### Quarterly Investment Performance Analysis City of Jacksonville Police and Fire Pension Fund

Period Ended: March 31, 2020



## 2019 Greenwich Quality Leader Award

Greenwich Associates recently announced that RVK is 1 of 3 firms among large US consultants to receive the 2019 Greenwich *Quality Leader* award.

We are proud to announce the 3<sup>rd</sup> consecutive year of receiving this recognition.



## We are deeply grateful for your continued confidence and support. From all of us here at RVK, thank you for the opportunity to serve you!

\*Between July and October 2019, Greenwich Associates conducted interviews with 1,100 individuals at 896 of the largest tax-exempt funds in the US–including corporate and union funds, public funds, endowments and foundations–with either pension or investment pool assets greater than \$150 million. Study participants were asked to provide quantitative and qualitative evaluations of their asset managers and investment consultants, including qualitative assessments of those firms soliciting their business and detailed information on important market trends. RVK is one of three firms recognized in the large investment consultant category. The ratings may not be representative of any one client's experience with RVK; rather they are representative of those clients submitted and that chose to participate in the survey. The results are not indicative of RVK's future performance.

To read the Greenwich article, please refer to the following URL: <u>https://www.greenwich.com/sites/default/files/reports/Five-Factors-Distinguish-Best-in-Class-Consultants-Average-Practitioners.20-4012.pd</u> For more information about RVK, please refer to the following URL: <u>https://www.rvkinc.com/about/about.php</u>



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## **Capital Markets Review**

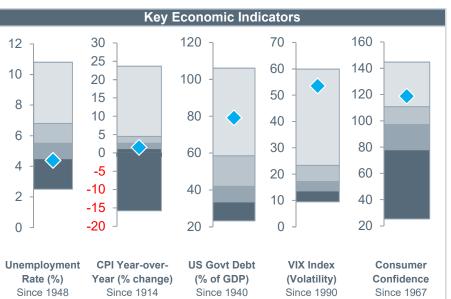


#### First Quarter Economic Environment

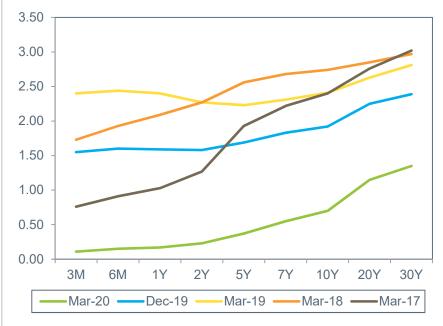
#### **Key Economic Indicators**

The first guarter of 2020 was dramatic as a local outbreak of a previously unknown coronavirus in the Hubei Province of China morphed into a global pandemic, which led to cases in the millions and casualties in the tens of thousands. Governments around the globe closed down huge portions of their economies, imposing travel restrictions, cancelling social gatherings, shuttering non-essential businesses, and locking down entire cities to reduce the virus' spread. In response, the Federal Reserve announced two emergency rate cuts, first by 50 basis points on March 3 and then by 100 basis points on March 16. By March 23, the Fed announced open-ended Quantitative Easing alongside a host of other liquidity enhancing programs, just as President Trump signed the \$2.3 Trillion Coronavirus Aid, Relief, and Economic Securities (CARES) Act into law. Markets did not begin heavily discounting the economic risks associated with the COVID-19 outbreak until the last week of February. As recently as February 19, 2020, the S&P 500 closed at an all-time high of 3,386. Over the next 3 weeks, the S&P 500 closed in bear market territory representing the fastest 20% drawdown from an all-time high in the history of the index.

Economic Indicators	Mar-20	Dec-19	Mar-19	Mar-17	20 Yr
Federal Funds Rate (%)	0.08 🔻	1.55	2.43	0.82	1.73
Breakeven Infl 5 Yr (%)	0.53 🔻	1.70	1.79	1.95	1.84
Breakeven Infl 10 Yr (%)	0.93 🔻	1.79	1.87	1.98	2.02
CPI YoY (Headline) (%)	1.5 🔻	2.3	1.9	2.4	2.2
Unemployment Rate (%)	4.4 🔺	3.5	3.8	4.4	5.9
Real GDP YoY (%)	0.3 🔻	2.3	2.7	2.1	2.1
PMI - Manufacturing	49.1 🔺	47.8	54.6	56.4	52.6
USD Total Wtd Idx	122.82 🔺	114.72	115.05	114.76	102.96
WTI Crude Oil per Barrel (\$)	20.5 🔻	61.1	60.1	50.6	62.1
Gold Spot per Oz (\$)	1,577 🔺	1,517	1,292	1,249	951
Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	-19.60	-19.60	-6.98	6.73	10.53
Russell 2000	-30.61	-30.61	-23.99	-0.25	6.90
MSCI EAFE (Net)	-22.83	-22.83	-14.38	-0.62	2.72
MSCI EAFE SC (Net)	-27.52	-27.52	-18.15	0.97	4.81
MSCI Emg Mkts (Net)	-23.60	-23.60	-17.69	-0.37	0.69
Bloomberg US Agg Bond	3.15	3.15	8.93	3.36	3.88
ICE BofAML 3 Mo US T-Bill	0.58	0.58	2.25	1.19	0.64
NCREIF ODCE (Gross)	0.98	0.98	4.88	8.46	11.45
FTSE NAREIT Eq REIT (TR)	-27.30	-27.30	-21.26	-0.35	7.40
HFRI FOF Comp	-8.78	-8.78	-5.48	0.00	1.75
Bloomberg Cmdty (TR)	-23.29	-23.29	-22.31	-7.76	-6.74



### Treasury Yield Curve (%)





#### **US Equity Review**

#### As of March 31, 2020

#### First Quarter Review

#### **Broad Market**

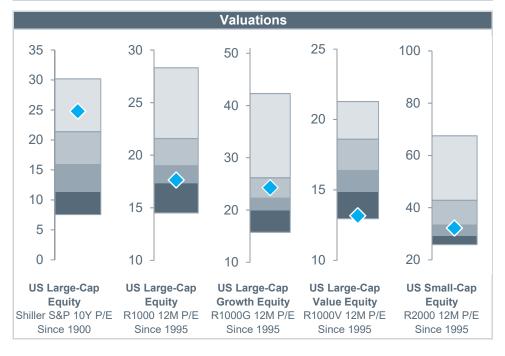
US markets hit their peak in mid-February before growing concerns about the spread of COVID-19 caused the S&P 500 to drawdown nearly -34% over the remainder of the quarter. However, buoyed by the stimulus provided in the CARES Act, the market experienced a 15.5% gain from the trough to end Q1.

#### Market Cap

Small- and mid-cap stocks were hit the hardest by COVID-19 pandemic fears with the Russell 2000 and Russell Mid Cap indexes down -30.6% and -27.1%, respectively. The Russell 1000 index also ended the quarter down -20.2%.

#### **Style and Sector**

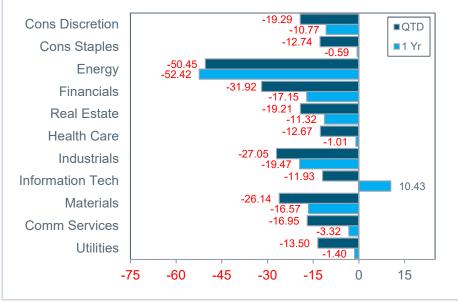
Value underperformed growth across all market capitalizations, experiencing a sharper drawdown and slower recovery than growth. In addition, active management continued to deliver mixed results in Q1 with approximately 50% providing excess returns.



Style and Capitalization Market Performance (%)



#### S&P 500 Index Sector Performance (%)



Valuation data courtesy of Bloomberg Professional Service and Robert J. Shiller, Irrational Exuberance, Second Edition. P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers.



#### **Non-US Equity Review**

#### As of March 31, 2020

#### **First Quarter Review**

#### **Developed Markets**

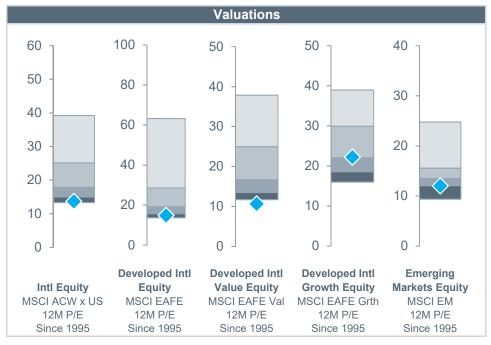
Developed international markets fared slightly worse than domestic markets during Q1 with broad indexes declining nearly 25%. Sectors were negative across the board, but defensive sectors, such as healthcare, consumer staples, and utilities held up better amidst the volatility. By region, performance was not as diverse as it was by sector, although Japan provided investors a measure of safety.

#### **Emerging Markets**

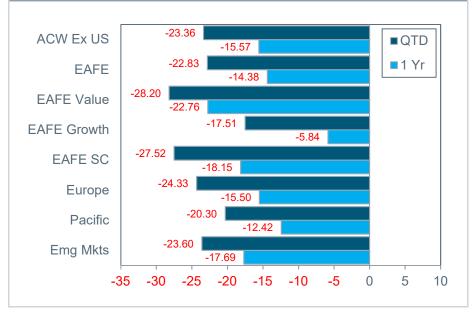
For the quarter, emerging markets were the worst performing equity asset class, trailing by a thin margin. Emerging markets were negative across sectors and countries but the disparity by region was wider than the developed world, as there was a flight to perceived quality by country.

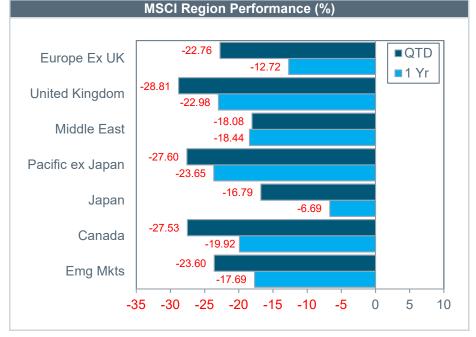
#### Market Cap & Style

In both developed international markets and emerging markets, value stocks continued to underperform growth, while large-cap stocks outperformed small-cap for the quarter.



MSCI Style and Capitalization Market Performance (%)





KVK

Valuation data courtesy of Bloomberg Professional Service.

P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers. All returns are shown net of foreign taxes on dividends.

#### **Fixed Income Review**

#### First Quarter Review

#### **Broad Market**

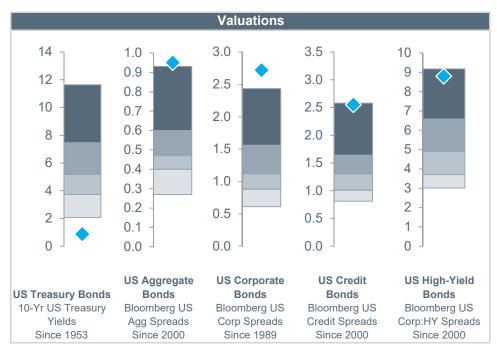
COVID-19-related fears and subsequent monetary policy responses led Treasury yields to steep declines of more than 100 basis points across all maturities. As of March 9th, the 30-year yield ended at just 0.99%, marking the first time ever that all maturities ended below the 1% threshold.

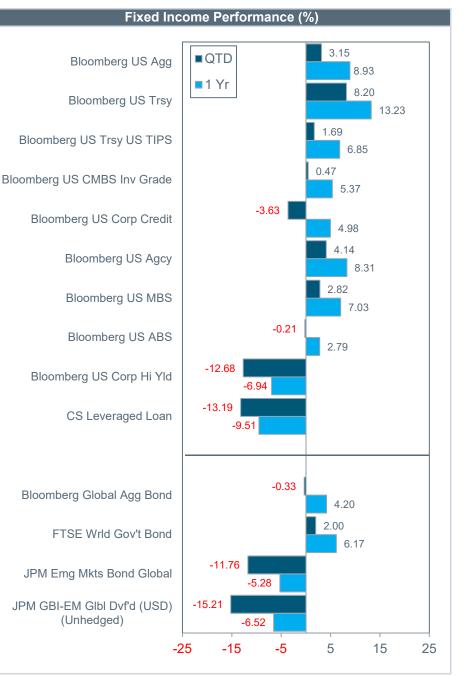
#### **Credit Market**

Credit experienced significant selloffs and volatility over the quarter. In all, the Bloomberg US Corporate Index returned -3.6% in Q1 with bifurcated returns between quality groups as AAA-rated bonds returned 4.7% while BBB-rated bonds returned -7.1%.

#### **Emerging Market Debt**

Emerging market debt suffered from both declining oil prices and coronavirusinduced reductions in demand. The JPM EMBI Global Diversified Index had its worst quarterly decline in more than 20 years, returning -13.4%, worse than the total losses experienced in 2008.





## A RI

Valuation data courtesy of Bloomberg Professional Service.

Valuations shown represent the 5th through 95th percentiles to minimize the effect of outliers.

#### First Quarter Review - Absolute Return

#### **General Market - Hedge Funds**

The HFRI Fund Weighted Composite Index returned -8.3% for the quarter, led lower by hedged equity (-13.0%) and event-driven (-15.0%) strategies that generally maintain significant net market exposure. Equity Long/Short (ELS) managers protected against major capital impairment through strong short alpha generation, particularly through bets against stocks in the physical retail or travel and leisure sub-sectors.

#### **General Market - Global Tactical Asset Allocation (GTAA)**

GTAA managers largely provided negative absolute returns during the quarter with long-biased strategies generally underperforming a static and less diversified blend of 60% US equity and 40% US fixed income. Strategies that provided the weakest relative returns versus peers tended to have higher relative allocations to emerging markets equities or exposure to oil markets and US small-cap equities. Long-biased managers that outperformed peers on a relative basis tended to have more exposure across US markets as opposed to emerging markets, both within fixed income and equities.

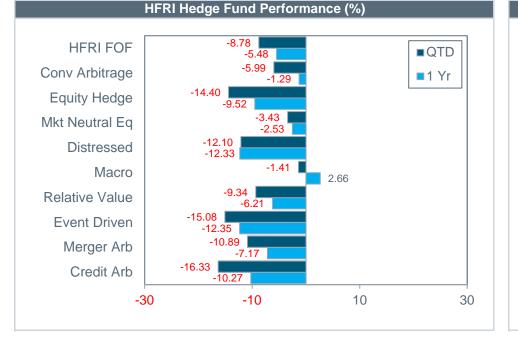
#### First Quarter Review - Real Assets

#### **General Market - Diversified Inflation Strategies (DIS)**

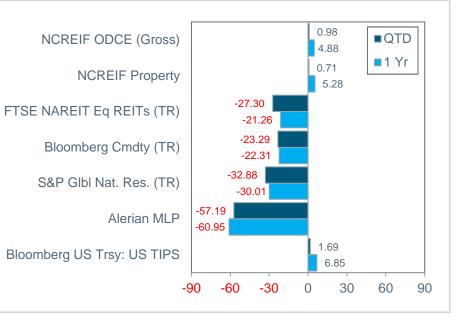
Performance across DIS managers RVK tracks was generally negative on an absolute basis during Q1, though there was dispersion among strategies driven by exposure differences. In a reversal from 2019, managers with larger TIPS allocations tended to outperform peers as riskier assets saw relatively large drawdowns during the quarter. Managers that underperformed by the widest margins versus peers emphasized allocations to REITs, global listed infrastructure and/or global natural resource equities in varying proportions.

#### **General Market - Real Estate**

Core private real estate returned 0.98% during Q1, as reported by the NCREIF-ODCE Index. Total return comprised of a 1.02% gain from income with a -0.04% loss due to price appreciation. While the income component remained in line with historical levels, price appreciation experienced a decrease of -0.51% compared to Q4. Public real estate returns trailed private by a wide margin during Q1.



#### Real Asset Performance (%)





	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	YTD
Best	35.03	39.38	8.44	78.51	27.94	22.49	20.00	38.82	30.14	15.02	21.31	37.28	8.35	31.49	6.21
Î	32.18	16.23	5.24	58.21	26.85	15.99	18.23	32.39	19.31	9.59	17.13	33.01	1.87	26.00	3.15
	26.34	15.97	2.06	46.78	22.04	13.56	18.06	29.30	13.69	3.20	11.96	25.03	0.01	25.53	1.69
	19.31	11.63	-2.35	31.78	18.88	8.29	17.32	22.78	12.50	1.38	11.77	21.83	-1.26	24.96	0.98
	18.37	11.17	-10.01	28.01	16.83	7.84	16.35	13.94	5.97	0.55	11.19	14.65	-2.08	22.01	0.58
	16.32	10.25	-21.37	27.17	16.36	4.98	16.00	8.96	4.89	0.05	8.77	10.71	-4.02	19.59	-8.78
	15.79	6.97	-26.16	26.46	15.12	2.11	15.81	7.44	3.64	-0.27	8.52	7.77	-4.38	18.44	-12.68
	11.86	6.60	-33.79	18.91	15.06	0.10	10.94	2.47	3.37	-0.81	6.67	7.62	-4.62	14.32	-19.60
	10.39	5.49	-35.65	11.47	10.16	-4.18	8.78	0.07	2.45	-1.44	4.68	7.50	-4.68	8.72	-22.83
	4.85	5.00	-37.00	11.41	7.75	-5.72	6.98	-2.02	0.04	-3.30	2.65	5.23	-11.01	8.43	-23.29
	4.34	1.87	-37.74	5.93	6.54	-12.14	4.79	-2.60	-2.19	-4.41	2.18	3.54	-11.25	8.39	-23.60
	2.72	1.45	-43.38	1.92	6.31	-13.32	4.21	-8.61	-4.90	-4.47	1.00	3.01	-13.79	7.69	-27.30
↓ ↓	2.07	-1.57	-47.01	0.21	5.70	-15.94	0.11	-8.83	-4.95	-14.92	0.51	1.70	-14.58	5.34	-27.52
Worst	0.49	-15.70	-53.33	-29.76	0.13	-18.42	-1.06	-9.52	-17.01	-24.66	0.33	0.86	-17.89	2.28	-30.61
S&P 50 US Larg Cap		mall (Net)		(Net) - (	MSCI EM Net) - Int'l Emg Mkts	Bloombrg US Agg Bond - Fl	Bloombrg US Corp Hi Yield - Fl		IS Credit I	v ODC .ng (Gros	CE NAR	EIT Eq EITs	FRI FOF Comp Index - ARS	Bloombrg Cmdty (TR) - Commod.	ICE BofAML 3 Mo T-Bill - Cash Equiv

NCREIF ODCE (Gross) performance is reported quarterly; performance is shown N/A in interim-quarter months.



