Quarterly Investment Performance Analysis

City of Jacksonville Employees' Retirement System

Period Ended: March 31, 2023



2022 Greenwich Quality Leader Award

RVK is 1 of 3 firms in the Overall U.S. Investment Consulting "large consultants" category to receive a 2022 *Coalition* Greenwich Quality Leader award. We are proud to be the only firm in this category to receive recognition for a 6th consecutive year. Coalition Greenwich issued the award on April 25, 2023, based on their February through November 2022 study. No direct or indirect compensation has been paid by RVK in connection with obtaining or using this award.



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!



- Usefulness of Written Investment Performance Reviews
- · Responsiveness and Prompt Follow-up on Client Requests
- Reasonable Fees Relative to Value Delivered

Please refer to the following URL to learn more:

https://www.greenwich.com/asset-management/investment-consultants-support-us-asset-owners-volatile-markets



Table of Contents

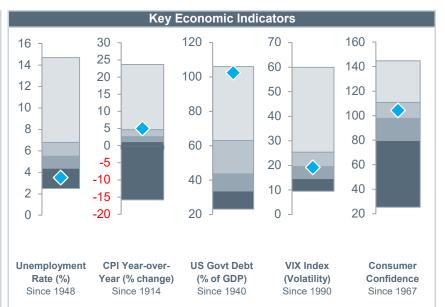
1	Capital Markets Review	Page 4
2	Total Fund	Page 12
3	Composite Profiles	Page 33
4	Investment Manager Profiles	Page 49
5	Addendum & Glossary	Page 72

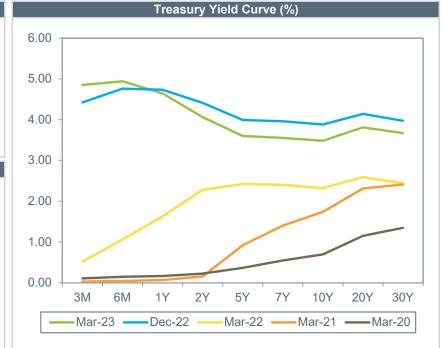
Capital Markets Review

First Quarter Economic Environment

During Q1, both defensive and risk assets generally provided positive returns, following a difficult environment in 2022 characterized by geopolitical risk and rising interest rates. Although, capital markets continued to experience bouts of volatility. Despite this volatility, broad equity market indexes finished Q1 in positive territory. The broad bond market delivered positive returns in Q1 as market participants changed expectations on future interest rate moves from pricing in rate hikes to discounting rate pauses, or in some circumstances, cuts. Internationally, moderate winter temperatures helped to ease energy price inflation in Europe, but the uncertainty around supply shortages persisted due to the ongoing war in Ukraine. The FOMC decided to increase the federal funds rate in Q1 to a target range between 4.75% - 5.00%, representing a second straight monthly increase of 0.25% after a string of 0.50% to 0.75% increases. The FOMC's actions demonstrated continued focus on combating inflation, although FOMC data indicated that most officials expect only one more rate hike in 2023. The most recent data release indicated that Headline CPI for March came in slightly below average expectations, with estimated year-over-year inflation of 5.00%. Recessionary risks remained a concern, and recent FOMC minutes indicated that members thought it was increasingly likely that the US will enter a recession later in 2023 due to banking sector stresses. The IMF revised its global GDP growth forecast at the end of the quarter to 2.80%, a decline from its January 2023 forecast of 2.90%.

Economic Indicators	Mar-23	Dec-22	Mar-22	Mar-20	20 Yr
Federal Funds Rate (%)	4.83 🔺	4.33	0.33	0.08	1.34
Breakeven Infl 5 Yr (%)	2.47 🔺	2.38	3.43	0.53	1.93
Breakeven Infl 10 Yr (%)	2.33 🔺	2.30	2.83	0.93	2.09
CPI YoY (Headline) (%)	5.0 🔻	6.5	8.5	1.5	2.5
Unemployment Rate (%)	3.5 —	3.5	3.6	4.4	6.0
Real GDP YoY (%)	1.6 🔺	0.9	3.7	0.8	2.0
PMI - Manufacturing	46.3 🔻	48.4	57.1	49.1	53.6
USD Total Wtd Idx	119.48 🔻	121.40	115.35	122.55	103.40
WTI Crude Oil per Barrel (\$)	75.7 🔻	80.3	100.3	20.5	68.4
Gold Spot per Oz (\$)	1,979 🔺	1,824	1,937	1,577	1,179
Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	7.50	7.50	-7.73	11.19	12.24
Russell 2000	2.74	2.74	-11.61	4.71	8.04
MSCI EAFE (Net)	8.47	8.47	-1.38	3.52	5.00
MSCI EAFE SC (Net)	4.92	4.92	-9.83	0.87	5.86
MSCI Emg Mkts (Net)	3.96	3.96	-10.70	-0.91	2.00
Bloomberg US Agg Bond	2.96	2.96	-4.78	0.90	1.36
ICE BofAML 3 Mo US T-Bill	1.07	1.07	2.50	1.41	0.87
NCREIF ODCE (Gross)	-3.16	-3.16	-3.07	7.52	9.45
FTSE NAREIT Eq REIT (TR)	2.68	2.68	-19.19	6.02	5.97
HFRI FOF Comp	0.71	0.71	-1.94	3.10	3.24
Bloomberg Cmdty (TR)	-5.36	-5.36	-12.49	5.36	-1.72

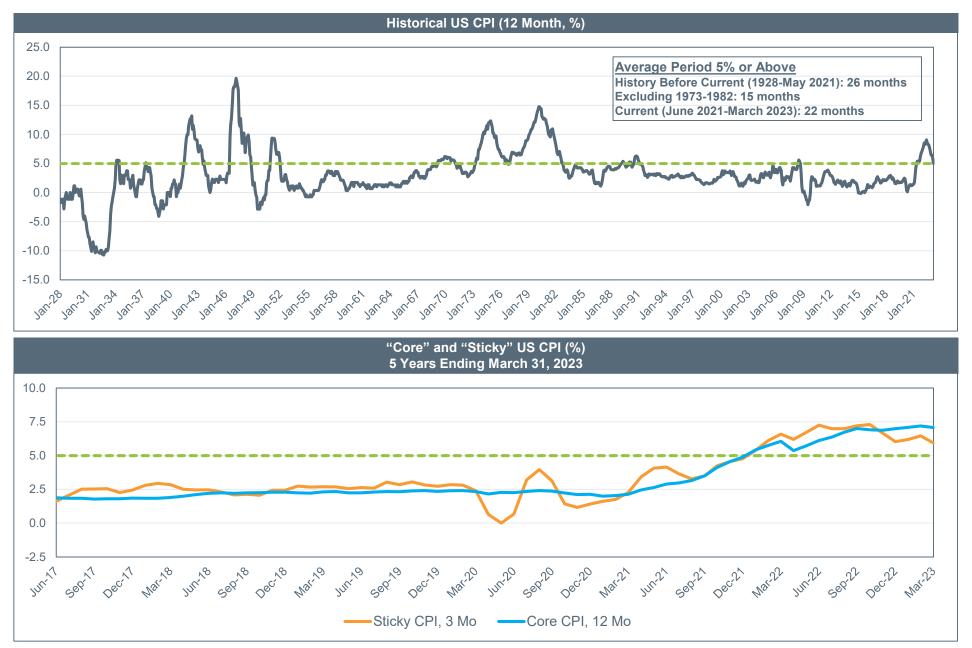






Current Inflation in Context

As of March 31, 2023



As of March 31, 2023. Sources: US Bureau of Labor Statistics, Federal Reserve Bank of Cleveland, and Federal Reserve Bank of Atlanta. Core CPI is represented by the Revised FRB Cleveland Trimmed Mean, 12-month. Sticky CPI is represented by the FRB Atlanta Sticky-Price Index, 3-month.



First Quarter Review

Broad Market

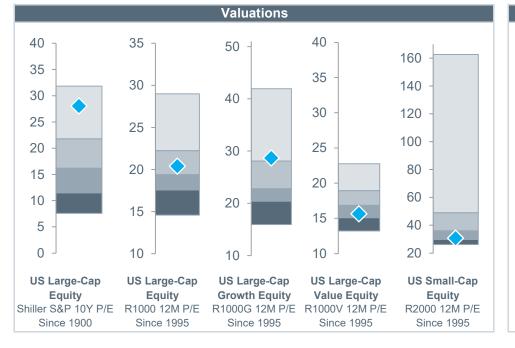
US equity markets performed well in Q1 overall, despite market turmoil caused by the banking sector in March and uncertainty regarding the Fed's path for short-term interest rates. The Russell 1000 Index was up 7.5%, while the Russell 2000 Index was up 2.7%. At the beginning of Q1, US stocks were buoyed by investor optimism after economic data indicated that inflation continued to cool, leading to expectations that the Fed's rate hiking cycle could end soon. However, the remainder of Q1 saw significant volatility due to both bank failures and weakening earnings.

Market Cap

Active large- and mid-cap managers across all style groups struggled to outpace their respective benchmarks in Q1. Small-cap managers performed well, with value-oriented managers having a better success rate than core and growth managers.

Style and Sector

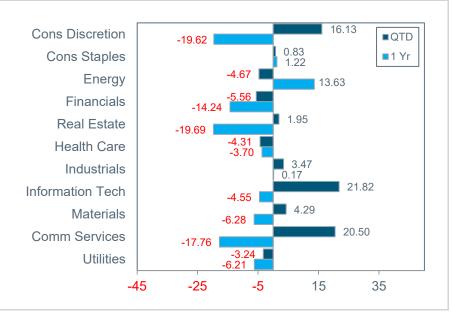
There was a strong rotation back into growth stocks across market capitalizations in Q1. The Russell 1000 Growth and Russell 2000 Growth indexes exceeded their value counterparts by 13.4% and 6.7%, respectively. Information technology and communication services were the best performing sectors while energy, healthcare, financials, and utilities were the largest contractors.



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, 2023

First Quarter Review

Developed Markets

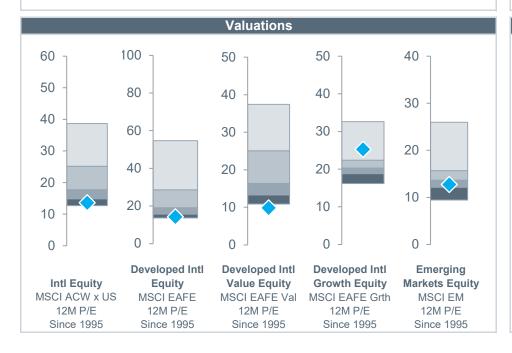
Q1 represented another strong showing for developed international equity markets, with the MSCI EAFE returning 8.5%, which outperformed both US as well as emerging markets. Growth stocks outperformed value stocks during the quarter, but they still lagged when measured over the trailing three-year period. Small-cap stocks underperformed large-cap stocks. Active management was broadly additive during the quarter.

Emerging Markets

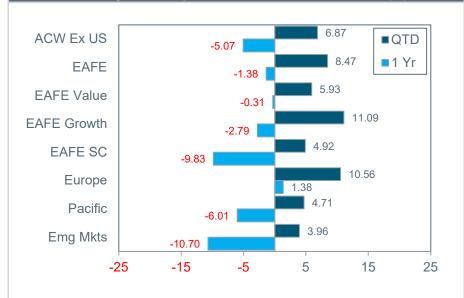
Although concerns about bank stability began in the US, they soon spread to Europe. After turmoil at Swiss bank Credit Suisse, UBS stepped in at the end of March to buy the troubled firm for \$3.25 billion, averting a major failure.

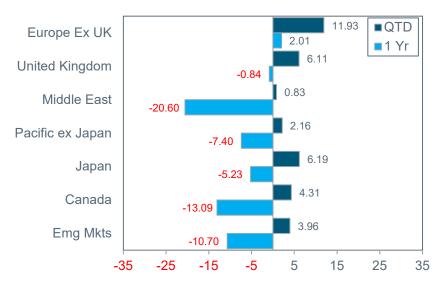
Market Cap & Style

As noted above, emerging markets continued to lag developed markets during Q1 with the MSCI Emerging Market Index returning 4.0%.



MSCI Style and Capitalization Market Performance (%)





MSCI Region Performance (%)

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

As of March 31, 2023

2.96

3.01

3.34

1.70

3.50

2.09

2.53

1.86

3.57

3.11

2.12

0.37

First Quarter Review

Broad Market

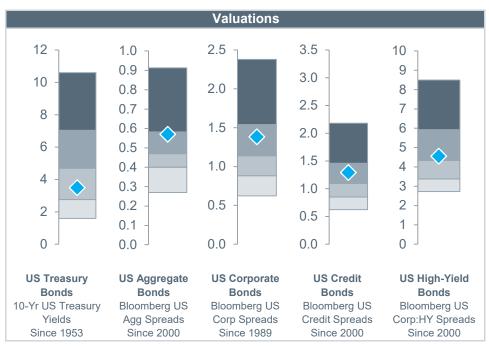
The decline in yields across Treasury notes and bonds produced a tailwind for fixed income markets, as the Bloomberg US Aggregate Bond Index experienced its best quarter in three years, returning 3.0% in Q1. However, volatility from 2022 continued into the new year as the Fed appeared to maintain its focus on fighting inflation. After initially declining in January, intermediate and long-term Treasury yields rose in February before falling again in March.

Credit Market

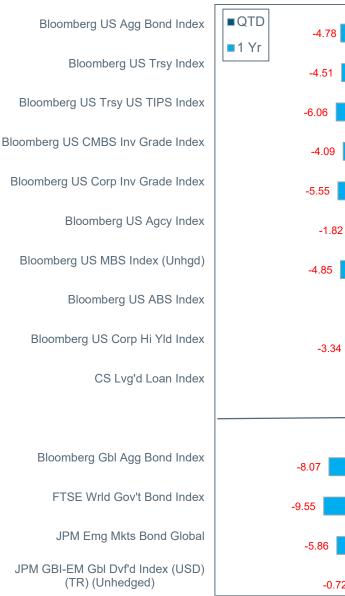
Corporate credit rallied to start the year amid expectations for a more dovish Fed. The optimism proved to be short-lived, however, as the banking crisis pushed spreads wider again in March. The Bloomberg US Credit Index returned 3.5% in Q1, lagging the Bloomberg US High Yield Index return of 3.6%.

Emerging Market Debt

Emerging market debt added to its recent rally, with the JPMorgan EMBI Global Diversified Index returning 1.9% in Q1, benefitting from the decline in Treasury yields. Despite a resurgence in February, the US dollar weakened over the quarter vs. emerging market currencies, and the JPMorgan GBI-EM Global Diversified Index ended the quarter up 5.2%.

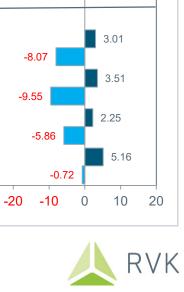


Fixed Income Performance (%)



-40

-30



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

During Q1, hedge funds broadly delivered positive results across most peer groups. Led by strong conditions for long/short equity and fixed income trading, the HFRI Fund-Weighted Composite Index delivered a quarterly return of 1.3%. Macro-oriented strategies, one of the top performing peer groups in 2022, widely struggled in Q1, driven by shifting momentum across interest rate and commodity trends that provided strong tailwinds in recent quarters. Although there were significant fluctuations throughout, overall alpha was broadly flat for the quarter, with longs performing above global indices as shorts struggled.

General Market - Global Tactical Asset Allocation (GTAA)

Global Tactical Asset Allocation (GTAA) strategies that RVK follows closely generally posted positive returns during Q1 with moderate dispersion. Almost all active managers with significant diversification underperformed a US centric blend of 60% equity and 40% fixed income during the quarter, which favored larger market cap companies globally.

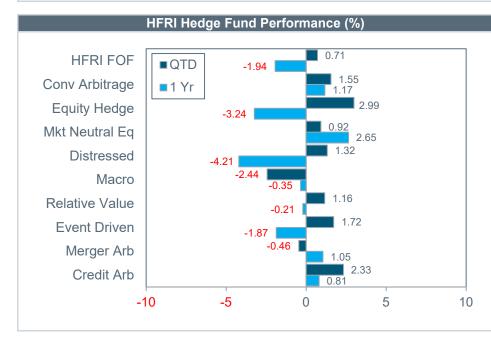
First Quarter Review - Real Assets

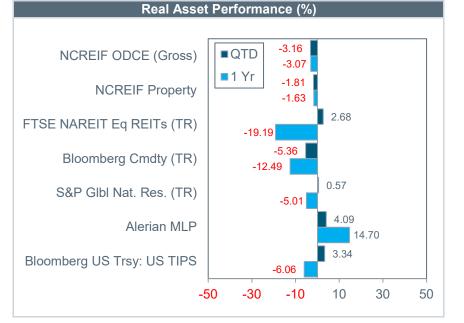
General Market - Diversified Inflation Strategies (DIS)

Diversified Inflation Strategy (DIS) managers tracked closely by RVK generally underperformed a US-centric blend of 60% equity and 40% fixed income over the quarter. Managers with larger exposures to TIPS and energy commodities, lagged peers most significantly in a quarter where strong equity performance on a global basis outperformed nearly all inflation sensitive asset classes.

