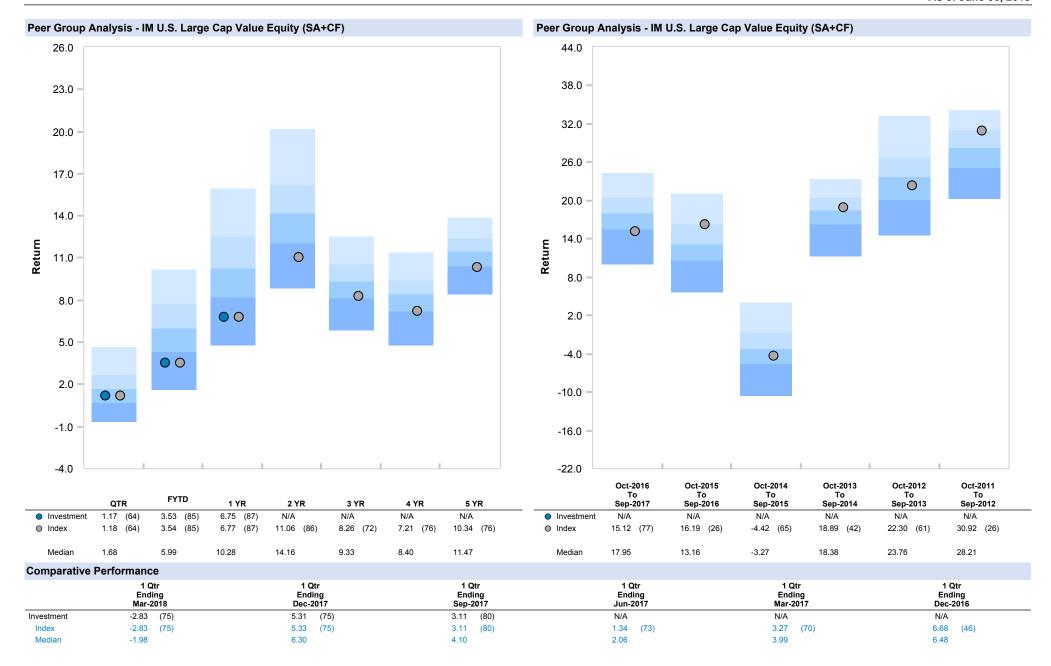


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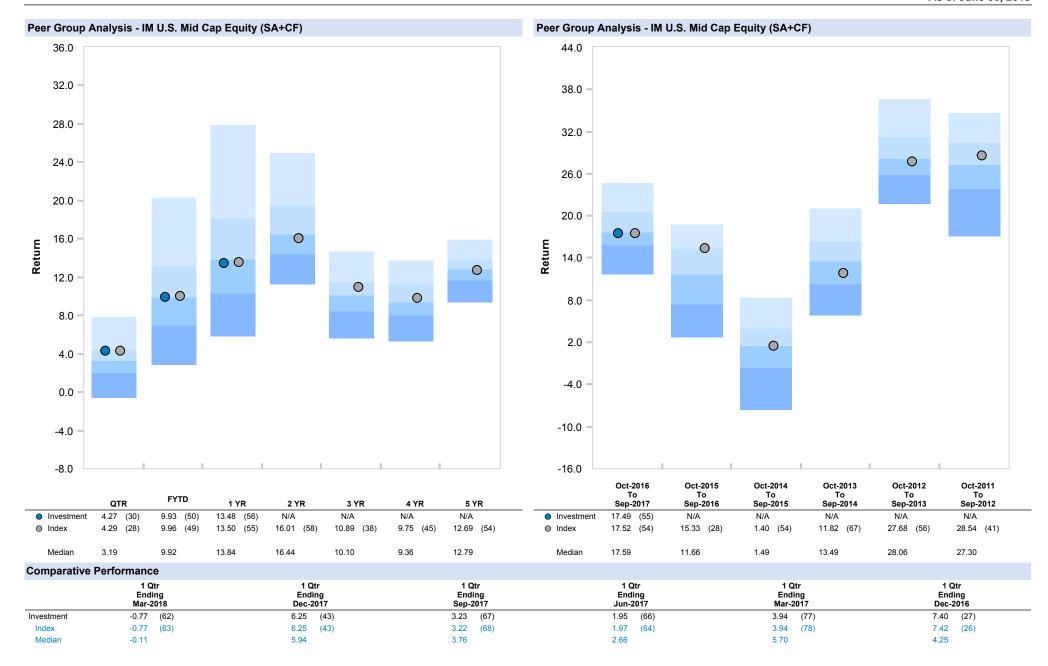








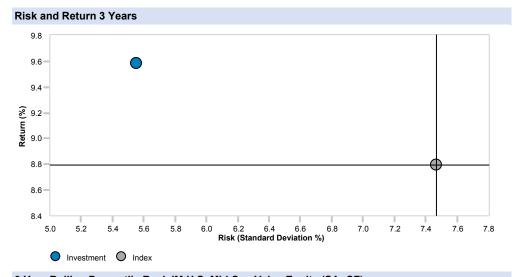


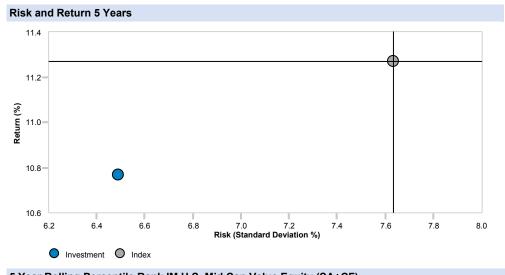


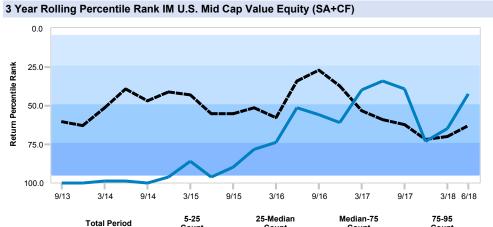


Historical Statistics 3 Years										
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters			
Investment	9.58	5.56	1.59	91.71	10	53.63	2			
Index	8.80	7 47	1.09	100.00	10	100.00	2			

<b>Historical Statis</b>	Historical Statistics 5 Years										
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters				
Investment	10.77	6.49	1.56	89.39	16	68.60	4				
Index	11.27	7.63	1.40	100.00	16	100.00	4				







Count

4 (20%)

7 (35%)

Count

6 (30%)

13 (65%)

Count

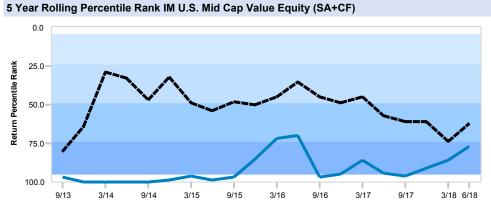
10 (50%)