## **Total Fund**

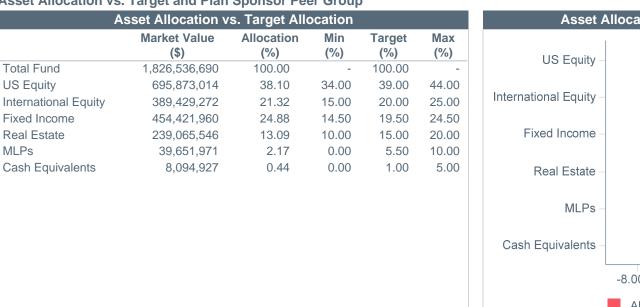


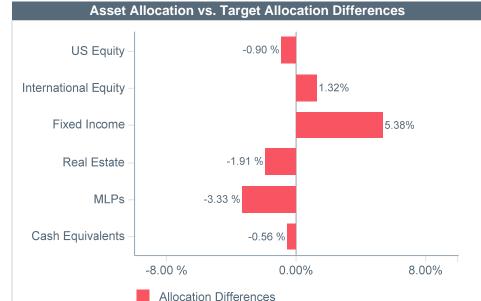
	Allocation		Performance (%)		Allocation		Performance (%)
	Market Value (\$)	%	QTD		Market Value (\$)	%	QTD
US Equity	695,873,014	38.10	-21.77	Real Estate	239,065,546	13.09	0.95
Eagle Capital Large Cap Value (SA)	165,816,109	9.08	-23.60	JPM Real Estate Strategic Property (CF)	181,053,919	9.91	1.13
NT S&P 500 Index (CF)	219,218,700	12.00	-19.59	Principal US Property (CF)	58,011,627	3.18	0.42
Loomis Sayles Large Cap Growth (CF)	102,785,944	5.63	-11.30				
Sawgrass Diversified Large Cap Growth (SA)	94,591,318	5.18	-14.80	MLPs	39,651,971	2.17	-49.12
Wedge Capital Small Cap Value (CF)	52,593,584	2.88	-37.79	Harvest Fund Advisors MLP (SA)	19,794,646	1.08	-49.00
Pinnacle Associates US SMID Cap Growth (SA)	60,836,235	3.33	-26.75	Tortoise Capital Advisors MLP (SA)	19,857,325	1.09	-49.24
GAMCO	17,634	0.00	N/A				
Brown Inv Advisory	13,490	0.00	N/A	Cash	8,094,927	0.44	0.36
International Equity	389,429,272	21.32	-21.68				
Silchester International Value (CF)	121,369,872	6.64	-24.16				
NT EAFE Index (CF)	30,206,544	1.65	-22.47				
Baillie Gifford International Growth (BGEFX)	118,101,677	6.47	-14.01				
Acadian Emerging Markets (CF)	119,751,178	6.56	-24.18				
Fixed Income	454,421,960	24.88	-1.93				
NT Aggregate Bond Index (CF)	12,186,085	0.67	3.29				
Thompson Siegel Core Fixed Income (SA)	94,308,559	5.16	-0.29				
Loomis Sayles Core Plus Full Discretion (CF)	140,770,316	7.71	-3.22				
Neuberger Berman Core Plus Trust (CF)	207,157,001	11.34	-2.08				
Periods Ending		Net	(	e Assets (Total Assets) Ending Gain/Loss (\$)	% Return	L	Init Value
Warket value (\$)		Flow (	)	Warket value (\$)			
CYTD 2,165,594,144	-29	93,117		-338,764,338 1,826,536,690	-15.65		84.35

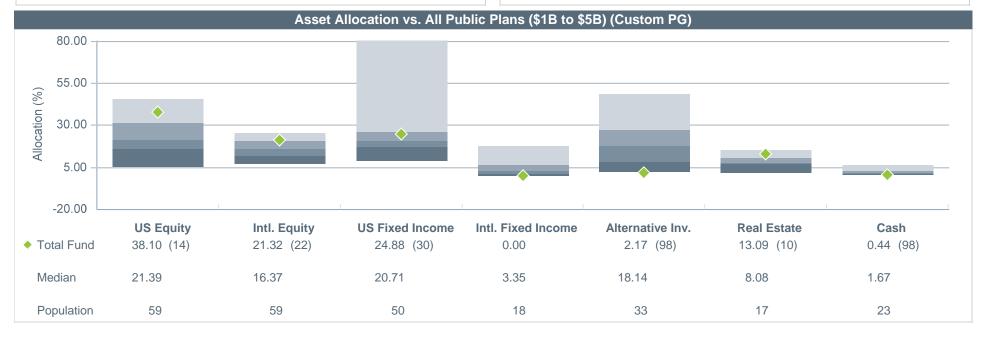
Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. Market values shown for GAMCO and Brown Inv Advisory represent residual cash.



MLPs







Allocations shown may not sum up to 100% exactly due to rounding. Parentheses contain percentile ranks. Target Allocation and associated ranges exclude the 10% allocation to Private Investments approved in 06/20/2019, and are therefore reflective of the previously approved 2016 policy targets.



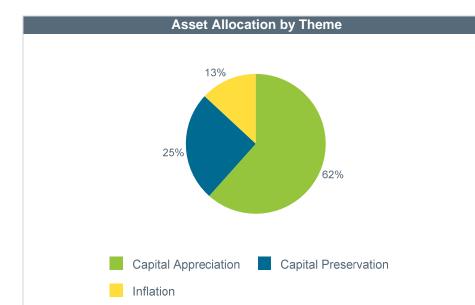
As of March 31, 2020

#### City of Jacksonville Police and Fire Pension Fund Total Fund vs. All Public Plans (\$1B to \$5B) (Custom PG) Plan Sponsor Peer Group Analysis



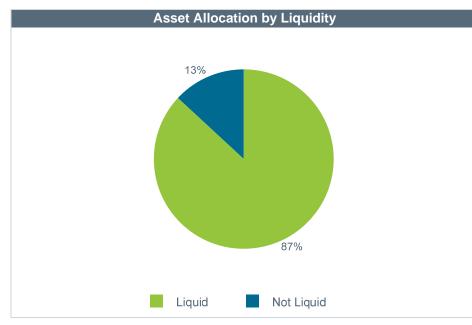
Performance shown is gross of fees. Parentheses contain percentile ranks.





### Thematic Analysis - July 1, 1999 to March 31, 2020





		Correlation Mat	rix - 10 Years	
	Α	В	С	D
А	1.00			
В	0.73	1.00		
С	-0.35	-0.45	1.00	
D	0.61	0.80	-0.13	1.00
A	=	HFRI EH: Eq Mkt Neut Ind	ex (Alpha)	
В	=	MSCI ACW Index (USD) (	Gross) (Capital Appre	ciation)
С	=	Bloomberg US Gov't Bond	Index (Capital Prese	rvation)

= Real Return Custom Index (Inflation)

Asset Allocation by Theme is based on dedicated manager allocations; as such, thematic allocations are approximations. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating. Please see the Glossary for additional information regarding liquidity, thematic, and custom index descriptions.

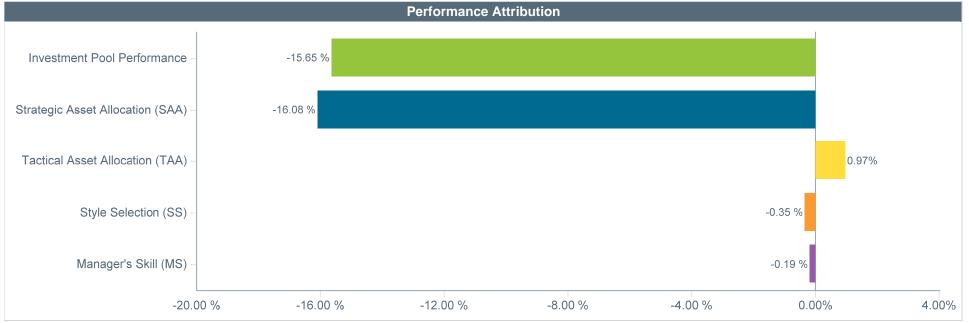


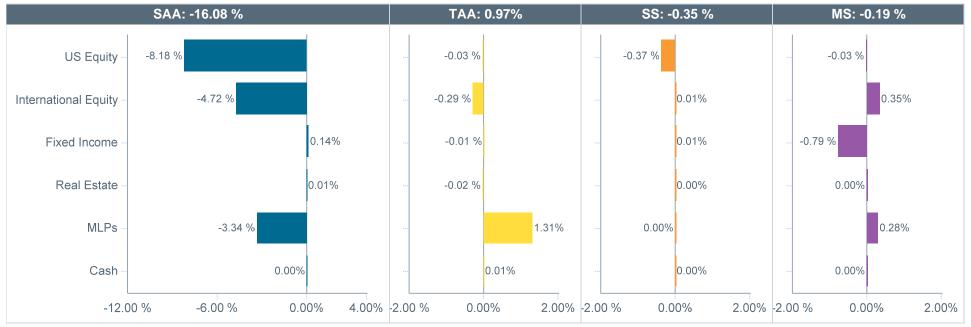
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#### City of Jacksonville Police and Fire Pension Fund

#### **Quarter To Date Ending March 31, 2020**

#### Total Fund Attribution - IDP vs. Total Fund Policy Index





Performance shown is net of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation.



	Allocatio	on					Perfor	mance (%	)			
	Market	%	QTD	CYTD	FYTD	1	3	5	7	10	Since	Inception
	Value (\$)					Year	Years	Years	Years	Years	Incep.	Date
Total Fund	1,826,536,690	100.00	-15.55	-15.55	-9.95	-7.08	2.47	3.48	5.55	6.80	7.62	04/01/1989
Total Fund Policy Index			-16.08	-16.08	-11.54	-8.46	1.79	3.02	5.07	6.60	7.58	
Difference			0.53	0.53	1.59	1.38	0.68	0.46	0.48	0.20	0.04	
All Public Plans (\$1B to \$5B) (Custom PG) Median			-13.08	-13.08	-9.09	-5.34	2.59	3.30	4.90	6.18	N/A	
Rank			88	88	71	72	54	42	24	23	N/A	
US Equity	695,873,014	38.10	-21.69	-21.69	-13.80	-9.52	3.94	5.38	8.19	9.71	9.63	01/01/1988
US Equity Policy Index			-20.90	-20.90	-13.70	-9.13	4.00	5.77	8.96	10.15	9.89	
Difference			-0.79	-0.79	-0.10	-0.39	-0.06	-0.39	-0.77	-0.44	-0.26	
IM U.S. Equity (SA+CF) Median			-24.44	-24.44	-18.25	-14.87	0.79	3.26	7.06	9.19	11.03	
Rank			41	41	34	35	36	35	42	45	89	
International Equity	389,429,272	21.32	-21.60	-21.60	-12.69	-12.87	0.05	1.18	3.14	3.18	4.23	02/01/1999
International Equity Policy Index			-23.36	-23.36	-16.52	-15.57	-1.96	-0.64	1.06	2.05	2.84	
Difference			1.76	1.76	3.83	2.70	2.01	1.82	2.08	1.13	1.39	
IM International Equity (SA+CF) Median			-23.83	-23.83	-16.40	-15.77	-1.70	0.13	2.23	3.83	6.35	
Rank			32	32	26	34	33	38	36	61	88	
Fixed Income	454,421,960	24.88	-1.86	-1.86	-1.00	4.22	3.65	3.11	2.84	3.74	6.13	01/01/1988
Fixed Income Policy Index			1.68	1.68	2.08	7.52	4.47	3.19	3.07	3.80	6.26	
Difference			-3.54	-3.54	-3.08	-3.30	-0.82	-0.08	-0.23	-0.06	-0.13	
IM U.S. Fixed Income (SA+CF) Median			-0.08	-0.08	0.50	4.19	3.44	2.94	3.06	4.13	6.51	
Rank			63	63	63	50	46	43	57	61	64	
Real Estate	239,065,546	13.09	1.33	1.33	3.44	5.45	6.70	8.44	9.92	11.81	8.81	04/01/200
NCREIF ODCE Index (AWA) (Gross)			0.98	0.98	2.50	4.88	6.81	8.46	9.90	11.45	7.48	
Difference			0.35	0.35	0.94	0.57	-0.11	-0.02	0.02	0.36	1.33	
MLPs	39,651,971	2.17	-49.02	-49.02	-49.59	-52.58	-23.10	-16.27	-8.55	N/A	-2.06	03/01/201
S&P MLP Index (TR)			-55.88	-55.88	-57.24	-59.21	-26.97	-19.88	-13.16	-3.92	-7.29	
Difference			6.86	6.86	7.65	6.63	3.87	3.61	4.61	N/A	5.23	



	Allocatio	n					Perfor	mance (%	)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Equity												
Eagle Capital Large Cap Value (SA)	165,816,109	9.08	-23.46	-23.46	-14.94	-10.56	3.50	5.72	9.20	N/A	10.20	04/01/201
Russell 1000 Val Index			-26.73	-26.73	-21.30	-17.17	-2.18	1.90	5.56	7.67	6.87	
Difference			3.27	3.27	6.36	6.61	5.68	3.82	3.64	N/A	3.33	
IM U.S. Large Cap Value Equity (SA+CF) Median			-26.27	-26.27	-20.54	-16.16	-1.15	2.38	6.14	8.02	7.23	
Rank			26	26	15	19	12	11	8	N/A	7	
NT S&P 500 Index (CF)	219,218,700	12.00	-19.59	-19.59	-12.29	-6.96	5.12	6.77	9.66	10.56	5.57	01/01/199
S&P 500 Index (Cap Wtd)			-19.60	-19.60	-12.31	-6.98	5.10	6.73	9.62	10.53	5.56	
Difference			0.01	0.01	0.02	0.02	0.02	0.04	0.04	0.03	0.01	
IM U.S. Large Cap Core Equity (SA+CF) Median			-20.02	-20.02	-13.76	-8.37	4.08	5.73	9.23	10.30	6.37	
Rank			42	42	33	35	31	24	36	36	84	
Loomis Sayles Large Cap Growth (CF)	102,785,944	5.63	-11.19	-11.19	-2.35	1.56	N/A	N/A	N/A	N/A	9.18	09/01/201
Russell 1000 Grth Index			-14.10	-14.10	-4.98	0.91	11.32	10.36	12.93	12.97	9.38	
Difference			2.91	2.91	2.63	0.65	N/A	N/A	N/A	N/A	-0.20	
IM U.S. Large Cap Growth Equity (SA+CF) Median			-14.38	-14.38	-6.14	-1.51	10.04	9.07	12.20	12.37	8.24	
Rank			14	14	15	25	N/A	N/A	N/A	N/A	40	
Sawgrass Diversified Large Cap Growth (SA)	94,591,318	5.18	-14.76	-14.76	-7.65	-1.62	9.82	8.71	N/A	N/A	10.34	11/01/201
Russell 1000 Grth Index			-14.10	-14.10	-4.98	0.91	11.32	10.36	12.93	12.97	11.69	
Difference			-0.66	-0.66	-2.67	-2.53	-1.50	-1.65	N/A	N/A	-1.35	
IM U.S. Large Cap Growth Equity (SA+CF) Median			-14.38	-14.38	-6.14	-1.51	10.04	9.07	12.20	12.37	10.78	
Rank			55	55	62	52	53	57	N/A	N/A	59	
Wedge Capital Small Cap Value (CF)	52,593,584	2.88	-37.67	-37.67	-32.65	-30.71	-10.80	N/A	N/A	N/A	-5.98	09/01/201
Russell 2000 Val Index			-35.66	-35.66	-30.20	-29.64	-9.51	-2.42	1.80	4.79	-4.41	
Difference			-2.01	-2.01	-2.45	-1.07	-1.29	N/A	N/A	N/A	-1.57	
IM U.S. Small Cap Value Equity (SA+CF) Median			-34.99	-34.99	-29.54	-28.18	-8.65	-2.01	2.94	6.50	-4.00	
Rank			76	76	75	69	81	N/A	N/A	N/A	81	
Pinnacle Associates US SMID Cap Growth (SA)	60,836,235	3.33	-26.66	-26.66	-14.65	-12.84	1.43	3.68	7.91	10.31	15.91	03/01/200
Russell 2500 Grth Index			-23.22	-23.22	-15.10	-14.40	3.35	3.64	8.09	10.10	14.99	
Difference			-3.44	-3.44	0.45	1.56	-1.92	0.04	-0.18	0.21	0.92	
IM U.S. SMID Cap Growth Equity (SA+CF) Median			-20.52	-20.52	-12.74	-10.96	6.73	5.34	9.07	11.39	15.48	
Rank			84	84	65	60	81	74	68	73	39	



