# **Quarterly Investment Performance Analysis**

Santa Barbara County Employees' Retirement System

Period Ended: March 31, 2024



Overview of R\	/K Performance Reports	
	Monthly Investment Performance Analysis	Quarterly Investment Performance Analysis
Frequency	Typically available by the 15th business day following month end	Typically available 30-45 calendar days following quarter end
Analytics Included		
Capital Markets Review (abbreviated)	✓	
Capital Markets Review (with full asset class detail)		√
Monthly Portfolio Highlights or Executive Summary	✓	√
Manager Monitoring/Investment Manager Updates/Watch List		√
Asset Allocation By Manager and Schedule of Investable Assets	✓	√
Asset Allocation vs. Target Allocation	✓	√
Plan Asset Overview	✓	√
Total Fund Asset Allocation & Ranks vs. Peers		√
Trailing Performance	✓	
Trailing & Fiscal Year Performance (including ranks)		√
Total Fund IDP Attribution		√
Composite Profile Pages (including ranks)		√
Private Credit AltInvest Report	✓	$\checkmark$
Investment Manager Profile Pages (including ranks)		√
Fee Schedule for Public Investment Managers	✓	$\checkmark$
Underlying Indices of SBCERS Policy Index		√
Work Plan		$\checkmark$



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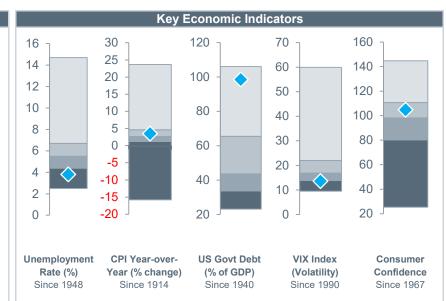
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# **Capital Markets Review**

#### First Quarter Economic Environment

In Q1, risk assets built on their impressive performance in 2023 amid a resilient US economy and strong labor market despite rising uncertainty regarding the timing of future monetary policy changes and elevated geopolitical tensions. Both US and developed international equities, across all capitalizations and styles, posted gains. The public fixed income market posted mixed results with strong economic data and moderating expectations for future rate cuts contributing to increasing yields in Q1. The broad fixed income market experienced negative returns with shorter duration bonds outperforming longer maturity bonds, representing a trend change from late-2023. The more credit sensitive sectors, such as bank loans, high yield, and emerging market debt, posted positive returns. While moderating, inflation levels above target ranges has led investors to carefully monitor comments from the Federal Open Market Committee (FOMC). In late March, the FOMC communicated its intention to maintain the plan for three rate cuts during the year. Overall, indicators currently point to stable economic activity with purchasing manager indexes for manufacturing and services remaining in expansionary territory in Q1. In its February economic outlook, the Organisation for Economic Co-operation and Development (OECD) forecasted world GDP growth of 2.9% and 3.0% in 2024 and 2025, respectively, and projected headline inflation of 6.6% in 2024 before moderating down to 3.8% in 2025.



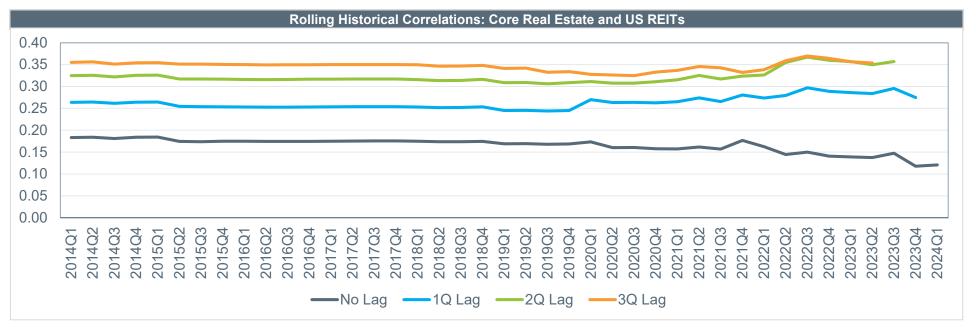
Economic Indicators	Mar-24	Dec-23	Mar-23	Mar-21	20 Yr
Federal Funds Rate (%)	5.33 🗕	5.33	4.83	0.06	1.55
Breakeven Infl 5 Yr (%)	2.44 🔺	2.14	2.47	2.60	1.94
Breakeven Infl 10 Yr (%)	2.32 🔺	2.17	2.33		2.10
CPI YoY (Headline) (%)	3.5 🔺	3.4	5.0	2.6	2.6
Unemployment Rate (%)	3.8 🔺	3.7	3.5	6.0	5.9
Real GDP YoY (%)	3.0 🔻	3.1	1.7	1.6	2.0
PMI - Manufacturing	50.3 🔺	47.4	46.3	63.7	
USD Total Wtd Idx	121.41 🔺	118.77		113.86	104.14
WTI Crude Oil per Barrel (\$)	83.2 🔺	71.7			
Gold Spot per Oz (\$)	2,230 🔺	2,068	1,979	1,708	1,259
Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	10.56	10.56	29.88	15.05	12.96
Russell 2000	5.18	5.18	19.71	8.10	7.58
MSCI EAFE (Net)	5.78	5.78	15.32	7.33	4.80
MSCI EAFE SC (Net)	2.40	2.40	10.45	4.94	4.70
MSCI Emg Mkts (Net)	2.37	2.37	8.15	2.22	2.95
Bloomberg US Agg Bond	-0.78	-0.78	1.70	0.36	1.54
ICE BofAML 3 Mo US T-Bill	1.29	1.29	5.24	2.02	1.38
NCREIF ODCE (Gross)	-2.37	-2.37	-11.29	3.46	6.76
FTSE NAREIT Eq REIT (TR)	-0.20	-0.20	10.54	4.15	6.61
HFRI FOF Comp	4.17	4.17	9.68	5.00	3.59
Bloomberg Cmdty (TR)	2.19	2.19	-0.56	6.38	-1.56

Treasury Yield Curve (%)





#### Private and Public Real Estate: Lag Effect





Underlying indexes are NCREIF ODCE (Gross) (AWA) for Core Real Estate and MSCI US Real Estate Index (Gross) for US REITs. 2024Q1 performance for Core Real Estate is preliminary and subject to change. Periodicity is quarterly. Page 6

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#### **First Quarter Review**

#### **Broad Market**

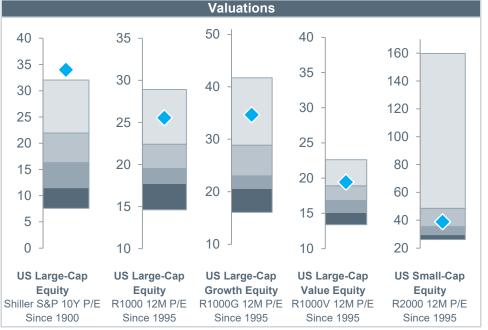
In Q1, US equity markets posted significant gains with the Russell 3000 Index returning 10.0%, although there was increased dispersion among the Magnificent 7. In general, companies that directly tied to the development of artificial intelligence (AI) have benefited from a sentiment tailwind.