General Market - Real Estate

Core private real estate returned -3.2% in Q1 (gross of fees), as reported by the NCREIF ODCE Index. The total return comprised of 0.8% income and -4.0% price appreciation. Income returns continue to trend at the lower end of historical levels, while price appreciation continues to trend negatively. Investors of publicly traded real estate outperformed private market, delivering a Q1 total return of 1.5%, as measured by FTSE NAREIT All REIT Index.







	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD
Best	78.51	27.94	22.49	20.00	38.82	30.14	15.02	21.31	37.28	8.35	31.49	19.96	43.24	16.09	8.47
Î	58.21	26.85	15.99	18.23	32.39	19.31	9.59	17.13	33.01	1.87	26.00	18.40	28.71	7.47	7.50
	46.78	22.04	13.56	18.06	29.30	13.69	3.20	11.96	25.03	0.01	25.53	18.31	27.11	1.46	5.76
	31.78	18.88	8.29	17.32	22.78	12.50	1.38	11.77	21.83	-1.26	24.96	16.12	22.17	-5.31	4.92
	28.01	16.83	7.84	16.35	13.94	5.97	0.55	11.19	14.65	-2.08	22.01	12.34	14.82	-11.19	3.96
	27.17	16.36	4.98	16.00	8.96	4.89	0.05	8.77	10.71	-4.02	19.59	10.99	11.26	-11.85	3.57
	26.46	15.12	2.11	15.81	7.44	3.64	-0.27	8.52	7.77	-4.38	18.42	10.88	10.10	-13.01	3.34
	18.91	15.06	0.10	10.94	2.47	3.37	-0.81	6.67	7.62	-4.62	14.32	7.82	6.17	-14.45	2.96
	11.47	10.16	-4.18	8.78	0.07	2.45	-1.44	4.68	7.50	-4.68	8.72	7.51	5.96	-18.11	2.74
	11.41	7.75	-5.72	6.98	-2.02	0.04	-3.30	2.65	5.23	-11.01	8.43	7.11	5.28	-20.09	2.68
	5.93	6.54	-12.14	4.79	-2.60	-2.19	-4.41	2.18	3.54	-11.25	8.39	1.19	0.05	-20.44	1.57
	1.92	6.31	-13.32	4.21	-8.61	-4.90	-4.47	1.00	3.01		7.69	0.67	-1.55	-21.39	1.07
Ļ	0.21	5.70	-15.94	0.11	-8.83	-4.95	-14.92	0.51	1.70	-14.57	5.34	-3.12	-2.52	-24.37	-3.16
Worst	-29.76	0.13	-18.42	-1.06	-9.52	-17.01	-24.66	0.33	0.86	-17.89	2.28	-8.00	-2.54	-27.09	-5.36
S&P 50 US Larg Cap		mall (Net)		C (Net) -	MSCI EM (Net) - Int'l Emg Mkts	Bloombrg US Agg Bond - Fl	Bloombrg US Corp Hi Yield - Fl	Bloombrg US Trsy U TIPS - FI	S Credit I	ov OD .ng (Gros	CE NAR	EIT Eq (EITs I	FRI FOF Comp ndex - 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

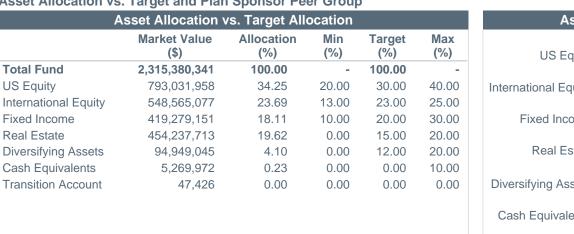
Page 12

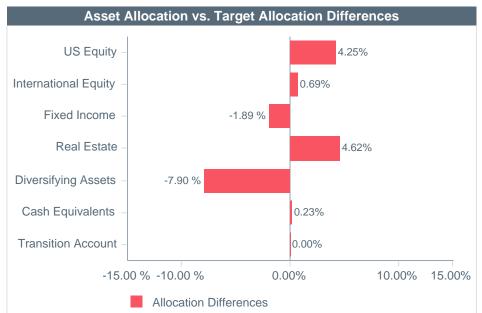
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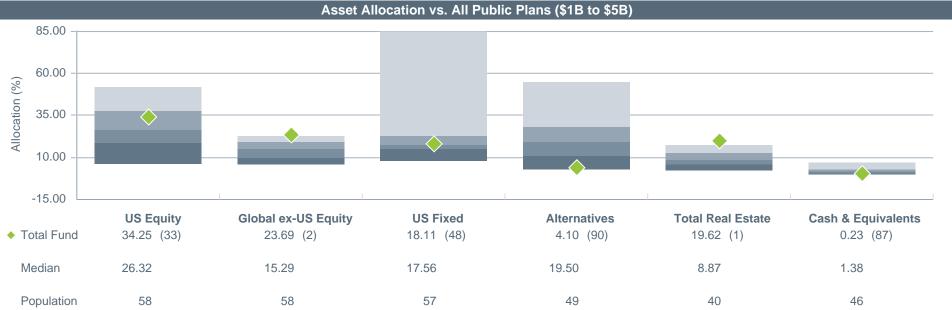
	Allocation		Performance (%)		Allocation		Performance (%)
	Market Value (\$)	%	QTD		Market Value (\$)	%	QTD
US Equity	793,031,958	34.25	10.69	Real Estate	454,237,713	19.62	-3.28
Eagle Capital Large Cap Value (SA)	200,270,956	8.65	11.73	Harrison Street Core Property (CF)	133,607,429	5.77	-0.72
Vellon Large Cap Core Index (CF)	209,099,371	9.03	7.44	PGIM Real Estate PRISA II (CF)	74,351,019	3.21	-6.42
oomis Sayles Large Cap Growth (CF)	180,971,139	7.82	21.29	Principal US Property (CF)	154,302,133	6.66	-3.17
Kayne Anderson US SMID Value (SA)	66,464,774	2.87	4.19	UBS Trumbull Property (CF)	74,474,698	3.22	-5.39
Systematic Financial US SMID Value (SA)	69,185,912	2.99	2.29	Vanguard RE Idx;ETF (VNQ)	1,154,944	0.05	1.65
Pinnacle Associates US SMID Cap Growth (SA) 67,039,806	2.90	8.43	Abacus Multi-Family Partners Fund VI (CF) 947,352	0.04	0.00
				H.I.G. Realty Fund IV (CF)	15,275,231	0.66	0.00
nternational Equity	548,565,077	23.69	9.14	Bell Value-Add Fund VII LP (CF)	124,906	0.01	N/A
Silchester International Value (CF)	266,900,457	11.53	7.43				
Baillie Gifford International Growth (BGEFX)	160,327,061	6.92	13.28	Diversifying Assets	94,949,045	4.10	3.56
Acadian Emerging Markets (CF)	121,337,558	5.24	7.73	Hancock Timberland (SA)	824,082	0.04	0.24
				Adams Street Private Equity (SA)	58,549,719	2.53	5.59
Fixed Income	419,279,151	18.11	2.90	Hamilton Lane Private Credit (SA)	35,575,244	1.54	0.74
Baird Core Fixed Income (SA)	208,353,605	9.00	3.36				
Loomis Sayles Multisector Full Discretion (Cl	F) 106,394,925	4.60	3.42	Dreyfus Gvt Csh Mgt;Inst (DGCXX)	5,269,972	0.23	1.10
Schroder Flexible Secured Income Fund	104,530,622	4.51	1.49	Transition Account	47,426	0.00	N/A
Be	Sch	edule o	of Investabl	e Assets (Total Assets)	Ending		
Marke	et Value (\$)		h Flow (\$)		arket Value (\$)		Return
CYTD 2,18	8,723,757	4,	105,883	122,550,701	2,315,380,341		5.60

Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. During 03/2023, Bell Value-Add Fund VII LP was incepted and issued its first capital call.









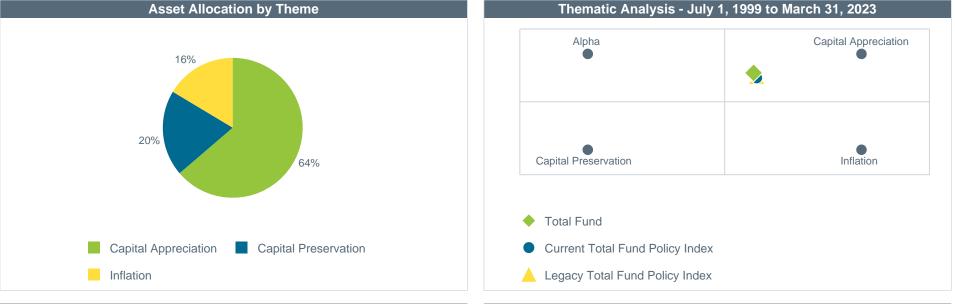
Allocations shown may not sum up to 100% exactly due to rounding. Parentheses contain percentile ranks.

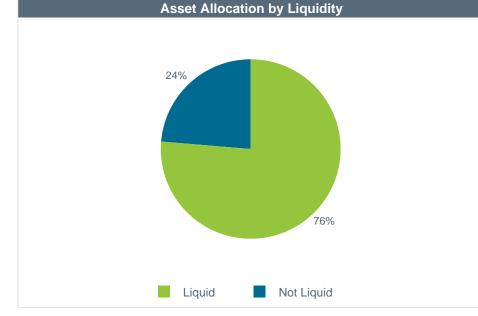




Performance shown is gross of fees. Parentheses contain percentile ranks. Fiscal year for the COJ ends 09/30.







		Correlation Mat	rix - 10 Years	
	Α	В	С	D
А	1.00			
В	0.52	1.00		
С	-0.14	0.05	1.00	
D	0.46	0.78	0.15	1.00
A B C D	=	HFRI EH: Equity Market N MSCI ACW Index (USD) (Bloomberg US Gov't Bond Real Return Custom Index	Gross) (Capital Appre Index (Capital Prese	

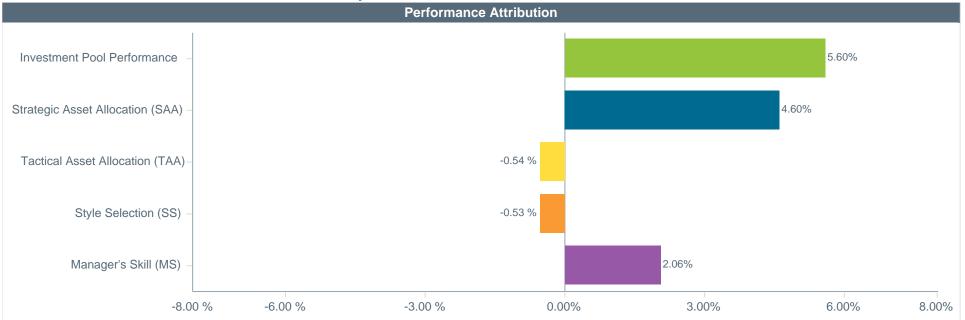
Asset Allocation by Theme is based on dedicated manager allocations; as such, thematic allocations are approximations. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating. Please see the Glossary for additional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

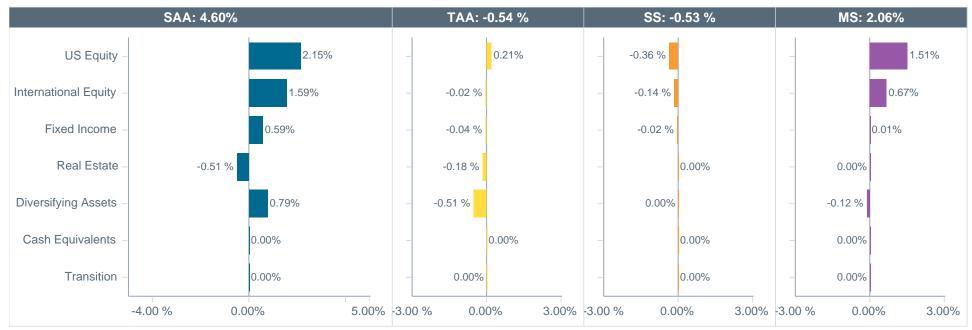


City of Jacksonville Employees' Retirement System

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

Quarter To Date Ending March 31, 2023





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



City of Jacksonville Employees' Retirement System **Historical Fiscal Year Returns**

FY 2011 FY 2012

Total Fund

FY 2013

otal Fund Urrent Total F Difference Otuarial Rate of Difference 30.00	und Policy Index	0.77 2.89 -2.12 8.25	18.32 16.83 1.49	17.09 13.64	11.54	-2.13	9.43	14.83	7.55	0.85	6.04	20.99	-15.13	11.39
Difference stuarial Rate o Difference		-2.12		13.64					1.55					
ctuarial Rate o Difference	of Return		1 /0		11.59	-1.89	10.39	11.35	7.83	3.09	2.34	22.78	-12.98	10.95
Difference	of Return	8 25		3.45	-0.05	-0.24	-0.96	3.48	-0.28	-2.24	3.70	-1.79	-2.15	0.44
			8.25	7.75	7.75	7.50	7.50	7.40	7.20	7.00	6.90	6.80	6.62	6.50
30.00 -		-7.48	10.07	9.34	3.79	-9.63	1.93	7.43	0.35	-6.15	-0.86	14.19	-21.75	4.89
24.00 -											22.78	3		
18.00	18.32 16.83		.64			1.	4.83							
12.00	8.25	8.25	7.75	7.75	9.4	10.39 13 7.50	7.40	7.55 7.83 7.20	7.0	10 4	5.90	6.80	11.3910	
6.00 0.00	2.89								3.09	6.04 2.34		0.80	6.62	6.50
0.00	.77			-2.13	-1.89				0.85					
-6.00														
-12.00												-15.13	98	
-18.00 -														

Performance shown is net of fees. Fiscal year for the COJ ends 09/30. The Fiscal Year Actuarial Rate of Return changed from 8.40% to 8.25% effective 10/01/2010, changed to 7.75% effective 10/01/2012, changed to 7.50% effective 10/01/2014, changed to 7.40% effective 10/01/2016, changed to 7.20% effective 10/01/2017, changed to 7.00% effective 10/01/2018, changed to 6.90% effective 10/01/2019, and then changed to 6.80% effective 10/01/2021. Please see the Addendum for custom index definitions.

FY 2014 FY 2015 FY 2016



FY 2023

Page 18

Current Total Fund Policy Index Actuarial Rate of Return

FY 2017 FY 2018 FY 2019

FY 2020

FY 2021

FY 2022

	Allocatio	on					Perfor	mance (%)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Total Fund	2,315,380,341	100.00	5.71	5.71	11.65	-3.59	10.78	5.40	7.48	7.28	6.40	07/01/1999
Current Total Fund Policy Index			4.60	4.60	10.95	-5.01	11.86	5.71	6.89	6.71	5.74	
Difference			1.11	1.11	0.70	1.42	-1.08	-0.31	0.59	0.57	0.66	
All Public Plans (\$1B to \$5B) (Custom PG) Median			3.86	3.86	9.13	-4.31	11.13	6.03	7.39	6.91	6.29	
Rank			2	2	16	34	57	67	41	35	35	
Total Equity	1,341,597,035	57.94	10.18	10.18	21.77	-5.12	15.99	6.96	10.12	9.53	6.59	07/01/1999
US Equity	793,031,958	34.25	10.81	10.81	18.95	-6.36	18.45	9.85	11.68	11.44	7.23	07/01/1999
US Equity Index			7.18	7.18	14.88	-8.58	18.48	10.45	11.99	11.73	7.01	
Difference			3.63	3.63	4.07	2.22	-0.03	-0.60	-0.31	-0.29	0.22	
IM U.S. Equity (SA+CF) Median			5.03	5.03	14.48	-7.30	18.97	9.09	11.24	10.89	8.78	
Rank			13	13	11	43	60	40	44	41	80	
International Equity	548,565,077	23.69	9.29	9.29	26.12	-3.52	12.00	2.41	7.54	6.16	5.91	07/01/1999
International Equity Index			6.87	6.87	22.13	-5.07	11.80	2.47	5.86	4.17	3.85	
Difference			2.42	2.42	3.99	1.55	0.20	-0.06	1.68	1.99	2.06	
IM International Equity (SA+CF) Median			7.96	7.96	24.65	-3.46	13.43	3.62	6.84	6.00	6.13	
Rank			30	30	41	51	73	72	37	46	58	
Fixed Income	419,279,151	18.11	2.97	2.97	4.64	-5.91	-1.55	0.16	1.23	1.17	4.41	07/01/1999
Fixed Income Index			2.93	2.93	5.24	-4.61	-2.02	1.05	0.98	1.44	4.04	
Difference			0.04	0.04	-0.60	-1.30	0.47	-0.89	0.25	-0.27	0.37	
IM Global Fixed Income (SA+CF) Median			3.16	3.16	7.87	-5.54	1.86	1.70	2.58	2.06	5.66	
Rank			65	65	85	53	80	66	69	57	61	
Real Estate	454,237,713	19.62	-3.16	-3.16	-4.38	3.70	7.86	7.25	7.52	8.74	6.63	12/01/2005
Real Estate Index			-3.36	-3.36	-8.35	-3.88	7.47	6.57	6.76	8.47	6.33	
Difference			0.20	0.20	3.97	7.58	0.39	0.68	0.76	0.27	0.30	
Core Real Estate	437,890,223	18.91	-3.26	-3.26	-4.61	3.06	7.64	7.11	7.43	8.68	6.59	12/01/2005
NCREIF ODCE Index (AWA) (Gross)			-3.17	-3.17	-7.98	-3.09	8.40	7.51	7.71	9.45	7.31	
Difference			-0.09	-0.09	3.37	6.15	-0.76	-0.40	-0.28	-0.77	-0.72	
Non-Core Real Estate	16,347,489	0.71	0.00	0.00	3.97	71.78	N/A	N/A	N/A	N/A	54.16	01/01/2022
NCREIF ODCE Index (AWA)(Gross) +2%			-2.69	-2.69	-7.06	-1.15	10.57	9.66	9.86	11.64	5.30	
Difference			2.69	2.69	11.03	72.93	N/A	N/A	N/A	N/A	48.86	
Diversifying Assets	94,949,045	4.10	3.63	3.63	2.29	16.64	32.80	11.73	9.92	6.73	8.83	03/01/2011
Diversifying Assets Index			6.56	6.56	15.18	-1.91	20.50	2.71	2.97	1.63	3.11	
Difference			-2.93	-2.93	-12.89	18.55	12.30	9.02	6.95	5.10	5.72	