	Allocation	n					Perfor	mance (%	)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity												
Silchester International Value (CF)	121,369,872	6.64	-24.04	-24.04	-17.01	-16.21	-2.82	0.44	N/A	N/A	3.05	09/01/201
MSCI EAFE Val Index (USD) (Net)			-28.20	-28.20	-22.59	-22.76	-6.65	-3.83	-0.58	0.62	-1.16	
Difference			4.16	4.16	5.58	6.55	3.83	4.27	N/A	N/A	4.21	
IM EAFE Value (SA+CF) Median			-25.93	-25.93	-18.68	-18.68	-4.75	-1.64	1.17	2.86	0.73	
Rank			34	34	28	33	34	23	N/A	N/A	15	
NT EAFE Index (CF)	30,206,544	1.65	-22.47	-22.47	-16.22	-13.83	N/A	N/A	N/A	N/A	-9.57	02/01/201
MSCI EAFE Index (USD) (Net)			-22.83	-22.83	-16.52	-14.38	-1.82	-0.62	1.75	2.72	-10.07	
Difference			0.36	0.36	0.30	0.55	N/A	N/A	N/A	N/A	0.50	
IM Enhanced and Indexed International Equity (SA+CF) Median			-23.32	-23.32	-16.90	-15.36	-1.83	-0.34	1.95	3.08	-11.38	
Rank			21	21	21	18	N/A	N/A	N/A	N/A	22	
Baillie Gifford International Growth (BGEFX)	118,101,677	6.47	-13.89	-13.89	-1.73	-0.90	8.28	6.04	7.55	N/A	6.58	03/01/201
Baillie Gifford Index			-18.25	-18.25	-10.22	-5.50	3.10	2.55	4.01	4.74	3.73	
Difference			4.36	4.36	8.49	4.60	5.18	3.49	3.54	N/A	2.85	
IM International Growth Equity (SA+CF) Median			-20.28	-20.28	-11.93	-8.75	2.21	1.95	4.01	5.53	4.38	
Rank			4	4	1	8	8	11	7	N/A	11	
Acadian Emerging Markets (CF)	119,751,178	6.56	-24.18	-24.18	-15.09	-17.99	-3.89	-1.12	N/A	N/A	-0.43	01/01/201
MSCI Emg Mkts Index (USD) (Net)			-23.60	-23.60	-14.55	-17.69	-1.62	-0.37	-0.40	0.69	-0.29	
Difference			-0.58	-0.58	-0.54	-0.30	-2.27	-0.75	N/A	N/A	-0.14	
IM Emerging Markets Equity (SA+CF) Median			-24.96	-24.96	-16.60	-18.05	-2.50	-0.41	0.28	2.00	0.06	
Rank			44	44	42	50	65	66	N/A	N/A	60	
Fixed Income												
NT Aggregate Bond Index (CF)	12,186,085	0.67	3.30	3.30	3.47	9.10	4.93	3.43	3.24	N/A	3.24	02/01/201
Bloomberg US Agg Bond Index			3.15	3.15	3.33	8.93	4.82	3.36	3.19	3.88	3.20	
Difference			0.15	0.15	0.14	0.17	0.11	0.07	0.05	N/A	0.04	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			1.73	1.73	1.99	7.83	4.77	3.47	3.38	4.26	3.39	
Rank			15	15	16	18	32	58	71	N/A	74	
Thompson Siegel Core Fixed Income (SA)	94,308,559	5.16	-0.24	-0.24	0.55	6.11	4.23	3.57	3.41	4.24	6.01	08/01/199
Thompson Siegel Policy Index			3.15	3.15	3.33	8.93	4.82	3.36	3.19	3.88	5.82	
Difference			-3.39	-3.39	-2.78	-2.82	-0.59	0.21	0.22	0.36	0.19	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			1.73	1.73	1.99	7.83	4.77	3.47	3.38	4.26	6.10	
Rank			88	88	82	83	86	39	45	51	67	



	Allocatio	n					Perfor	mance (%	5)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Loomis Sayles Core Plus Full Discretion (CF)	140,770,316	7.71	-3.08	-3.08	-2.08	2.55	3.16	N/A	N/A	N/A	3.42	02/01/2017
Bloomberg US Unv Bond Index			1.30	1.30	1.76	7.15	4.37	3.35	3.22	4.05	4.38	
Difference			-4.38	-4.38	-3.84	-4.60	-1.21	N/A	N/A	N/A	-0.96	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			-0.41	-0.41	0.12	5.64	4.15	3.43	3.40	4.55	4.23	
Rank			79	79	75	80	82	N/A	N/A	N/A	82	
Neuberger Berman Core Plus Trust (CF)	207,157,001	11.34	-2.04	-2.04	-1.26	4.21	3.53	N/A	N/A	N/A	3.69	01/01/2017
Bloomberg US Unv Bond Index			1.30	1.30	1.76	7.15	4.37	3.35	3.22	4.05	4.38	
Difference			-3.34	-3.34	-3.02	-2.94	-0.84	N/A	N/A	N/A	-0.69	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			-0.41	-0.41	0.12	5.64	4.15	3.43	3.40	4.55	4.25	
Rank			68	68	68	71	75	N/A	N/A	N/A	77	
Real Estate												
JPM Real Estate Strategic Property (CF)	181,053,919	9.91	1.56	1.56	3.90	5.57	6.41	8.09	9.69	11.29	7.92	04/01/2005
NCREIF ODCE Index (AWA) (Gross)			0.98	0.98	2.50	4.88	6.81	8.46	9.90	11.45	7.48	
Difference			0.58	0.58	1.40	0.69	-0.40	-0.37	-0.21	-0.16	0.44	
Principal US Property (CF)	58,011,627	3.18	0.62	0.62	2.02	5.11	7.61	9.55	N/A	N/A	10.35	07/01/2013
NCREIF ODCE Index (AWA) (Gross)			0.98	0.98	2.50	4.88	6.81	8.46	9.90	11.45	9.67	
Difference			-0.36	-0.36	-0.48	0.23	0.80	1.09	N/A	N/A	0.68	
MLPs												
Harvest Fund Advisors MLP (SA)	19,794,646	1.08	-48.90	-48.90	-49.37	-52.02	-22.73	-16.26	-8.55	N/A	-1.83	03/01/2011
S&P MLP Index (TR)			-55.88	-55.88	-57.24	-59.21	-26.97	-19.88	-13.16	-3.92	-7.29	
Difference			6.98	6.98	7.87	7.19	4.24	3.62	4.61	N/A	5.46	
Tortoise Capital Advisors MLP (SA)	19,857,325	1.09	-49.14	-49.14	-49.81	-53.12	-23.34	-16.20	-8.53	N/A	-2.27	03/01/2011
S&P MLP Index (TR)			-55.88	-55.88	-57.24	-59.21	-26.97	-19.88	-13.16	-3.92	-7.29	
Difference			6.74	6.74	7.43	6.09	3.63	3.68	4.63	N/A	5.02	



	Allocatio	n		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date	
Total Fund	1,826,536,690	100.00	-15.66	-15.66	-10.14	-7.44	2.11	3.08	5.11	6.37	7.40	04/01/1989	
Total Fund Policy Index			-16.08	-16.08	-11.54	-8.46	1.79	3.02	5.07	6.60	7.58		
Difference			0.42	0.42	1.40	1.02	0.32	0.06	0.04	-0.23	-0.18		
US Equity	695,873,014	38.10	-21.77	-21.77	-13.97	-9.84	3.57	4.96	7.72	9.24	9.47	01/01/1988	
US Equity Policy Index			-20.90	-20.90	-13.70	-9.13	4.00	5.77	8.96	10.15	9.89		
Difference			-0.87	-0.87	-0.27	-0.71	-0.43	-0.81	-1.24	-0.91	-0.42		
International Equity	389,429,272	21.32	-21.71	-21.71	-12.90	-13.25	-0.41	0.75	2.72	2.77	3.98	02/01/1999	
International Equity Policy Index			-23.36	-23.36	-16.52	-15.57	-1.96	-0.64	1.06	2.05	2.84		
Difference			1.65	1.65	3.62	2.32	1.55	1.39	1.66	0.72	1.14		
Fixed Income	454,421,960	24.88	-1.93	-1.93	-1.09	4.10	3.57	3.00	2.72	3.60	6.08	01/01/1988	
Fixed Income Policy Index			1.68	1.68	2.08	7.52	4.47	3.19	3.07	3.80	6.26		
Difference			-3.61	-3.61	-3.17	-3.42	-0.90	-0.19	-0.35	-0.20	-0.18		
Real Estate	239,065,546	13.09	0.95	0.95	3.03	4.52	6.09	7.67	9.07	10.94	8.20	04/01/2005	
NCREIF ODCE Index (AWA) (Net)			0.75	0.75	2.03	3.93	5.85	7.48	8.91	10.42	6.49		
Difference			0.20	0.20	1.00	0.59	0.24	0.19	0.16	0.52	1.71		
MLPs	39,651,971	2.17	-49.12	-49.12	-49.79	-52.94	-23.68	-16.90	-9.24	N/A	-2.75	03/01/2011	
S&P MLP Index (TR)			-55.88	-55.88	-57.24	-59.21	-26.97	-19.88	-13.16	-3.92	-7.29		
Difference			6.76	6.76	7.45	6.27	3.29	2.98	3.92	N/A	4.54		



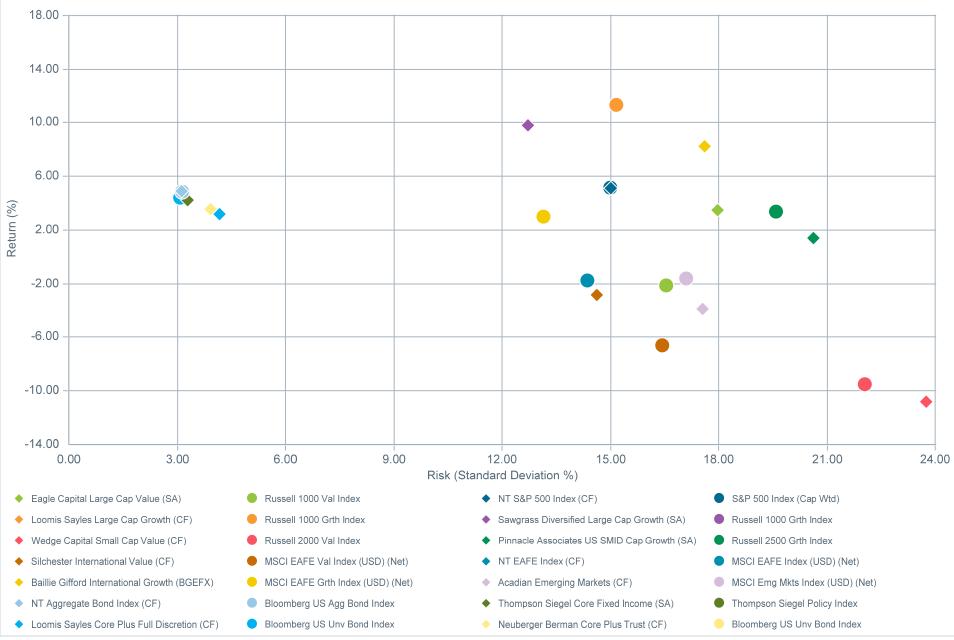
	Allocation	n					Perfor	mance (%)				
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Equity												
Eagle Capital Large Cap Value (SA)	165,816,109	9.08	-23.60	-23.60	-15.28	-11.25	2.72	4.95	8.40	N/A	9.41	04/01/201 <sup>-</sup>
Russell 1000 Val Index			-26.73	-26.73	-21.30	-17.17	-2.18	1.90	5.56	7.67	6.87	
Difference			3.13	3.13	6.02	5.92	4.90	3.05	2.84	N/A	2.54	
NT S&P 500 Index (CF)	219,218,700	12.00	-19.59	-19.59	-12.30	-6.96	5.10	6.75	9.63	10.53	5.55	01/01/1999
S&P 500 Index (Cap Wtd)			-19.60	-19.60	-12.31	-6.98	5.10	6.73	9.62	10.53	5.56	
Difference			0.01	0.01	0.01	0.02	0.00	0.02	0.01	0.00	-0.01	
Loomis Sayles Large Cap Growth (CF)	102,785,944	5.63	-11.30	-11.30	-2.56	1.11	N/A	N/A	N/A	N/A	8.79	09/01/2017
Russell 1000 Grth Index			-14.10	-14.10	-4.98	0.91	11.32	10.36	12.93	12.97	9.38	
Difference			2.80	2.80	2.42	0.20	N/A	N/A	N/A	N/A	-0.59	
Sawgrass Diversified Large Cap Growth (SA)	94,591,318	5.18	-14.80	-14.80	-7.75	-1.82	9.59	8.48	N/A	N/A	10.10	11/01/2013
Russell 1000 Grth Index			-14.10	-14.10	-4.98	0.91	11.32	10.36	12.93	12.97	11.69	
Difference			-0.70	-0.70	-2.77	-2.73	-1.73	-1.88	N/A	N/A	-1.59	
Wedge Capital Small Cap Value (CF)	52,593,584	2.88	-37.79	-37.79	-32.78	-30.84	-11.13	N/A	N/A	N/A	-6.30	09/01/2010
Russell 2000 Val Index			-35.66	-35.66	-30.20	-29.64	-9.51	-2.42	1.80	4.79	-4.41	
Difference			-2.13	-2.13	-2.58	-1.20	-1.62	N/A	N/A	N/A	-1.89	
Pinnacle Associates US SMID Cap Growth (SA)	60,836,235	3.33	-26.75	-26.75	-14.91	-13.37	0.93	3.05	7.22	9.61	15.24	03/01/2009
Russell 2500 Grth Index			-23.22	-23.22	-15.10	-14.40	3.35	3.64	8.09	10.10	14.99	
Difference			-3.53	-3.53	0.19	1.03	-2.42	-0.59	-0.87	-0.49	0.25	
International Equity												
Silchester International Value (CF)	121,369,872	6.64	-24.16	-24.16	-17.26	-16.73	-3.40	-0.23	N/A	N/A	2.33	09/01/2013
MSCI EAFE Val Index (USD) (Net)			-28.20	-28.20	-22.59	-22.76	-6.65	-3.83	-0.58	0.62	-1.16	
Difference			4.04	4.04	5.33	6.03	3.25	3.60	N/A	N/A	3.49	
NT EAFE Index (CF)	30,206,544	1.65	-22.47	-22.47	-16.22	-13.83	N/A	N/A	N/A	N/A	-9.57	02/01/2019
MSCI EAFE Index (USD) (Net)			-22.83	-22.83	-16.52	-14.38	-1.82	-0.62	1.75	2.72	-10.07	
Difference			0.36	0.36	0.30	0.55	N/A	N/A	N/A	N/A	0.50	
Baillie Gifford International Growth (BGEFX)	118,101,677	6.47	-14.01	-14.01	-1.90	-1.07	8.06	5.76	7.19	N/A	6.21	03/01/2011
Baillie Gifford Index			-18.25	-18.25	-10.22	-5.50	3.10	2.55	4.01	4.74	3.73	
Difference			4.24	4.24	8.32	4.43	4.96	3.21	3.18	N/A	2.48	
Acadian Emerging Markets (CF)	119,751,178	6.56	-24.27	-24.27	-15.31	-18.45	-4.48	-1.69	N/A	N/A	-0.96	01/01/2014
MSCI Emg Mkts Index (USD) (Net)			-23.60	-23.60	-14.55	-17.69	-1.62	-0.37	-0.40	0.69	-0.29	
Difference			-0.67	-0.67	-0.76	-0.76	-2.86	-1.32	N/A	N/A	-0.67	



	Allocation	n			Performance (%)								
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date	
Fixed Income													
NT Aggregate Bond Index (CF)	12,186,085	0.67	3.29	3.29	3.46	9.09	4.91	3.40	3.21	N/A	3.21	02/01/2013	
Bloomberg US Agg Bond Index			3.15	3.15	3.33	8.93	4.82	3.36	3.19	3.88	3.20		
Difference			0.14	0.14	0.13	0.16	0.09	0.04	0.02	N/A	0.01		
Thompson Siegel Core Fixed Income (SA)	94,308,559	5.16	-0.29	-0.29	0.51	5.96	4.06	3.39	3.22	4.06	5.95	08/01/1991	
Thompson Siegel Policy Index			3.15	3.15	3.33	8.93	4.82	3.36	3.19	3.88	5.82		
Difference			-3.44	-3.44	-2.82	-2.97	-0.76	0.03	0.03	0.18	0.13		
Loomis Sayles Core Plus Full Discretion (CF)	140,770,316	7.71	-3.22	-3.22	-2.21	2.41	3.08	N/A	N/A	N/A	3.34	02/01/2017	
Bloomberg US Unv Bond Index			1.30	1.30	1.76	7.15	4.37	3.35	3.22	4.05	4.38		
Difference			-4.52	-4.52	-3.97	-4.74	-1.29	N/A	N/A	N/A	-1.04		
Neuberger Berman Core Plus Trust (CF)	207,157,001	11.34	-2.08	-2.08	-1.31	4.15	3.51	N/A	N/A	N/A	3.68	01/01/2017	
Bloomberg US Unv Bond Index			1.30	1.30	1.76	7.15	4.37	3.35	3.22	4.05	4.38		
Difference			-3.38	-3.38	-3.07	-3.00	-0.86	N/A	N/A	N/A	-0.70		
Real Estate													
JPM Real Estate Strategic Property (CF)	181,053,919	9.91	1.13	1.13	3.45	4.42	5.79	7.31	8.82	10.40	7.30	04/01/2005	
NCREIF ODCE Index (AWA) (Net)			0.75	0.75	2.03	3.93	5.85	7.48	8.91	10.42	6.49		
Difference			0.38	0.38	1.42	0.49	-0.06	-0.17	-0.09	-0.02	0.81		
Principal US Property (CF)	58,011,627	3.18	0.42	0.42	1.75	4.83	7.03	8.84	9.88	N/A	9.88	04/01/2013	
NCREIF ODCE Index (AWA) (Net)			0.75	0.75	2.03	3.93	5.85	7.48	8.91	10.42	8.91		
Difference			-0.33	-0.33	-0.28	0.90	1.18	1.36	0.97	N/A	0.97		
MLPs													
Harvest Fund Advisors MLP (SA)	19,794,646	1.08	-49.00	-49.00	-49.56	-52.39	-23.31	-16.88	-9.23	N/A	-2.53	03/01/2011	
S&P MLP Index (TR)			-55.88	-55.88	-57.24	-59.21	-26.97	-19.88	-13.16	-3.92	-7.29		
Difference			6.88	6.88	7.68	6.82	3.66	3.00	3.93	N/A	4.76		
Tortoise Capital Advisors MLP (SA)	19,857,325	1.09	-49.24	-49.24	-50.00	-53.48	-23.93	-16.83	-9.23	N/A	-2.95	03/01/2011	
S&P MLP Index (TR)			-55.88	-55.88	-57.24	-59.21	-26.97	-19.88	-13.16	-3.92	-7.29		
Difference			6.64	6.64	7.24	5.73	3.04	3.05	3.93	N/A	4.34		



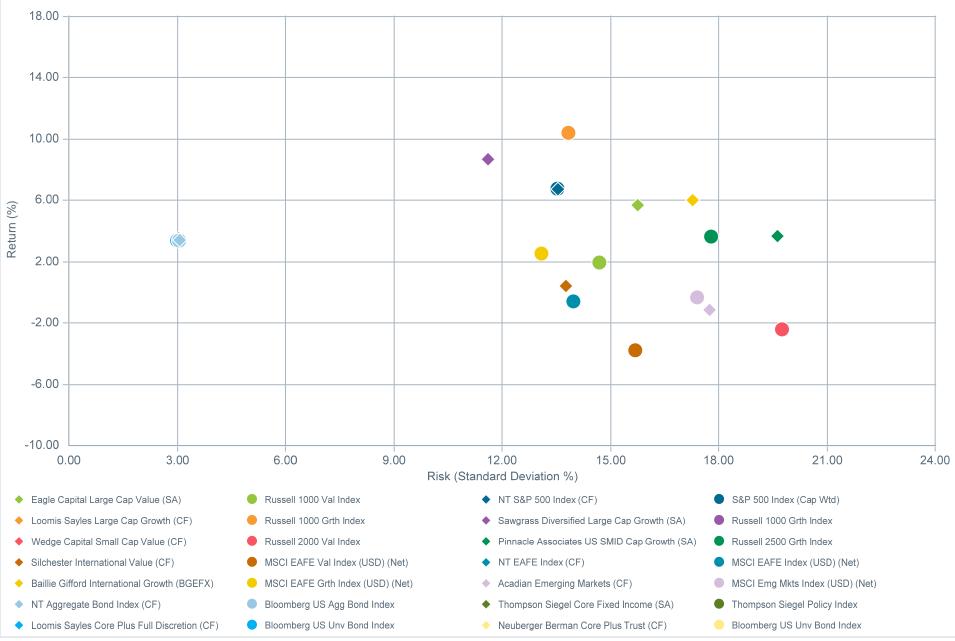
#### City of Jacksonville Police and Fire Pension Fund Risk and Return Traditional Managers



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Managers with less history than the specified time period will not appear. Please see the Addendum for custom index definitions.