0 (0%)

Count

0 (0%)

0 (0%)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	0 (0%)	2 (10%)	18 (90%)
Index	20	0 (0%)	12 (60%)	7 (35%)	1 (5%)

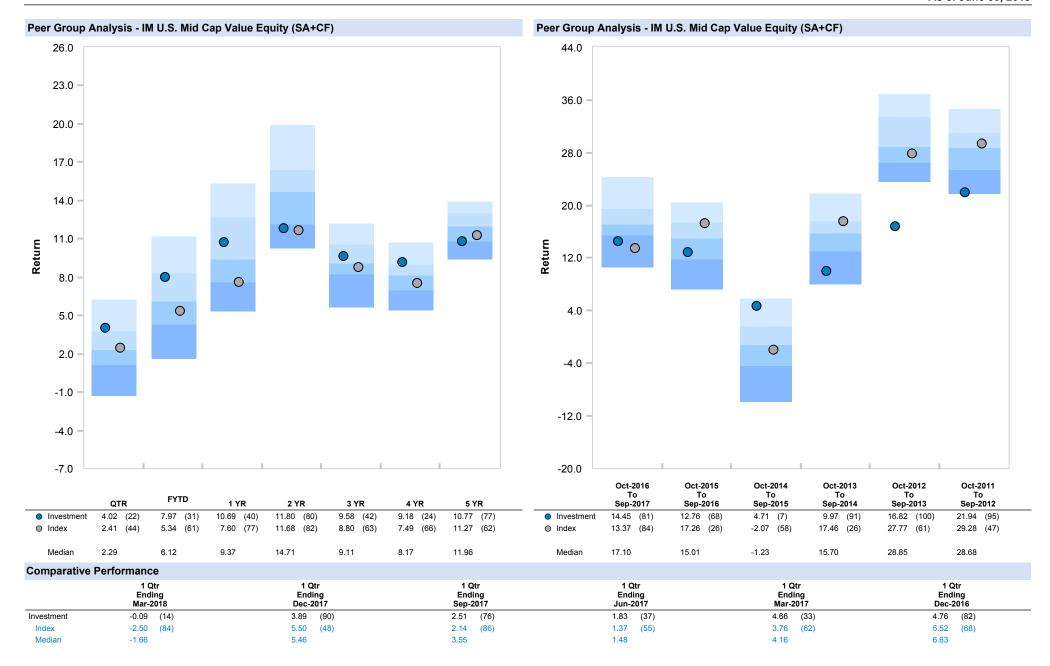


Investment

\_\_ Index

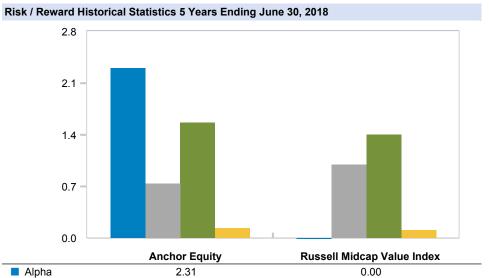
20

20





# Risk / Reward Historical Statistics 3 Years Ending June 30, 2018 6.0 4.0 2.0 0.0



Anchor Equity	Russell Midcap value index
3.49	0.00
0.68	1.00
1.59	1.09
0.13	0.08
	3.49 0.68 1.59

### Beta 0.74 1.00 ■ Sharpe Ratio 1.56 1.40 Treynor Ratio 0.14 0.11

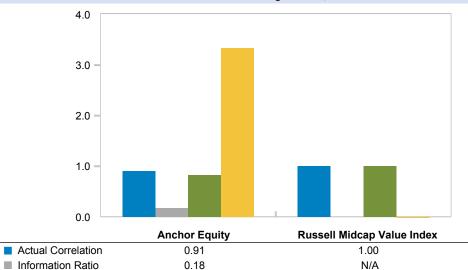
# Benchmark Relative Historical Statistics 3 Years Ending June 30, 2018

0.18

0.83

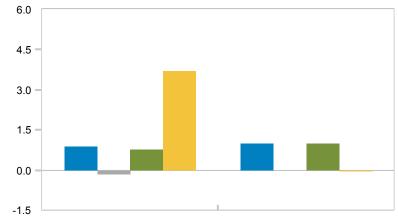
3.33

# Benchmark Relative Historical Statistics 5 Years Ending June 30, 2018



1.00

0.00



	<b>Anchor Equity</b>	Russell Midcap Value Index
Actual Correlation	0.88	1.00
Information Ratio	-0.15	N/A
R-Squared	0.77	1.00
Tracking Error	3.68	0.00

Benchmark: Russell Midcap Value Index

R-Squared

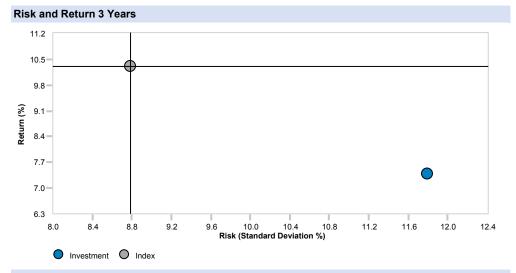
Tracking Error

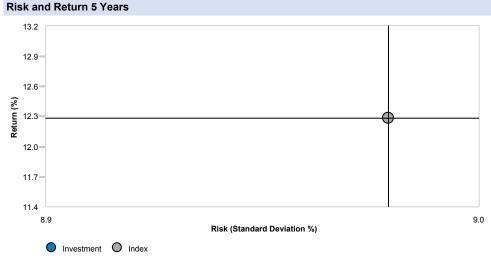


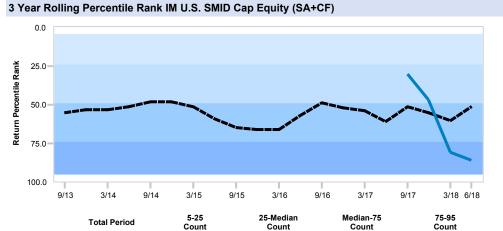


Historical Statistics 3 Years									
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		
Investment	7.37	11.79	0.61	84.45	7	108.92	5		
Index	10.30	8 79	1 11	100.00	10	100.00	2		

<b>Historical Statis</b>	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	12.29	8.98	1.31	100.00	16	100.00	4







2 (50%)

3 (15%)

0 (0%)

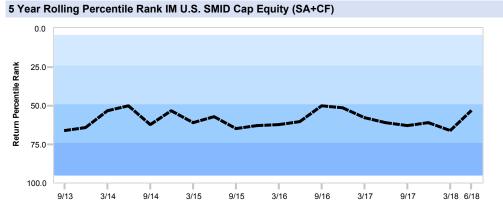
17 (85%)