	Allocation Performance (%)											
	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)	200,270,956	8.65	11.93	11.93	21.17	-7.82	17.89	9.40	12.34	12.04	10.45	02/01/2007
Russell 1000 Val Index			1.01	1.01	13.55	-5.91	17.93	7.50	9.02	9.13	6.41	
Difference			10.92	10.92	7.62	-1.91	-0.04	1.90	3.32	2.91	4.04	
IM U.S. Large Cap Value Equity (SA+CF) Median			0.85	0.85	14.30	-4.52	19.95	9.03	10.38	10.19	7.87	
Rank			2	2	5	86	77	40	14	13	3	
Mellon Large Cap Core Index (CF)	209,099,371	9.03	7.45	7.45	15.25	-8.39	18.53	N/A	N/A	N/A	10.37	05/01/2019
Russell 1000 Index			7.46	7.46	15.24	-8.39	18.55	10.87	12.23	12.01	10.40	
Difference			-0.01	-0.01	0.01	0.00	-0.02	N/A	N/A	N/A	-0.03	
IM U.S. Large Cap Core Equity (SA+CF) Median			6.36	6.36	14.97	-7.07	18.28	10.34	12.10	12.06	9.99	
Rank			27	27	45	74	45	N/A	N/A	N/A	37	
Loomis Sayles Large Cap Growth (CF)	180,971,139	7.82	21.41	21.41	29.23	-3.95	16.65	12.74	N/A	N/A	13.40	08/01/2017
Russell 1000 Grth Index			14.37	14.37	16.88	-10.90	18.58	13.66	15.01	14.59	14.37	
Difference			7.04	7.04	12.35	6.95	-1.93	-0.92	N/A	N/A	-0.97	
IM U.S. Large Cap Growth Equity (SA+CF) Median			12.78	12.78	16.65	-10.67	16.35	11.82	13.76	13.56	12.72	
Rank			1	1	2	7	43	32	N/A	N/A	33	
Kayne Anderson US SMID Value (SA)	66,464,774	2.87	4.33	4.33	10.56	-5.51	N/A	N/A	N/A	N/A	-5.42	03/01/2022
Russell 2500 Val Index			1.40	1.40	10.73	-10.53	21.80	5.61	7.97	7.72	-8.01	
Difference			2.93	2.93	-0.17	5.02	N/A	N/A	N/A	N/A	2.59	
IM U.S. SMID Cap Value Equity (SA+CF) Median			2.77	2.77	13.49	-5.32	23.63	7.42	9.59	9.54	-4.59	
Rank			24	24	86	54	N/A	N/A	N/A	N/A	60	
Systematic Financial US SMID Value (SA)	69,185,912	2.99	2.43	2.43	15.11	-5.17	N/A	N/A	N/A	N/A	-5.11	03/01/2022
Russell 2500 Val Index			1.40	1.40	10.73	-10.53	21.80	5.61	7.97	7.72	-8.01	
Difference			1.03	1.03	4.38	5.36	N/A	N/A	N/A	N/A	2.90	
IM U.S. SMID Cap Value Equity (SA+CF) Median			2.77	2.77	13.49	-5.32	23.63	7.42	9.59	9.54	-4.59	
Rank			57	57	35	48	N/A	N/A	N/A	N/A	54	
Pinnacle Associates US SMID Cap Growth (SA)	67,039,806	2.90	8.60	8.60	12.66	-12.89	19.64	9.48	11.95	11.26	12.92	03/01/2010
Russell 2500 Grth Index			6.54	6.54	11.57	-10.35	14.75	6.82	10.39	10.05	11.74	
Difference			2.06	2.06	1.09	-2.54	4.89	2.66	1.56	1.21	1.18	
IM U.S. SMID Cap Growth Equity (SA+CF) Median			7.99	7.99	13.45	-11.52	17.50	10.03	12.64	11.26	13.33	
Rank			46	46	57	71	32	59	66	50	66	



	Allocatio	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)	266,900,457	11.53	7.58	7.58	27.82	1.63	14.80	3.37	7.06	7.10	9.12	06/01/2009
MSCI EAFE Val Index (USD) (Net)			5.93	5.93	26.74	-0.31	14.58	1.75	5.13	3.75	4.88	
Difference			1.65	1.65	1.08	1.94	0.22	1.62	1.93	3.35	4.24	
IM EAFE Value (SA+CF) Median			9.25	9.25	28.19	0.57	14.02	3.27	6.03	5.40	7.03	
Rank			68	68	59	43	42	48	30	11	10	
Baillie Gifford International Growth (BGEFX)	160,327,061	6.92	13.40	13.40	28.40	-4.55	9.07	3.93	10.32	8.28	9.54	06/01/2009
Baillie Gifford Index			8.59	8.59	22.59	-6.35	9.49	3.36	5.94	5.29	6.86	
Difference			4.81	4.81	5.81	1.80	-0.42	0.57	4.38	2.99	2.68	
Baillie Gifford Spliced Index			6.87	6.87	22.13	-5.07	11.80	2.94	5.78	4.70	6.02	
Difference			6.53	6.53	6.27	0.52	-2.73	0.99	4.54	3.58	3.52	
IM ACWI Ex US Growth (SA+CF) Median			9.86	9.86	25.37	-4.39	12.47	4.55	7.74	6.42	8.19	
Rank			7	7	9	54	90	70	8	16	12	
Acadian Emerging Markets (CF)	121,337,558	5.24	7.87	7.87	19.79	-12.07	11.67	-0.17	6.15	2.59	2.94	02/01/2011
MSCI Emg Mkts Index (USD) (Net)			3.96	3.96	14.04	-10.70	7.83	-0.91	4.91	2.00	1.43	
Difference			3.91	3.91	5.75	-1.37	3.84	0.74	1.24	0.59	1.51	
IM Emerging Markets Equity (SA+CF) Median			4.94	4.94	15.66	-8.78	10.01	0.69	6.07	3.30	2.88	
Rank			11	11	17	81	39	64	48	72	49	
Fixed Income												
Baird Core Fixed Income (SA)	208,353,605	9.00	3.41	3.41	5.35	-4.42	N/A	N/A	N/A	N/A	-4.60	03/01/2021
Bloomberg US Agg Bond Index			2.96	2.96	4.89	-4.78	-2.77	0.90	0.88	1.36	-4.87	
Difference			0.45	0.45	0.46	0.36	N/A	N/A	N/A	N/A	0.27	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			3.16	3.16	5.04	-4.67	-1.82	1.34	1.39	1.78	-4.58	
Rank			15	15	24	30	N/A	N/A	N/A	N/A	51	
Loomis Sayles Multisector Full Discretion (CF)	106,394,925	4.60	3.42	3.42	6.17	-3.90	2.54	2.95	4.41	3.73	5.77	10/01/2007
Bloomberg Gbl Agg Bond Index			3.01	3.01	7.69	-8.07	-3.43	-1.34	-0.27	0.07	1.84	
Difference			0.41	0.41	-1.52	4.17	5.97	4.29	4.68	3.66	3.93	
IM Global Fixed Income (SA+CF) Median			3.16	3.16	7.87	-5.54	1.86	1.70	2.58	2.06	2.98	
Rank			33	33	73	34	46	26	28	23	8	
Schroder Flexible Secured Income Fund	104,530,622	4.51	1.64	1.64	1.78	N/A	N/A	N/A	N/A	N/A	1.78	10/01/2022
1 Month LIBOR+1.75%			1.56	1.56	2.91	4.47	2.78	3.25	3.09	2.75	2.91	
Difference			0.08	0.08	-1.13	N/A	N/A	N/A	N/A	N/A	-1.13	
1 Month LIBOR+5%			2.36	2.36	4.54	7.81	6.06	6.55	6.38	6.03	4.54	
Difference			-0.72	-0.72	-2.76	N/A	N/A	N/A	N/A	N/A	-2.76	



	Allocation	n					Perfor	mance (%))			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Estate												
Harrison Street Core Property (CF)	133,607,429	5.77	-0.72	-0.72	1.43	10.39	7.73	8.13	8.48	N/A	8.18	11/01/2015
NCREIF ODCE Index (AWA) (Gross)			-3.17	-3.17	-7.98	-3.09	8.40	7.51	7.71	9.45	8.05	
Difference			2.45	2.45	9.41	13.48	-0.67	0.62	0.77	N/A	0.13	
PGIM Real Estate PRISA II (CF)	74,351,019	3.21	-6.26	-6.26	-5.22	6.52	9.09	9.09	9.00	N/A	9.57	01/01/2015
NCREIF ODCE Index (AWA) (Gross)			-3.17	-3.17	-7.98	-3.09	8.40	7.51	7.71	9.45	8.61	
Difference			-3.09	-3.09	2.76	9.61	0.69	1.58	1.29	N/A	0.96	
Principal US Property (CF)	154,302,133	6.66	-2.97	-2.97	-8.81	-5.22	8.39	7.93	8.41	N/A	9.66	01/01/2014
NCREIF ODCE Index (AWA) (Gross)			-3.17	-3.17	-7.98	-3.09	8.40	7.51	7.71	9.45	9.02	
Difference			0.20	0.20	-0.83	-2.13	-0.01	0.42	0.70	N/A	0.64	
UBS Trumbull Property (CF)	74,474,698	3.22	-5.20	-5.20	-5.18	6.32	5.86	4.14	4.84	6.88	6.01	12/01/2005
NCREIF ODCE Index (AWA) (Gross)			-3.17	-3.17	-7.98	-3.09	8.40	7.51	7.71	9.45	7.31	
Difference			-2.03	-2.03	2.80	9.41	-2.54	-3.37	-2.87	-2.57	-1.30	
Vanguard RE Idx;ETF (VNQ)	1,154,944	0.05	1.65	1.65	6.04	-20.15	9.79	5.78	3.78	5.65	10.89	12/01/2008
Custom REITs Index			1.83	1.83	6.26	-20.00	9.96	6.22	4.20	6.04	11.61	
Difference			-0.18	-0.18	-0.22	-0.15	-0.17	-0.44	-0.42	-0.39	-0.72	
Abacus Multi-Family Partners Fund VI (CF)	947,352	0.04	0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	0.00	10/01/2022
NCREIF ODCE Index (AWA) (Net) (Monthly)+2%			-2.90	-2.90	-7.46	-1.99	9.61	8.69	8.89	10.64	-7.46	
Difference			2.90	2.90	7.46	N/A	N/A	N/A	N/A	N/A	7.46	
H.I.G. Realty Fund IV (CF)	15,275,231	0.66	0.00	0.00	4.23	79.52	N/A	N/A	N/A	N/A	N/A	01/01/2022
NCREIF ODCE Index (AWA)(Gross) +2%			-2.69	-2.69	-7.06	-1.15	10.57	9.66	9.86	11.64	5.30	
Difference			2.69	2.69	11.29	80.67	N/A	N/A	N/A	N/A	N/A	
Bell Value-Add Fund VII LP (CF)	124,906	0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	04/01/2023
NCREIF ODCE Index (AWA) (Net) (Monthly)+2%			-2.90	-2.90	-7.46	-1.99	9.61	8.69	8.89	10.64	N/A	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	



	Allocation	1					Perfor	mance (%))			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Diversifying Assets												
Hancock Timberland (SA)	824,082	0.04	0.24	0.24	-5.43	52.69	26.06	17.25	14.59	11.22	7.19	10/01/2006
NCREIF Timberland Index			1.75	1.75	6.72	11.31	8.09	5.54	5.02	5.82	5.89	
Difference			-1.51	-1.51	-12.15	41.38	17.97	11.71	9.57	5.40	1.30	
Adams Street Private Equity (SA)	58,549,719	2.53	5.59	5.59	3.25	13.91	N/A	N/A	N/A	N/A	30.39	11/01/2020
S&P 500 Index+3%			8.29	8.29	17.35	-4.96	22.16	14.52	15.80	15.61	15.01	
Difference			-2.70	-2.70	-14.10	18.87	N/A	N/A	N/A	N/A	15.38	
Hamilton Lane Private Credit (SA)	35,575,244	1.54	0.92	0.92	1.44	5.39	N/A	N/A	N/A	N/A	4.83	04/01/2021
ICE BofAML GbI Hi Yld Index +2%			4.10	4.10	11.92	-2.49	6.72	3.65	6.08	5.39	-2.62	
Difference			-3.18	-3.18	-10.48	7.88	N/A	N/A	N/A	N/A	7.45	
Dreyfus Gvt Csh Mgt;Inst (DGCXX)	5,269,972	0.23	1.14	1.14	2.06	2.68	1.19	1.58	1.34	0.98	1.42	04/01/2001
FTSE 3 Mo T-Bill Index			1.12	1.12	2.01	2.61	0.95	1.40	1.20	0.85	1.35	
Difference			0.02	0.02	0.05	0.07	0.24	0.18	0.14	0.13	0.07	



	Allocatio	n					Perfor	mance (%	6)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Total Fund	2,315,380,341	100.00	5.60	5.60	11.39	-4.04	10.27	4.88	6.95	6.75	6.07	07/01/1999
Current Total Fund Policy Index			4.60	4.60	10.95	-5.01	11.86	5.71	6.89	6.71	5.74	
Difference			1.00	1.00	0.44	0.97	-1.59	-0.83	0.06	0.04	0.33	
Total Equity	1,341,597,035	57.94	10.05	10.05	21.46	-5.60	15.44	6.42	9.55	8.95	6.27	07/01/1999
US Equity	793,031,958	34.25	10.69	10.69	18.66	-6.81	17.93	9.34	11.14	10.88	6.92	07/01/1999
US Equity Index			7.18	7.18	14.88	-8.58	18.48	10.45	11.99	11.73	7.01	
Difference			3.51	3.51	3.78	1.77	-0.55	-1.11	-0.85	-0.85	-0.09	
International Equity	548,565,077	23.69	9.14	9.14	25.78	-4.04	11.39	1.84	6.95	5.56	5.57	07/01/1999
International Equity Index			6.87	6.87	22.13	-5.07	11.80	2.47	5.86	4.17	3.85	
Difference			2.27	2.27	3.65	1.03	-0.41	-0.63	1.09	1.39	1.72	
Fixed Income	419,279,151	18.11	2.90	2.90	4.47	-6.20	-1.82	-0.10	0.97	0.94	4.24	07/01/1999
Fixed Income Index			2.93	2.93	5.24	-4.61	-2.02	1.05	0.98	1.44	4.04	
Difference			-0.03	-0.03	-0.77	-1.59	0.20	-1.15	-0.01	-0.50	0.20	
Real Estate	454,237,713	19.62	-3.28	-3.28	-4.63	3.16	7.26	6.51	6.80	7.97	5.97	12/01/2005
Real Estate Index			-3.36	-3.36	-8.35	-3.88	7.47	6.57	6.76	8.47	6.33	
Difference			0.08	0.08	3.72	7.04	-0.21	-0.06	0.04	-0.50	-0.36	
Core Real Estate	437,890,223	18.91	-3.39	-3.39	-4.86	2.51	7.06	6.39	6.71	7.91	5.93	12/01/2005
NCREIF ODCE Index (AWA) (Net)			-3.38	-3.38	-8.37	-3.91	7.46	6.56	6.75	8.47	6.33	
Difference			-0.01	-0.01	3.51	6.42	-0.40	-0.17	-0.04	-0.56	-0.40	
Non-Core Real Estate	16,347,489	0.71	0.00	0.00	3.97	71.78	N/A	N/A	N/A	N/A	54.16	01/01/2022
NCREIF ODCE Index (AWA) (Net) (Monthly)+2%			-2.90	-2.90	-7.46	-1.99	9.61	8.69	8.89	10.64	4.40	
Difference			2.90	2.90	11.43	73.77	N/A	N/A	N/A	N/A	49.76	
Diversifying Assets	94,949,045	4.10	3.56	3.56	2.15	16.28	32.13	11.17	9.39	6.20	8.29	03/01/2011
Diversifying Assets Index			6.56	6.56	15.18	-1.91	20.50	2.71	2.97	1.63	3.11	
Difference			-3.00	-3.00	-13.03	18.19	11.63	8.46	6.42	4.57	5.18	