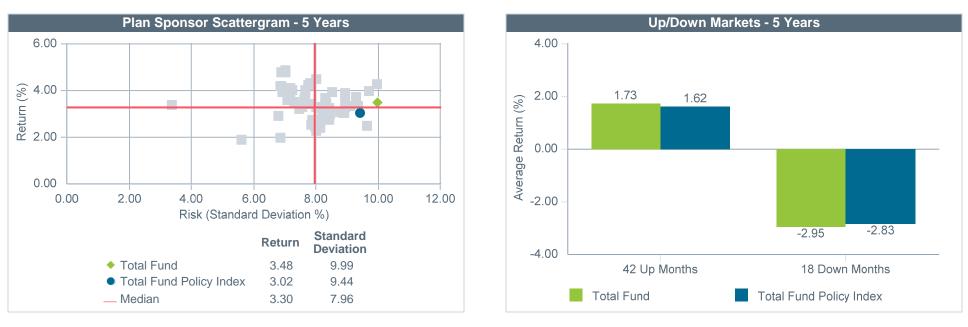


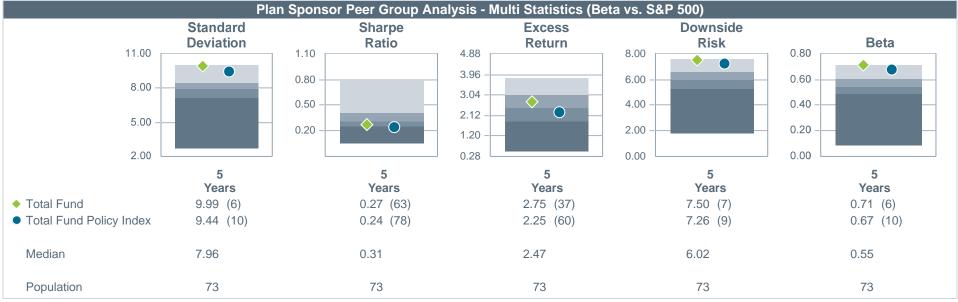
#### City of Jacksonville Police and Fire Pension Fund Risk and Return Traditional Managers



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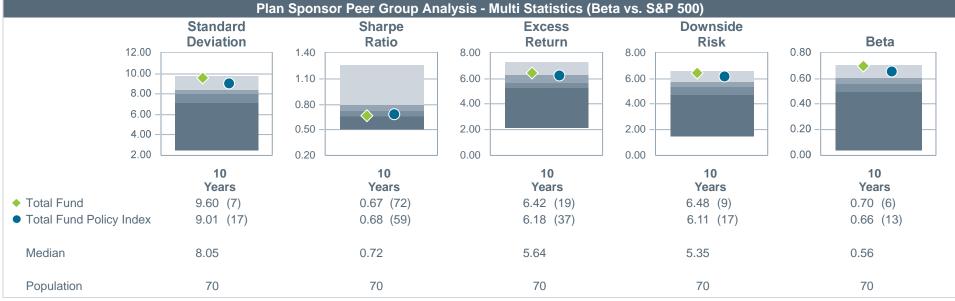




Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.







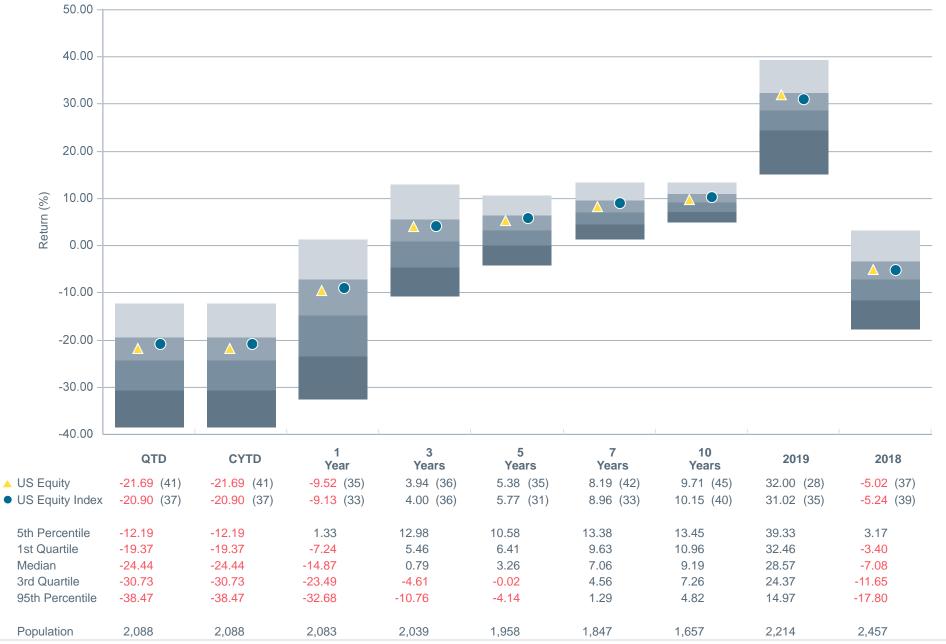
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



# **Composite Profiles**

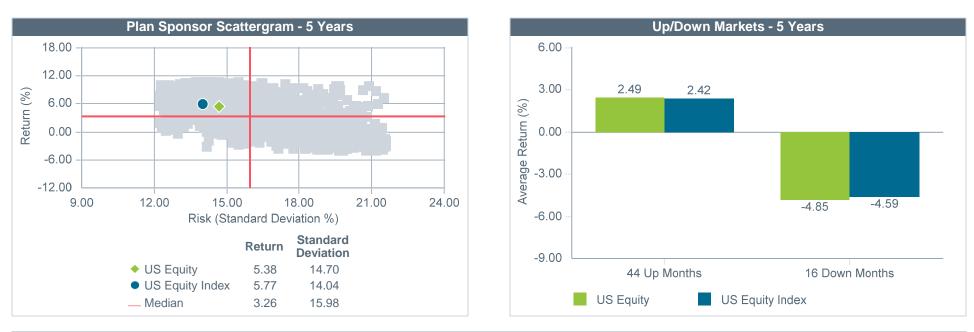


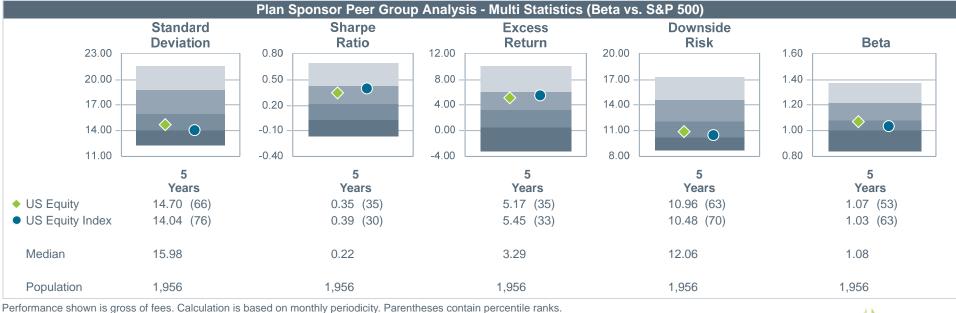
#### City of Jacksonville Police and Fire Pension Fund US Equity vs. IM U.S. Equity (SA+CF) Peer Group Analysis



Performance shown is gross of fees. Parentheses contain percentile ranks.





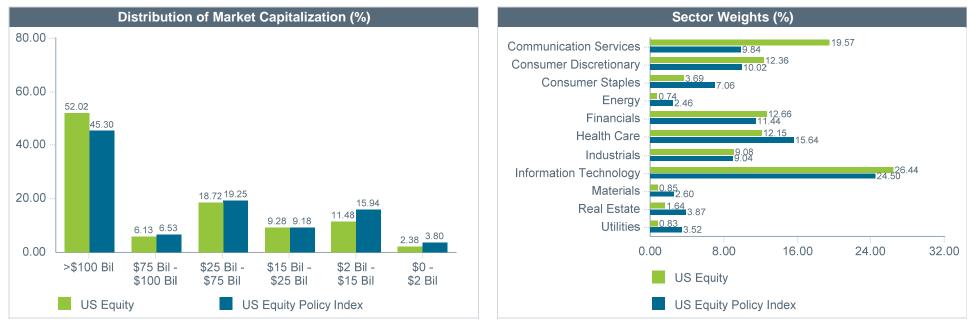


🙏 RVK

#### City of Jacksonville Police and Fire Pension Fund US Equity vs. US Equity Policy Index Portfolio Characteristics

	Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)	
Microsoft Corp	6.71	4.79	1.92	0.28	
Amazon.com Inc	4.74	3.28	1.46	5.51	
Alphabet Inc	3.58	1.40	2.18	-13.03	
Facebook Inc	3.21	1.60	1.61	-18.73	
Apple Inc	2.91	4.21	-1.30	-13.19	
Berkshire Hathaway Inc	2.71	1.44	1.27	-19.28	
Comcast Corp	2.13	0.62	1.51	-22.69	
Oracle Corp	1.84	0.39	1.45	-8.37	
Alphabet Inc	1.77	1.40	0.37	-13.25	
Unitedhealth Group Inc	1.58	0.95	0.63	-14.83	
% of Portfolio	31.18	20.08	11.10		

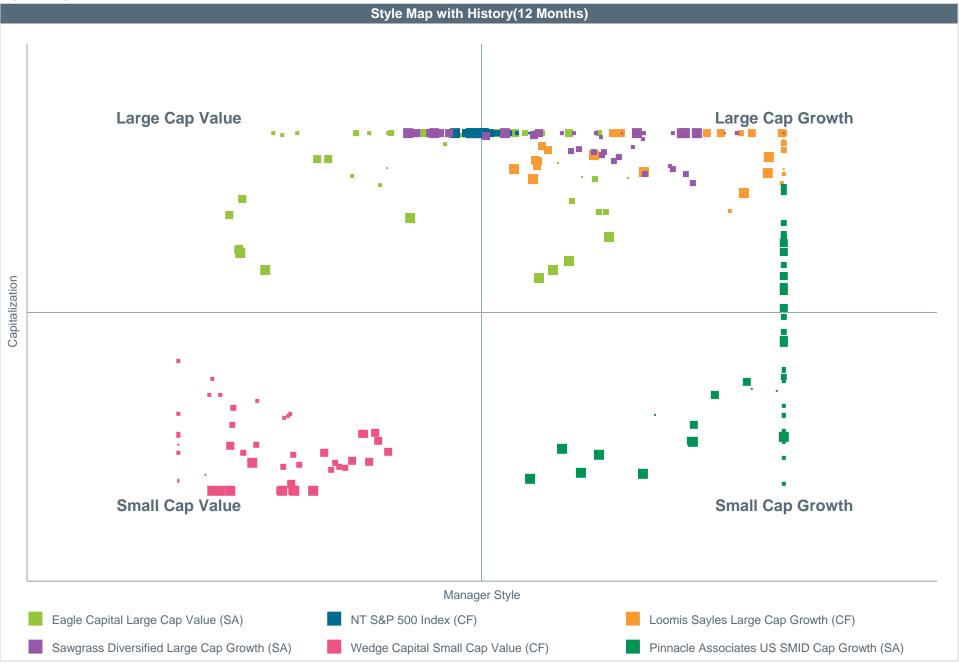
Portfolio Characteristics				
	Portfolio	Benchmark		
Wtd. Avg. Mkt. Cap (\$M)	294,343	241,045		
Median Mkt. Cap (\$M)	15,681	1,148		
Price/Earnings Ratio	17.17	16.99		
Price/Book Ratio	3.86	3.53		
5 Yr. EPS Growth Rate (%)	20.44	16.84		
Current Yield (%)	1.76	2.31		
Beta (5 Years, Monthly)	1.04	1.00		
Number of Securities	588	2,976		



Alphabet Inc. is shown twice in the Top Ten Equity Holdings, but represents two different share classes: GOOGL (Class A) and GOOG (Class C).



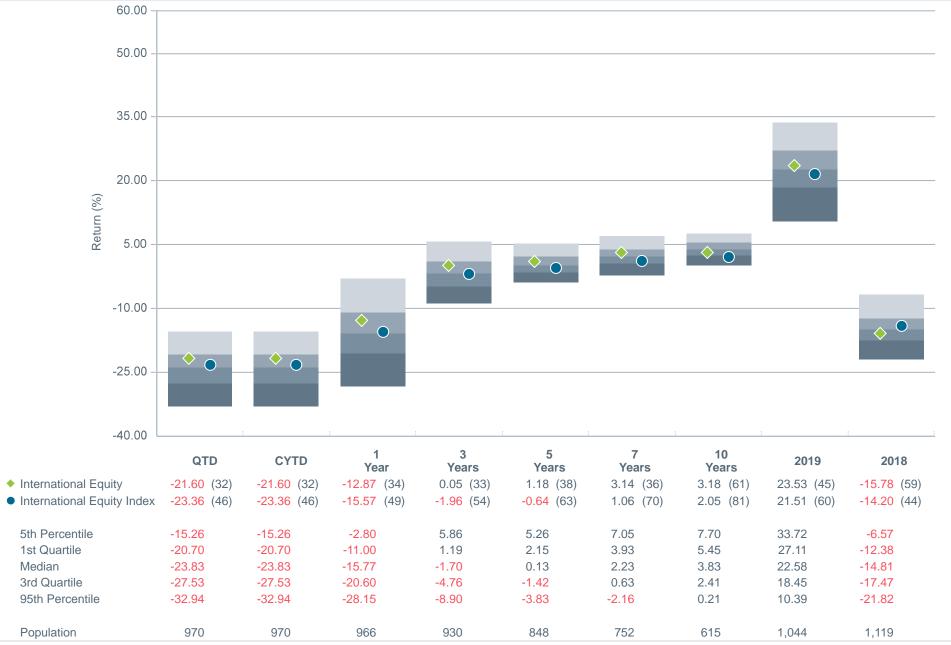
City of Jacksonville Police and Fire Pension Fund Style Analysis - 5 Years



Calculation is based on monthly periodicity. This is a return based calculation.



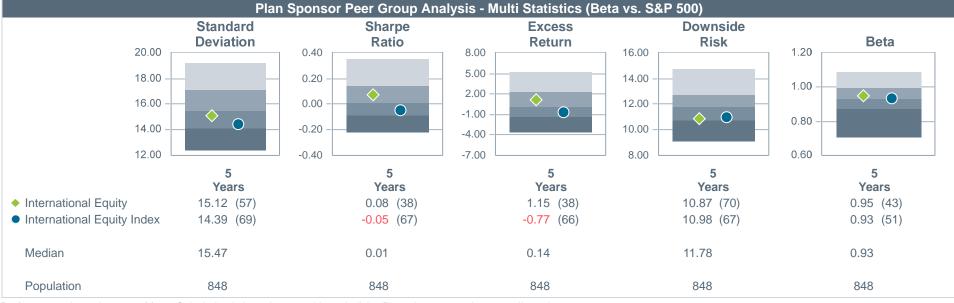
#### City of Jacksonville Police and Fire Pension Fund International Equity vs. IM International Equity (SA+CF) Peer Group Analysis



Performance shown is gross of fees. Parentheses contain percentile ranks.