#### Market Cap

During the quarter, large-cap stocks outperformed small-cap stocks with the Russell 1000 Index returning 10.3% compared to the Russell 2000 Index returning 5.2%. Value-oriented indexes and managers trailed their core- and growth-oriented peers, with the Russell 3000 Growth Index returning 11.2% in Q1 compared to 8.6% for the Russell 3000 Value Index.

#### **Style and Sector**

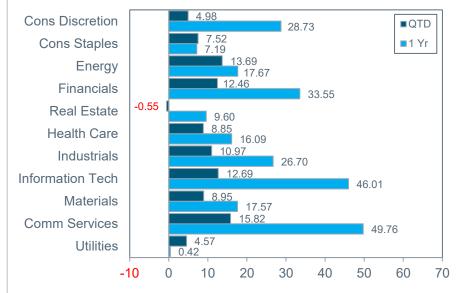
In a reversal of a recent trend, median manager excess returns were positive for active large-cap growth managers, suggesting the increased dispersion among the Magnificent 7 has provided increased opportunities for alpha generation. The best benchmark-relative results were reported by active small-cap value managers while active mid- and small-cap growth managers had more difficulty outpacing strong benchmark returns.



Style and Capitalization Market Performance (%)



# S&P 500 Index Sector Performance (%)



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



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

#### As of March 31, 2024

### **First Quarter Review**

#### **Developed Markets**

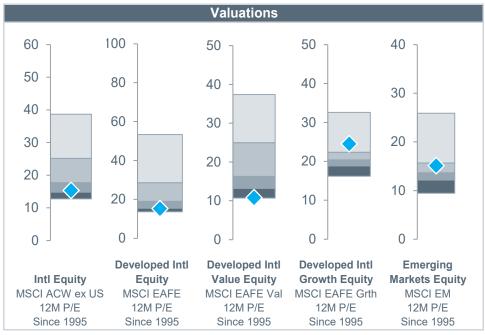
Developed international markets trailed their US counterparts in Q1 with the MSCI EAFE returning 5.8%. In similar fashion to the US markets, large-cap stocks outpaced small-cap stocks with the MSCI EAFE Index returning 5.8% compared to the MSCI EAFE Small Cap Index returning 2.4%.

#### **Emerging Markets**

In a continuation of a theme in Q4 2023, emerging market equities lagged developed markets with the MSCI Emerging Market Index returning 2.4% during the quarter. The majority of active emerging market managers outperformed in Q1 amid a lower return environment. Equity returns from China were led lower with sentiment impacted by concerns regarding debt and issues within its property sector, combined with stimulus levels falling below the expectations of some investors.

#### Market Cap & Style

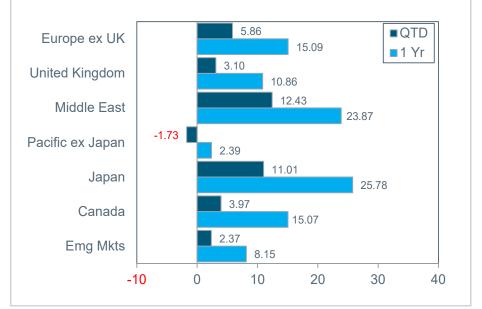
According to median manager excess returns, the quarter represented a favorable environment for active management across most sub-asset classes. One exception was the international small-cap growth space. Among developed international equity managers with positive excess returns in Q1, allocations to Japan and stock selection within the country was a common theme observed across portfolios.



MSCI Style and Capitalization Market Performance (%)



# MSCI Region Performance (%)



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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.

#### **First Quarter Review**

#### **Broad Market**

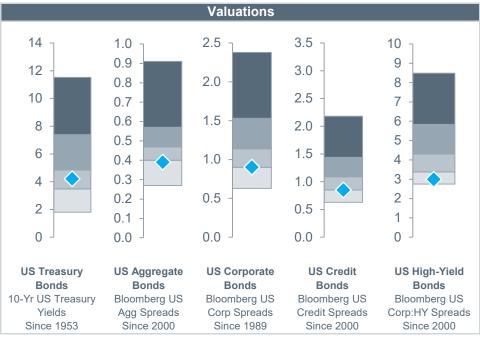
In Q1, investor expectations related to monetary policy actions shifted due to persistent inflation, a strong labor market, and stable economic conditions. Market expectations of rate cuts now align with that of FOMC members, anticipating three rate cuts totaling 75 basis points in 2024. US Treasury yields experienced a steady increase across the curve, with the 10-year yield rising by 32 basis points to end the quarter at 4.2%. The yield curve remained inverted with the spread between 2-year and 10-year Treasury yields standing at 39 basis points at quarter-end. Against this backdrop, the Bloomberg US Aggregate Bond Index posted a return of -0.8% in Q1.

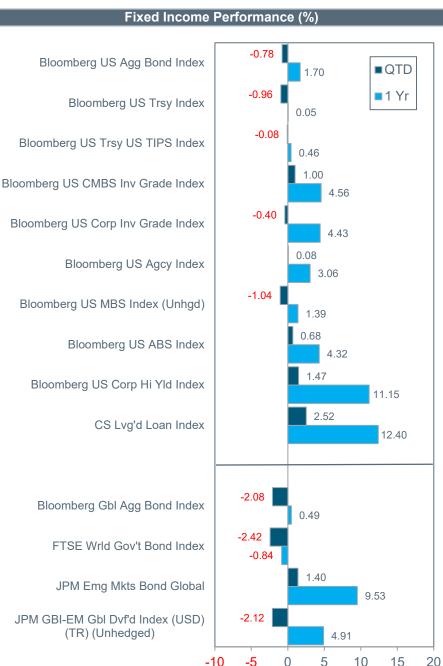
#### **Credit Market**

Risk assets weathered rising rates, with lower-rated bonds outperforming. The Bloomberg US Corporate Investment Grade Index returned -0.4%, while the Bloomberg US Corporate High Yield Index returned 1.5%.

#### **Emerging Market Debt**

Emerging market debt delivered mixed results. The JPMorgan EMBI Global Diversified Index—tracking hard currency bonds in emerging markets—posted a 2.0% return in Q1. However, the strength of the US dollar put downward pressure on foreign exchange rates, leading to the underperformance of the JPMorgan GBI-EM Global Diversified Index, which tracks local currency bond markets, declining -2.1% in Q1.





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**

In Q1, hedge funds delivered positive results across the spectrum of major strategy groups. The HFRI Asset Weighted Composite Index delivered a return of 5.0%. The only outlier was seen across Merger Arbitrage managers, which broadly ended the quarter in flat territory. This has been driven by a continuation of sluggish deal flows due to muted activity from corporate management teams. Long-biased Equity Long/Short managers fared well on both a market capture and alpha basis, driven by the tailwinds of strong returns across nearly all public market sectors.