2 (50%)

0 (0%)

0 (0%)

0 (0%)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
Investment	0	0	0	0	0	
Index	20	0 (0%)	2 (10%)	18 (90%)	0 (0%)	



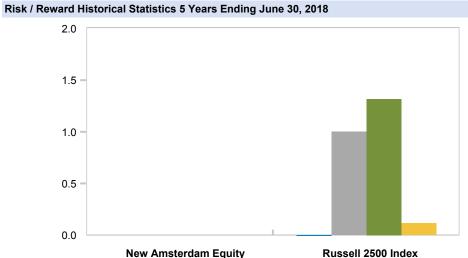
Investment

\_\_ Index





# Risk / Reward Historical Statistics 3 Years Ending June 30, 2018 2.0 -2.0 -4.0 New Amsterdam Equity Russell 2500 Index



	New Amsterdam Equity	Russell 2500 Ir
Alpha	N/A	0.00
■ Beta	N/A	1.00
Sharpe Ratio	N/A	1.31
Treynor Ratio	N/A	0.12

# Benchmark Relative Historical Statistics 3 Years Ending June 30, 2018

0.81

-0.35

0.65

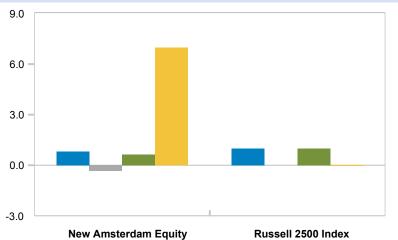
6.97

-3.31

1.09

0.61

0.07



0.00

1.00

1.11

0.10

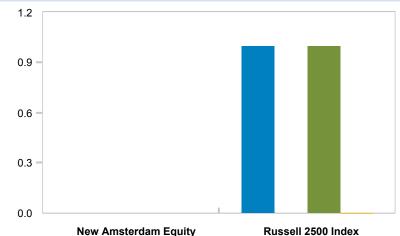
1.00

N/A

1.00

0.00

Benchmark Relative	Listariaal Ctatisti	oo E Voore Endi	am luma 20 2040
Denominark Relative	a mistoricai Statisti	cs o rears Endii	iu June 30. 2010



	New Amsterdam Equity	Russell 2500 Inde
Actual Correlation	N/A	1.00
Information Ratio	N/A	N/A
R-Squared	N/A	1.00
Tracking Error	N/A	0.00

Benchmark: Russell 2500 Index

R-Squared

Actual Correlation

■ Information Ratio

Alpha

Beta

■ Sharpe Ratio

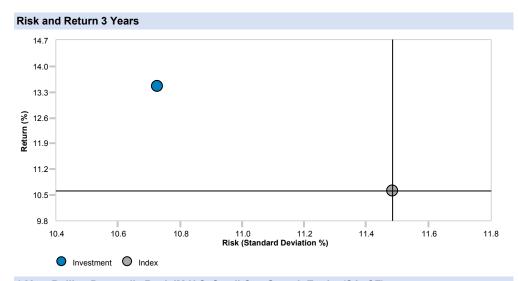
Treynor Ratio

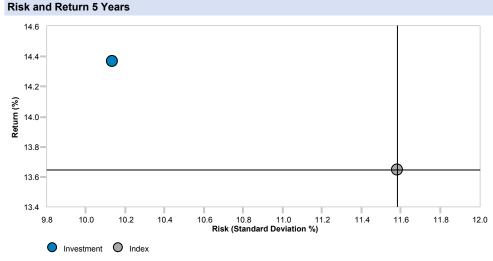




<b>Historical Stati</b>	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	13.47	10.73	1.20	109.75	10	84.89	2
Index	10.60	11 /12	0.00	100.00	10	100.00	2

<b>Historical Stati</b>	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	14.37	10.14	1.37	97.86	16	81.45	4
Index	13.65	11.59	1.15	100.00	17	100.00	3







Count

7 (41%)

4 (20%)

Count

7 (41%)

16 (80%)

Count

2 (12%)

0 (0%)

Count

1 (6%)

0 (0%)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	9	0 (0%)	1 (11%)	8 (89%)	0 (0%)
Index	20	0 (0%)	0 (0%)	20 (100%)	0 (0%)



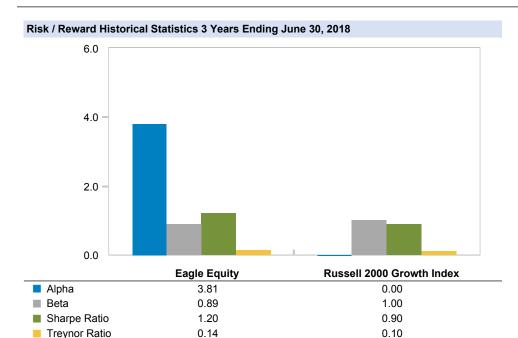
Investment

\_\_ Index

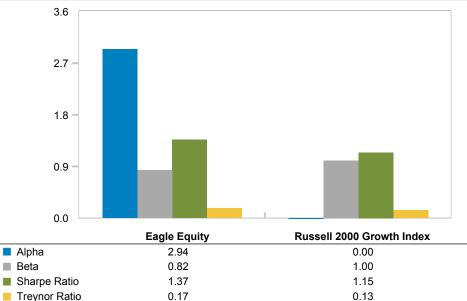
17





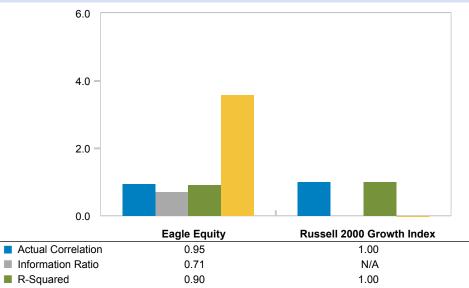


# Risk / Reward Historical Statistics 5 Years Ending June 30, 2018



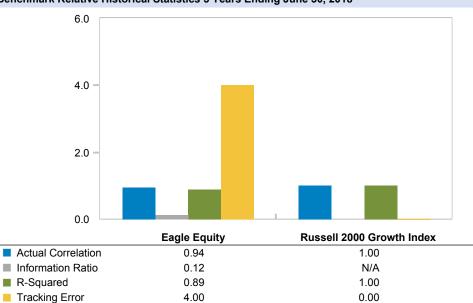
# Benchmark Relative Historical Statistics 3 Years Ending June 30, 2018