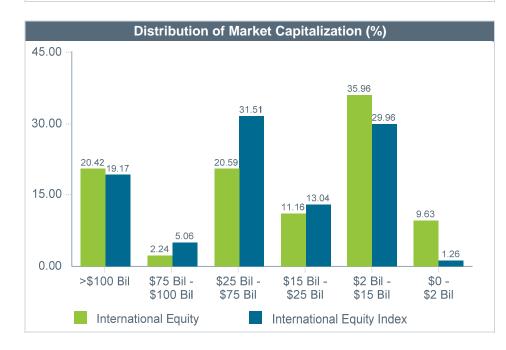
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

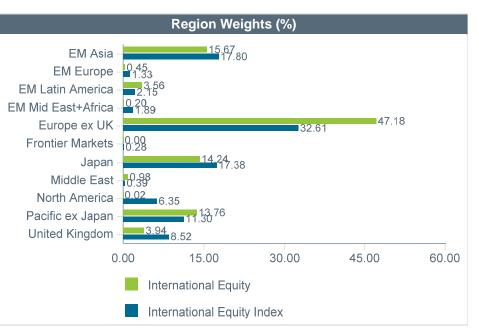


#### City of Jacksonville Police and Fire Pension Fund International Equity vs. International Equity Index Portfolio Characteristics

Тор	Top Ten Equity Holdings			
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Alibaba Group Holding Ltd	3.78	1.95	1.83	-8.31
Tencent Holdings LTD	2.90	1.63	1.27	1.72
ASML Holding NV	2.36	0.66	1.70	-9.97
Samsung Electronics Co Ltd	2.13	1.09	1.04	-18.14
Ferrari NV	1.93	0.11	1.82	-6.28
M3 Inc	1.48	0.08	1.40	-2.09
Sanofi	1.34	0.57	0.77	-12.44
Kering	1.32	0.23	1.09	-19.90
China Construction Bank Corp	1.25	0.45	0.80	-5.34
AIA Group Ltd	1.25	0.63	0.62	-13.82
% of Portfolio	19.74	7.40	12.34	

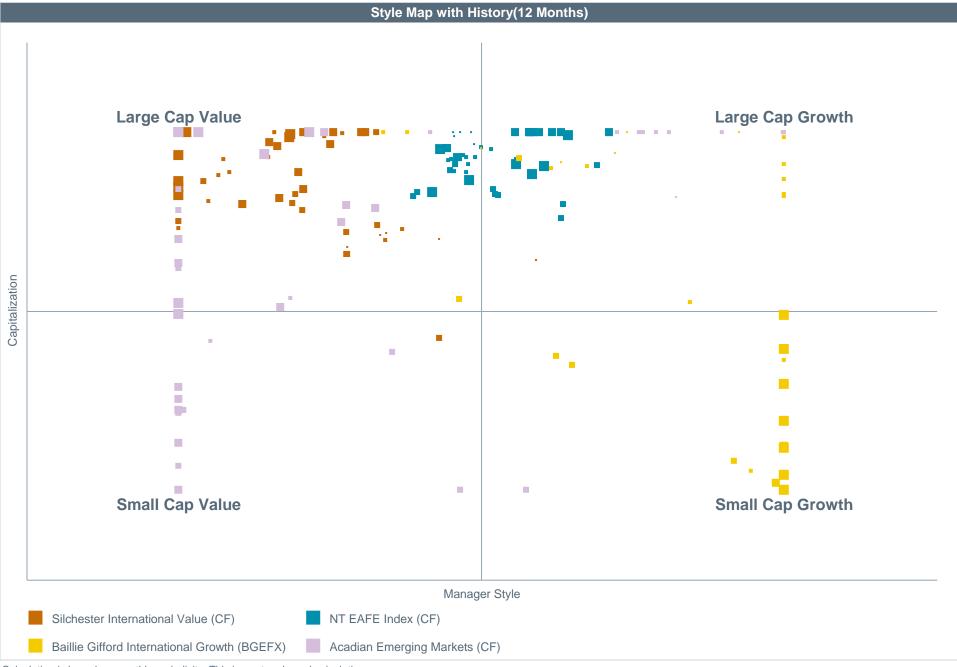
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	69,913	70,741
Median Mkt. Cap (\$M)	1,855	6,090
Price/Earnings Ratio	11.05	12.86
Price/Book Ratio	3.06	2.47
5 Yr. EPS Growth Rate (%)	9.89	7.86
Current Yield (%)	3.57	3.89
Beta (5 Years, Monthly)	1.03	1.00
Number of Securities	700	2,411







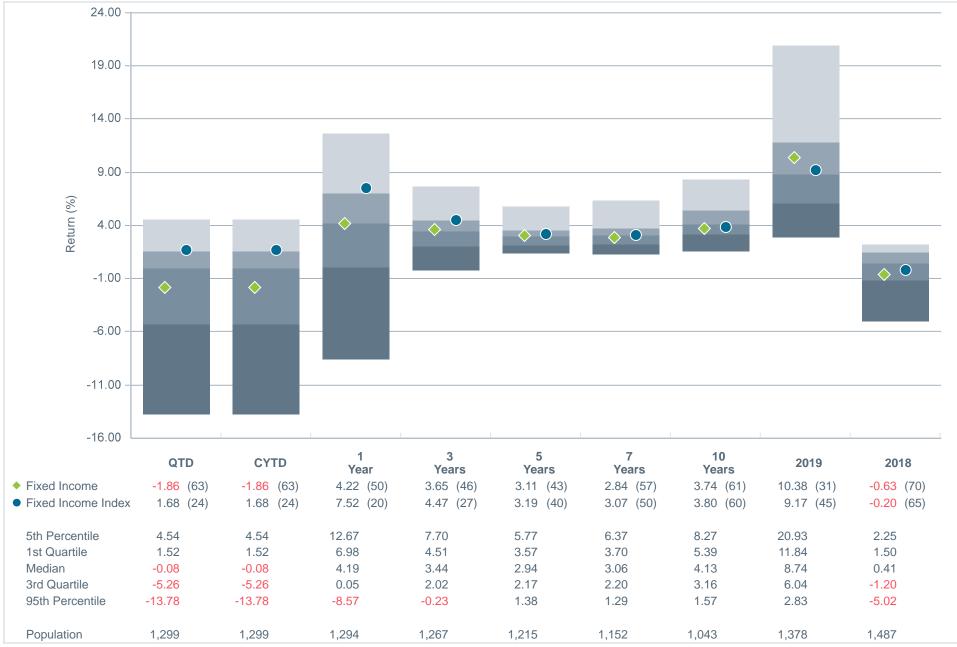
City of Jacksonville Police and Fire Pension Fund Style Analysis - 5 Years



Calculation is based on monthly periodicity. This is a return based calculation.



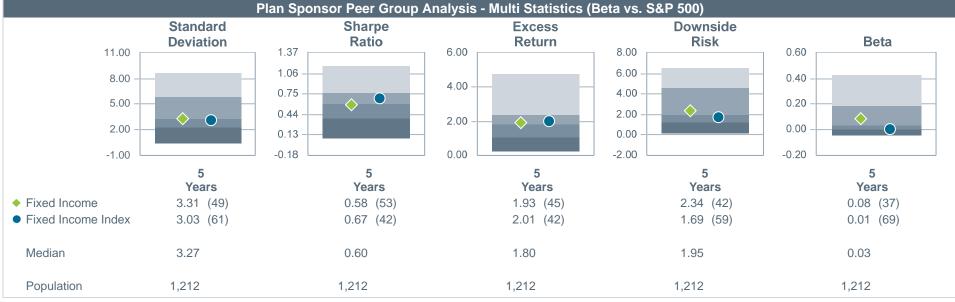
#### City of Jacksonville Police and Fire Pension Fund Fixed Income vs. IM U.S. Fixed Income (SA+CF) Peer Group Analysis



Performance shown is gross of fees. Parentheses contain percentile ranks.







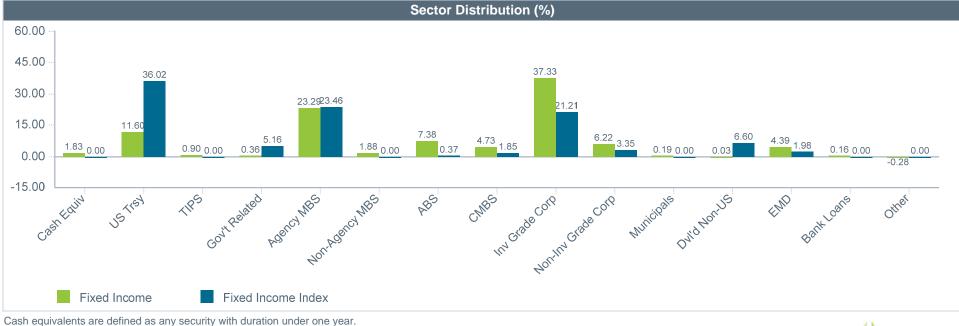
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



RVK

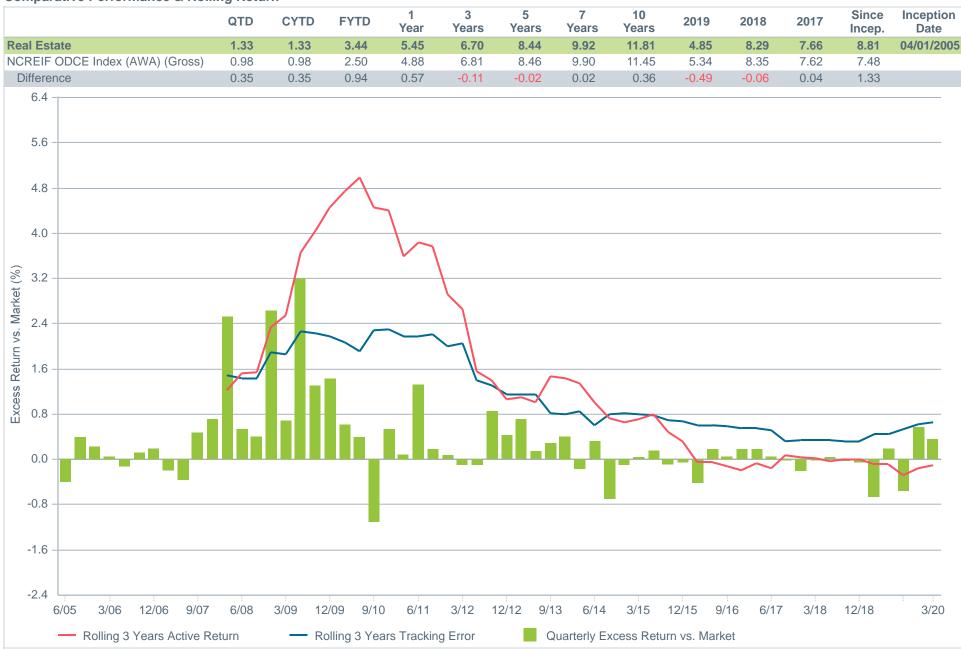
#### City of Jacksonville Police and Fire Pension Fund Fixed Income vs. Fixed Income Index Portfolio Characteristics

	Portfolio Characteristics	
	Portfolio	Benchmark
Effective Duration	6.06	5.59
Avg. Maturity	9.52	7.70
Avg. Quality	A2	N/A
Yield To Maturity (%)	3.76	2.21
Coupon Rate (%)	3.74	3.37
Current Yield (%)	3.80	N/A





#### City of Jacksonville Police and Fire Pension Fund Real Estate vs. NCREIF ODCE Index (AWA) (Gross) Comparative Performance & Rolling Return



Performance shown is gross of fees. Calculation is based on quarterly periodicity.



As of March 31, 2020

#### City of Jacksonville Police and Fire Pension Fund MLPs vs. S&P MLP Index (TR) Comparative Performance & Rolling Return

	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	Since Incep.	Inception Date
MLPs	-49.02	-49.02	-49.59	-52.58	-23.10	-16.27	-8.55	N/A	11.34	-12.70	-3.81	-2.06	03/01/2011
S&P MLP Index (TR)	-55.88	-55.88	-57.24	-59.21	-26.97	-19.88	-13.16	-3.92	9.78	-11.67	-5.58	-7.29	
Difference	6.86	6.86	7.65	6.63	3.87	3.61	4.61	N/A	1.56	-1.03	1.77	5.23	



KVK

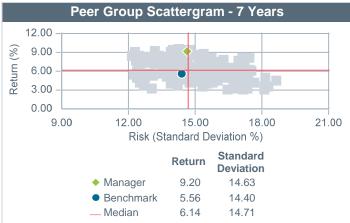
# **Investment Manager Profiles**



## Manager: Eagle Capital Large Cap Value (SA)

Peer Group: IM U.S. Large Cap Value Equity (SA+CF)

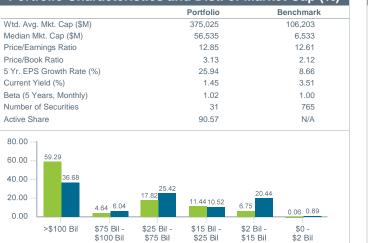
Performance													
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015		
Manager	-23.46	-10.56	3.50	5.72	9.20	N/A	32.20	-5.55	23.64	10.81	1.90		
Benchmark	-26.73	-17.17	-2.18	1.90	5.56	7.67	26.54	-8.27	13.66	17.34	-3.83		
Difference	3.27	6.61	5.68	3.82	3.64	N/A	5.66	2.72	9.98	-6.53	5.73		
Peer Group Median	-26.27	-16.16	-1.15	2.38	6.14	8.02	27.28	-8.31	17.24	14.52	-2.25		
Rank	26	19	12	11	8	N/A	14	27	8	80	13		
Population	287	287	286	277	268	243	303	328	348	375	391		



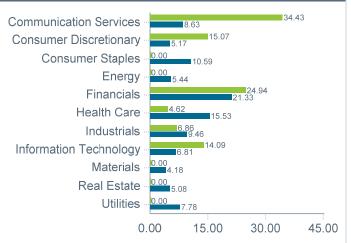




#### Portfolio Characteristics and Dist. of Market Cap (%)



#### Sector Weights (%)



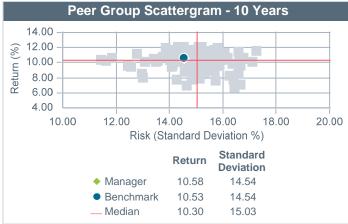
Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

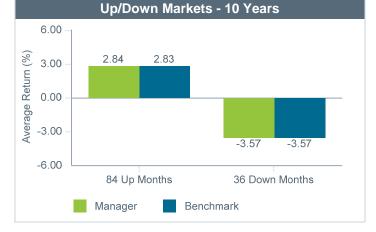


## Manager: NT Collective Daily S&P 500 Index Lending (CF)

Benchmark: S&P 500 Index (Cap Wtd) **Peer Group:** IM U.S. Large Cap Core Equity (SA+CF)

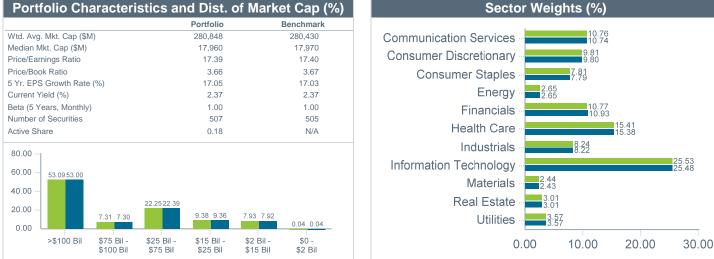
Performance													
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015		
Manager	-19.59	-6.96	5.15	6.79	9.68	10.58	31.54	-4.34	21.87	12.03	1.49		
Benchmark	-19.60	-6.98	5.10	6.73	9.62	10.53	31.49	-4.38	21.83	11.96	1.38		
Difference	0.01	0.02	0.05	0.06	0.06	0.05	0.05	0.04	0.04	0.07	0.11		
Peer Group Median	-20.02	-8.37	4.08	5.73	9.23	10.30	29.96	-5.16	21.84	10.54	1.42		
Rank	42	35	29	24	33	34	33	36	49	33	48		
Population	220	219	216	208	198	173	234	266	291	312	328		







#### Portfolio Characteristics and Dist. of Market Cap (%)



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



#### Manager: Loomis, Sayles & Co Lg Cap Grth (CF) Benchmark: Russell 1000 Grth Index

Peer Group: IM U.S. Large Cap Growth Equity (SA+CF)

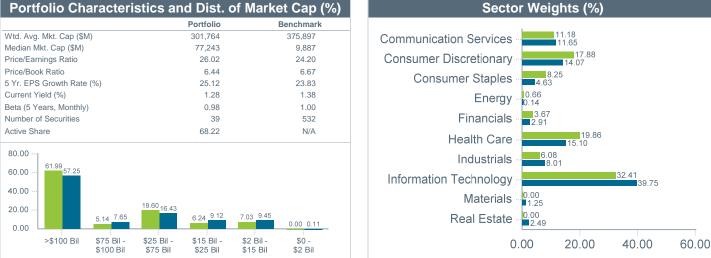
Performance													
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015		
Manager	-11.23	1.39	12.57	12.23	14.35	14.28	32.71	-1.72	34.03	6.54	10.99		
Benchmark	-14.10	0.91	11.32	10.36	12.93	12.97	36.39	-1.51	30.21	7.08	5.67		
Difference	2.87	0.48	1.25	1.87	1.42	1.31	-3.68	-0.21	3.82	-0.54	5.32		
Peer Group Median	-14.38	-1.51	10.04	9.07	12.20	12.37	33.81	-0.94	28.26	4.72	4.88		
Rank	15	27	27	12	16	11	61	56	16	34	11		
Population	235	235	232	222	213	197	247	276	288	308	338		







#### Portfolio Characteristics and Dist. of Market Cap (%)



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



## Manager: Sawgrass Diversified Large Cap Growth (SA)

Benchmark: Russell 1000 Grth Index

Peer Group: IM U.S. Large Cap Growth Equity (SA+CF)