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

Global Tactical Asset Allocation (GTAA) strategies that RVK follows closely posted positive returns with moderate dispersion in Q1. All active managers targeting significant diversification underperformed a US-centric 60% equity and 40% fixed income blend (60/40 blend) as stocks were buoyed by strong earnings and investor appetite for names associated with the Al theme. The top performing long-biased GTAA strategies featured a higher allocation to US equities, Japanese equities, and exposure to the technology sector, while those who trailed peers tended to hold larger emerging market equity and fixed income exposures.



# HFRI Hedge Fund Performance (%)

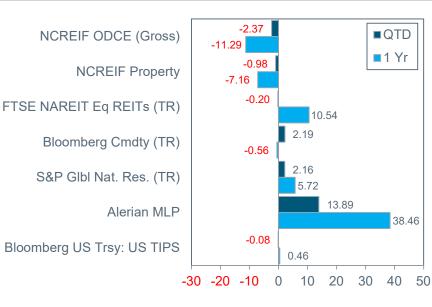
## First Quarter Review - Real Assets

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

Diversified Inflation Strategy managers that RVK follows closely reported positive performance in Q1, but still underperformed a 60/40 blend. Managers with larger exposures to energy and gold within commodities outperformed peers while those with higher allocations to US bonds and REITs lagged behind.

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

In Q1, core private real estate generated a return of -2.4% (on a preliminary and gross of fee basis), as reported by the NFI-ODCE Index, with the total return comprising of 1.0% from income and -3.3% from price appreciation. Income returns continued to trend at the lower end of historical levels due to elevated borrowing costs and expenses. Regarding price appreciation, this marks the sixth consecutive quarter of negative returns. While also reporting negative returns, publicly traded real estate outperformed private market counterparts with a total return of -1.3% in Q1, as measured by the FTSE/NAREIT All REITs Index. Recent REIT performance has given some private real estate investors a sense of anticipation that the negative appreciation trend in private real estate may be nearing a bottom. Historically, the direction of the public REIT market has served as a leading indicator for private market counterparts.



## Real Asset Performance (%)



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD
Best	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	26.29	10.56
Î	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	18.24	5.78
	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	16.93	5.18
	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	13.73	4.17
	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	13.45	2.40
	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	13.16	2.37
	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	9.83	2.19
	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	7.13	1.47
	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	6.07	1.29
	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	5.53	-0.08
	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	5.02	-0.20
	6.31	-13.32	4.21	-8.61	-4.90	-4.47	1.00	3.01	-13.79	7.69	0.67	-1.55	-21.39	3.90	-0.78
•	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	-7.91	-2.37
Worst	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	-12.02	-2.41
S&P 50 US Lar Cap	ge US Si	mall (Net)		(Net) - (N	/ISCI EM Net) - Int'l mg Mkts	Bloombrg US Agg Bond - Fl	Bloombrg US Corp Hi Yield - Fl	Bloombrg US Trsy U TIPS - FI		v OD( ng (Gros	E NAR	EIT Eq C EITs Ir	onip	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**

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# Q1 2024 Executive Summary

# **Total Fund Summary**

The Total Fund market value was \$4.36 billion as of March 31, 2024, an increase of approximately \$113.2 million from the previous quarter. The Total Fund returned 2.70% for the first quarter, net of fees, and ranked in the 91<sup>st</sup> percentile among the Public Plans \$1B-\$5B peer group. The Total Fund underperformed the Policy Benchmark by 126 basis points and the Dynamic Policy Benchmark by 147 basis points.

All asset classes except Cash were within their respective target ranges as of March 31, 2024.

# **Contributors to Total Fund Performance**

US Equity, Developed Non-US Equity, and Non-Core Fixed Income had the highest absolute performance during the quarter, returning 9.07%, 8.15%, and 1.81%, respectively.

Performance relative to the Policy Benchmark was aided by Developed Non-US Equity, Real Estate, and Core Fixed Income strong relative performance, which beat their benchmarks by 237, 181, and 4 basis points, respectively.

Performance relative to the Dynamic Policy Benchmark was positively impacted by individual manager relative outperformance, including Artisan, Acadian, and PanAgora which beat their benchmarks by 425, 272, and 199 basis points, respectively.

# **Detractors from Total Fund Performance**

Real Estate, Core Fixed Income, and Private Equity had the lowest absolute performance during the quarter, returning -3.19%, -0.74%, and 0.84%, respectively.

Performance versus the Policy Benchmark was hurt by the weak relative performance of Private Equity, Real Return, and US Equity which lagged their benchmarks by 1,206, 114, and 95 basis points, respectively.

Performance relative to the Dynamic Policy Benchmark was negatively impacted by individual manager underperformance, including Private Equity, BNY Mellon HEDI, and RBC which lagged their benchmarks by 1,206, 202, and 188 basis points, respectively.

#### Santa Barbara County Employees' Retirement System Manager Monitoring

	Significant Events (Yes/No)	Last Meeting with Board of Retirement	Last Meeting with RVK	Last RVK On-Site at Manager Office	Commonts
U.S. Equity					
BNY Mellon HEDI (SA)	No	January 2024	February 2023	September 2022	
BNY Mellon R1000 Index - NL (CF)	No		February 2023	September 2022	
DFA US Small Cap;I (DFSTX)	No	November 2020	July 2023	April 2018	
Developed Market Non-U.S. Equity					
PanAgora Dynamic International Equity (SA)	No		December 2023	June 2017	
Artisan Non-U.S. Growth (SA)	No		February 2024	May 2018	
Acadian Non-US Small Cap Equity (CF)	No	April 2023	April 2024	August 2023	
Emerging Market Equity					
DFA Emg Mkts Value;I (DFEVX)	No	September 2023	July 2023	April 2018	
RBC Emerging Markets Equity (CF)	No	September 2023	March 2024	February 2019	
Core Fixed Income					
Garcia Hamilton Core Fixed Income (SA)	Yes	April 2023	April 2024	December 2019	The firm added Justo Gonzalez as Director of Research in December 2023. The firm's CCO, Beth McWilliam, has announced her retirement at the end of 2024, the firm has launched as a search for a replacement.
PGIM Core Plus Fixed Income (CF)	Yes	December 2023	May 2024	May 2022	Richard Greenwood, who has been with PGIM Fixed Income for 37 years, will retire as Managing Director & Head of Credit in April 2025. Craig Dewling will start overseeing the credit portfolio management teams directly, beginning January 2025. Cheryl Akawie, Managing Director & Head of U.S. and Japan Investment Grade Credit Research at PGIM Fixed Income, will retire in October 2024 after 34 years with the firm. Liz Halpin, currently Managing Director & Co-Head of U.S. Leveraged Finance Research, will take over as Head of U.S. and Japan Investment Grade Credit Research starting in October 2024. Until Ms. Akawie retires, Ms. Halpin will work alongside her as Co-Head. Ms. Halpin will still report to Brian Barnhurst, Head of Global Credit Research. Gary Horbacz, Managing Director & Head of Securitized Products Research at PGIM Fixed Income, will retire in April 2025 after 36 years with the firm. Until January 1, 2025, he will oversee securitized credit research. Then, from January to April 2025, he'll serve as an advisor to the firm and report to Edwin Wilches and Gabe Rivera, Co-Heads of Securitized Products, until retirement. Kaustub Samant, Principal & Head of Mortgage Credit Research, will take over as Head of Securitized Products Research starting January 2025. Mr. Samant will also continue to oversee Mortgage Credit Research and report to Mr. Wilches and Mr. Rivera. Peter Freitag, Principal & Securitized Products Portfolio Manager at PGIM Fixed Income, will retire in the second quarter of 2025, concluding a 31-year career with the firm. Prior to his retirement, PGIM will begin a search for a new securitized products portfolio manager, specifically focusing on Asset-Based Finance. Lastly, Jason Pan, Principal & Securitized Products Credit Research Analyst, will become Head of CMBS Research effective January 2025.