	Allocation				Performance (%)							
	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)	200,270,956	8.65	11.73	11.73	20.72	-8.52	17.02	8.58	11.50	11.18	9.74	02/01/2007
Russell 1000 Val Index			1.01	1.01	13.55	-5.91	17.93	7.50	9.02	9.13	6.41	
Difference			10.72	10.72	7.17	-2.61	-0.91	1.08	2.48	2.05	3.33	
Mellon Large Cap Core Index (CF)	209,099,371	9.03	7.44	7.44	15.24	-8.41	18.50	N/A	N/A	N/A	10.35	05/01/2019
Russell 1000 Index			7.46	7.46	15.24	-8.39	18.55	10.87	12.23	12.01	10.40	
Difference			-0.02	-0.02	0.00	-0.02	-0.05	N/A	N/A	N/A	-0.05	
Loomis Sayles Large Cap Growth (CF)	180,971,139	7.82	21.29	21.29	28.86	-4.59	15.98	12.15	N/A	N/A	12.60	07/01/2017
Russell 1000 Grth Index			14.37	14.37	16.88	-10.90	18.58	13.66	15.01	14.59	14.67	
Difference			6.92	6.92	11.98	6.31	-2.60	-1.51	N/A	N/A	-2.07	
Kayne Anderson US SMID Value (SA)	66,464,774	2.87	4.19	4.19	10.22	-5.99	N/A	N/A	N/A	N/A	-5.90	03/01/2022
Russell 2500 Val Index			1.40	1.40	10.73	-10.53	21.80	5.61	7.97	7.72	-8.01	
Difference			2.79	2.79	-0.51	4.54	N/A	N/A	N/A	N/A	2.11	
Systematic Financial US SMID Value (SA)	69,185,912	2.99	2.29	2.29	14.75	-5.70	N/A	N/A	N/A	N/A	-5.60	03/01/2022
Russell 2500 Val Index			1.40	1.40	10.73	-10.53	21.80	5.61	7.97	7.72	-8.01	
Difference			0.89	0.89	4.02	4.83	N/A	N/A	N/A	N/A	2.41	
Pinnacle Associates US SMID Cap Growth (SA)	67,039,806	2.90	8.43	8.43	12.29	-13.47	18.84	8.78	11.26	10.50	12.16	03/01/2010
Russell 2500 Grth Index			6.54	6.54	11.57	-10.35	14.75	6.82	10.39	10.05	11.74	
Difference			1.89	1.89	0.72	-3.12	4.09	1.96	0.87	0.45	0.42	



	Allocation					Perfor	mance (%	6)				
	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)	266,900,457	11.53	7.43	7.43	27.46	1.05	14.15	2.78	6.45	6.48	8.48	06/01/2009
MSCI EAFE Val Index (USD) (Net)			5.93	5.93	26.74	-0.31	14.58	1.75	5.13	3.75	4.88	
Difference			1.50	1.50	0.72	1.36	-0.43	1.03	1.32	2.73	3.60	
Baillie Gifford International Growth (BGEFX)	160,327,061	6.92	13.28	13.28	28.11	-5.00	8.55	3.41	9.76	7.72	9.11	06/01/2009
Baillie Gifford Index			8.59	8.59	22.59	-6.35	9.49	3.36	5.94	5.29	6.86	
Difference			4.69	4.69	5.52	1.35	-0.94	0.05	3.82	2.43	2.25	
Baillie Gifford Spliced Index			6.87	6.87	22.13	-5.07	11.80	2.94	5.78	4.70	6.02	
Difference			6.41	6.41	5.98	0.07	-3.25	0.47	3.98	3.02	3.09	
Acadian Emerging Markets (CF)	121,337,558	5.24	7.73	7.73	19.45	-12.58	11.03	-0.74	5.54	1.98	2.35	02/01/2011
MSCI Emg Mkts Index (USD) (Net)			3.96	3.96	14.04	-10.70	7.83	-0.91	4.91	2.00	1.43	
Difference			3.77	3.77	5.41	-1.88	3.20	0.17	0.63	-0.02	0.92	
Fixed Income												
Baird Core Fixed Income (SA)	208,353,605	9.00	3.36	3.36	5.23	-4.63	N/A	N/A	N/A	N/A	-4.78	03/01/2021
Bloomberg US Agg Bond Index			2.96	2.96	4.89	-4.78	-2.77	0.90	0.88	1.36	-4.87	
Difference			0.40	0.40	0.34	0.15	N/A	N/A	N/A	N/A	0.09	
Loomis Sayles Multisector Full Discretion (CF)	106,394,925	4.60	3.42	3.42	6.05	-4.17	2.20	2.59	4.03	3.31	5.42	10/01/2007
Bloomberg Gbl Agg Bond Index			3.01	3.01	7.69	-8.07	-3.43	-1.34	-0.27	0.07	1.84	
Difference			0.41	0.41	-1.64	3.90	5.63	3.93	4.30	3.24	3.58	
Schroder Flexible Secured Income Fund	104,530,622	4.51	1.49	1.49	1.48	N/A	N/A	N/A	N/A	N/A	1.48	10/01/2022
1 Month LIBOR+1.75%			1.56	1.56	2.91	4.47	2.78	3.25	3.09	2.75	2.91	
Difference			-0.07	-0.07	-1.43	N/A	N/A	N/A	N/A	N/A	-1.43	
1 Month LIBOR+5%			2.36	2.36	4.54	7.81	6.06	6.55	6.38	6.03	4.54	
Difference			-0.87	-0.87	-3.06	N/A	N/A	N/A	N/A	N/A	-3.06	

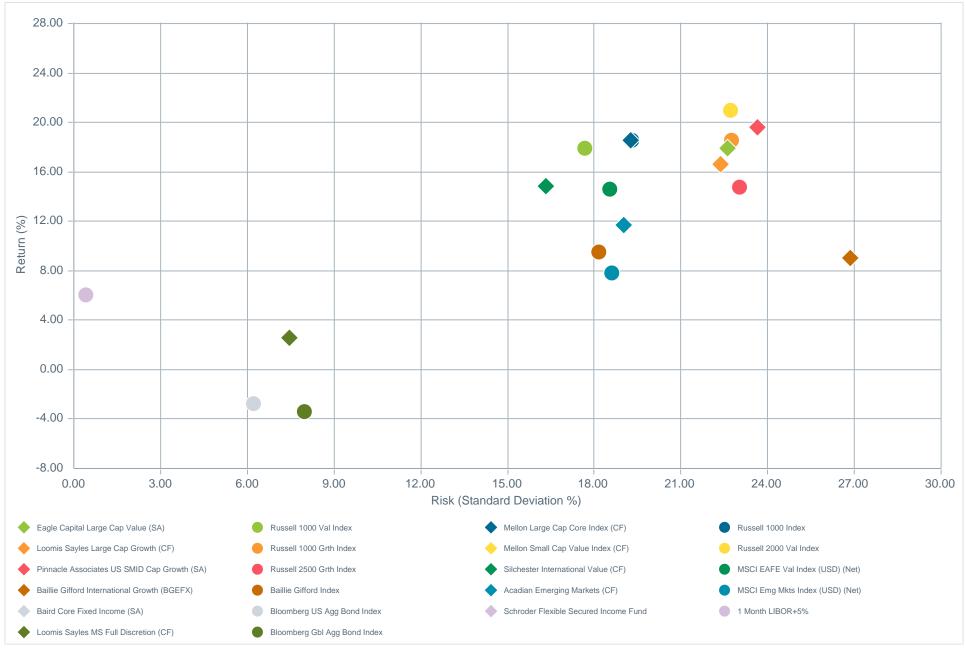


	Allocation					Performance (%)						
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Estate												
Harrison Street Core Property (CF)	133,607,429	5.77	-0.72	-0.72	1.43	10.39	7.55	7.64	8.13	N/A	7.85	11/01/2015
NCREIF ODCE Index (AWA) (Net)			-3.38	-3.38	-8.37	-3.91	7.46	6.56	6.75	8.47	7.08	
Difference			2.66	2.66	9.80	14.30	0.09	1.08	1.38	N/A	0.77	
PGIM Real Estate PRISA II (CF)	74,351,019	3.21	-6.42	-6.42	-5.54	5.84	8.41	8.16	8.09	N/A	8.73	01/01/2015
NCREIF ODCE Index (AWA) (Net)			-3.38	-3.38	-8.37	-3.91	7.46	6.56	6.75	8.47	7.64	
Difference			-3.04	-3.04	2.83	9.75	0.95	1.60	1.34	N/A	1.09	
Principal US Property (CF)	154,302,133	6.66	-3.17	-3.17	-9.17	-5.97	7.53	7.06	7.53	N/A	8.78	01/01/2014
NCREIF ODCE Index (AWA) (Net)			-3.38	-3.38	-8.37	-3.91	7.46	6.56	6.75	8.47	8.05	
Difference			0.21	0.21	-0.80	-2.06	0.07	0.50	0.78	N/A	0.73	
UBS Trumbull Property (CF)	74,474,698	3.22	-5.39	-5.39	-5.54	5.52	5.13	3.36	3.99	5.96	5.09	12/01/2005
NCREIF ODCE Index (AWA) (Net)			-3.38	-3.38	-8.37	-3.91	7.46	6.56	6.75	8.47	6.33	
Difference			-2.01	-2.01	2.83	9.43	-2.33	-3.20	-2.76	-2.51	-1.24	
Vanguard RE Idx;ETF (VNQ)	1,154,944	0.05	1.65	1.65	6.04	-20.15	9.79	5.78	3.78	5.65	10.89	12/01/2008
Custom REITs Index			1.83	1.83	6.26	-20.00	9.96	6.22	4.20	6.04	11.61	
Difference			-0.18	-0.18	-0.22	-0.15	-0.17	-0.44	-0.42	-0.39	-0.72	
Abacus Multi-Family Partners Fund VI (CF)	947,352	0.04	0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	0.00	10/01/2022
NCREIF ODCE Index (AWA) (Net) (Monthly)+2%			-2.90	-2.90	-7.46	-1.99	9.61	8.69	8.89	10.64	-7.46	
Difference			2.90	2.90	7.46	N/A	N/A	N/A	N/A	N/A	7.46	
H.I.G. Realty Fund IV (CF)	15,275,231	0.66	0.00	0.00	4.23	79.52	N/A	N/A	N/A	N/A	N/A	01/01/2022
NCREIF ODCE Index (AWA) (Net) (Monthly)+2%			-2.90	-2.90	-7.46	-1.99	9.61	8.69	8.89	10.64	4.40	
Difference			2.90	2.90	11.69	81.51	N/A	N/A	N/A	N/A	N/A	
Bell Value-Add Fund VII LP (CF)	124,906	0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	04/01/2023
NCREIF ODCE Index (AWA) (Net) (Monthly)+2%			-2.90	-2.90	-7.46	-1.99	9.61	8.69	8.89	10.64	N/A	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	



	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Diversifying Assets												
Hancock Timberland (SA)	824,082	0.04	0.24	0.24	-5.43	52.69	26.06	17.25	14.59	11.22	7.19	10/01/2006
NCREIF Timberland Index			1.75	1.75	6.72	11.31	8.09	5.54	5.02	5.82	5.89	
Difference			-1.51	-1.51	-12.15	41.38	17.97	11.71	9.57	5.40	1.30	
Adams Street Private Equity (SA)	58,549,719	2.53	5.59	5.59	3.25	13.91	N/A	N/A	N/A	N/A	30.39	11/01/2020
S&P 500 Index+3%			8.29	8.29	17.35	-4.96	22.16	14.52	15.80	15.61	15.01	
Difference			-2.70	-2.70	-14.10	18.87	N/A	N/A	N/A	N/A	15.38	
Hamilton Lane Private Credit (SA)	35,575,244	1.54	0.74	0.74	1.06	4.28	N/A	N/A	N/A	N/A	-2.30	04/01/2021
ICE BofAML Gbl Hi Yld Index +2%			4.10	4.10	11.92	-2.49	6.72	3.65	6.08	5.39	-2.62	
Difference			-3.36	-3.36	-10.86	6.77	N/A	N/A	N/A	N/A	0.32	
Dreyfus Gvt Csh Mgt;Inst (DGCXX)	5,269,972	0.23	1.10	1.10	1.99	2.53	1.04	1.44	1.24	0.90	1.37	04/01/2001
FTSE 3 Mo T-Bill Index			1.12	1.12	2.01	2.61	0.95	1.40	1.20	0.85	1.35	
Difference			-0.02	-0.02	-0.02	-0.08	0.09	0.04	0.04	0.05	0.02	

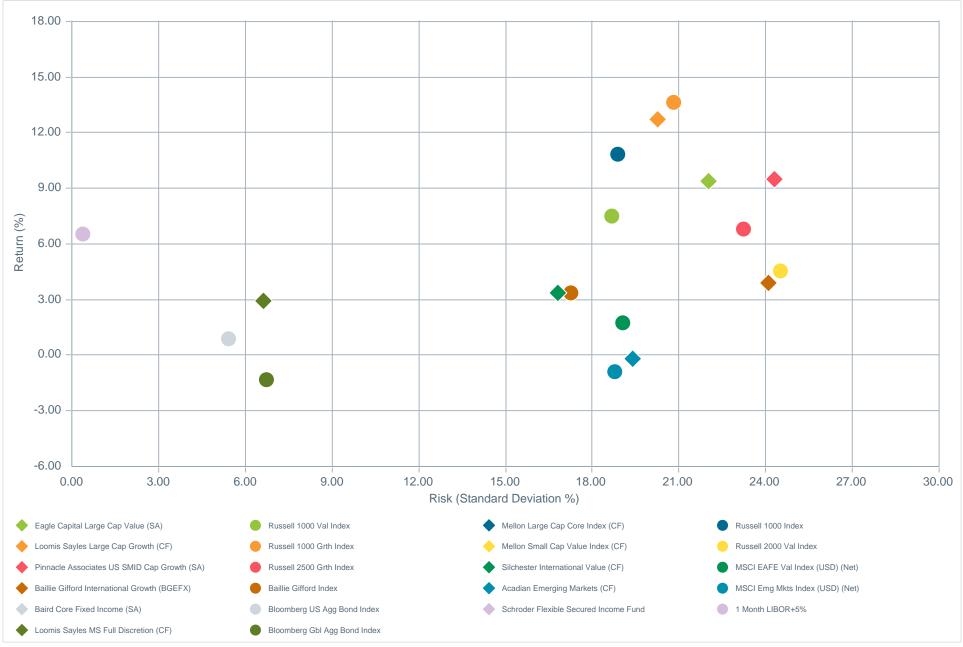




Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Managers with less history than the specified time period will not appear. Please see the Addendum for custom index definitions.



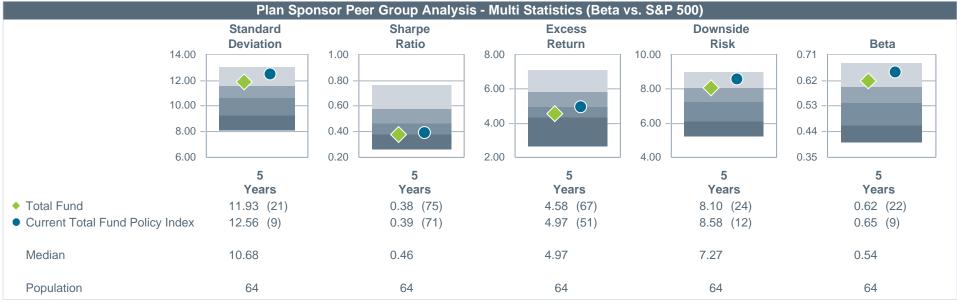
City of Jacksonville Employees' Retirement System Risk and Return Traditional Managers



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.



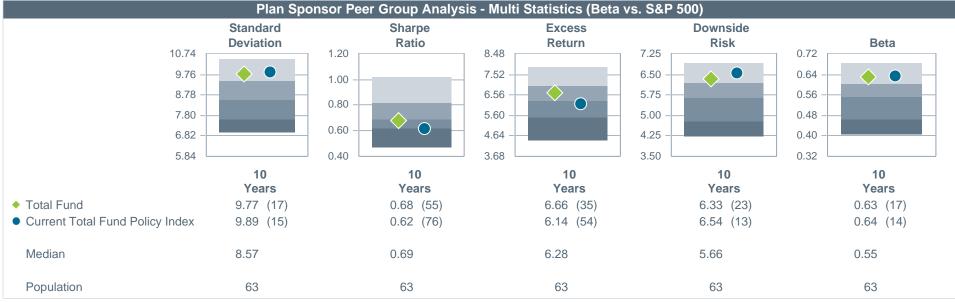




Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.