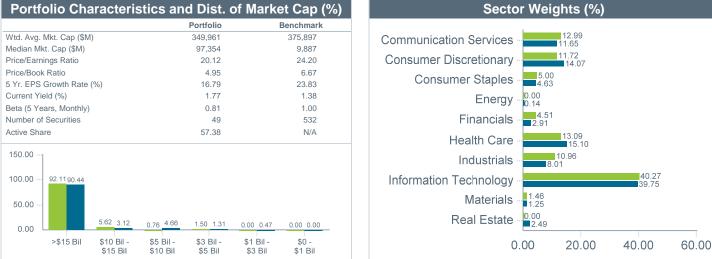
				Pe	rforman	се					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	-14.76	-1.62	9.82	8.71	N/A	N/A	30.50	3.34	22.94	6.80	2.21
Benchmark	-14.10	0.91	11.32	10.36	12.93	12.97	36.39	-1.51	30.21	7.08	5.67
Difference	-0.66	-2.53	-1.50	-1.65	N/A	N/A	-5.89	4.85	-7.27	-0.28	-3.46
Peer Group Median	-14.38	-1.51	10.04	9.07	12.20	12.37	33.81	-0.94	28.26	4.72	4.88
Rank	55	52	53	57	N/A	N/A	78	15	82	30	73
Population	235	235	232	222	213	197	247	276	288	308	338







#### Portfolio Characteristics and Dist. of Market Cap (%)



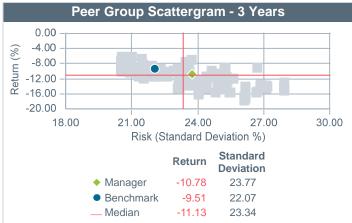
Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



## Manager: Wedge Capital Mgmt Sm Cap Val (CF)

**Peer Group:** IM U.S. Small Cap Value Equity (MF)

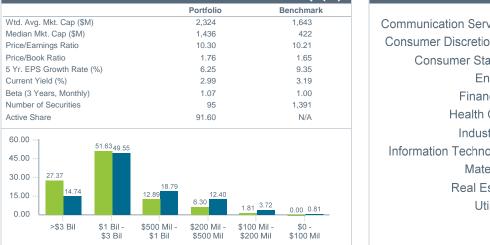
				Pe	rforman	ce					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	-37.67	-30.71	-10.78	N/A	N/A	N/A	26.10	-14.38	6.47	N/A	N/A
Benchmark	-35.66	-29.64	-9.51	-2.42	1.80	4.79	22.39	-12.86	7.84	31.74	-7.47
Difference	-2.01	-1.07	-1.27	N/A	N/A	N/A	3.71	-1.52	-1.37	N/A	N/A
Peer Group Median	-37.32	-32.43	-11.13	-4.35	0.46	4.08	21.26	-16.08	8.32	26.61	-7.10
Rank	56	41	46	N/A	N/A	N/A	15	39	71	N/A	N/A
Population	251	250	231	201	175	135	250	257	244	233	213



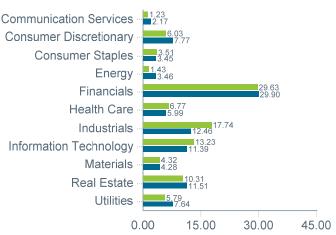




#### Portfolio Characteristics and Dist. of Market Cap (%)



#### Sector Weights (%)



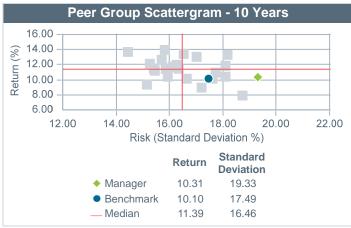
Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



## Manager: Pinnacle Associates US SMID Cap Growth (SA)

Peer Group: IM U.S. SMID Cap Growth Equity (SA+CF)

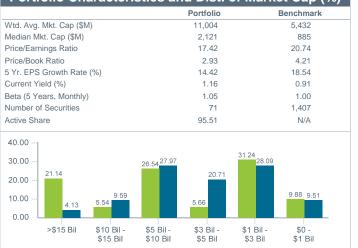
Performance													
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015		
Manager	-26.66	-12.84	1.43	3.68	7.91	10.31	41.32	-11.11	25.97	5.33	0.58		
Benchmark	-23.22	-14.40	3.35	3.64	8.09	10.10	32.65	-7.47	24.46	9.73	-0.19		
Difference	-3.44	1.56	-1.92	0.04	-0.18	0.21	8.67	-3.64	1.51	-4.40	0.77		
Peer Group Median	-20.52	-10.96	6.73	5.34	9.07	11.39	31.74	-4.62	25.00	8.56	0.14		
Rank	84	60	81	74	68	73	4	90	44	76	41		
Population	53	53	49	42	36	30	57	63	62	68	69		



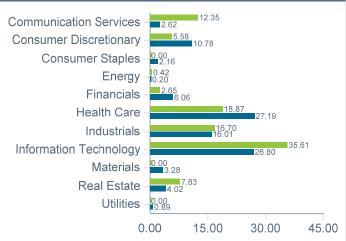




#### Portfolio Characteristics and Dist. of Market Cap (%)



#### Sector Weights (%)



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



## Manager: Silchester Int'l Value Equity (CF)

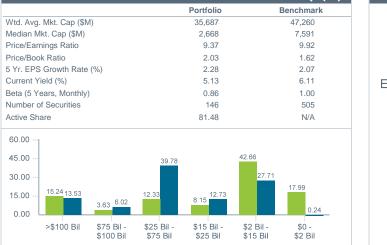
				Pe	rforman	ce					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	-24.04	-16.23	-2.80	0.45	3.95	5.88	18.02	-13.74	28.10	8.27	2.35
Benchmark	-28.20	-22.76	-6.65	-3.83	-0.58	0.62	16.09	-14.78	21.44	5.02	-5.68
Difference	4.16	6.53	3.85	4.28	4.53	5.26	1.93	1.04	6.66	3.25	8.03
Peer Group Median	-25.93	-18.68	-4.75	-1.64	1.17	2.86	21.17	-15.76	24.17	3.15	-1.05
Rank	34	33	34	23	11	6	90	41	26	9	26
Population	50	50	50	50	48	46	55	59	61	65	76



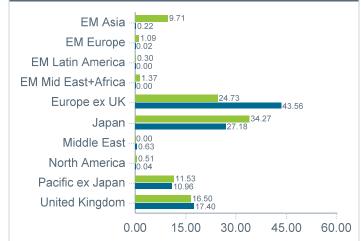




#### Portfolio Characteristics and Dist. of Market Cap (%)



#### Region Weights (%)



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.





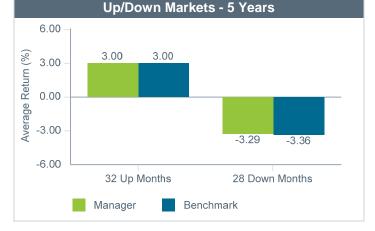
## Manager: NT Collective Daily EAFE Index Lending (CF)

#### Benchmark: MSCI EAFE Index (USD) (Net)

Peer Group: IM Enhanced and Indexed International Equity (SA+CF)

	Performance													
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015			
Manager	-22.48	-13.84	-1.39	-0.20	N/A	N/A	22.23	-13.18	25.16	1.42	-0.45			
Benchmark	-22.83	-14.38	-1.82	-0.62	1.75	2.72	22.01	-13.79	25.03	1.00	-0.81			
Difference	0.35	0.54	0.43	0.42	N/A	N/A	0.22	0.61	0.13	0.42	0.36			
Peer Group Median	-23.32	-15.36	-1.83	-0.34	1.95	3.08	21.98	-13.72	25.54	4.57	-2.05			
Rank	21	18	24	33	N/A	N/A	39	30	60	84	27			
Population	35	35	35	32	29	26	38	45	48	49	46			







#### Portfolio Characteristics and Dist. of Market Cap (%) **Region Weights (%)** Portfolio Benchmark Wtd. Avg. Mkt. Cap (\$M) 56,919 57,871 EM Asia 0.15 Median Mkt. Cap (\$M) 8,348 8,404 0.01 Price/Earnings Ratio 13 44 13 56 **EM** Europe Price/Book Ratio 2.50 2.54 5 Yr. EPS Growth Rate (%) EM Mid East+Africa 0.01 5.73 5.53 Current Yield (%) 3.91 4.10 53.09 9.19 Europe ex UK Beta (5 Years, Monthly) 0.99 1.00 Number of Securities 937 918 28.39 26.31 Japan Active Share 8.05 N/A 0.63 Middle East 100.00 72.2673.15 0.61 75.00 North America 50.00 11.74 10.86 Pacific ex Japan 25.00 13.3112.99 5.37 United Kingdom 8.75 8.40 12 86 4.29 4.10 1.39 1.35 0.00 0.00 0.00 >\$15 Bil \$10 Bil -\$5 Bil -\$3 Bil -\$1 Bil \$0 -0.00 20.00 40.00 60.00 80.00 \$15 Bil \$10 Bil \$5 Bil \$3 Bil \$1 Bil

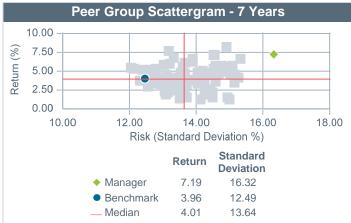
Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



## Manager: Baillie Gifford International Growth (BGEFX)

#### Benchmark: MSCI ACW Ex US Index (USD) (Net) Peer Group: IM International Growth Equity (SA+CF)

Performance													
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015		
Manager	-14.01	-1.07	8.06	5.76	7.19	N/A	37.47	-17.26	46.24	1.42	-2.99		
Benchmark	-23.36	-15.57	-1.96	-0.64	1.06	2.05	21.51	-14.20	27.19	4.50	-5.66		
Difference	9.35	14.50	10.02	6.40	6.13	N/A	15.96	-3.06	19.05	-3.08	2.67		
Peer Group Median	-20.28	-8.75	2.21	1.95	4.01	5.53	28.29	-14.82	32.62	-0.45	3.27		
Rank	5	8	8	11	8	N/A	6	77	6	30	93		
Population	147	147	145	136	122	107	157	169	180	185	197		







#### Portfolio Characteristics and Dist. of Market Cap (%)



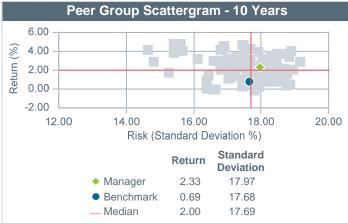
Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



## Manager: Acadian Emg Mkts Equity CI II (CF)

Benchmark: MSCI Emg Mkts Index (USD) (Net) Peer Group: IM Emerging Markets Equity (SA+CF)

				Pe	rforman	се					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	-24.13	-17.87	-3.77	-0.97	-0.96	2.33	18.00	-18.30	38.94	14.08	-17.37
Benchmark	-23.60	-17.69	-1.62	-0.37	-0.40	0.69	18.44	-14.58	37.28	11.19	-14.92
Difference	-0.53	-0.18	-2.15	-0.60	-0.56	1.64	-0.44	-3.72	1.66	2.89	-2.45
Peer Group Median	-24.96	-18.05	-2.50	-0.41	0.28	2.00	19.63	-15.23	36.81	10.35	-12.64
Rank	44	50	64	64	73	42	65	81	36	23	90
Population	282	280	266	239	202	136	304	314	329	339	342







#### Portfolio Characteristics and Dist. of Market Cap (%) **Region Weights (%)** Portfolio Benchmark Wtd. Avg. Mkt. Cap (\$M) 70,752 109,307 68.18 EM Asia 64.04 Median Mkt. Cap (\$M) 4,092 1,293 9.80 Price/Earnings Ratio 11 70 8 67 **EM Europe** 4 78 Price/Book Ratio 2.00 2.53 5 Yr. EPS Growth Rate (%) 7.55 10.08 13.51 **EM Latin America** Current Yield (%) 4.28 3.36 3.55 EM Mid East+Africa Beta (5 Years, Monthly) 1.00 1.00 Number of Securities 508 1.404 Europe ex UK 0.15 Active Share 72.32 N/A 0.01 Frontier Markets 60.00 0.00 45.00 North America 38.0138.77 10.76 30.00 25.38 Pacific ex Japan 23.14 20.62 19.1 15.00 9.89 10.05 0.00 United Kingdom 3.99 0.15 1.35 0.00 >\$100 Bil \$75 Bil -\$25 Bil \$15 Bil \$2 Bil \$0 0.00 25.00 50.00 75.00 100.00 \$100 Bil \$75 Bil \$25 Bil \$15 Bil \$2 Bil

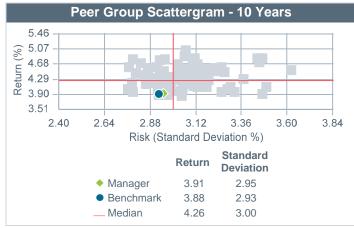
Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



## Manager: NT Collective Daily Agg Bnd Index Lending (CF)

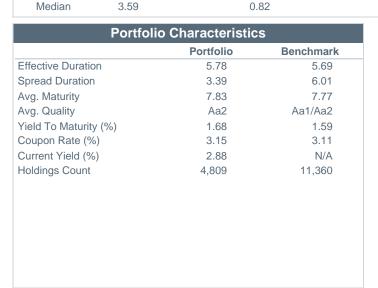
**Benchmark:** Bloomberg US Agg Bond Index **Peer Group:** IM U.S. Broad Market Core Fixed Income (SA+CF)

Performance											
				PE	errorman	ce					
	QTD	1	3	5	7	10	2019	2018	2017	2016	2015
	QID	Year	Years	Years	Years	Years	2019	2010	2017	2010	2015
Manager	3.30	9.09	4.90	3.41	3.23	3.91	8.77	0.03	3.57	2.64	0.58
Benchmark	3.15	8.93	4.82	3.36	3.19	3.88	8.72	0.01	3.54	2.65	0.55
Difference	0.15	0.16	0.08	0.05	0.04	0.03	0.05	0.02	0.03	-0.01	0.03
Peer Group Median	1.73	7.83	4.77	3.47	3.38	4.26	9.19	0.06	4.04	3.10	0.82
Rank	15	19	34	62	72	85	72	56	79	75	71
Population	141	141	138	133	129	124	150	156	161	168	173

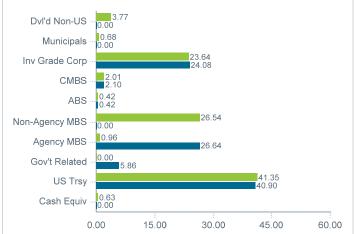








#### Sector Distribution (%)



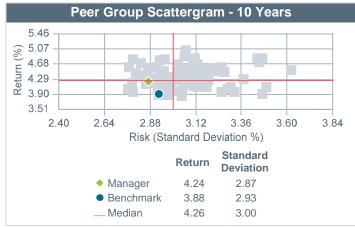
Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

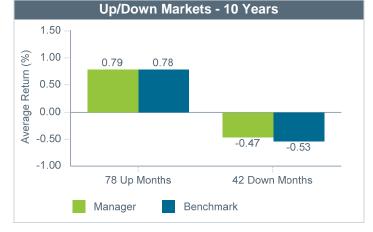


## Manager: Thompson Siegel Core Fixed Income (SA)

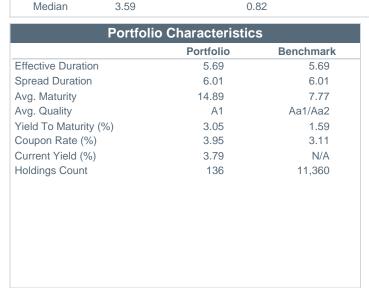
Peer Group: IM U.S. Broad Market Core Fixed Income (SA+CF)

				Pe	erforman	се					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	-0.24	6.11	4.23	3.57	3.41	4.24	10.35	-0.25	4.44	4.44	1.42
Benchmark	3.15	8.93	4.82	3.36	3.19	3.88	8.72	0.01	3.54	2.65	0.55
Difference	-3.39	-2.82	-0.59	0.21	0.22	0.36	1.63	-0.26	0.90	1.79	0.87
Peer Group Median	1.73	7.83	4.77	3.47	3.38	4.26	9.19	0.06	4.04	3.10	0.82
Rank	88	83	86	39	45	51	9	82	28	14	13
Population	141	141	138	133	129	124	150	156	161	168	173

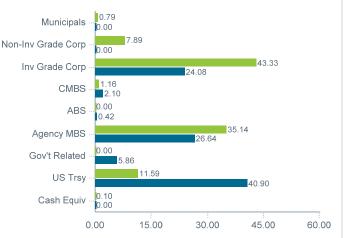












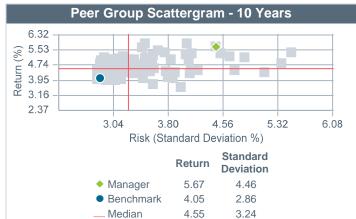
Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



## Manager: Loomis Core Plus Full Discretion (CF)

Peer Group: IM U.S. Broad Market Core+ Fixed Income (SA+CF)

				Pe	rforman	се					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	-2.10	3.25	3.73	3.56	3.67	5.67	9.06	0.54	6.58	7.83	-1.82
Benchmark	1.30	7.15	4.37	3.35	3.22	4.05	9.29	-0.25	4.09	3.91	0.43
Difference	-3.40	-3.90	-0.64	0.21	0.45	1.62	-0.23	0.79	2.49	3.92	-2.25
Peer Group Median	-0.41	5.64	4.15	3.43	3.40	4.55	9.94	-0.36	4.81	4.68	0.31
Rank	69	77	72	36	28	7	81	12	14	13	90
Population	140	139	136	134	130	119	153	161	166	169	175







	Portfolio	Benchmark
Effective Duration	5.93	5.56
Spread Duration	4.34	N/A
Avg. Maturity	8.09	7.68
Avg. Quality	A3	N/A
Yield To Maturity (%)	4.37	2.37
Coupon Rate (%)	3.87	3.44
Current Yield (%)	3.88	0.19
Ioldings Count	575	17,978
-		





Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "Other" consists of convertibles and hedges.