# Santa Barbara County Employees' Retirement System Manager Monitoring

	Significant Events (Yes/No)	Last Meeting with Board of Retirement	Last Meeting with RVK	Last RVK On-Site at Manager Office	Comments
Non-Core Fixed Income	·				
Wellington Blended Opportunistic EMD (CF)	No	September 2023	November 2022	November 2022	
Beach Point Leveraged Loan (CF)	No		August 2023	August 2019	
AG Direct Lending LP (Funds III, IV, and Evergreen)	No	April 2023	March 2024	October 2021	
Ares Pathfinder Core LP	No		December 2023	September 2023	
Deerpath Capital LP (Funds V and VI)	No	June 2021	March 2023	March 2020	
First Eagle Direct Lending (Funds IV and V-B)	No	February 2021	April 2024	October 2019	
KKR US Direct Lending Evergreen Fund	No		October 2023	July 2023	
Marathon Dislocation Credit Fund II LP	Yes		April 2024	July 2023	During Q1 2024, the default rate of the syndicated loan market exceeded 4%. Therefore, 100% of Fund commtiments are now available to be called. Marathon will begin putting 50% of commitments to work in Dislocated/Distressed investments.
PIMCO Private Income Fund, LLC	No	April 2019	April 2024	August 2022	
Real Return					
BNY Mellon TIPS - NL (CF)	No		February 2023	September 2022	
Cohen & Steers Real Assets Fund (CIT)	No	July 2017	January 2024	August 2022	
Nuveen Real Asset Income Fund (SA)	Yes	July 2017	March 2024	March 2024	Jay Rosenberg, lead portfolio manager of Nuveen Real Asset Income and Head of Public Real Assets, will retire effective July 1, 2024, after nearly 20 years with Nuveen. Benjamin Kerl was appointed as Head of Public Real Assets effective March 31, 2024.
Private Natural Resources	No	February 2024	-	-	
Private Infrastructure	No	February 2024	-	-	
Private Equity					
Hamilton Lane	No	February 2024	-	-	
Real Estate	·				
Hamilton Lane	No	February 2024	-	-	

# As of March 31, 2024



# **INVESTMENT MANAGER UPDATES**

# Garcia Hamilton Core Fixed Income (SA)

The firm added Justo Gonzalez as Director of Research in December 2023. The firm's CCO, Beth McWilliam, has announced her retirement at the end of 2024, the firm has launched as a search for a replacement.

#### Opinion: RVK will continue to closely monitor and recommends no action at this time.

## **PGIM Core Plus Fixed Income (CF)**

Richard Greenwood, who has been with PGIM Fixed Income for 37 years, will retire as Managing Director & Head of Credit in April 2025. Craig Dewling will start overseeing the credit portfolio management teams directly, beginning January 2025. Cheryl Akawie, Managing Director & Head of U.S. and Japan Investment Grade Credit Research at PGIM Fixed Income, will retire in October 2024 after 34 years with the firm. Liz Halpin, currently Managing Director & Co-Head of U.S. Leveraged Finance Research, will take over as Head of U.S. and Japan Investment Grade Credit Research starting in October 2024. Until Ms. Akawie retires, Ms. Halpin will work alongside her as Co-Head. Ms. Halpin will still report to Brian Barnhurst, Head of Global Credit Research. Gary Horbacz, Managing Director & Head of Securitized Products Research at PGIM Fixed Income, will retire in April 2025 after 36 years with the firm. Until January 1, 2025, he will oversee securitized credit research. Then, from January to April 2025, he'll serve as an advisor to the firm and report to Edwin Wilches and Gabe Rivera, Co-Heads of Securitized Products Research starting January 2025. Mr. Samant will also continue to oversee Mortgage Credit Research and report to Mr. Wilches and Mr. Rivera. Peter Freitag, Principal & Securitized Products Portfolio Manager at PGIM Fixed Income, will retire in the second quarter of 2025, concluding a 31-year career with the firm. Prior to his retirement, PGIM will begin a search for a new securitized products portfolio manager, specifically focusing on Asset-Based Finance. Lastly, Jason Pan, Principal & Securitized Products Credit Research Analyst, will become Head of CMBS Research effective January 2025.

Opinion: PGIM's investment strategy and processes will remain intact with minimal disruptions during these transitions. The steadfastness of PGIM's credit research will be maintained throughout these changes. PGIM Fixed Income portfolio managers and the investment team will continue operations as usual, leveraging its robust global research platforms and capabilities. RVK believes that these strategic retirements and appointments have been meticulously planned and executed and will not materially affect PGIM's investment processes or team dynamics.



# **INVESTMENT MANAGER UPDATES**

# Marathon Dislocation Credit Fund II LP

During Q1 2024, the default rate of the syndicated loan market exceeded 4%. Therefore, 100% of Fund commtiments are now available to be called. Marathon will begin putting 50% of commitments to work in Dislocated/Distressed investments.

Opinion: RVK will continue to closely monitor and recommends no action at this time.

## **Nuveen Real Asset Income Fund (SA)**

Jay Rosenberg, lead portfolio manager of Nuveen Real Asset Income and Head of Public Real Assets, will retire effective July 1, 2024, after nearly 20 years with Nuveen. Benjamin Kerl will be appointed as Head of Public Real Assets effective March 31, 2024.

Opinion: The team managing the strategy is broad, well-staffed and offers significant depth of professional expertise. Mr. Kerl has extensive tenure working alongside Mr. Rosenberg, and according to the team, has already implemented improvements on team communication and bottom-up valuation processes. RVK will continue to closely monitor and recommends no action at this time.