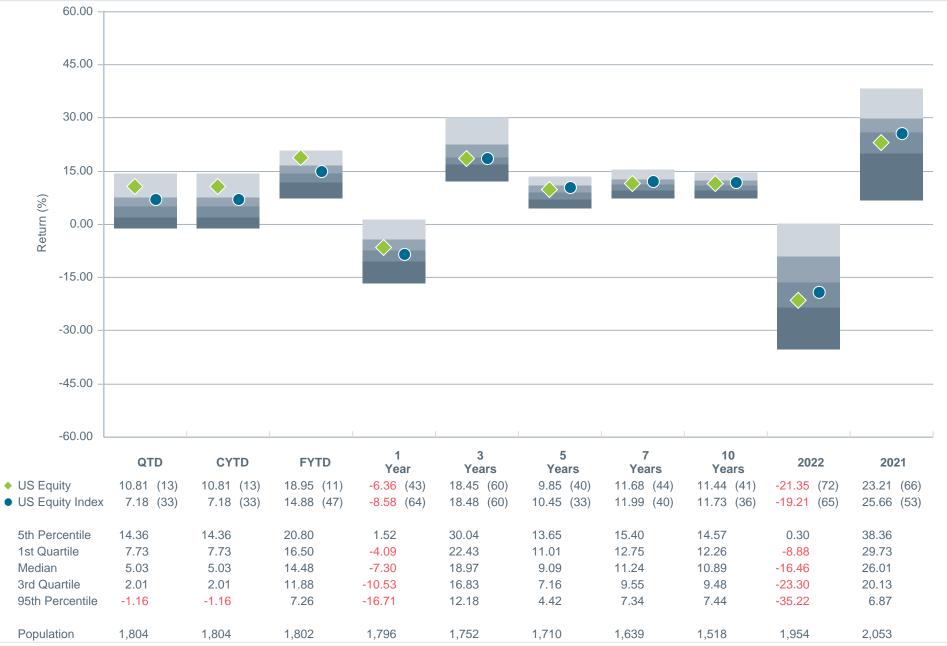


Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



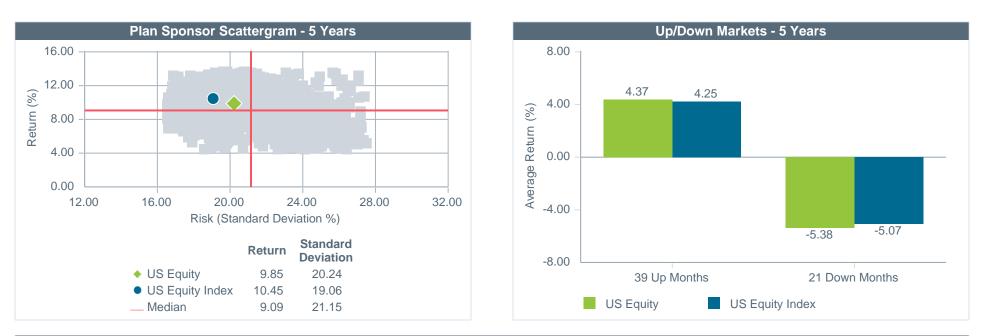
Composite Profiles

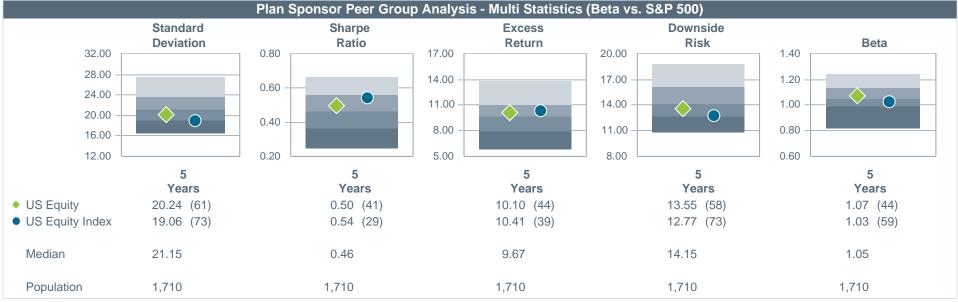
City of Jacksonville Employees' Retirement System US Equity vs. IM U.S. Equity (SA+CF) Peer Group Analysis



Performance shown is gross of fees. Parentheses contain percentile ranks. Fiscal year for the COJ ends 09/30.







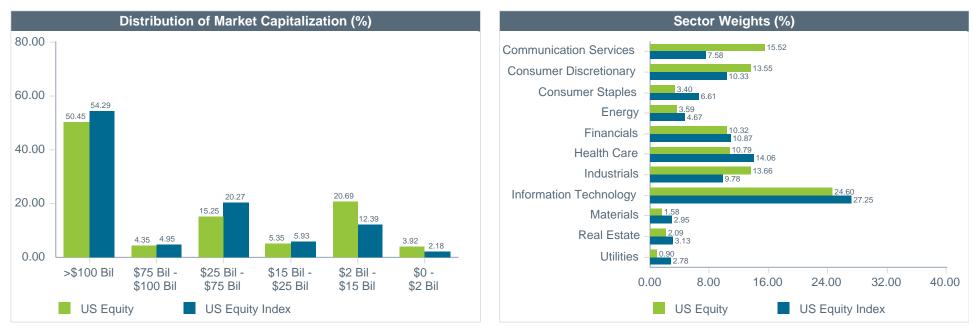
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



City of Jacksonville Employees' Retirement System US Equity vs. US Equity Index **Portfolio Characteristics**

Top Ten Equity Holdings								
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)				
Microsoft Corp	4.63	5.37	-0.74	20.52				
Meta Platforms Inc	3.75	1.17	2.58	76.12				
Amazon.com Inc	3.42	2.29	1.13	22.96				
Alphabet Inc	2.78	1.36	1.42	17.21				
Netflix Inc	2.57	0.38	2.19	17.16				
NVIDIA Corporation	2.17	1.64	0.53	90.10				
Visa Inc	2.01	0.91	1.10	8.73				
Apple Inc	1.76	6.17	-4.41	27.11				
General Electric Co	1.51	0.26	1.25	43.55				
Tesla Inc	1.48	1.34	0.14	68.42				
% of Portfolio	26.08	20.89	5.19					

Portfolio Characteristics								
	Portfolio	Benchmark						
Wtd. Avg. Mkt. Cap (\$M)	351,854	462,697						
Median Mkt. Cap (\$M)	10,640	2,051						
Price/Earnings Ratio	19.37	19.78						
Price/Book Ratio	3.66	3.95						
5 Yr. EPS Growth Rate (%)	16.92	18.82						
Current Yield (%)	1.18	1.64						
Beta (5 Years, Monthly)	1.05	1.00						
Number of Securities	1,149	2,928						
Active Share	54.40	N/A						



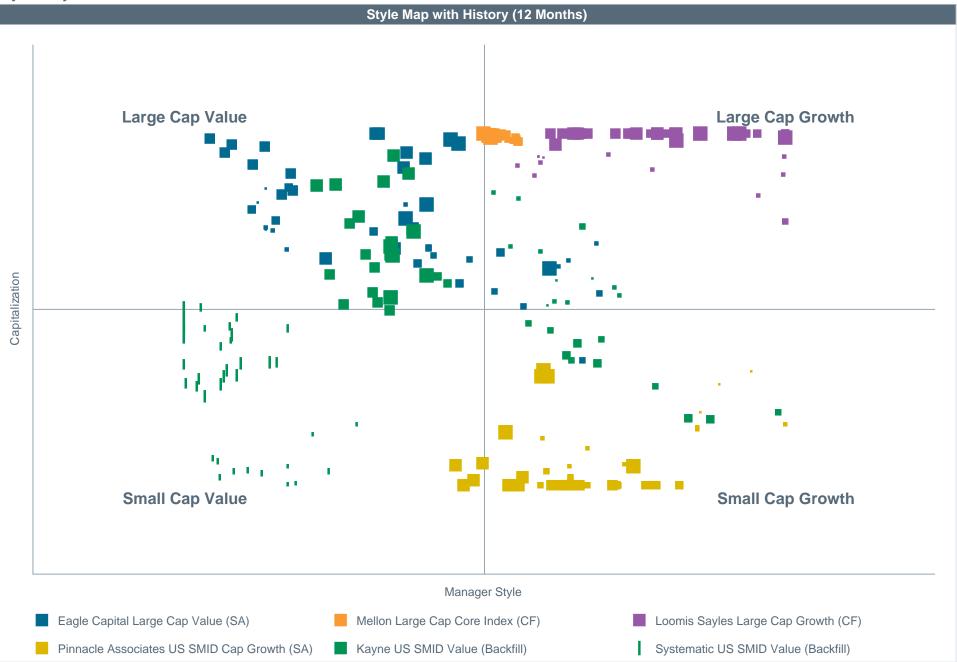
The Top ten Domestic Equity Holdings included Unitedhealth Group (1.59%), Boeing (1.45%), and Goldman Sachs (1.33%) in Q4 2022 which was replaced by NVIDIA Corporation (2.17%), General Electric Co (1.51%), and Tesla Inc (1.48%) in Q1 2023.



As of March 31, 2023

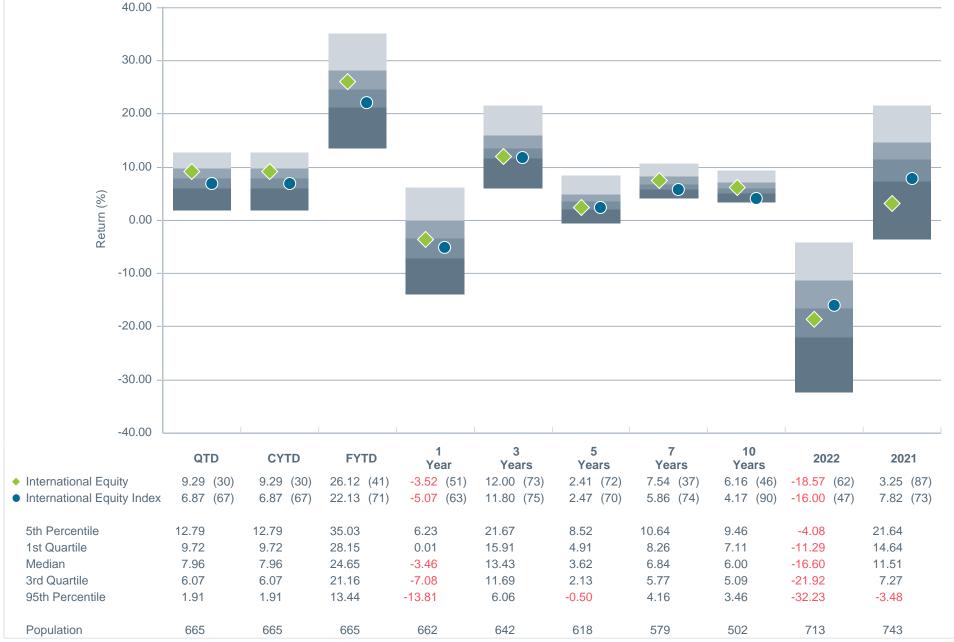


City of Jacksonville Employees' Retirement System Style Analysis - 5 Years



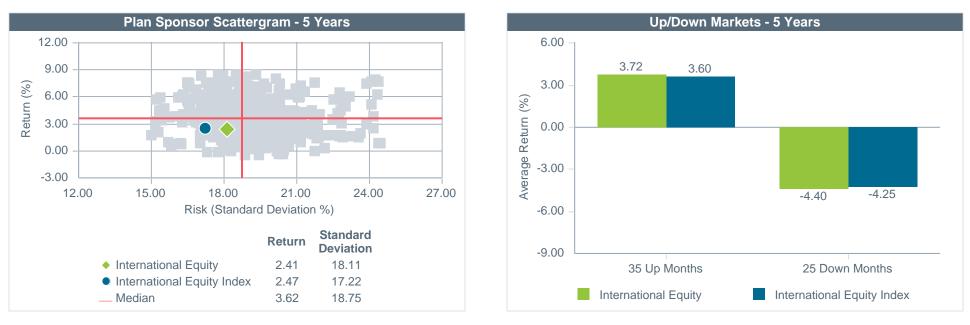
Calculation is based on monthly periodicity. This is a return based calculation. Performance prior to manager inception date is backfilled with product specific returns.

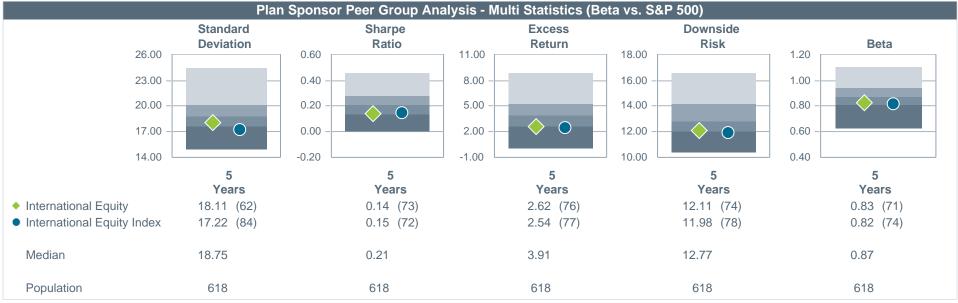




Performance shown is gross of fees. Parentheses contain percentile ranks. Fiscal year for the COJ ends 09/30.







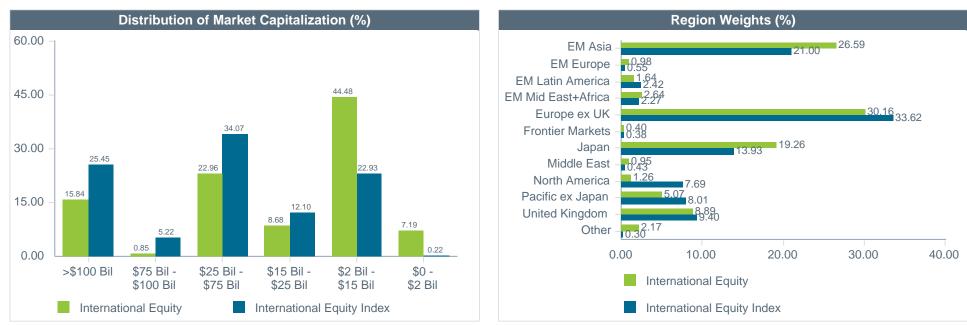
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



City of Jacksonville Employees' Retirement System International Equity vs. International Equity Index Portfolio Characteristics

	Top Ten Equi	ity Holdings		
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
ASML Holding NV	2.04	1.16	0.88	24.29
MercadoLibre Inc	1.91	0.00	1.91	55.76
Taiwan Semiconductor Mfg	1.90	1.82	0.08	20.56
Honda Motor Co Ltd	1.76	0.18	1.58	16.69
Sanofi	1.65	0.52	1.13	13.43
Kering	1.48	0.21	1.27	25.43
Ferrari NV	1.45	0.14	1.31	26.59
Tesco PLC	1.39	0.10	1.29	21.61
Adyen N.V	1.38	0.15	1.23	15.13
Novartis AG	1.35	0.84	0.51	5.72
% of Portfolio	16.31	5.12	11.19	

86,264 8,946 12.78 2.46 10.49 3.28 1.00
12.78 2.46 10.49 3.28
2.46 10.49 3.28
10.49 3.28
3.28
1 00
1.00
2,262
N/A



The Top Ten International Equity Holdings included Meituan (1.53%) and Genmab A/S (1.36%) in Q4 2022 which was replaced by Novartis AG (1.35%) and Spotify Technology SA (1.28%) in Q1 2023.



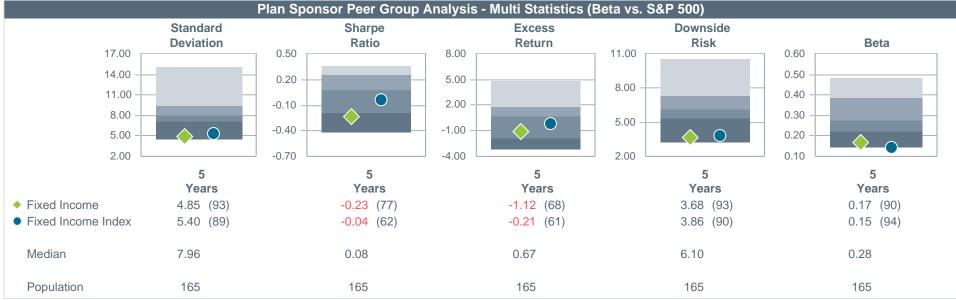
City of Jacksonville Employees' Retirement System Fixed Income vs. IM Global Fixed Income (SA+CF) Peer Group Analysis



Performance shown is gross of fees. Parentheses contain percentile ranks. Fiscal year for the COJ ends 09/30.