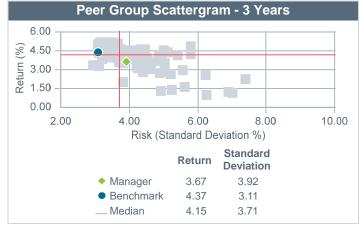


## Manager: Neuberger Berman Core Plus Trust – Class III (CIT)

Benchmark: Bloomberg US Unv Bond Index

Peer Group: IM U.S. Broad Market Core+ Fixed Income (SA+CF)

				Pe	rforman	ce					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	-2.04	4.31	3.67	N/A	N/A	N/A	11.03	-0.89	4.63	N/A	N/A
Benchmark	1.30	7.15	4.37	3.35	3.22	4.05	9.29	-0.25	4.09	3.91	0.43
Difference	-3.34	-2.84	-0.70	N/A	N/A	N/A	1.74	-0.64	0.54	N/A	N/A
Peer Group Median	-0.41	5.64	4.15	3.43	3.40	4.55	9.94	-0.36	4.81	4.68	0.31
Rank	68	69	73	N/A	N/A	N/A	24	75	59	N/A	N/A
Population	140	139	136	134	130	119	153	161	166	169	175

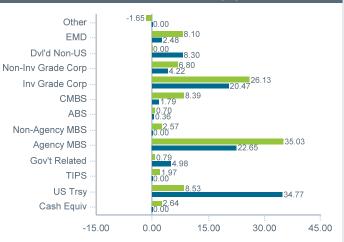






Spread Duration 5.53 N/A   Avg. Maturity 8.15 7.68   Avg. Quality Aa3 N/A   Yield To Maturity (%) 3.80 2.37   Coupon Rate (%) 3.59 3.44   Current Yield (%) 3.80 0.19		Portfolio	Benchmark
Avg. Maturity8.157.68Avg. QualityAa3N/AYield To Maturity (%)3.802.37Coupon Rate (%)3.593.44Current Yield (%)3.800.19	Effective Duration	6.33	5.56
Avg. Quality Aa3 N/A   Yield To Maturity (%) 3.80 2.37   Coupon Rate (%) 3.59 3.44   Current Yield (%) 3.80 0.19	Spread Duration	5.53	N/A
Yield To Maturity (%) 3.80 2.37   Coupon Rate (%) 3.59 3.44   Current Yield (%) 3.80 0.19	Avg. Maturity	8.15	7.68
Coupon Rate (%) 3.59 3.44   Current Yield (%) 3.80 0.19	Avg. Quality	Aa3	N/A
Current Yield (%) 3.80 0.19	Yield To Maturity (%)	3.80	2.37
	Coupon Rate (%)	3.59	3.44
Holdings Count 370 17.978	Current Yield (%)	3.80	0.19
	Holdings Count	370	17,978

#### Sector Distribution (%)



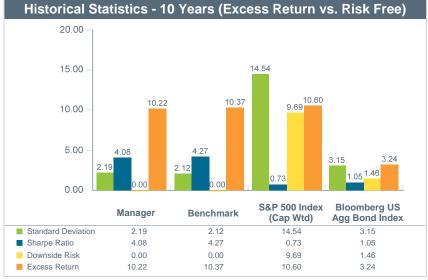
Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "Other" consists of net unsettled positions, credit risk transfer, derivatives, and CLOs.



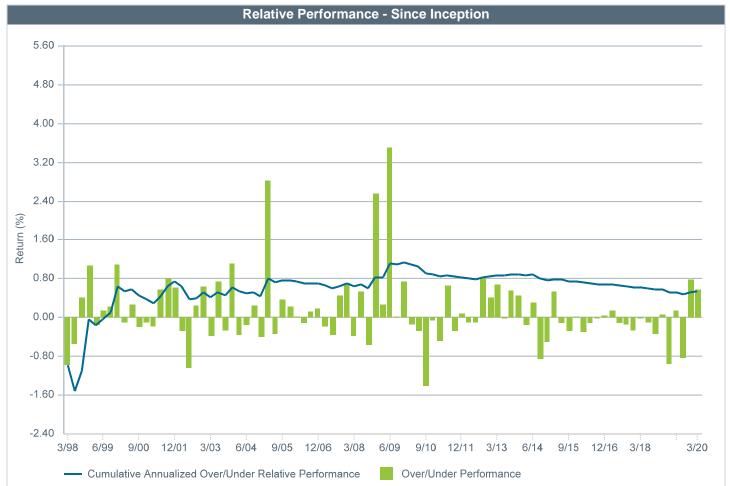
### Manager: JPMorgan Strategic Property (CF)

Benchmark: NCREIF ODCE Index (AWA) (Gross)

				Pe	erforman	се					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	1.57	5.57	6.38	8.07	9.68	11.28	4.41	7.95	7.20	8.37	15.23
Benchmark	0.98	4.88	6.81	8.46	9.90	11.45	5.34	8.35	7.62	8.77	15.02
Difference	0.59	0.69	-0.43	-0.39	-0.22	-0.17	-0.93	-0.40	-0.42	-0.40	0.21



Actual Correlation - 10	Actual Correlation - 10 Years								
	Actual Correlation								
NCREIF ODCE Index (AWA) (Gross)	0.90								
S&P 500 Index (Cap Wtd)	0.05								
Russell 2000 Index	0.14								
MSCI EAFE Index (USD) (Net)	0.12								
MSCI Emg Mkts Index (USD) (Net)	0.01								
Bloomberg US Agg Bond Index	-0.20								
Bloomberg US Trsy US TIPS Index	-0.08								
Wilshire US REIT Index	0.02								
HFRI FOF Comp Index	0.10								
Bloomberg Cmdty Index (TR)	0.07								
ICE BofAML 3 Mo US T-Bill Index	-0.72								
Cons Price Index (Unadjusted)	-0.03								





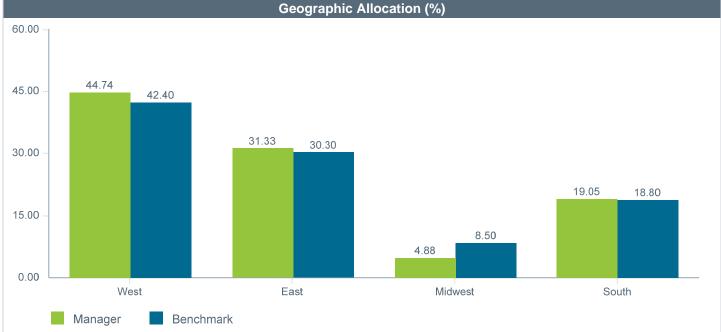
#### Investment Strategy

The Fund pursues a diversified core real estate strategy that seeks a total return which consists largely of current income with modest appreciation and low risk potential. The Fund invests in high-quality, well-leased and stabilized assets with dominant competitive characteristics in attractive demographic markets throughout the US and targets to outperform the NCREIF ODCE Index over a full market cycle. The Fund uses third-party leverage, not presently expected to exceed 35% of the total portfolio value or 65% on any individual property at the time of procurement of debt.

Investment Pr	rofile
---------------	--------

Fund Inception	1998
Legal Structure	Collective Trust
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	41,303
Fund Leverage %	23.23
Portfolio Occupancy %	93.76
Cash Reserve %	3.26
Number of Investments	161
Number of Limited Partners	376





Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of land. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.



## Manager: Principal US Property (CF)

Actual

Correlation

0.90

0.09

0.14

0.07

-0.03

-0.02

-0.03

0.24

0.10

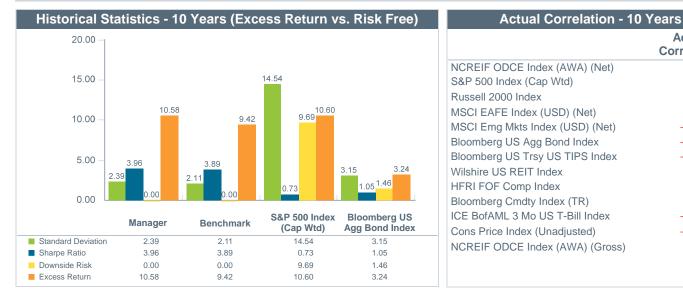
0.08

-0.62

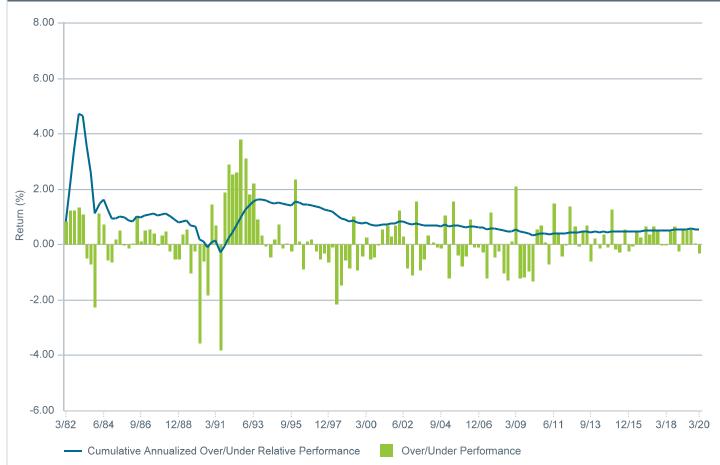
-0.09

0.91

				Pe	rforman	се					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	0.43	4.88	7.08	8.59	9.95	11.67	6.22	8.32	8.29	9.21	13.81
Benchmark	0.75	3.93	5.85	7.48	8.91	10.42	4.39	7.36	6.66	7.79	13.95
Difference	-0.32	0.95	1.23	1.11	1.04	1.25	1.83	0.96	1.63	1.42	-0.14







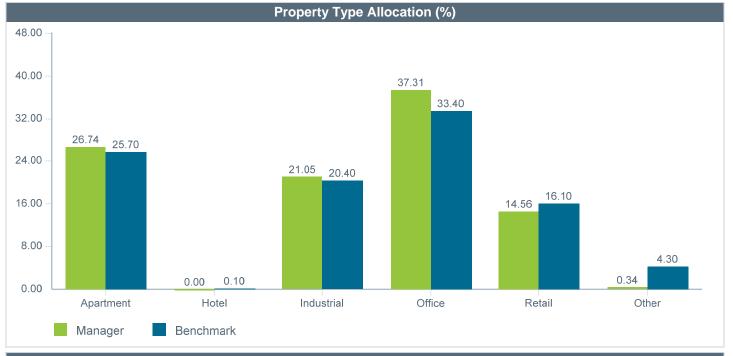


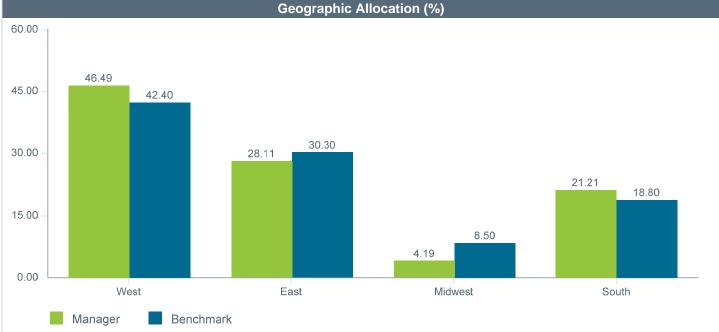
#### Investment Strategy

The Principal U.S. Property Account is a core real estate account designed to have a low to moderate risk profile consistent with other open-end real estate funds comprising the NFI-ODCE. This risk profile has two components: 1) a low to moderate real estate property risk profile; and 2) a low to moderate risk portfolio level operating profile. Low to moderate real estate property risk is accomplished by investing primarily in well-leased properties on an unleveraged basis. Low to moderate portfolio level risk is accomplished by operating with limited portfolio level obligations and a well-diversified portfolio. The Account invests in the traditional real estate property types; multifamily, office, industrial, and retail.

#### **Investment Profile**

Fund Inception	1982
Legal Structure	Insurance SA
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	10,731
Fund Leverage %	18.78
Portfolio Occupancy %	91.14
Cash Reserve %	3.79
Number of Investments	133
Number of Limited Partners	5,918





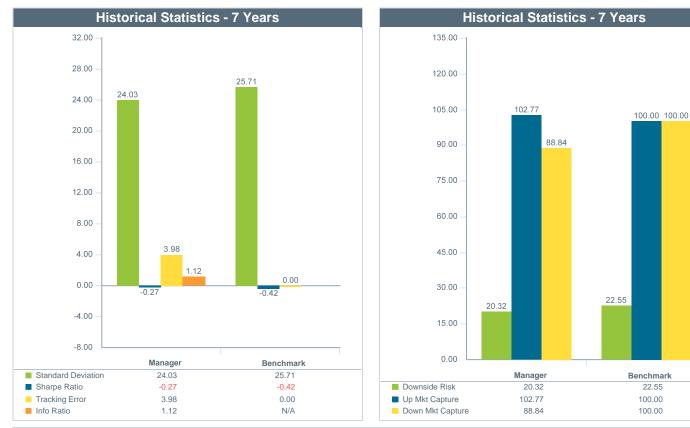
Performance shown is net of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of land. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.



#### Manager: Harvest Fund Advisors MLP (SA) Benchmark: S&P MLP Index (TR)

#### As of March 31, 2020

	Performance										
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	-48.90	-52.02	-22.73	-16.26	-8.55	N/A	13.53	-12.78	-4.85	19.97	-30.37
S&P MLP Index (TR)	-55.88	-59.21	-26.97	-19.88	-13.16	-3.92	9.78	-11.67	-5.58	21.95	-35.07
Difference	6.98	7.19	4.24	3.62	4.61	N/A	3.75	-1.11	0.73	-1.98	4.70



Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	24,327	11,011
Median Mkt. Cap (\$M)	6,077	974
Price/Earnings Ratio	7.36	5.52
Price/Book Ratio	1.56	1.99
5 Yr. EPS Growth Rate (%)	7.89	10.00
Current Yield (%)	14.61	19.67
Beta (5 Years, Monthly)	0.92	1.00
Number of Securities	24	36





Performance shown is gross of fees and client specific. Calculations are based on monthly periodicity.

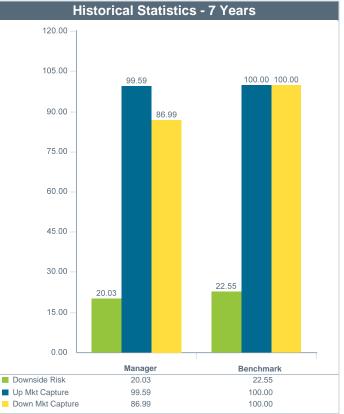


#### Manager: Tortoise Capital Advisors MLP (SA) Benchmark: S&P MLP Index (TR)

#### As of March 31, 2020

	Performance										
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	-49.14	-53.12	-23.34	-16.20	-8.53	N/A	9.24	-12.24	-2.77	16.46	-26.59
Benchmark	-55.88	-59.21	-26.97	-19.88	-13.16	-3.92	9.78	-11.67	-5.58	21.95	-35.07
Difference	6.74	6.09	3.63	3.68	4.63	N/A	-0.54	-0.57	2.81	-5.49	8.48





Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	23,194	11,011
Median Mkt. Cap (\$M)	9,014	974
Price/Earnings Ratio	7.36	5.52
Price/Book Ratio	2.08	1.99
5 Yr. EPS Growth Rate (%)	8.41	10.00
Current Yield (%)	14.35	19.67
Beta (5 Years, Monthly)	0.89	1.00
Number of Securities	21	36





Performance shown is gross of fees and client specific. Calculations are based on monthly periodicity.



# Addendum & Glossary



## City of Jacksonville Police and Fire Pension Fund Addendum

### Performance Related Comments:

- Performance is annualized for periods greater than one year.
- Performance and market values shown are preliminary and subject to change.
- The inception date shown indicates the first full month of performance following initial funding.
- RVK began monitoring the assets of the City of Jacksonville Police and Fire on 12/01/2019. Prior historical data was provided by the custodian and previous consultant.

#### Custom Composite Benchmark Comments:

- Total Fund Policy Index: The passive Current Total Fund Policy Index is calculated monthly and currently consists of 39% Russell 3000 Index, 20% MSCI ACW Ex US Index (USD) (Net), 4% Bloomberg US Agg Bond Index, 15.5% Bloomberg US Unv Bond Index, 15% NCREIF Fund Index-ODCE (VW) (Net), 5.5% S&P MLP Index (TR), and 1% FTSE 3 Mo T-Bill Index.
- US Equity Policy Index: The passive US Equity Policy Index consists of 100% US Equity Composite Custom Index through 09/2013 and 100% Russell 3000 Index thereafter.
- International Equity Policy Index: The passive International Equity Policy Index consists of 100% MSCI EAFE Index (USD) (Net) through 09/2009 and 100% MSCI ACW Ex US Index (USD) (Net) thereafter.
- Fixed Income Policy Index: The passive Fixed Income Policy Index consists of 100% Bloomberg US Agg Bond Index through 12/2016 and 20.5% Bloomberg US Agg Bond Index/79.5% Bloomberg US Unv Bond Index thereafter.

#### Custom Manager Benchmark Comments:

- Baillie Gifford Index: The passive Baillie Gifford Index consists of 100% MSCI EAFE Grth Index (USD) (Net) through 11/2019 and 100% MSCI ACW Ex US Grth Index (USD) (Net) thereafter.
- **Thompson Siegel Policy Index**: The passive Thompson Siegel Policy Index consists of 100% Thompson Siegel Custom Policy Index through 09/2009 and 100% Bloomberg US Agg Bond Index thereafter.



Active Return - The difference between the investment manager/composite performance relative to the performance of an appropriate market benchmark.

Active Share - Measures the degree to which the holdings of a fund differ from the holdings of the benchmark. Active share is calculated by taking the sum of the absolute value of the differences of the weight of each holding in the fund versus the weight of each holding in the benchmark and dividing by two.

Alpha - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. It is a measure of the portfolio's historical performance not explained by movements of the market or a portfolio's non-systematic return.

Alpha Ratio - A measure of a portfolio's non-systematic return per unit of downside risk. It is measured by dividing the alpha of a portfolio by the downside risk. The non-systematic return is a measure of a portfolio's historical performance not explained by movements of the market.