As of Ma	rch	31,	2024
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			year ı rollin		(net of -year b	nager's rolling, five- fees) falls below the penchmark return for ecutive quarters.	yeai coi		n (net c ive qua n third	nager's rolling, five- of fees) for three (3) arters ranks in the of the General er group universe.		Qualitative Factor(s) Resulting in						
Asset Class	Investment Manager	Inception Date	fa	indica iled te 2023 Q4	est	Watch List Status	fa	2023 2023 2024		Watch List Status	A B	Quali		Qualitative Factor(s) Watch List Ac A B C D E F G H I J		Benchmark	Peer Group	
U.S. Equity	DFA US Small Cap;I (DFSTX)	3/1/2024				N/A (Insufficient Performance History)				N/A (Insufficient Performance History)							Russell 2000 Index	U.S. Small Cap Core Equity
larket luity	PanAgora Dynamic International Equity (SA)	5/1/2009															MSCI EAFE Index (USD) (Net)	EAFE Core
Developed Market non-U.S. Equity	Artisan Non-U.S. Growth (SA)	2/1/2014				On Watch (2023 Q4)				On Watch (2023 Q4)							MSCI EAFE Index (USD) (Net)	EAFE Growth
Deve non	Acadian Non-US Small Cap Equity (CF)	12/1/2020				N/A (Insufficient Performance History)				N/A (Insufficient Performance History)							MSCI EAFE Sm Cap Index (USD) (Net)	International Small Cap Equity
Emerging Markets Equity	DFA Emg Mkts Value;I (DFEVX)	5/1/2013															MSCI Emg Mkts Index (USD) (Net)	Emerging Markets Equity
Emei Mar Eqi	RBC Emerging Markets Equity (CF)	9/1/2016															MSCI Emg Mkts Index (USD) (Net)	Emerging Markets Equity
Core Fixed Income	Garcia Hamilton Core Fixed Income (SA)	9/1/2017															Bloomberg US Agg Bond Index	U.S. Broad Market Core Fixed Income
Core Inco	PGIM Core Plus Fixed Income (CF)	6/1/2018															Bloomberg US Agg Bond Index	U.S. Broad Market Core+ Fixed Income
Core ed	Wellington Blended Opportunistic EMD (CF) Beach Point Leveraged	4/1/2020				N/A (Insufficient Performance History)				N/A (Insufficient Performance History)							Wellington Blended Benchmark	Emerging Markets Debt
Non-Core Fixed Income	Beach Point Leveraged Loan (CF)	10/1/2012															CS Lvg'd Loan Index	U.S. Bank Loans
Real Return	Cohen & Steers Real Assets Fund (CIT)	9/1/2017								N/A (No Comparable Universe)							 Cohen & Steers Real Assets Custom Index	N/A
Ret	Nuveen Real Asset Income Fund (SA)	9/1/2017								N/A (No Comparable Universe)							Nuveen Real Asset Income Blend Index	N/A

Qualitative Factors Resulting in Watch List Additions:

A. Violation of investment guidelines

B. Deviation from stated investment style or shifts in the firm's philosophy or process

C. Turnover of one or more key personnel

D. Change in firm ownership or structure

E. Significant loss of clients and/or assets under management

F. Significant and persistent lack of responsiveness to client requests

G. The initiation of significant litigation or regulatory action

H. Failure to disclose significant information, including potential conflicts of interest

I. Chronic violations of SBCERS' Investment Policy Statement

J. Any other issue or situation of which the General Investment Consultant and/or Board become aware that is deemed material

### Santa Barbara County Employees' Retirement System Asset Allocation By Manager and Schedule of Investable Assets

	Market Value (\$)	Allocation (%)
BNY Mellon HEDI (SA)	333,064,803	7.63
BNY Mellon R1000 Index - NL (CF)	437,805,202	10.03
DFA US Small Cap;I (DFSTX)	66,905,007	1.53
PanAgora Dynamic International Equity (SA)	243,569,713	5.58
Artisan Non-U.S. Growth (SA)	163,374,736	3.74
Acadian Non-US Small Cap Equity (CF)	64,158,669	1.47
DFA Emg Mkts Value;I (DFEVX)	142,118,610	3.26
RBC Emerging Markets Equity (CF)	134,051,988	3.07
Garcia Hamilton Core Fixed Income (SA)	360,945,801	8.27
PGIM Core Plus Fixed Income (CF)	258,299,544	5.92
Wellington Blended Opportunistic EMD (CF)	111,923,116	2.56
Beach Point Leveraged Loan (CF)	141,636,299	3.25
AG Direct Lending III LP	14,848,575	0.34
First Eagle Direct Lending Fund IV	11,920,395	0.27
PIMCO Private Income Fund, LLC	27,445,089	0.63
Deerpath Capital V LP	20,044,014	0.46
AG Direct Lending IV LP	20,411,980	0.47
First Eagle Direct Lending Fund V-B	16,616,612	0.38
Deerpath Capital VI LP	17,223,951	0.39
AG Direct Lending Evergreen LP	12,039,074	0.28
Ares Pathfinder Core LP	20,256,293	0.46
Marathon Dislocation Credit Fund II LP	3,250,000	0.07
BNY Mellon TIPS - NL (CF)	10,329,493	0.24
Cohen & Steers Real Assets Fund (CIT)	53,506,408	1.23
Nuveen Real Asset Income Fund (SA)	52,890,777	1.21
Private Natural Resources	191,750,689	4.39
Private Infrastructure	303,635,110	6.96
Hamilton Lane Real Estate	450,912,893	10.33
130 Robin Hill Rd	9,953,915	0.23
Private Equity Composite	576,610,427	13.21
■ Transition Account	1,325,224	0.03
Cash Composite	91,157,827	2.09

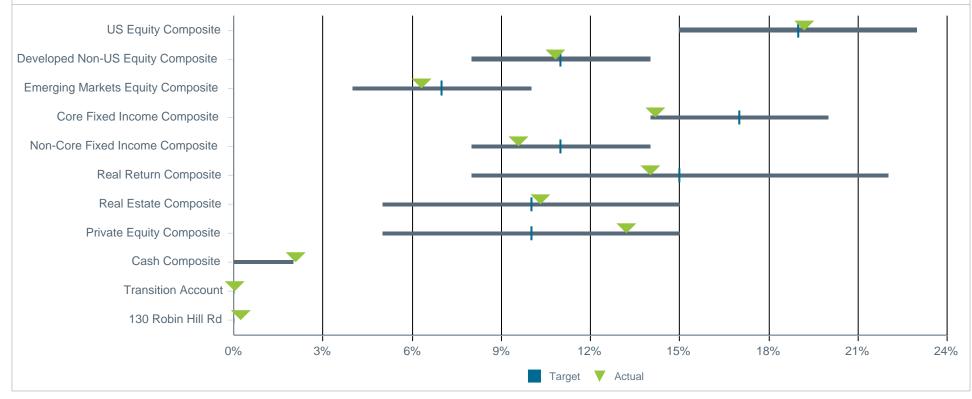
Schedule of Investable Assets Ex Treasury Cash												
Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return							
FYTD	4,070,901,428	-20,216,955	280,221,593	4,330,906,066	6.91							

Performance shown is net of fees and provided by BNY Mellon. Allocations shown may not sum up to 100% exactly due to rounding. Schedule of Investable Assets excludes Treasury Cash. The fiscal year ends 06/30. Total fund market value includes residual assets from terminated managers, including Copper Rock, First Eagle, Hotchkis & Wiley, New Star, and Rice Hall James. During Q1 2024, Rice Hall James and DFA US Small Cap Value were liquidated to fund DFA US Small Cap;I (DFSTX).