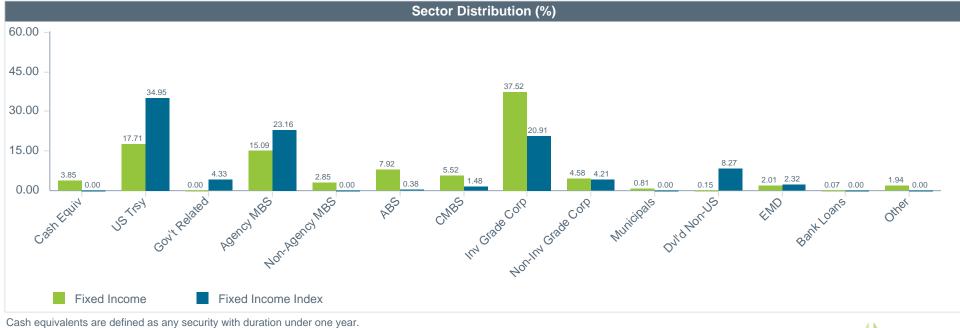


Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



City of Jacksonville Employees' Retirement System Fixed Income vs. Fixed Income Index Portfolio Characteristics

	Portfolio Characteristics	
	Portfolio	Benchmark
Effective Duration	6.39	6.10
Avg. Maturity	7.59	8.30
Avg. Quality	A2	N/A
Yield To Maturity (%)	N/A	4.81
Coupon Rate (%)	3.22	3.06
Current Yield (%)	N/A	0.16





As of March 31, 2023

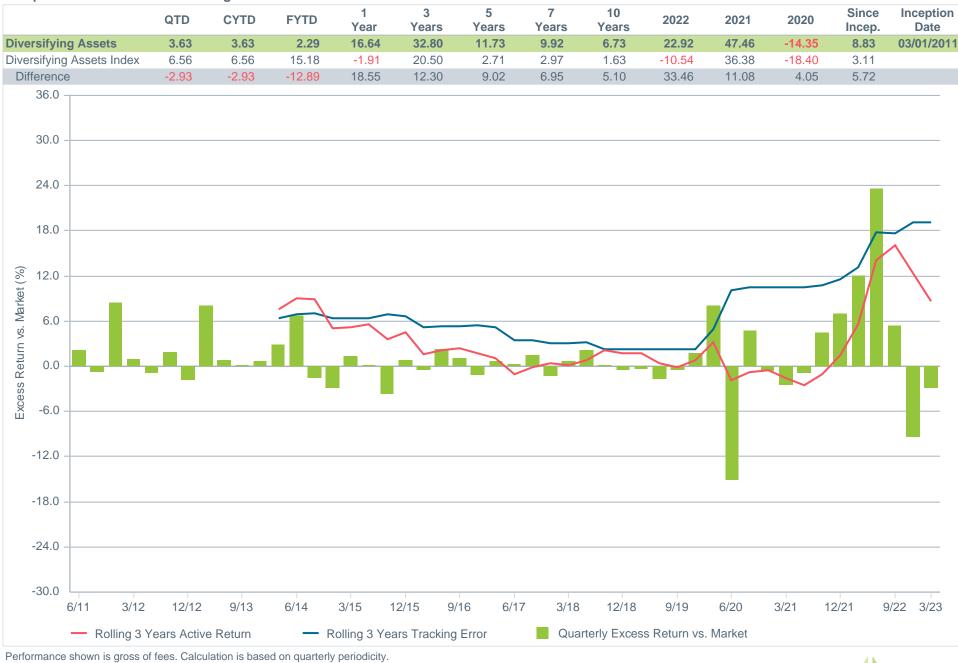
City of Jacksonville Employees' Retirement System Real Estate vs. Real Estate Index Comparative Performance & Rolling Return

	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	Since Incep.	Inception Date
al Estate	-3.16	-3.16	-4.38	3.70	7.86	7.25	7.52	8.74	12.96	15.43	0.31	6.63	12/01/200
al Estate Index	-3.36	-3.36	-8.35	-3.88	7.47	6.57	6.76	8.47	6.57	21.02	0.34	6.33	
Difference 8.0 –	0.20	0.20	3.97	7.58	0.39	0.68	0.76	0.27	6.39	-5.59	-0.03	0.30	
6.0													
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-6.0 3/06 12/0	06 9/07	6/08 3/09	12/09 9/1	0 6/11 3	3/12 12/12	9/13 6/14	3/15 12	/15 9/16	6/17 3/18	12/18 9/19	9 6/20 3	8/21 12/21	3/2

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



City of Jacksonville Employees' Retirement System Diversifying Assets vs. Diversifying Assets Index Comparative Performance & Rolling Return



KVK

As of March 31, 2023

City of Jacksonville Employees' Retirement System Alternative Investment Real Estate Fund Performance Listing

Fund Name	Vintage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Quartile	Index IRR (%)	Fund Multiple
H.I.G. Realty Partners IV, LP	2021	Real Estate - Opportunistic	25,000,000	12,247,314	3,137,648	12,598,716	91.08	N/A	-2.58	1.28
Abacus Multi-Family Partners Fund VI	2022	Real Estate - Value Added	20,000,000	1,232,301	0	763,842	N/M	N/A	N/M	0.62
Bell Value-Add Fund VII LP	2022	Real Estate - Value Added	20,000,000	0	0	0 *	N/M	N/A	N/M	
Hammes Partners IV LP	2022	Real Estate - Value Added	15,000,000	0	0	0 *	N/M	N/A	N/M	
			80,000,000	13,479,615	3,137,648	13,362,558	75.24		-3.38	1.22

Certain valuations (marked with a '*') are preliminary estimates of valuation as of the date of reporting and reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Index IRR represents the dollar-weighted returns calculated using the NCREIF ODCE Index (AWA) (Net) (Monthly)+2% assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Fund IRR is the annualized since-inception net internal rate for the indicated fund or composite. Fund Multiple is the since inception sum of distributions and valuation divided by paid in capital. Quartile data is based on information provided by Preqin.



City of Jacksonville Employees' Retirement System

Alternative Investment Private Equity Fund Performance Listing

Fund Name	Vintage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Quartile	Index IRR (%)	Fund Multiple
ASP COJ PE Fund LP	2020	Private Equity - Fund of Funds	105,000,000	41,877,892	5,564,720	49,655,282	29.20	N/A	3.01	1.32
			105,000,000	41,877,892	5,564,720	49,655,282	29.20		3.01	1.32

Certain valuations (marked with a '*') are preliminary estimates of valuation as of the date of reporting and reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Index IRR represents the dollar-weighted returns calculated using the S&P 500 Index (CW)+3% assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Fund IRR is the annualized since-inception net internal rate for the indicated fund or composite. Fund Multiple is the since inception sum of distributions and valuation divided by paid in capital. Quartile data is based on information provided by Preqin.



City of Jacksonville Employees' Retirement System

Alternative Investment Private Credit Fund Performance Listing

Fund Name	Vintage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Quartile	Index IRR (%)	Fund Multiple
Hamilton Lane Private Credit (SA)	2021	Private Credit - Direct Investment	250,000,000	36,585,035	3,904,649	34,313,700	6.66	N/A	-3.58	1.04
			250,000,000	36,585,035	3,904,649	34,313,700	6.66		-3.58	1.04

Certain valuations (marked with a '*') are preliminary estimates of valuation as of the date of reporting and reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Index IRR represents the dollar-weighted returns calculated using the ICE BofAML Global High Yield Index +2% assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Fund IRR is the annualized since-inception net internal rate for the indicated fund or composite. Fund Multiple is the since inception sum of distributions and valuation divided by paid in capital. Quartile data is based on information provided by Preqin.



Investment Manager Profiles

Manager: Eagle Capital Large Cap Value (SA) Benchmark: Russell 1000 Val Index

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

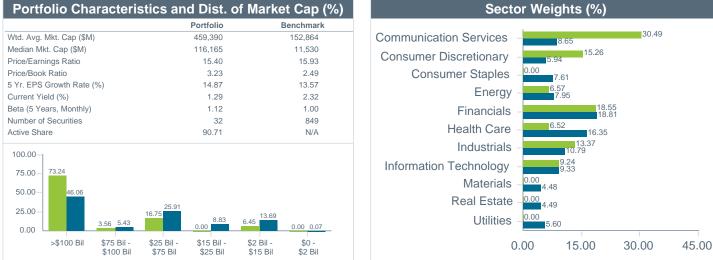
	Performance													
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018			
Manager	11.93	-7.82	17.89	9.40	12.34	12.04	-24.80	28.01	15.54	31.94	-3.90			
Benchmark	1.01	-5.91	17.93	7.50	9.02	9.13	-7.54	25.16	2.80	26.54	-8.27			
Difference	10.92	-1.91	-0.04	1.90	3.32	2.91	-17.26	2.85	12.74	5.40	4.37			
Peer Group Median	0.85	-4.52	19.95	9.03	10.38	10.19	-5.42	27.86	4.44	27.48	-8.39			
Rank	2	86	77	40	14	13	98	49	12	14	17			
Population	225	224	216	213	207	197	239	255	272	296	311			







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.



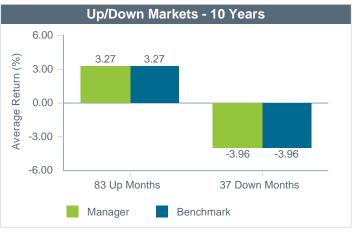
Manager: BNYM DB Lg Cap Stock Idx NL (CF)

Benchmark: Russell 1000 Index

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

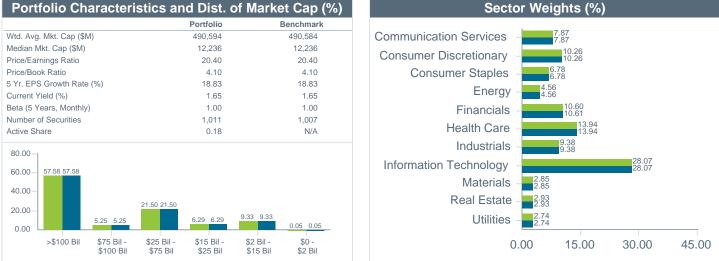
	Performance													
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018			
Manager	7.46	-8.40	18.53	10.86	12.22	12.01	-19.14	26.46	20.91	31.42	-4.77			
Benchmark	7.46	-8.39	18.55	10.87	12.23	12.01	-19.13	26.45	20.96	31.43	-4.78			
Difference	0.00	-0.01	-0.02	-0.01	-0.01	0.00	-0.01	0.01	-0.05	-0.01	0.01			
Peer Group Median	6.36	-7.07	18.28	10.34	12.10	12.06	-16.49	27.71	17.54	30.03	-5.07			
Rank	27	75	45	38	44	53	75	59	30	34	46			
Population	179	177	173	169	164	145	204	212	229	256	277			







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)

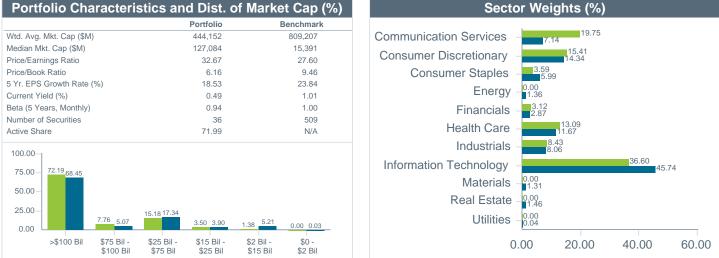
	Performance													
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018			
Manager	21.61	-4.13	16.59	12.73	14.84	15.02	-27.15	19.45	32.95	32.71	-1.72			
Benchmark	14.37	-10.90	18.58	13.66	15.01	14.59	-29.14	27.60	38.49	36.39	-1.51			
Difference	7.24	6.77	-1.99	-0.93	-0.17	0.43	1.99	-8.15	-5.54	-3.68	-0.21			
Peer Group Median	12.78	-10.67	16.35	11.82	13.76	13.56	-29.13	24.98	35.35	34.01	-0.53			
Rank	1	8	44	33	23	11	40	81	63	63	59			
Population	197	197	193	191	179	170	208	212	224	237	253			







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: Pinnacle Associates US SMID Cap Growth (SA)

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

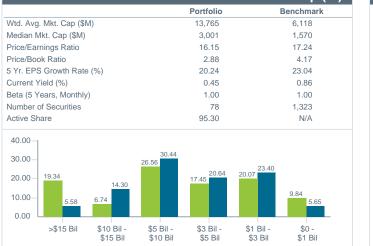
	Performance														
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018				
Manager	8.60	-12.89	19.64	9.48	11.95	11.26	-23.95	12.71	33.32	41.57	-10.36				
Benchmark	6.54	-10.35	14.75	6.82	10.39	10.05	-26.21	5.04	40.47	32.65	-7.47				
Difference	2.06	-2.54	4.89	2.66	1.56	1.21	2.26	7.67	-7.15	8.92	-2.89				
Peer Group Median	7.99	-11.52	17.50	10.03	12.64	11.26	-27.93	13.34	47.90	32.16	-3.57				
Rank	46	71	32	59	66	50	31	54	79	3	89				
Population	52	52	49	43	39	30	57	59	59	56	57				



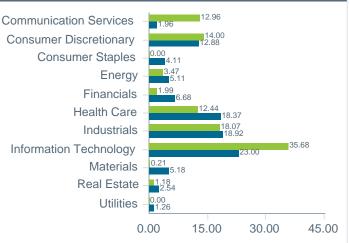




Portfolio Characteristics and Dist. of Market Cap (%)



Sector Weights (%)



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

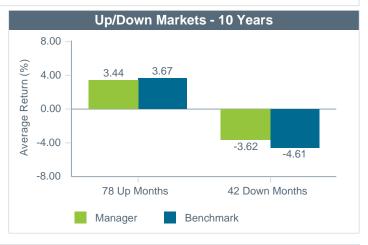


Manager: Kayne Anderson US SMID Value (SA) Benchmark: Russell 2500 Val Index

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

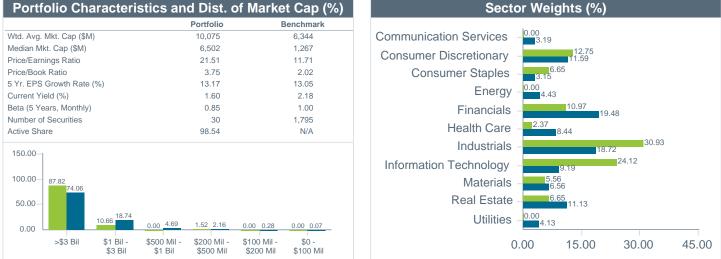
	Performance													
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018			
Manager	4.33	-5.51	18.53	8.61	10.14	10.68	-20.00	22.18	24.69	33.20	-11.97			
Benchmark	1.40	-10.53	21.80	5.61	7.97	7.72	-13.08	27.78	4.88	23.56	-12.36			
Difference	2.93	5.02	-3.27	3.00	2.17	2.96	-6.92	-5.60	19.81	9.64	0.39			
Peer Group Median	2.77	-5.32	23.63	7.42	9.59	9.54	-10.29	27.78	7.23	27.19	-12.88			
Rank	24	54	93	27	35	21	90	93	5	6	41			
Population	69	69	69	65	60	56	73	77	85	85	92			







Portfolio Characteristics and Dist. of Market Cap (%)



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

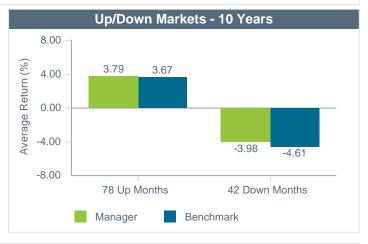


Manager: Systematic Financial US SMID Value (SA) Benchmark: Russell 2500 Val Index

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

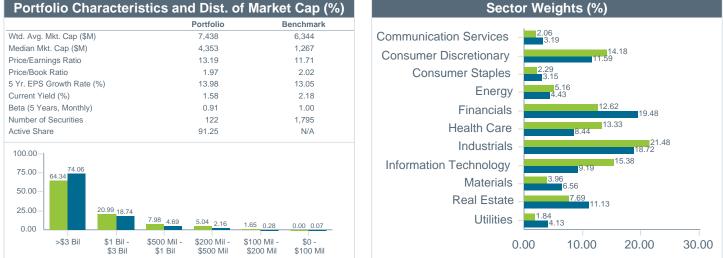
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	2.43	-5.17	24.30	7.39	11.49	11.91	-9.07	31.53	7.55	27.80	-14.17
Benchmark	1.40	-10.53	21.80	5.61	7.97	7.72	-13.08	27.78	4.88	23.56	-12.36
Difference	1.03	5.36	2.50	1.78	3.52	4.19	4.01	3.75	2.67	4.24	-1.81
Peer Group Median	2.77	-5.32	23.63	7.42	9.59	9.54	-10.29	27.78	7.23	27.19	-12.88
Rank	57	48	42	54	21	11	41	25	49	42	61
Population	69	69	69	65	60	56	73	77	85	85	92







Portfolio Characteristics and Dist. of Market Cap (%)



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



Manager: Silchester Intl Val Equity (CF)

Benchmark: MSCI EAFE Val Index (USD) (Net) Peer Group: IM EAFE Value (SA+CF)

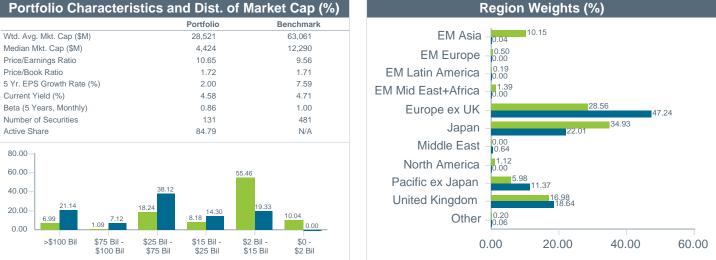
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	7.58	1.63	14.80	3.37	7.06	7.10	-5.23	12.52	0.17	18.05	-13.74
Benchmark	5.93	-0.31	14.58	1.75	5.13	3.75	-5.58	10.89	-2.63	16.09	-14.78
Difference	1.65	1.94	0.22	1.62	1.93	3.35	0.35	1.63	2.80	1.96	1.04
Peer Group Median	9.25	0.57	14.02	3.27	6.03	5.40	-9.50	11.38	4.45	21.10	-15.75
Rank	68	43	42	48	30	11	10	41	81	90	42
Population	39	39	39	38	38	38	44	45	50	56	58