3.57



0.00

# Benchmark Relative Historical Statistics 5 Years Ending June 30, 2018

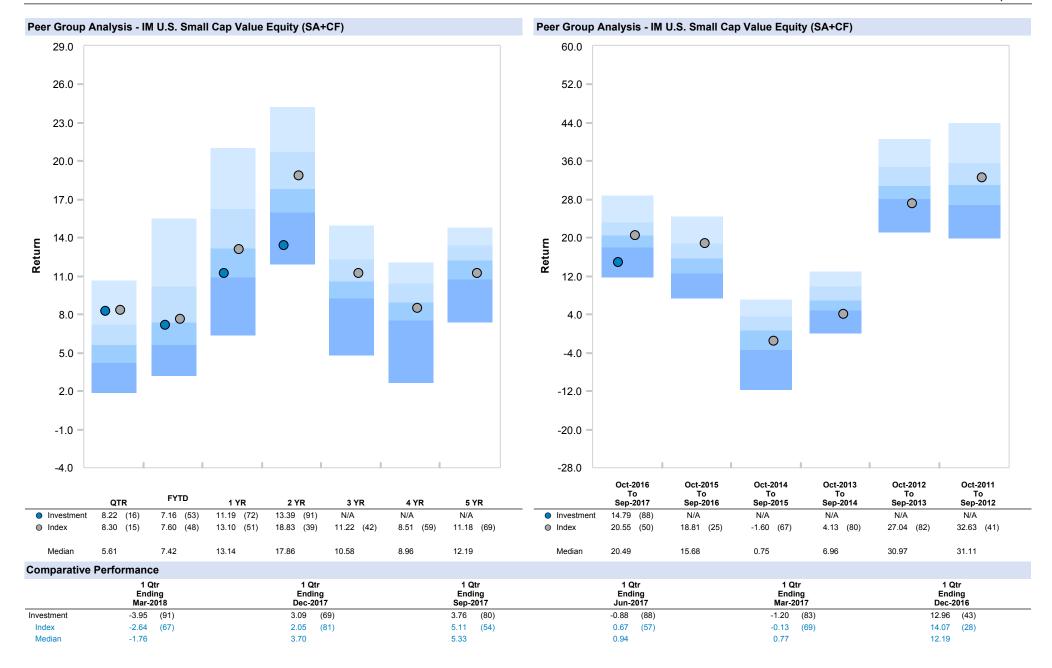


Benchmark: Russell 2000 Growth Index

Tracking Error





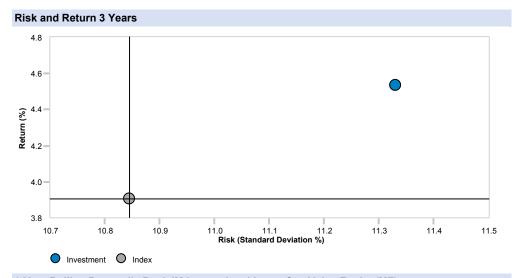


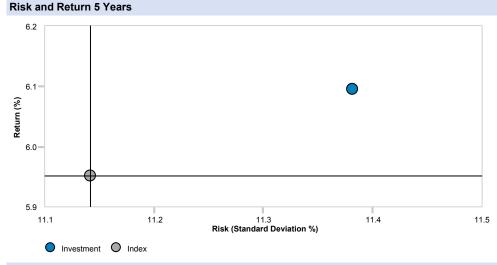




Historical Statistics 3 Years								
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters	
Investment	4.53	11.33	0.40	92.94	7	79.58	5	
Index	3.90	10.85	0.35	100.00	7	100.00	5	

Historical Statistics 5 Years								
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters	
Investment	6.10	11.38	0.55	95.10	12	87.73	8	
Index	5.95	11.14	0.54	100.00	13	100.00	7	







2 (22%)

6 (30%)

0 (0%)

0 (0%)

0 (0%)

0 (0%)

7 (78%)

14 (70%)

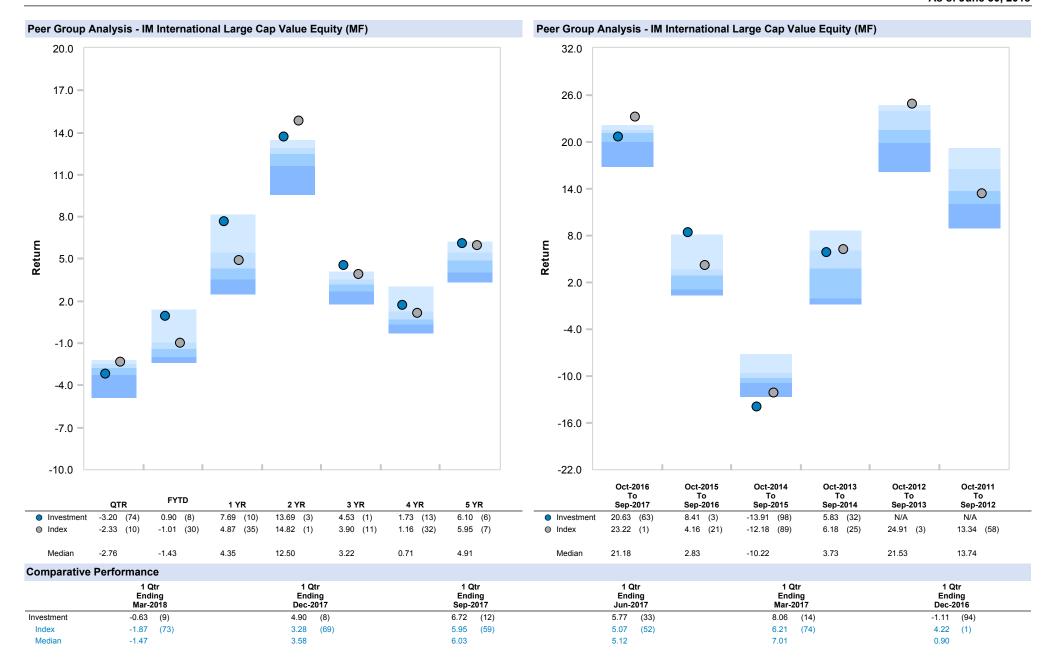


	Total Period	Cou		Z5-IVIE Cou		Cou		Cou		
Investment	1	1	(100%)	0	(0%)	0	(0%)	0	(0%)	
Index	20	13	(65%)	7	(35%)	0	(0%)	0	(0%)	