Average Quality - Bond quality ratings are reported using the investment managers' and the index providers' preferred rating agency. Average Quality for managers unable to provide this statistic is instead provided by Morningstar; if unavailable on Morningstar, it has been estimated using a credit quality distribution provided by the manager. There are two primary rating agencies in the US. Moody's assigns ratings on a system that employs up to four symbols (consisting of letters and numbers) such as, Aaa, Aa2, etc., with Aaa being the highest or safest rating. Standard & Poor's (S&P) employs a system that uses + and - along with letters such as AAA, AA+, etc. The two rating agencies' systems are summarized below:

	<u>S&amp;P</u>	Moody's	Explanation	<u>S&amp;P</u>	Moody's	Explanation		
Higher Credit Quality – Investment Grade				Lower Credit Quality – Below Investment Grade				
	AAA	Aaa	Prime/Highest credit quality	BB+	Ba1	Speculative/Low credit quality		
	AA+	Aa1	High credit quality	BB	Ba2			
	AA	Aa2		BB-	Ba3			
	AA-	Aa3		B+	B1	Highly speculative		
	A+	A1	Upper-medium credit quality	В	B2			
	А	A2		B-	B3			
	A-	A3		CCC+	Caa1	Substantial credit/default risk		
	BBB+	Baa1	Lower-medium credit quality	CCC	Caa2	Extremely speculative		
	BBB	Baa2		CCC-	Caa3	5 1		
	BBB-	Baa3		CC	Са	Vulnerable to default		
				С	Ca			
				D	С	In default		

Benchmark Effect - The difference between the blended return of each respective managers' benchmark within a composite and the composite's benchmark return.

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

**Box Plots** - A graphical representation of the distribution of observations. From top to bottom, the four boxes represent the spread between the maximum value and the minimum value in each quartile. A quartile represents the values that divide the observations into four quarters (i.e., 1<sup>st</sup> quartile, 2<sup>nd</sup> quartile, 3<sup>rd</sup> quartile, and 4<sup>th</sup> quartile). The median observation is where the 2<sup>nd</sup> quartile and 3<sup>rd</sup> quartile meet.

**Buy and Hold Attribution** - At the beginning of the time period under analysis, the manager and benchmark portfolios are broken down into segments (i.e., styles, sectors, countries, and regions) based on the desired type of attribution. The formula assumes zero turn-over to the manager and benchmark portfolios throughout the period and calculates the segment returns ("buy and hold returns") to arrive at performance attribution. Due to portfolio turnover, buy and hold attribution may not accurately represent quarterly performance relative to the benchmark. Country, region, sector, and style allocations are as of the date one quarter prior to the reporting date, and the returns shown are for those segments throughout the quarter reported. Due to disclosure guidelines set by each investment manager, equity characteristics shown are as of the most recent date available. The following is the methodology for segment classification:

Sector - Attribution is calculated using the Global Industry Classification Standard (GICS) which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector, as defined by S&P Capital IQ data.

Country/Region - Attribution is calculated using the Morgan Stanley Capital International (MSCI) region standards. Stocks are classified by their domicile country/region, as defined by S&P Capital IQ data.

Style - Stocks are classified into the following style boxes: large/mid/small vs. growth/neutral/value. Stocks are classified along large/mid/small categories at the time of the Russell index rebalancing, using the index market cap boundaries as cutoff points. Stocks are classified along growth/neutral/value categories at the time of the Russell index rebalancing, using the price/book ratio as supplied by S&P Capital IQ. Stocks in the Russell 3000 Index portfolio are sorted by price/book ratio; names with the highest price/book ratio that make up 1/3 of the total market capitalization are assigned to the growth category, names that make up the subsequent 1/3 of the total market capitalization are assigned to the names are assigned to the value category. Stocks are unclassified when there is not enough data to determine a size and style metric.

Portfolio Characteristics and Buy and Hold Attribution reports utilize product-specific data for all mutual funds and commingled funds.

#### Capital Markets Review -

**Breakeven Inflation** - Measures the expected inflation rate at each stated maturity by taking the difference between the real yield of the inflationlinked maturity curve and the yield of the closest nominal Treasury maturity.

**Consumer Confidence** - Measures domestic consumer confidence as defined by the degree of optimism on the state of the economy that consumers express through saving and spending.

Consumer Price Index (CPI) - Measures the change in the price level of consumer goods and services.

**Federal Funds Rate** - The interest rate at which a depository institution lends funds maintained at the Federal Reserve to another depository institution overnight. It is one of the most influential interest rates in the US economy, since it affects monetary and financial conditions, which in turn have a bearing on key aspects of the broad economy including employment, growth and inflation.

Option-Adjusted Spread - Measures the flat spread of an index or bond to the Treasury yield curve after removing the effect of any embedded options.

Purchasing Managers Index (PMI) - Measures economic activity by surveying purchasing managers on a monthly basis as to whether business conditions have improved, worsened, or stayed the same.

Real Gross Domestic Product (Real GDP) - An inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year.

US Dollar Total Weighted Index - Measures the value of the US Dollar relative to a basket of other world currencies. It is calculated as the weighted geometric mean of the dollar's value versus the EUR, GBP, CAD, SEK, CHF, and JPY.

**Unemployment Rate** - The percentage of the total labor force that is unemployed but actively seeking employment.

VIX - Measures the implied volatility of S&P 500 Index options by looking at the market's expectation of the S&P 500 Index volatility over the next 30 day period. Commonly referred to as the "fear index" or the "fear gauge."

Cash Flow Effect - The composite's active return minus the sum of each managers' active return minus the benchmark effect.

**Consistency** - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.

Convexity - A measure of the shape of the curve that describes the relationship between bond prices and bond yields.

**Correlation** - A statistical measure of the relationship between asset class returns. A value of 1.00 is a perfect correlation; that is, the asset classes always move in the same direction. A value of -1.00 indicates a perfect negative correlation, in which the asset classes always move in opposite directions of each other. A value of 0 indicates there is no relationship between the direction of returns of the two asset classes. Correlation calculations only consider the direction of changes relative to two variables and not the magnitude of those changes.

Coupon Rate - The percentage rate of interest paid on a bond or fixed income security; it is typically paid twice per year.

Current Yield - The annual income of a security divided by the security's current price.

**Down Market Capture** - Down market by definition is negative benchmark return and down market capture represents the ratio in % terms of the average portfolios return over the benchmark during the down market period. The lower the value of the down market capture the better the product's performance.

**Downside Risk** - A measure similar to standard deviation, but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative returns for the selected periodicity. The higher the factor, the riskier the product.

Earnings Per Share - It is backward looking, calculated using the one year current EPS divided by the one year EPS five years ago.

Effective Duration - The approximate percentage change in a bond's price for a 100 basis point change in yield.

Excess Return vs. Market - Average of the monthly arithmetic difference between the manager's return and the benchmark return over a specified time period, shown on an annualized basis.

**Excess Return vs. Risk Free** - Average of the monthly arithmetic difference between the manager's return and the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) over a specified time period, shown on an annualized basis.

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

Expense Ratios - Morningstar is the source for mutual fund expense ratios.

Gain/Loss - The net increase or decrease in the market value of a portfolio excluding its Net Cash Flow for a given period.

**Indices** - All indices and related information are considered intellectual property and are licensed by each index provider. The indices may not be copied, used or distributed without the index provider's prior written approval. Index providers make no warranties and bear no liability with respect to the indices, any related data, their quality, accuracy, suitability and/or completeness.

Information Ratio - Measured by dividing the active rate of return by the tracking error. The higher the information ratio, the more value-added contribution by the manager.

Liability Driven Investing (LDI) - A method to optimally structure asset investments relative to liabilities. The change in liabilities is estimated by the Ryan Labs Generic PPA Index of appropriate duration for that Plan. This benchmark is based on generic data and is therefore an approximation. RVK is not an actuarial firm, and does not have actuarial expertise.

Estimated Funded Status - The estimated ratio of a Plan's assets relative to its future liabilities. This is calculated by dividing the Plan's asset market value by the estimated present value of its liabilities. The higher the estimated funded status, the better the Plan's ability to cover its projected benefit obligations. An estimated funded status of 100% indicates a Plan that is fully funded.

**Estimated PV of Liabilities** - An estimate of a Plan's future liabilities in present value terms. The beginning of the period liability is provided by the Plan's actuary. The period-end present value liability estimate provided in this report is derived by applying the estimated percentage change generated using the Ryan Labs Generic PPA Index with duration similar to that reported on the most recent actuarial valuation report. **Duration of Liabilities** - The sensitivity of the value of a Plan's liabilities to changes in interest rates, as calculated by the Plan's actuary.

Duration of Assets - The dollar-weighted average duration of all the individual Plan assets.

**Estimated Plan Hedge Ratio** - The estimate of how well a Plan's investment portfolio is hedged against changes in interest rates - a primary driver of funded status movements. This is calculated by dividing the dollar-weighted values of both the Plan asset duration by the liability duration and multiplying by the estimated funded status. An estimated plan hedge ratio of zero indicates that the Plan's liabilities have not been hedged, whereas a value of one indicates fully hedged.

Modified Duration - The approximate percentage change in a bond's price for a 100 basis point change in yield, assuming the bonds' expected cash flows do not change.

**Mutual Fund Performance** - Whenever possible, manager performance is extended for any share class that does not have 10 years of history. Using Morningstar's methodology, a single ticker within the same fund family (often the oldest share class) is chosen to append historical performance.

**Net Cash Flow** - The sum, in dollars, of a portfolio's contributions and withdrawals. This includes all management fees and expenses only when performance shown is gross of fees.

#### Peer Groups -

**Plan Sponsor Peer Groups** - RVK utilizes the Mellon Analytical Solutions Trust Universe along with the Investment Metrics Plan Sponsor Universe. The combined Mellon Analytical Solutions Trust Universe and Investment Metrics Plan Sponsor Universe is used for comparison of total fund composite results and utilizes actual client performance compiled from consultant and custodian data. The Plan Sponsor Peer Group database includes performance and other quantitative data for over 2,100 plans which include corporate, endowment, foundation, public, and Taft Hartley plans. Plan Sponsor Peer Groups are gross of fees.

**Investment Manager Peer Groups -** RVK utilizes Investment Metrics' Peer Groups for investment manager peer comparison and ranking. The Investment Metrics Peer Group database includes performance and other quantitative data for over 840 investment management firms and 29,000 investments products, across more than 160 standard peer groups. Mutual Fund Peer Groups are net of fees.

**Percentile Rankings** - Percentile rank compares an individual fund's performance with those of other funds within a defined peer group of managers possessing a similar investment style. Percentile rank identifies the percentage of a fund's peer group that has a higher return (or other comparative measurement) than the fund being ranked. Conversely, 100 minus the individual fund's ranking will identify the percentage of funds within the peer group that have a lower return than the fund being ranked.

1 - Highest Statistical Value 100 - Lowest Statistical Value

Example: American Funds AMCP;R-4 (RAFEX) is ranked in the 4<sup>th</sup> percentile within the IM US Equity Large-Cap Growth Funds (MF) Peer Group for the Sharpe Ratio. Within the IM US Equity Large-Cap Growth Funds peer group, 4% of the other funds performed better than American Funds AMCP;R-4 (RAFEX), while 96% of the funds performed worse.

Performance Methodology - RVK calculates performance for investment managers and composites using different methodologies.

**Investment Managers** - Performance is calculated for interim periods between all large external cash flows for a given month and geometrically linked to calculate period returns. An external cash flow is defined as cash, securities, or assets that enter or exit a portfolio. RVK defines a "large cash flow" as a net aggregate cash flow of  $\geq 10\%$  of the beginning-period portfolio market value or any cash flow that causes RVK calculated performance to deviate from manager/custodian reported performance in excess of 5 basis points for a given month.

**Composites** - The Modified Dietz methodology is utilized to calculate asset class, sub-asset class, and total fund composite performance. The Modified Dietz method calculates a time-weighted total rate of return that considers the timing of external cash flows; however, it does not utilize interim period performance to mitigate the impact of significant cash in- and outflows to the composite.

RVK calculates performance beginning with the first full month following inception. Since inception performance may vary from manager reported performance due to RVK using the first full month of returns as the inception date. Performance for both managers and composites is annualized for periods greater than one year.

Portfolio Characteristics - Due to disclosure guidelines set by each investment manager, portfolio characteristics shown are as of the most recent date available.

Price to Earnings Ratio - The ratio of a company's share price to its per-share earnings

Private Equity Quartile Ranks - Private Equity quartile ranks are generated using vintage year peer group data provided by Thomson Reuters, and are based on each fund's annualized, since inception internal rate of return (IRR). Three Private Equity peer groups are available via Thomson Reuters: Buyout, Venture, and All Private Equity. Ranks are available quarterly, at a one-quarter lag.

Return - Compounded rate of return for the period.

% Return - The time-weighted rate of return of a portfolio for a given period.

**R-Squared** - The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio's performance to the appropriate benchmark.

Risk Free Benchmark – ICE BofAML 3 Mo US T-Bill Index unless specified otherwise.

**RVK Liquidity Rating** - A qualitative method for determining the relative amount of liquidity in a portfolio. The characteristics considered when determining relative liquidity include trading volume, gates for redemption, leverage, nature of transactions, and pricing mechanisms. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating.

Asset Class	<b>RVK Liquidity Rating</b>	Asset Class	<b>RVK Liquidity Rating</b>
Liquid Investments		Less Liquid Investments	
T-Bills and Treasurys	100	Fixed Income Plus Sector	50
Cash Equivalents	98	Bank Loans	50
TIPS	95	Stable Value (Plan Sponsor Directed)	50
US Large Cap Equity	95	Absolute Return Strategies	35
Diversified Real Return	93	5	
Stable Value (Participant Directed)	91		
Non-US Large Cap Equity	90	Not Liquid Investments	
Global Tactical Asset Allocation	88	Core Real Estate	25
US Small Cap Equity	85	Core Plus Real Estate	15
REITS	85	Non-Core Real Estate	5
Non-US Small Cap Equity	85	Private Equity Funds of Funds	5
Emerging Markets Equity	85		
Core Fixed Income	85		
Core Plus Fixed Income	80		

Sector Allocation - Negative fixed income sector allocation reflects manager's use of derivatives, short selling, or interest rate swaps.

Sharpe Ratio - Represents the excess rate of return over the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise), divided by the standard deviation of the excess return to the risk free asset. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.

Simple Alpha - The difference between the manager's return and the benchmark's return.

**Spread Duration** - The approximate percentage change in a bond's price for a 100 basis point change in its spread over a Treasury of the same maturity.

Standard Deviation - A statistical measure of the range of a portfolio's performance. The variability of a return around its average return over a specified time period.

Time Period Abbreviations - QTD - Quarter-to-Date. CYTD - Calendar Year-to-Date. FYTD - Fiscal Year-to-Date. YOY - Year Over Year.

Thematic Classification - Represents dedicated manager allocations; as such, thematic allocations are approximations. RVK categorizes the following asset classes as Alpha, Capital Appreciation, Capital Preservation, and Inflation:

<u>Alpha</u> Absolute Return Strategies Currency Overlay

- Capital Appreciation Public Equity Private Equity Preferred Securities High Yield Convertible Fixed Income TALF Funds Distressed Debt Emerging Market Fixed Income Value Added Real Estate Opportunistic Real Estate
- Capital Preservation Core Fixed Income CMBS Fixed Income Asset Backed Fixed Income Domestic Core Plus Fixed Income Mortgage Backed Fixed Income International Developed Fixed Income Cash Equivalents Stable Value
- Inflation TIPS Bank Loans Core Real Estate Real Return Inflation Hedges REITS Commodities

**Total Fund Attribution** – The Investment Decision Process (IDP) model provides an approach to evaluating investment performance that applies to all asset classes and investment styles. The IDP model is based on a top-down hierarchy framework of investment decisions, with each decision contributing to the overall profit or loss. The IDP approach starts from the strategic asset allocation and follows the flow of the investments down to the manager's skill.

Strategic Asset Allocation (SAA) – The percentage return gained or lost from the long-term strategic asset allocation decision, the most significant determinant of long-term performance. SAA is the product of the target asset allocation multiplied by the corresponding benchmark returns. Tactical Asset Allocation (TAA) – The percentage return gained or lost from not having been precisely allocated at the target asset allocation mix, whether by deviations that are tactical in nature or a by-product of moving towards the target mix. TAA is the product of the actual asset allocation multiplied by the broad asset class benchmarks, less the SAA.

Style Selection (SS) – The percentage return gained or lost from intentional style biases within each asset class (e.g. value rather than core or overweight to emerging markets relative to benchmark). SS is the product of the actual manager allocation within each asset class multiplied by their specific benchmark, less TAA.

Manager's Skill (MS) – The percentage return gained or lost from manager value added relative to their specific benchmark. MS is the product of the actual manager allocation multiplied by their achieved excess return.

Total Fund Beta - Total Fund Beta is calculated using the S&P 500 as the benchmark. It represents a measure of the sensitivity of the total fund to movements in the S&P 500 and is a measure of the Total Fund's non-diversifiable or systematic risk.

Tracking Error - A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.

**Treynor Ratio** - Similar to Sharpe ratio, but focuses on beta rather than excess risk (standard deviation). Treynor ratio represents the excess rate of return over the risk-free rate (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) divided by the beta. The result is the absolute rate of return per unit of risk. The higher the value, the better historical risk-adjusted performance.

Unit Value - The dollar value of a portfolio, assuming an initial nominal investment of \$100, growing at the compounded rate of %Return for a given period.

**Up Market Capture** - Up market by definition is positive benchmark return and up market capture represents the ratio in % terms of the average portfolios return over the benchmark during the up market period. The higher the value of the up market capture the better the product's performance.

Yield to Maturity - The rate of return achieved on a bond or other fixed income security assuming the security is bought and held to maturity and that the coupon interest paid over the life of the bond will be reinvested at the same rate of return. The 30-Day SEC Yield is similar to the Yield to Maturity and is reported for mutual funds.

Yield to Worst - The bond yield calculated by using the worst possible yield taking into consideration all call, put, and optional sink dates.

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