# Santa Barbara County Employees' Retirement System Asset Allocation vs Target Allocation

	Market Value (\$)	Allocation (%)	Lower Range (%)	Target (%)	Upper Range (%)
Total Fund Composite	4,364,873,331	100.0	-	100.0	-
US Equity Composite	837,775,916	19.2	15.0	19.0	23.0
Developed Non-US Equity Composite	471,833,235	10.8	8.0	11.0	14.0
Emerging Markets Equity Composite	276,170,598	6.3	4.0	7.0	10.0
Core Fixed Income Composite	619,245,345	14.2	14.0	17.0	20.0
Non-Core Fixed Income Composite	417,775,472	9.6	8.0	11.0	14.0
Real Return Composite	612,112,478	14.0	8.0	15.0	22.0
Real Estate Composite	450,912,893	10.3	5.0	10.0	15.0
Private Equity Composite	576,610,427	13.2	5.0	10.0	15.0
Cash Composite	91,157,827	2.1	0.0	0.0	2.0
Transition Account	1,325,224	0.0	0.0	0.0	0.0
130 Robin Hill Rd	9,953,915	0.2	0.0	0.0	0.0

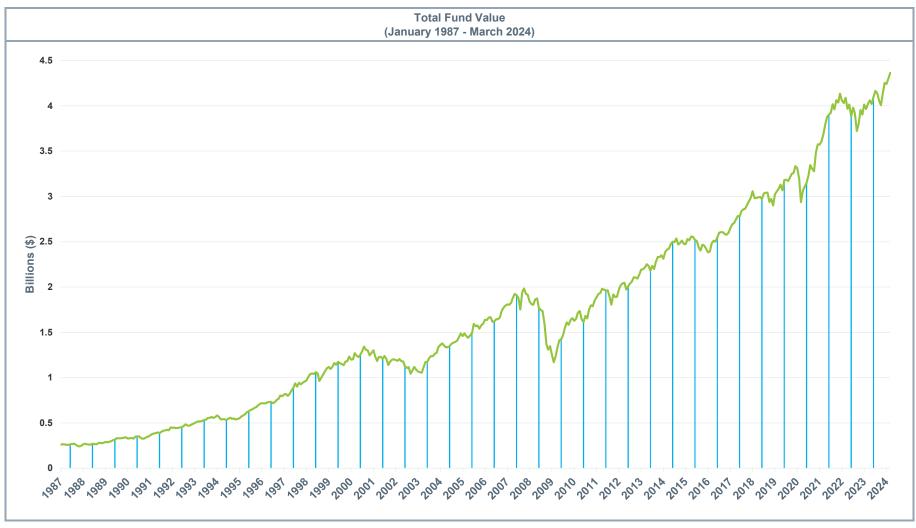


Allocations shown may not sum up to 100% exactly due to rounding. Market value for the Transition Account represents residual assets from portfolio restructuring. Composite market values includes residual assets from liquidated managers.



# Santa Barbara County Employees' Retirement System Plan Asset Overview

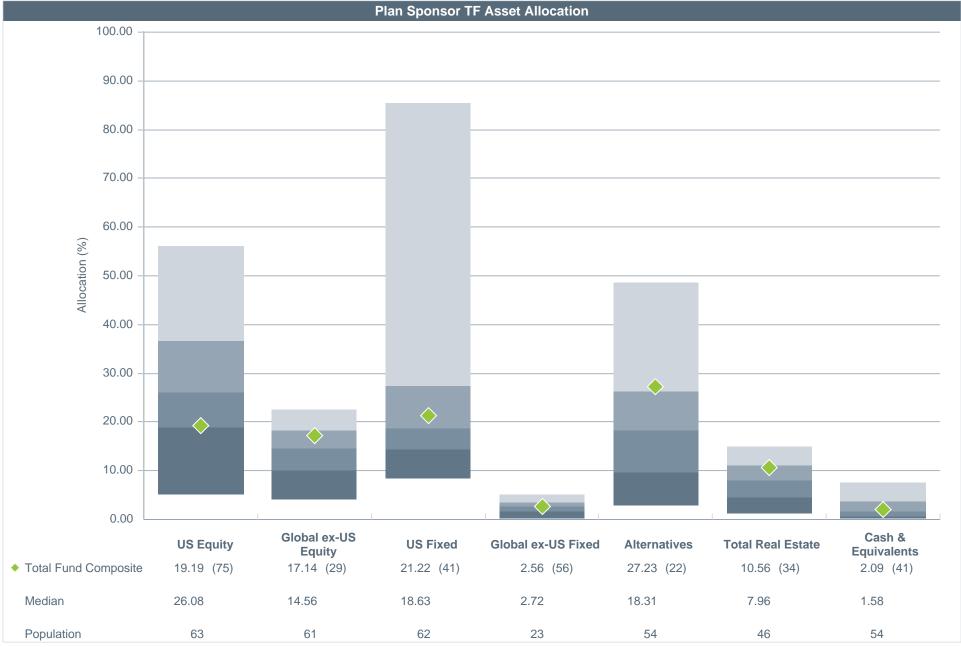
	Market Value		Performance (%)											
	(\$)	FYTD	FY 2023	FY 2022	FY 2021	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016	FY 2015	FY 2014	Since Incep.	
Total Fund	4,364,873,331	6.91	7.09	0.28	25.20	-0.10	7.74	7.80	10.49	1.37	0.42	15.25	8.21	



Performance shown is net of fees and is annualized for periods greater than one year. The fiscal year for Santa Barbara County Employees' Retirement System ends 06/30. Inception date for the Total Fund is 01/01/1987. Total Fund performance excludes Treasury Cash.



### Santa Barbara County Employees' Retirement System All Public Plans \$1B-\$5B Plan Sponsor TF Asset Allocation



Parentheses contain percentile ranks. Global ex-US Fixed consists of Wellington Blended Opportunistic EMD (CF). US Fixed includes the Transition Account. Allocation to Total Real Estate includes 130 Robin Hill Road.

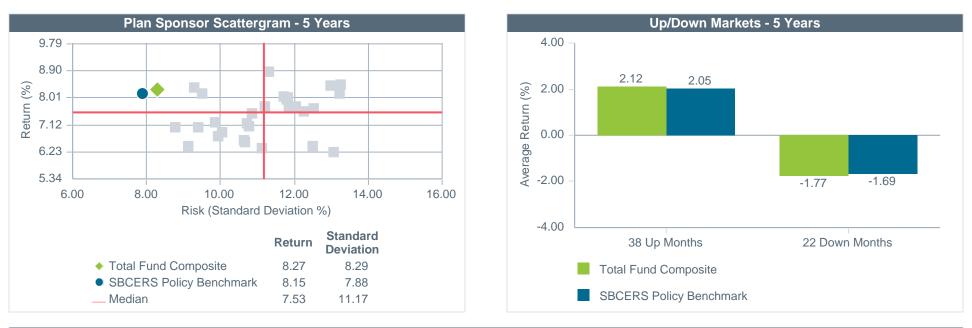


#### Santa Barbara County Employees' Retirement System All Public Plans \$1B-\$5B Plan Sponsor Peer Group Analysis



Performance shown is net of fees. Parentheses contain percentile ranks. The fiscal year ends 06/30. Total Fund performance excludes 130 RHR and Treasury Cash.