Investment

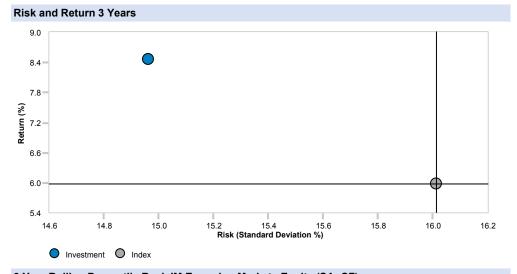
\_\_ Index

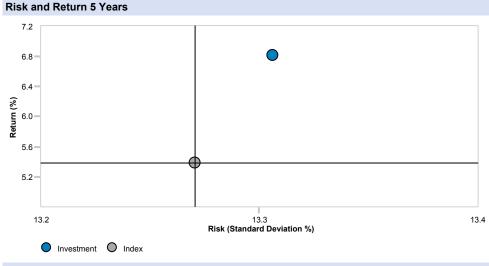


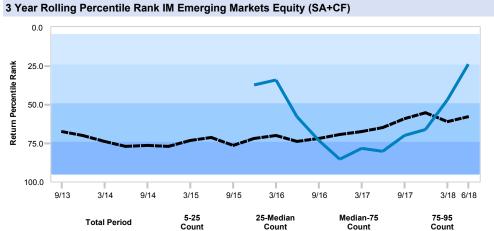


Historical Stati	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.46	14.97	0.58	105.04	9	86.72	3
Index	5 98	16.02	0.41	100.00	q	100.00	3

Historical Statistics 5 Years								
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters	
Investment	6.81	13.31	0.54	108.74	13	98.02	7	
Index	5.39	13.27	0.44	100.00	14	100.00	6	







3 (27%)

0 (0%)

4 (36%)

16 (80%)

3 (27%)

4 (20%)

1 (9%)

0 (0%)



	Total Period	5-25 Count	Count	Count	Count	
Investment	3	0 (0%)	3 (100%)	0 (0%)	0 (0%)	
Index	20	0 (0%)	0 (0%)	11 (55%)	9 (45%)	



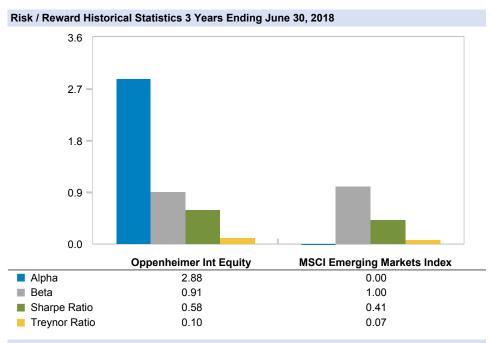
Investment

\_\_ Index

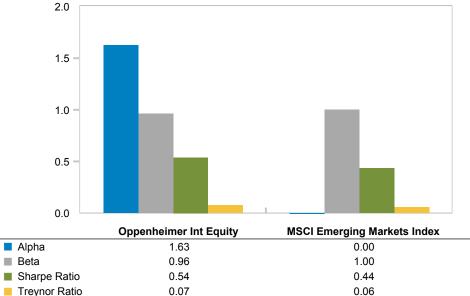
11



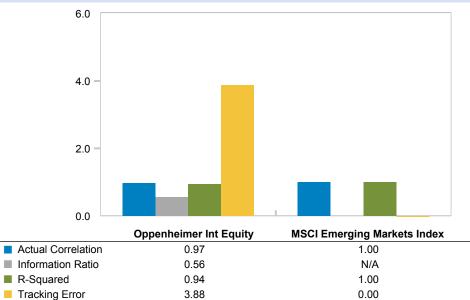




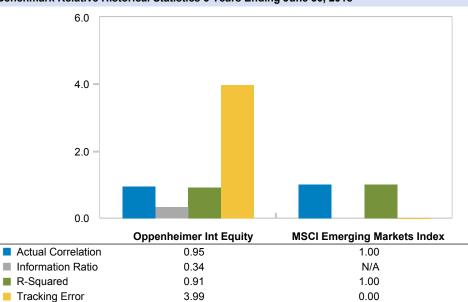
# Risk / Reward Historical Statistics 5 Years Ending June 30, 2018 2.0



# Benchmark Relative Historical Statistics 3 Years Ending June 30, 2018



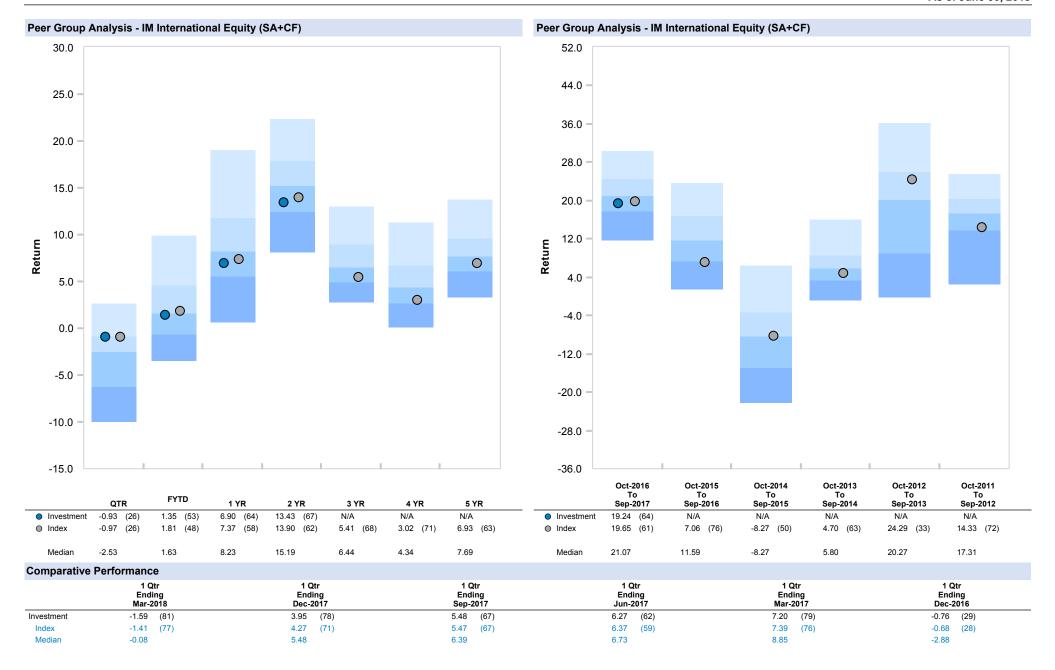
# Benchmark Relative Historical Statistics 5 Years Ending June 30, 2018