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: Baillie Gifford International Growth (BGEFX)

Benchmark: MSCI ACW Ex US Index (USD) (Net) Peer Group: IM ACWI Ex US Growth (MF)

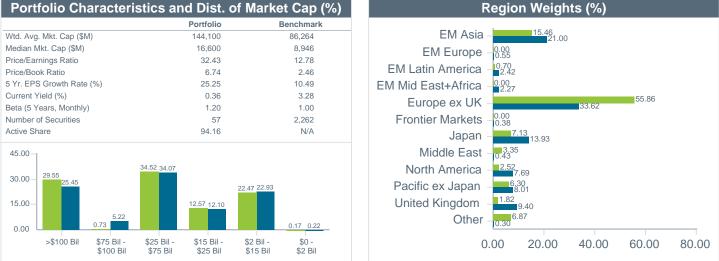
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	13.28	-5.00	8.55	3.41	9.76	7.72	-34.36	-9.32	63.13	37.48	-17.23
Benchmark	6.87	-5.07	11.80	2.47	5.86	4.17	-16.00	7.82	10.65	21.51	-14.20
Difference	6.41	0.07	-3.25	0.94	3.90	3.55	-18.36	-17.14	52.48	15.97	-3.03
Peer Group Median	9.23	-4.76	10.95	3.17	6.38	5.23	-26.63	7.93	22.75	27.84	-14.32
Rank	15	53	85	41	8	12	90	98	1	2	79
Population	170	170	170	170	160	121	170	170	170	172	176







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 Eq II (CF)

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

	0.										
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	7.93	-11.86	11.83	-0.05	6.29	2.71	-19.69	8.75	12.55	18.00	-18.30
Benchmark	3.96	-10.70	7.83	-0.91	4.91	2.00	-20.09	-2.54	18.31	18.42	-14.57
Difference	3.97	-1.16	4.00	0.86	1.38	0.71	0.40	11.29	-5.76	-0.42	-3.73
Peer Group Median	4.94	-8.78	10.01	0.69	6.07	3.30	-19.72	0.75	18.93	20.64	-15.23
Rank	11	80	38	64	44	67	50	23	76	67	79
Population	277	276	259	232	217	174	291	306	334	358	358







Portfolio Characteristics and Dist. of Market Cap (%) **Region Weights (%)** Portfolio Benchmark 76.89 Wtd. Avg. Mkt. Cap (\$M) 75,559 102,229 EM Asia Median Mkt. Cap (\$M) 913 6.315 3.24 1.99 **EM Europe** Price/Earnings Ratio 6.28 11.01 6.01 9.71 Price/Book Ratio 2.49 2.42 **EM Latin America** 5 Yr. EPS Growth Rate (%) 19.32 15.03 Current Yield (%) 6.37 3.35 8.68 8.19 EM Mid East+Africa 1.00 Beta (5 Years, Monthly) 1.00 Europe ex UK 1.29 0.63 Number of Securities 741 1,379 Active Share 68.47 N/A **Frontier Markets** 1.79 1.37 60.00 0.00 North America 14 49.40 45.00 1.52 2.46 Pacific ex Japan 30.00 0.00 23.55 United Kingdom 17.20 18.09 15.00 11 74 0.58 Other 1.81 0.46 0.81 0.00 >\$100 Bil \$75 Bil -\$25 Bil -\$15 Bil -\$2 Bil \$0 -0.00 50.00 100.00 \$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.

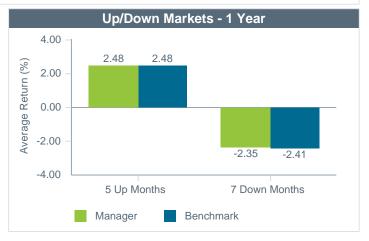


Manager: Baird Core Fixed Income (SA)

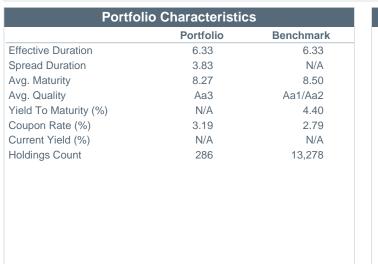
Peer Group: IM U.S. Broad Market Core Fixed Income (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	3.41	-4.42	N/A	N/A	N/A	N/A	-13.23	N/A	N/A	N/A	N/A
Benchmark	2.96	-4.78	-2.77	0.90	0.88	1.36	-13.01	-1.55	7.51	8.72	0.01
Difference	0.45	0.36	N/A	N/A	N/A	N/A	-0.22	N/A	N/A	N/A	N/A
Peer Group Median	3.16	-4.67	-1.82	1.34	1.39	1.78	-12.96	-1.23	8.51	9.18	0.06
Rank	15	30	N/A	N/A	N/A	N/A	73	N/A	N/A	N/A	N/A
Population	130	130	130	127	125	122	140	147	155	157	164

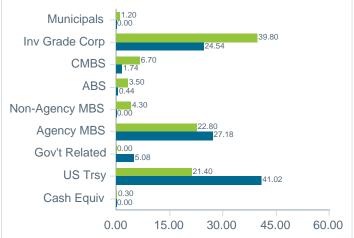








Sector Distribution (%)



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



Manager: Loomis Sayles Multisector Full Discretion (CF)

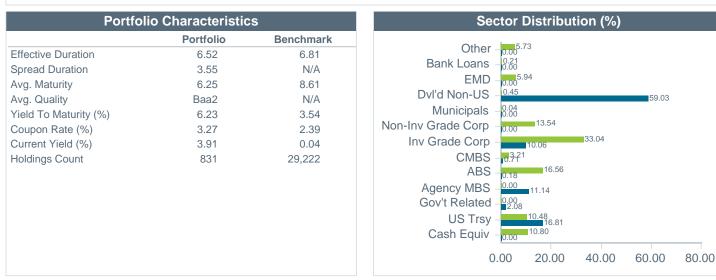
Benchmark: Bloomberg Gbl Agg Bond Index **Peer Group:** IM Global Fixed Income (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	3.42	-3.90	2.57	2.97	4.43	3.74	-12.09	0.55	15.08	9.79	0.09
Benchmark	3.01	-8.07	-3.43	-1.34	-0.27	0.07	-16.25	-4.71	9.20	6.84	-1.19
Difference	0.41	4.17	6.00	4.31	4.70	3.67	4.16	5.26	5.88	2.95	1.28
Peer Group Median	3.16	-5.54	1.86	1.70	2.58	2.06	-12.81	0.38	8.70	9.70	-1.81
Rank	33	34	46	26	28	22	47	48	9	49	22
Population	180	180	177	165	156	139	205	221	236	247	260









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



Manager: Harrison Street Core Property, LP

Benchmark: NCREIF ODCE Index (AWA) (Gross)

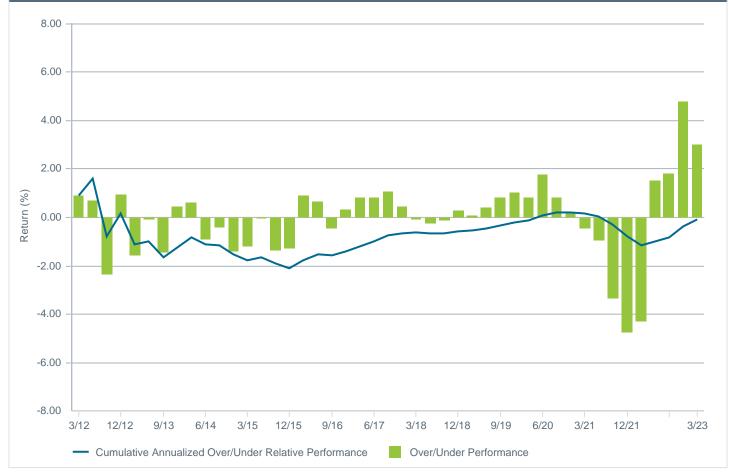
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	-0.26	8.15	8.31	8.13	8.71	9.48	11.43	10.94	4.91	7.87	8.18
Benchmark	-3.17	-3.09	8.40	7.51	7.71	9.45	7.47	22.17	1.19	5.34	8.35
Difference	2.91	11.24	-0.09	0.62	1.00	0.03	3.96	-11.23	3.72	2.53	-0.17





Actual Correlation - 10 Years							
	Actual Correlation						
NCREIF ODCE Index (AWA) (Gross)	0.69						
S&P 500 Index (Cap Wtd)	-0.42						
Russell 2000 Index	-0.37						
MSCI EAFE Index (USD) (Net)	-0.47						
MSCI Emg Mkts Index (USD) (Net)	-0.36						
Bloomberg US Agg Bond Index	-0.47						
Bloomberg US Trsy US TIPS Index	-0.55						
Wilshire US REIT Index	-0.34						
HFRI FOF Comp Index	-0.33						
Bloomberg Cmdty Index (TR)	0.00						
ICE BofAML 3 Mo US T-Bill Index	-0.50						
Cons Price Index (Unadjusted)	0.33						
NCREIF ODCE Index (AWA) (Gross)	0.69						



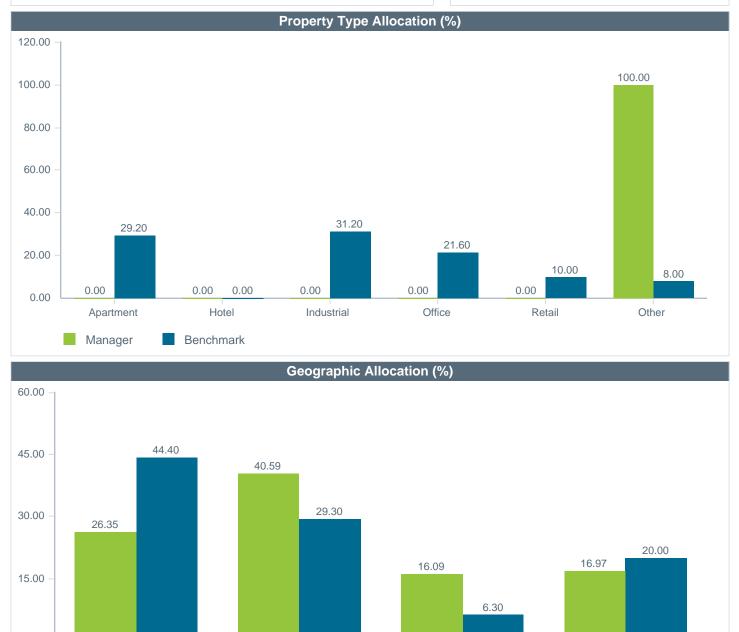




Investment Strategy

The Fund's strategy is on primarily stabilized income-producing investments in niche sectors; Education, Health, and Storage. Within these sectors the fund invests in student housing, seniors housing, medical office buildings, life science buildings, and self-storage. The majority of the return from the Fund is expected to be realized from current income, with a modest portion of the return to be derived from asset appreciation. Harrison Street believes that the primary property types it targets will provide better risk/return profiles than properties in traditional core portfolios across all economic cycles.

Investment Profile	
Fund Inception	2011
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (mm) \$	14,606
Fund Leverage %	22.75
Portfolio Occupancy %	89.90
Cash Reserve %	0.37
Number of Investments	397
Number of Limited Partners	247



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 education, healthcare, senior housing, and storage real estate. 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.

East

0.00

West

Benchmark

Manager



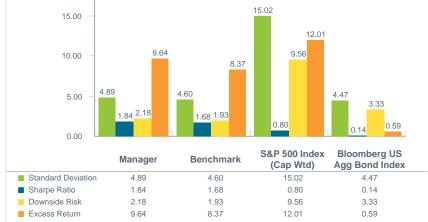
South

Midwest

Manager: PGIM Real Estate PRISA II (CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	-2.02	-2.56	8.88	8.34	8.73	10.80	7.13	23.30	1.03	7.52	9.48
Benchmark	-3.17	-3.09	8.40	7.51	7.71	9.45	7.47	22.17	1.19	5.34	8.35
Difference	1.15	0.53	0.48	0.83	1.02	1.35	-0.34	1.13	-0.16	2.18	1.13

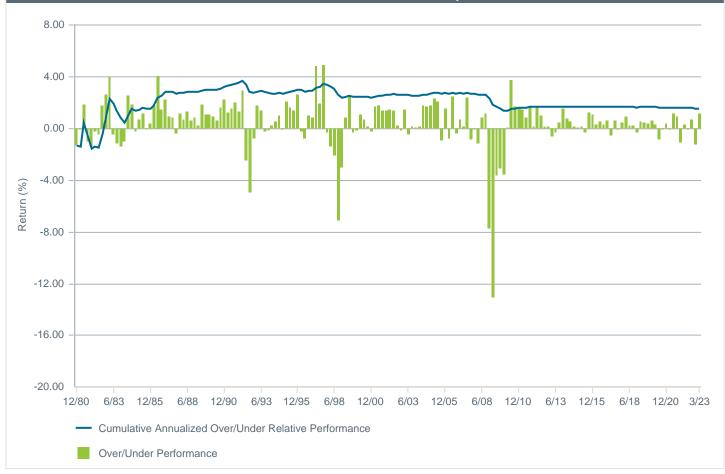




	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.97
S&P 500 Index (Cap Wtd)	-0.24
Russell 2000 Index	-0.25
MSCI EAFE Index (USD) (Net)	-0.37
MSCI Emg Mkts Index (USD) (Net)	-0.39
Bloomberg US Agg Bond Index	-0.39
Bloomberg US Trsy US TIPS Index	-0.31
Wilshire US REIT Index	-0.01
HFRI FOF Comp Index	-0.24
Bloomberg Cmdty Index (TR)	0.12
ICE BofAML 3 Mo US T-Bill Index	-0.62
Cons Price Index (Unadjusted)	0.28

Actual Correlation - 10 Years

Relative Performance - Since Inception



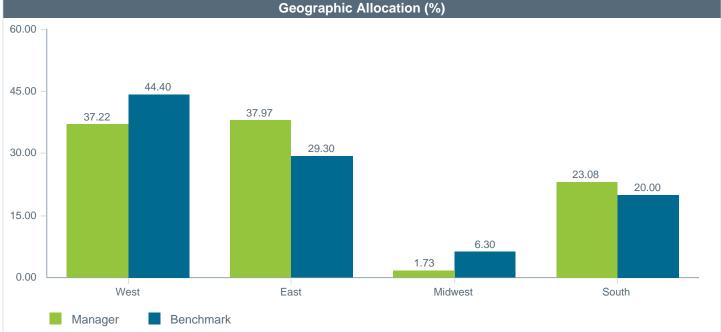


Investment Strategy

The Fund pursues a diversified core-plus real estate strategy that seeks to outperform the NCREIF ODCE Index by 100 basis points over a complete market cycle by structuring investments to enhance risk-adjusted returns. Investments may be made through direct property ownership or indirectly through such vehicles as joint ventures, general or limited partnerships, limited liability companies, mortgage loans and other loan types, including mezzanine debt, and debt secured by an interest in the borrowing entity or interests in companies or entities that directly or indirectly hold real estate or real estate interests. It operates with a leverage limit of 40% and may invest up to 35% of its gross assets in higher-risk, non-core real estate investment opportunities.

Investment Profile	
Fund Inception	1980
Legal Structure	REIT
Fund Structure	Open-End
Gross Real Estate Assets (mm) \$	17,546
Fund Leverage %	34.20
Portfolio Occupancy %	90.51
Cash Reserve %	1.95
Number of Investments	160
Number of Limited Partners	112





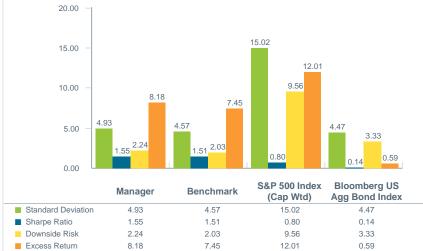
Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of land, student housing, self-storage, and life science/lab space. 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)

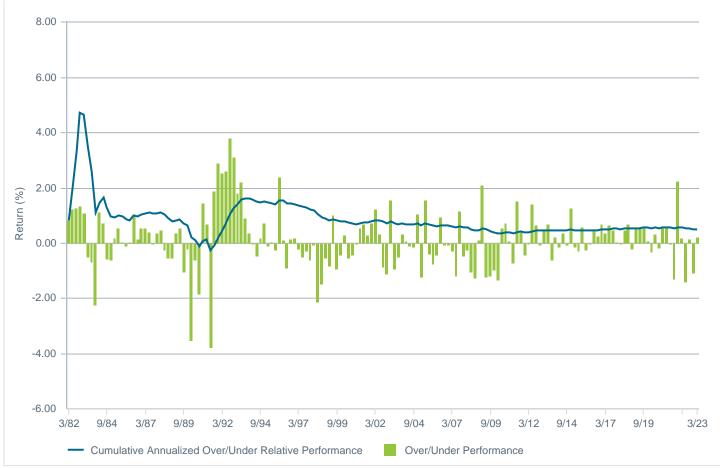
Performance											
QTD 1 3 5 7 10 Year Years Years Years Years											
Manager	-3.16	-5.93	7.58	7.13	7.60	9.24	4.27	22.83	0.81	6.22	8.32
Benchmark	-3.38	-3.91	7.46	6.56	6.75	8.47	6.55	21.02	0.34	4.39	7.36
Difference	0.22	-2.02	0.12	0.57	0.85	0.77	-2.28	1.81	0.47	1.83	0.96





Actual Correlation - 10	Actual Correlation - 10 Years							
	Actual Correlation							
NCREIF ODCE Index (AWA) (Net)	0.96							
S&P 500 Index (Cap Wtd)	-0.11							
Russell 2000 Index	-0.14							
MSCI EAFE Index (USD) (Net)	-0.30							
MSCI Emg Mkts Index (USD) (Net)	-0.32							
Bloomberg US Agg Bond Index	-0.37							
Bloomberg US Trsy US TIPS Index	-0.27							
Wilshire US REIT Index	0.13							
HFRI FOF Comp Index	-0.17							
Bloomberg Cmdty Index (TR)	0.10							
ICE BofAML 3 Mo US T-Bill Index	-0.63							
Cons Price Index (Unadjusted)	0.25							
NCREIF ODCE Index (AWA) (Gross)	0.97							







1.92

160

4,675

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 welldiversified portfolio. The Account invests in the traditional real estate property types; multifamily, office, industrial, and retail.