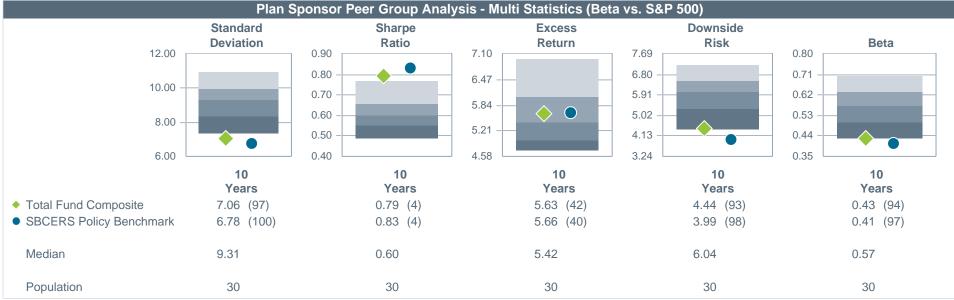


#### Plan Sponsor Peer Group Analysis - Multi Statistics (Beta vs. S&P 500) Standard Downside Sharpe **Excess** Beta Deviation Ratio Return Risk 14.00 0.80 7.92 10.00 0.80 7.16 0.71 12.00 0.60 8.00 0.62 6.40 10.00 5.64 0.53 0.40 6.00 8.00 4.88 0.44 6.00 0.20 4.12 4.00 0.35 5 5 5 5 5 Years Years Years Years Years Total Fund Composite 8.29 (95) 0.75 (3) 6.32 (35) 5.34 (93) 0.43 (93) • SBCERS Policy Benchmark 7.88 (100) 0.78 (3) 6.17 (41) 4.73 (98) 0.41 (95) Median 11.17 0.52 5.95 7.31 0.58 Population 36 36 36 36 36

Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Total Fund performance excludes 130 RHR and Treasury Cash.



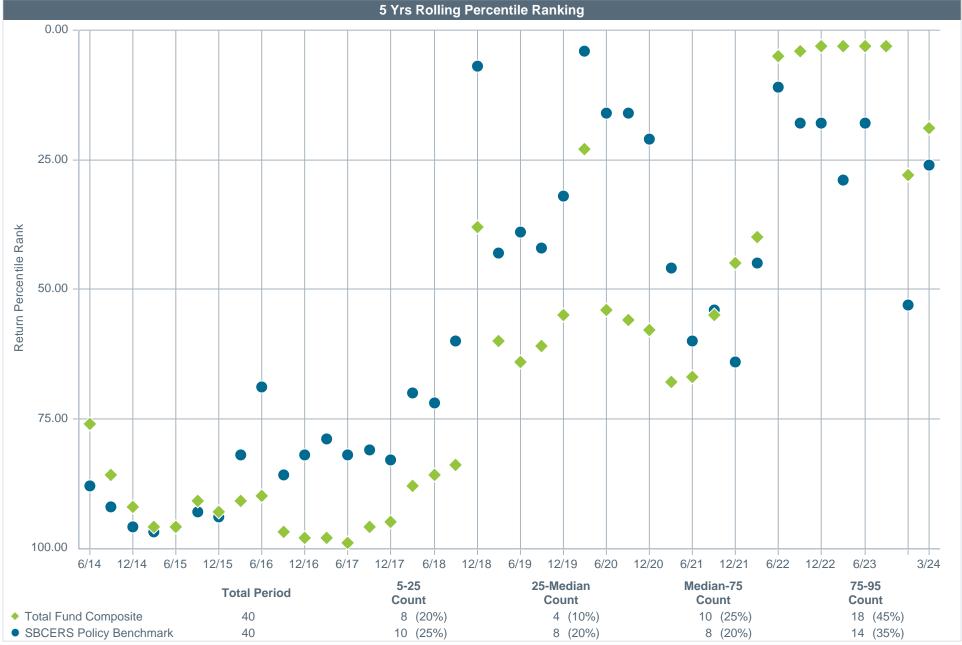




Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Total Fund performance excludes 130 RHR and Treasury Cash.



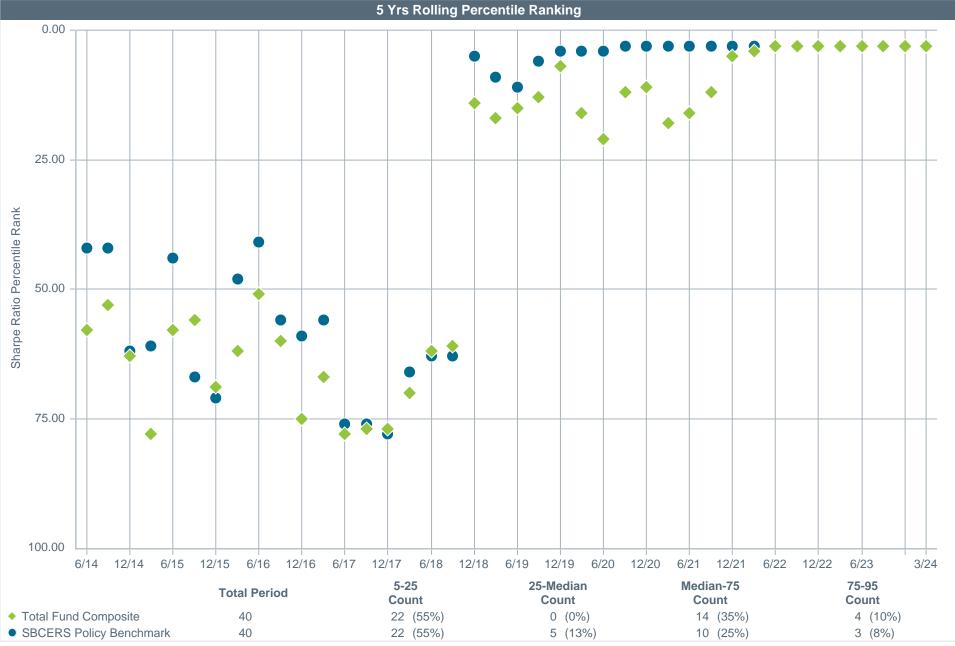
#### Santa Barbara County Employees' Retirement System All Public Plans \$1B-\$5B Rolling 5-Year Return Percentile Ranking



Ranks shown are based on net of fees performance. Total Fund performance excludes 130 RHR and Treasury Cash.