Benchmark: MSCI Emerging Markets Index





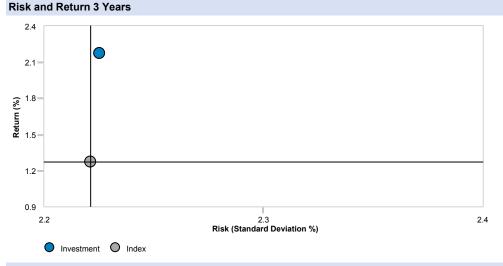


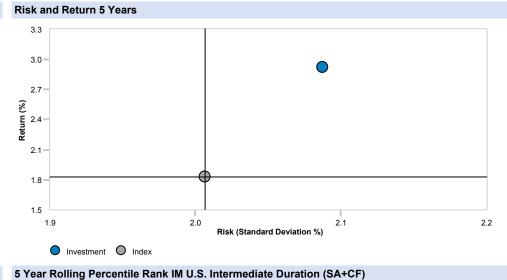


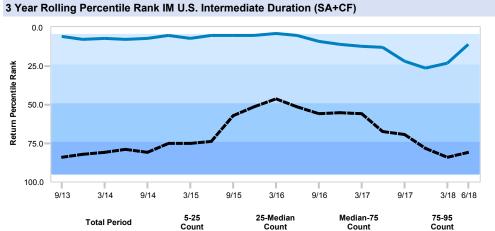


Historical Statistics 3 Years								
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters	
Investment	2.18	2.23	0.67	119.46	9	66.90	3	
Index	1 27	2 22	0.28	100.00	Ω	100.00	1	

Historical Statistics 5 Years								
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters	
Investment	2.92	2.09	1.16	123.50	16	52.39	4	
Index	1.83	2.01	0.69	100.00	14	100.00	6	







1 (5%)

1 (5%)

0 (0%)

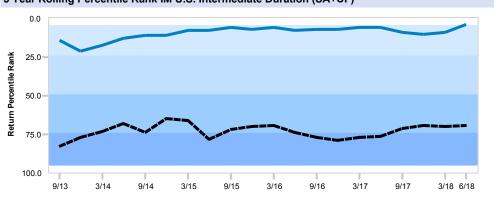
11 (55%)

0 (0%)

8 (40%)

19 (95%)

0 (0%)



25-Median

Count

0 (0%)

0 (0%)

Median-75

Count

0 (0%)

13 (65%)

5-25

Count

20 (100%)

0 (0%)

**Total Period** 

20

20

Investment

\_\_ Index



75-95

Count

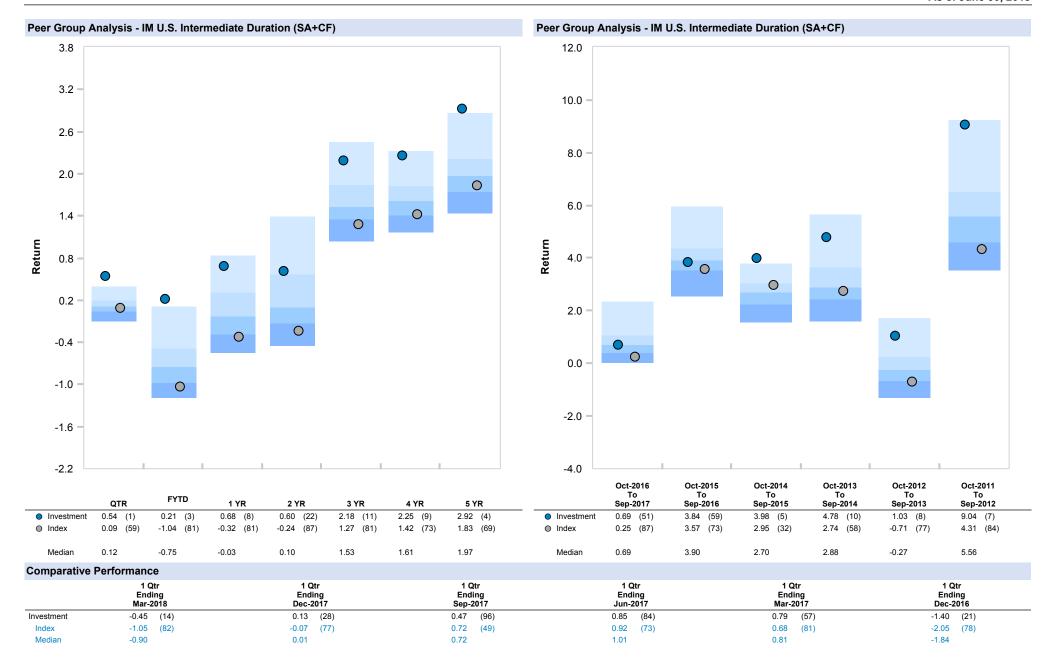
0 (0%)

7 (35%)

Investment

\_\_ Index

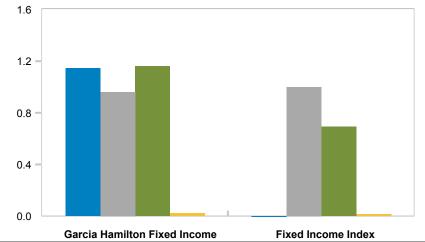
20





# Risk / Reward Historical Statistics 3 Years Ending June 30, 2018 1.2 0.9 0.6 0.3 0.0 **Garcia Hamilton Fixed Income Fixed Income Index** Alpha 0.96 0.00 Beta 0.95 1.00 Sharpe Ratio 0.67 0.28

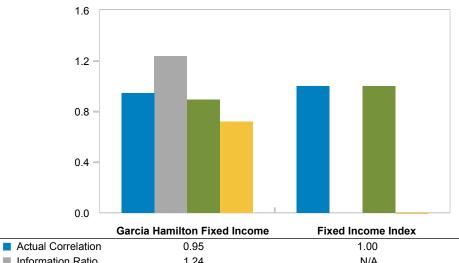
# Risk / Reward Historical Statistics 5 Years Ending June 30, 2018



	Garcia Hamilton Fixed Income	Fixed Income Index
Alpha	1.14	0.00
Beta	0.96	1.00
Sharpe Ratio	1.16	0.69
Treynor Ratio	0.03	0.01

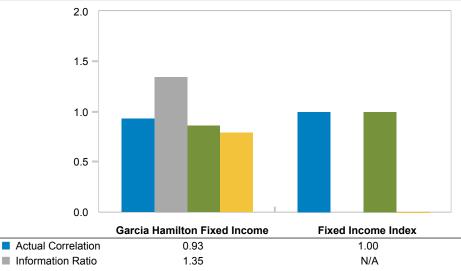
# Benchmark Relative Historical Statistics 3 Years Ending June 30, 2018

0.02



0.01

# Benchmark Relative Historical Statistics 5 Years Ending June 30, 2018



Information Ratio ■ Information Ratio 1.24 N/A 0.86 1.00 R-Squared R-Squared 0.90 1.00 0.79 0.00 Tracking Error Tracking Error 0.72 0.00