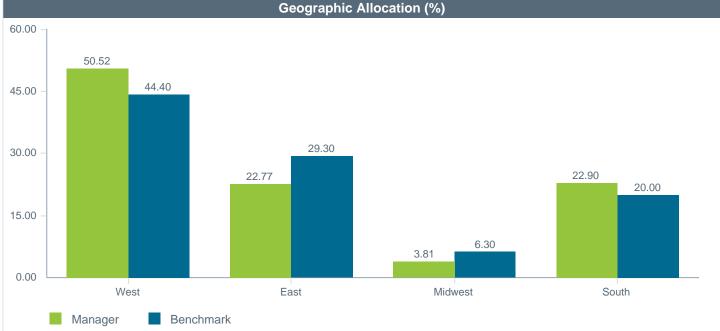
Investment Profile							
Fund Inception	1982						
Legal Structure	Insurance SA						
Fund Structure	Open-End						
Gross Real Estate Assets (mm) \$	13,347						
Fund Leverage %	24.20						
Portfolio Occupancy %	90.93						

Cash Reserve %

Number of Investments

Number of Limited Partners





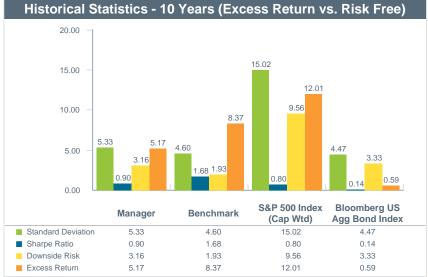
Performance shown is net of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of land, self storage, and data centers. 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.



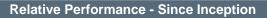
Manager: UBS Trumbull Property (CF)

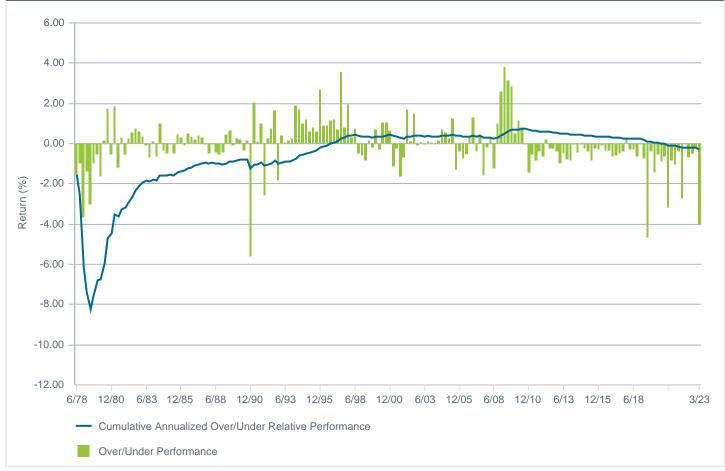
Benchmark: NCREIF ODCE Index (AWA) (Gross)

Performance											
	QTD 1 3 5 7 10 Year Years Years Years Years 2022 2021 2020 2019 2018										
Manager	-7.05	-8.33	3.02	2.45	3.64	6.03	5.91	16.24	-4.04	-2.10	6.99
Benchmark	-3.17	-3.09	8.40	7.51	7.71	9.45	7.47	22.17	1.19	5.34	8.35
Difference	-3.88	-5.24	-5.38	-5.06	-4.07	-3.42	-1.56	-5.93	-5.23	-7.44	-1.36



Actual Correlation - 10 Years						
	Actual Correlation					
NCREIF ODCE Index (AWA) (Gross)	0.92					
S&P 500 Index (Cap Wtd)	-0.31					
Russell 2000 Index	-0.32					
MSCI EAFE Index (USD) (Net)	-0.43					
MSCI Emg Mkts Index (USD) (Net)	-0.41					
Bloomberg US Agg Bond Index	-0.44					
Bloomberg US Trsy US TIPS Index	-0.38					
Wilshire US REIT Index	-0.07					
HFRI FOF Comp Index	-0.31					
Bloomberg Cmdty Index (TR)	0.09					
ICE BofAML 3 Mo US T-Bill Index	-0.69					
Cons Price Index (Unadjusted)	0.20					



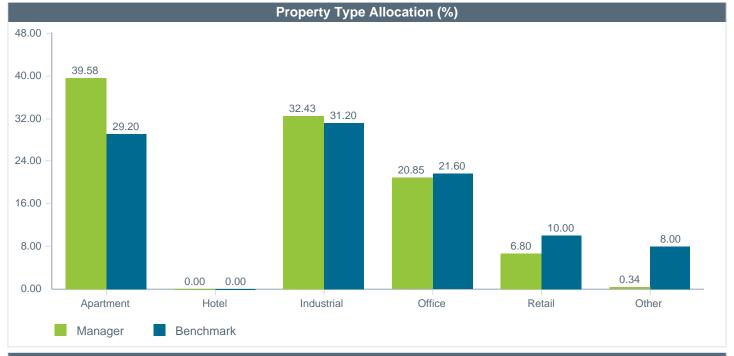


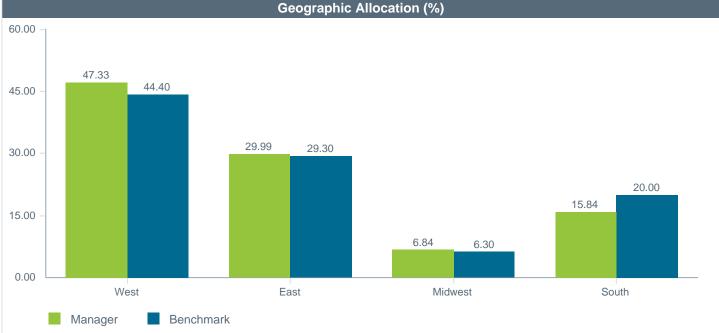


Investment Strategy

The Fund pursues a diversified core real estate strategy that seeks to produce attractive risk-adjusted returns by focusing on selective acquisitions, diversification, active portfolio management, and asset management. The Fund invests in well-leased, stabilized assets in major US metropolitan markets and receives the majority of its return from the income component. Diversification for the Fund is consistently pursued on many levels, including geographic region, property type, and economic sector. The Fund has historically maintained a leverage ratio significantly lower than the NCREIF ODCE Index and invests 5-15% of its gross assets in value-added type real estate investment opportunities.

Investment Profile	
Fund Inception	1978
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (mm) \$	16,777
Fund Leverage %	19.07
Portfolio Occupancy %	94.00
Cash Reserve %	1.50
Number of Investments	144
Number of Limited Partners	439





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 self-storage. 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.



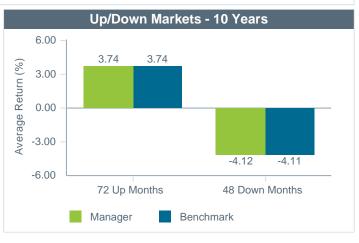
Manager: Vanguard RE Idx;ETF (VNQ)

Benchmark: Vanguard Spl Real Estate Index

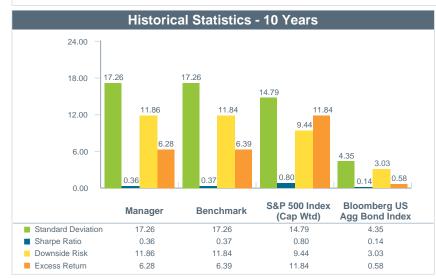
Peer Group: IM Real Estate Sector (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	1.77	-20.12	9.80	5.80	3.88	5.78	-26.20	40.38	-4.72	28.91	-5.95
Benchmark	1.83	-20.00	9.96	5.92	4.00	5.89	-26.12	40.56	-4.55	29.03	-5.86
Difference	-0.06	-0.12	-0.16	-0.12	-0.12	-0.11	-0.08	-0.18	-0.17	-0.12	-0.09
Peer Group Median	2.56	-20.05	10.18	5.73	3.99	5.61	-26.17	41.32	-4.31	27.32	-5.71
Rank	83	53	60	49	56	44	51	63	55	35	54
Population	252	250	232	209	192	149	247	251	248	256	244









Actual Correlation - 10 Years						
	Actual Correlation					
Vanguard Spl Real Estate Index	1.00					
S&P 500 Index (Cap Wtd)	0.71					
Russell 2000 Index	0.65					
MSCI EAFE Index (USD) (Net)	0.64					
MSCI Emg Mkts Index (USD) (Net)	0.52					
Bloomberg US Agg Bond Index	0.51					
Bloomberg US Trsy US TIPS Index	0.60					
Wilshire US REIT Index	0.99					
HFRI FOF Comp Index	0.58					
Bloomberg Cmdty Index (TR)	0.30					
ICE BofAML 3 Mo US T-Bill Index	-0.14					
Cons Price Index (Unadjusted)	-0.04					

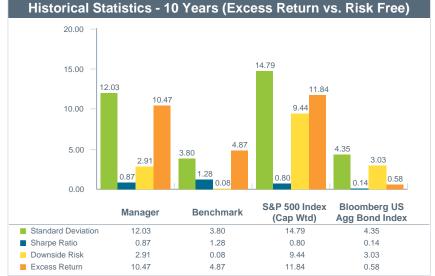
Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Performance shown is calculated using Net Asset Values (NAV). Parentheses contain percentile ranks. Benchmark consists of MSCI US REIT Index (USD) (Gross) adjusted to include a 2% cash position (Lipper Money Market Average) through 04/30/09; MSCI US REIT Index (USD) (Gross) through 01/31/18; MSCI US IM Real Estate 25/50 Transition Index through 07/24/18; and MSCI US IM Real Estate 25/50 Index (Gross) threafter.



Manager: Hancock Timberland (SA)

Benchmark: NCREIF Timberland Index

Performance											
QTD 1 3 5 7 10 Year Years Years Years Years											
Manager	0.24	52.69	26.06	17.25	14.59	11.22	52.32	19.14	10.18	-1.69	12.47
Benchmark	1.75	11.31	8.09	5.54	5.02	5.82	12.90	9.17	0.81	1.30	3.21
Difference	-1.51	41.38	17.97	11.71	9.57	5.40	39.42	9.97	9.37	-2.99	9.26



Actual Correlation NCREIF Timberland Index 0.03 S&P 500 Index (Cap Wtd) -0.20 Russell 2000 Index -0.15 MSCI EAFE Index (USD) (Net) -0.20 MSCI Emg Mkts Index (USD) (Net) -0.16 Bloomberg US Agg Bond Index -0.26 Bloomberg US Trsy US TIPS Index -0.27 Wilshire US REIT Index -0.16 HFRI FOF Comp Index -0.09 Bloomberg Cmdty Index (TR) -0.14 ICE BofAML 3 Mo US T-Bill Index -0.07 Cons Price Index (Unadjusted) 0.28

Actual Correlation - 10 Years

Relative Performance - Since Inception 30.00 24.00 18.00 12.00 Return (%) 6.00 0.00 -6.00 -12.00 -18.00 10/07 10/08 10/09 10/10 10/11 10/12 10/13 10/14 10/15 10/16 10/17 10/18 10/19 10/20 10/21 10/06 3/23 Cumulative Annualized Over/Under Relative Performance Over/Under Performance

KVK

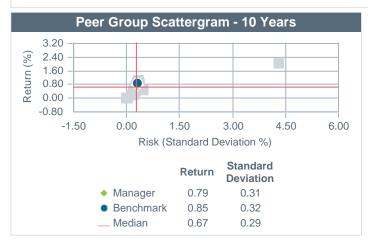
Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity.

Manager: Dreyfus Gvt Csh Mgt;Inst (DGCXX)

Benchmark: FTSE 3 Mo T-Bill Index

Peer Group: IM U.S. Taxable Money Market (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018
Manager	1.09	2.62	0.90	1.30	1.12	0.79	1.52	0.03	0.37	2.09	1.73
Benchmark	1.12	2.61	0.95	1.40	1.20	0.85	1.50	0.05	0.58	2.25	1.86
Difference	-0.03	0.01	-0.05	-0.10	-0.08	-0.06	0.02	-0.02	-0.21	-0.16	-0.13
Peer Group Median	1.04	2.45	0.83	1.19	0.96	0.67	1.39	0.01	0.30	1.90	1.54
Rank	18	24	24	20	19	20	24	12	31	20	22
Population	792	780	718	673	599	525	785	773	793	798	822







Rolling Return - Since Inception



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



Addendum & Glossary

City of Jacksonville Employees' Retirement System Addendum

Performance Related Comments:

- Performance is annualized for periods greater than one year.
- The inception date shown indicates the first full month of performance following initial funding.
- The market value shown for the Transition Account includes residual assets from terminated managers.
- RVK began monitoring the assets of the City of Jacksonville Retirement System on 01/01/2019. Prior historical data was provided by the custodian and previous consultant.
- During 03/2023, Bell Value-Add Fund VII LP was incepted and issued its first capital call.

Custom Composite Benchmark Comments:

- Current Total Fund Policy Index: The passive Total Fund Policy Index is calculated monthly and currently consists of 30% Russell 3000 Index, 23% MSCI ACW Ex US Index (USD) (Net), 20% Fixed Income Index, 15% Real Estate Index, and 12% Diversifying Assets Index.
- US Equity Index: The passive US Equity Index consists of 100% DJ US TSM Index through 06/2009 and 100% Russell 3000 Index thereafter.
- International Equity Index: The passive International Equity Index consists of 100% MSCI EAFE Index (USD) (Gross) through 01/2011 and 100% MSCI ACW Ex US Index (USD) (Net) thereafter.
- Fixed Income Index: The passive Fixed Income Index consists of 100% Bloomberg US Agg Bond Index through 10/2017 and 100% Bloomberg US Universal Bond Index thereafter.
- Real Estate Index: The active Real Estate Index is calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark return.
- Diversifying Assets Index: The Diversifying Assets Index is calculated monthly and consists of 50% S&P MLP Index (TR)/50% NCREIF Timberland Index through 10/2017, 67% S&P MLP Index (TR)/33% NCREIF Timberland Index through 09/2020, and calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark return thereafter.

Custom Manager Benchmark Comments:

- Baillie Gifford Index: The passive Baillie Gifford Index consists of 100% MSCI EAFE Grth Index (USD) (Net) through 10/2017 and 100% MSCI ACW Ex US Grth Index (USD) (Net) thereafter.
- Baillie Gifford Spliced Index: The passive Baillie Gifford Spliced Index consists of 100% MSCI EAFE Index (USD) (Net) through 11/2019 and 100% MSCI ACW Ex US Index (USD) (Net) thereafter.
- Custom REITs Index: The passive Custom REITs Index consists of 100% MSCI US REIT Index (USD) (Gross) through 01/2019 and 100% Vanguard Spl Real Estate Index thereafter.
- Vanguard Spliced Real Estate Index: The Vanguard Spl Real Estate Index consists of MSCI US REIT Index (USD) (Gross) adjusted to include a 2% cash position (Lipper Money Market Average) through 04/30/2009, MSCI US REIT Index (USD) (Gross) through 01/31/2018, MSCI US IM Real Estate 25/50 Transition Index through 07/24/2018, and MSCI US IM Real Estate 25/50 Index (Gross) 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&P</u>	<u>Moody's</u>	Explanation	<u>S&P</u>	<u>Moody's</u>	Explanation
Higher Cr	edit Quality – I	nvestment Grade	Lower Cro	edit Quality – E	elow 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	1 3	CCC-	Caa3	3
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., 1st quartile, 2nd quartile, 3rd quartile, and 4th quartile). The median observation is where the 2nd quartile and 3rd 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. Attribution to "other" is the result of securities based in industries that do not fit into any GICS classification.

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, and thus may differ from the classification of the investment manager and/or index provider. Attribution to "other" is the result of securities based in countries/regions that do not fit into any MSCI classification.

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, and 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.

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

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.

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 that 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. 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 4th 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 ≥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 valuing a company's current share price relative to its trailing 12-month per-share earnings (EPS).

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.

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.

Return - Compounded rate of return for the period.

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

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

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.

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:

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

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

Opportunistic Real Estate

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 portfolio's 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.

PORTLAND

BOISE

CHICAGO

NEW YORK

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