Benchmark: Garcia Hamilton Fixed Inc Index

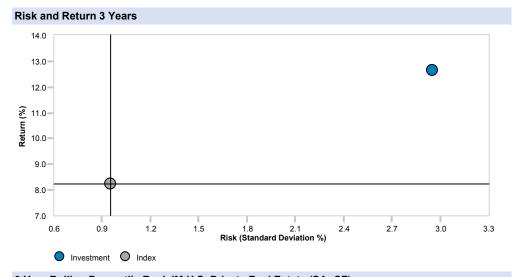
Treynor Ratio

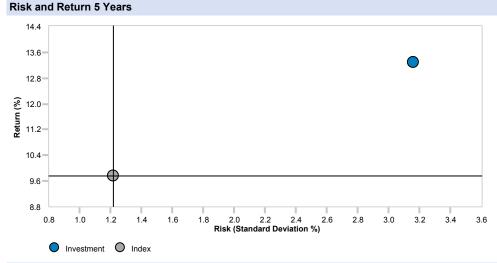




Historical Stati	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	12.63	2.95	3.76	151.22	12	N/A	N/A
Index	8.25	0.95	6.52	100.00	12	N/A	N/A

Historical Statistics 5 Years								
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters	
Investment	13.28	3.16	3.80	134.73	20	N/A	N/A	
Index	9.77	1.22	6.42	100.00	20	N/A	N/A	







2 (10%)

0 (0%)

18 (90%)

0 (0%)

0 (0%)

0 (0%)

0 (0%)

20 (100%)



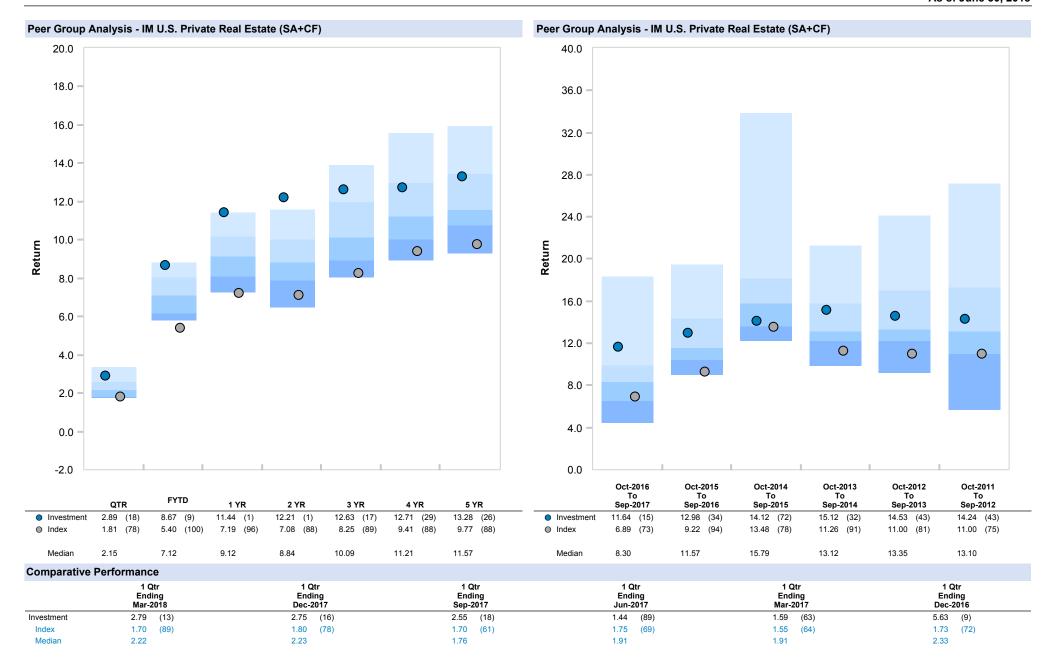
	Total Period	5-28 Cou		25-Me Cou		Media Cou		75- Cou	
Investment	13	1	(8%)	11	(85%)	1	(8%)	0	(0%)
Index	13	0	(0%)	0	(0%)	0	(0%)	13	(100%)



Investment

\_\_ Index

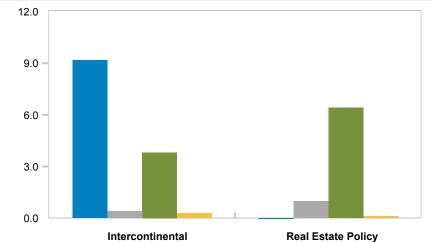
20





# Risk / Reward Historical Statistics 3 Years Ending June 30, 2018 9.0 6.0 3.0 0.0 **Real Estate Policy** Intercontinental Alpha 0.86 0.00 Beta 1.40 1.00 ■ Sharpe Ratio 3.76 6.52

# Risk / Reward Historical Statistics 5 Years Ending June 30, 2018



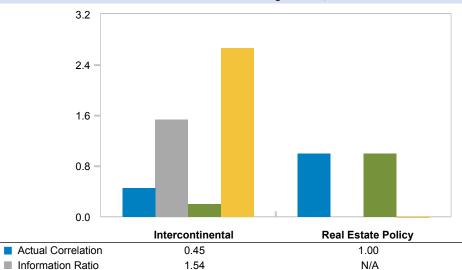
	Intercontinental	Real Estate Policy
Alpha	9.20	0.00
■ Beta	0.40	1.00
Sharpe Ratio	3.80	6.42
Treynor Ratio	0.30	0.09

# Benchmark Relative Historical Statistics 3 Years Ending June 30, 2018

0.21

2.66

0.08

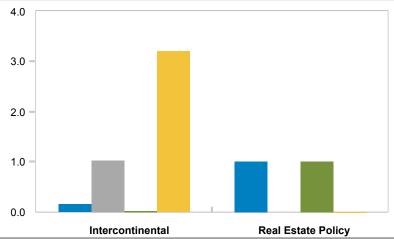


0.07

1.00

0.00

# Benchmark Relative Historical Statistics 5 Years Ending June 30, 2018



	intercontinental	ittear Estate i o
Actual Correlation	0.16	1.00
Information Ratio	1.02	N/A
R-Squared	0.02	1.00
Tracking Error	3.21	0.00

Benchmark: Real Estate Policy

R-Squared

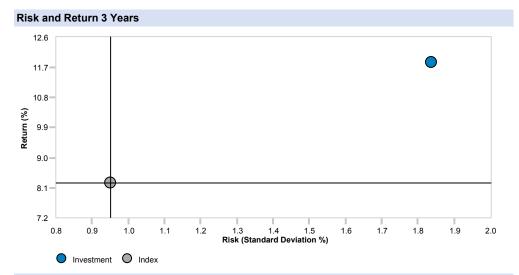
Treynor Ratio





Historical Stati	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	11.86	1.84	5.59	142.09	12	N/A	N/A
Index	8.25	0.95	6.52	100.00	12	N/A	N/A

<b>Historical Statis</b>	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	N/A	N/A	N/A	N/A	N/A	N/A	N/A



# Risk and Return 5 Years

No data found.

100.0

9/13

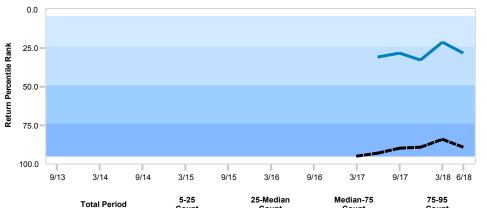
3/14

# 3 Year Rolling Percentile Rank IM U.S. Private Real Estate (SA+CF)

Count

1 (20%)

0 (0%)



Count

4 (80%)

0 (0%)

Count

0 (0%)

0 (0%)

Count

0 (0%)

6 (100%)

# 

5 Year Rolling Percentile Rank IM U.S. Private Real Estate (SA+CF)

9/14

3/15

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	0	0	0	0	0

3/16

9/16

3/17

9/17

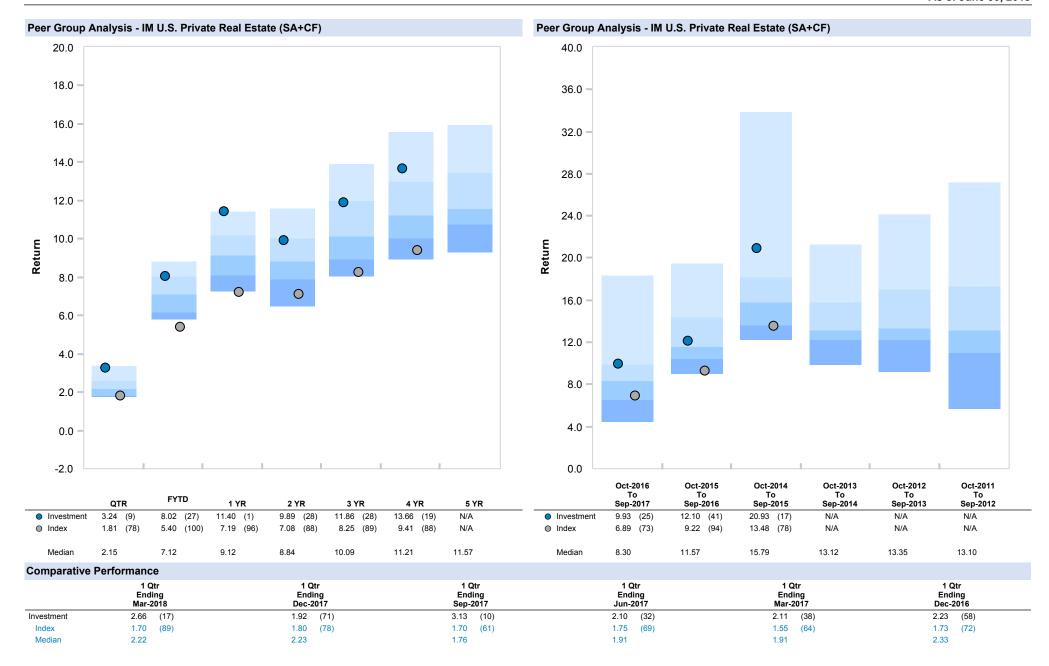
9/15



3/18 6/18

Investment

\_\_ Index





Total Fund Historical Hybrid Composition			
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Oct-2007		Apr-2014	
Blmbg. Barc. U.S. Aggregate Index	35.00	Bloomberg Barclays Intermed Aggregate Index	26.00
S&P 500 Index	29.00	S&P 500 Index	25.00
Russell Midcap Index	16.00	Russell Midcap Index	16.00
Russell 2000 Index	10.00	Russell 2000 Index	10.00
MSCI EAFE Index	10.00	MSCI EAFE Index	10.00
		NCREIF Property Index	10.00
Jul-2010		MSCI Emerging Markets Index	3.00
Blmbg. Barc. U.S. Aggregate Index	35.00		
S&P 500 Index	26.00	Oct-2016	
Russell Midcap Index	16.00	Bloomberg Barclays Intermed Aggregate Index	22.00
Russell 2000 Index	10.00	S&P 500 Index	26.00
MSCI EAFE Index	10.00	Russell Midcap Index	8.00
NCREIF Property Index	3.00	Russell 2000 Index	10.00
		MSCI EAFE Index	10.00
Apr-2011	05.00	NCREIF Property Index	13.00
Bloomberg Barclays Intermed Aggregate Index	35.00	MSCI Emerging Markets Index	3.00
S&P 500 Index	26.00	Russell 2500 Index	8.00
Russell Midcap Index	16.00		
Russell 2000 Index	10.00		
MSCI EAFE Index	10.00		
NCREIF Property Index	3.00		
Oct-2011			
Bloomberg Barclays Intermed Aggregate Index	30.00		
S&P 500 Index	29.00		
Russell Midcap Index	16.00		
Russell 2000 Index	10.00		
MSCI EAFE Index	10.00		
NCREIF Property Index	5.00		
Jan-2013			
Bloomberg Barclays Intermed Aggregate Index	30.00		
S&P 500 Index	26.00		
Russell Midcap Index	16.00		
Russell 2000 Index	10.00		
MSCI EAFE Index	10.00		
NCREIF Property Index	5.00		
MSCI Emerging Markets Index	3.00		



Total Equity Historical Hybrid Composition		Fixed Income Historical Hybrid Composition		
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)	
Oct-2007		Oct-2007		
S&P 500 Index	44.60	Blmbg. Barc. U.S. Aggregate Index	100.00	
Russell Midcap Index	24.60			
Russell 2000 Index	15.40	Apr-2011		
MSCI EAFE Index	15.40	Bloomberg Barclays Intermed Aggregate Index	100.00	
Jul-2010				
S&P 500 Index	40.00			
Russell Midcap Index	24.60			
Russell 2000 Index	15.40			
MSCI EAFE Index	15.40			
NCREIF Property Index	4.60			
Oct-2011				
S&P 500 Index	45.00			
Russell Midcap Index	25.00			
Russell 2000 Index	15.00			
MSCI EAFE Index	15.00			
Jan-2013				
S&P 500 Index	40.00			
Russell Midcap Index	25.00			
Russell 2000 Index	15.00			
MSCI EAFE Index	15.00			
MSCI Emerging Markets Index	5.00			
Oct-2014				
S&P 500 Index	40.00			
Russell Midcap Index	12.50			
Russell 2000 Index	15.00			
MSCI EAFE Index	15.00			
MSCI Emerging Markets Index	5.00			
Russell 2500 Index	12.50			



Active I	Rei	turi	1
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- 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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