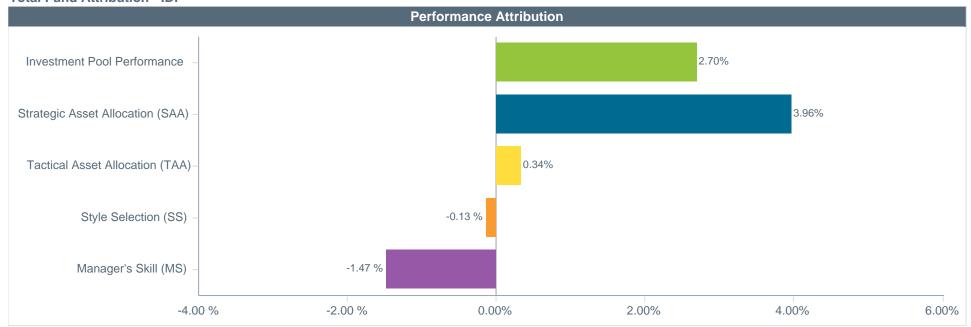
#### Santa Barbara County Employees' Retirement System All Public Plans \$1B-\$5B Rolling 5-Year Sharpe Ratio Percentile Ranking

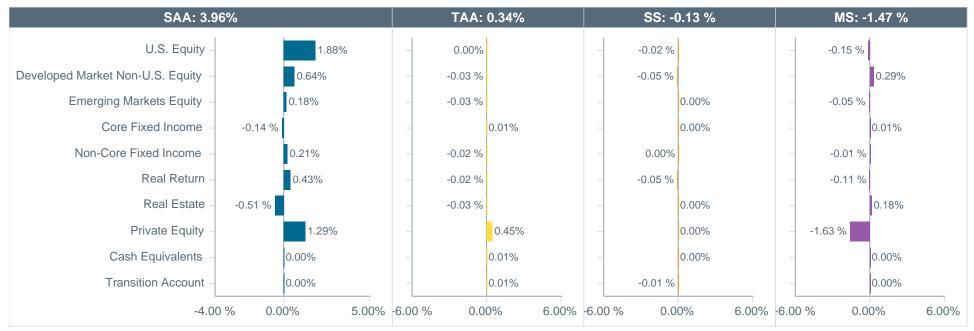


Ranks shown are based on net of fees performance. Total Fund performance excludes 130 RHR and Treasury Cash.



#### Santa Barbara County Employees' Retirement System Total Fund Attribution - IDP

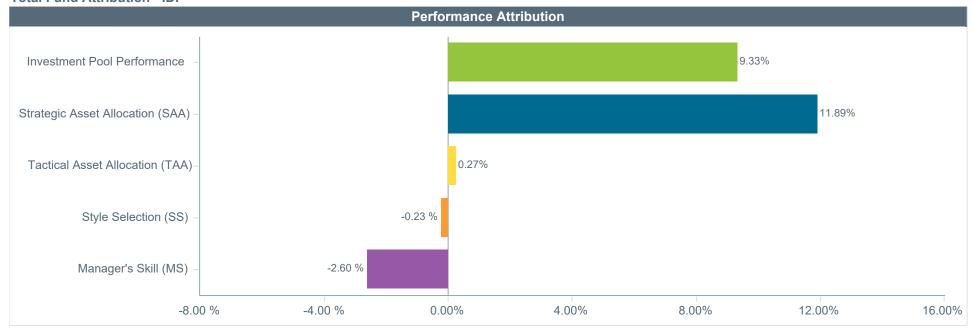


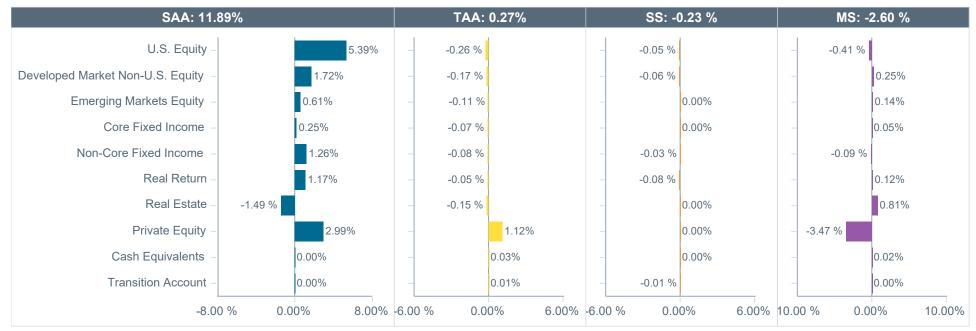


Performance shown is net of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation. Total Fund performance excludes 130 RHR and Treasury Cash.



#### Santa Barbara County Employees' Retirement System Total Fund Attribution - IDP





Performance shown is net of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation. Total Fund performance excludes 130 RHR and Treasury Cash.



	Allocatio	n					Perfor	mance (%	)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Total Fund Composite	4,364,873,331	100.00	2.70	2.70	6.91	9.30	6.76	8.20	8.02	6.93	8.21	01/01/1987
Total Fund Ex 130 Robin Hill Rd	4,354,919,417	99.77	2.70	2.70	6.94	9.33	6.89	8.27	8.07	6.96	8.21	01/01/1987
SBCERS Policy Benchmark			3.96	3.96	8.69	11.89	5.48	8.15	7.82	7.02	N/A	
Difference			-1.26	-1.26	-1.75	-2.56	1.41	0.12	0.25	-0.06	N/A	
SBCERS Dynamic Policy Benchmark			4.17	4.17	8.75	11.93	4.88	7.65	7.37	6.48	N/A	
Difference			-1.47	-1.47	-1.81	-2.60	2.01	0.62	0.70	0.48	N/A	
US Equity Composite	837,775,916	19.19	9.07	9.07	17.30	26.46	9.97	14.12	13.63	12.07	11.05	01/01/1987
Russell 3000 Index			10.02	10.02	19.29	29.29	9.78	14.34	13.45	12.33	10.85	
Difference			-0.95	-0.95	-1.99	-2.83	0.19	-0.22	0.18	-0.26	0.20	
US Large Cap Equity Composite	770,870,005	17.66	9.42	9.42	17.46	27.26	10.52	14.50	14.13	N/A	14.25	06/01/201
Russell 1000 Index			10.30	10.30	19.61	29.87	10.45	14.76	13.85	12.68	14.28	
Difference			-0.88	-0.88	-2.15	-2.61	0.07	-0.26	0.28	N/A	-0.03	
US Small Cap Equity Composite	66,905,912	1.53	5.13	5.13	15.47	19.75	5.40	10.62	9.07	N/A	10.68	06/01/201
Russell 2000 Index			5.18	5.18	13.79	19.71	-0.10	8.10	7.73	7.58	9.58	
Difference			-0.05	-0.05	1.68	0.04	5.50	2.52	1.34	N/A	1.10	
Developed Non-US Equity Composite	471,833,235	10.81	8.15	8.15	14.47	17.14	5.46	7.26	6.58	5.18	7.53	07/01/2012
MSCI EAFE Index (USD) (Net)			5.78	5.78	12.01	15.32	4.78	7.33	6.70	4.80	7.15	
Difference			2.37	2.37	2.46	1.82	0.68	-0.07	-0.12	0.38	0.38	
Emerging Markets Equity Composite	276,170,598	6.33	1.57	1.57	6.38	10.26	-0.20	3.97	4.90	4.02	4.17	07/01/2012
MSCI Emg Mkts Index (USD) (Net)			2.37	2.37	7.19	8.15	-5.05	2.22	3.72	2.95	3.36	
Difference			-0.80	-0.80	-0.81	2.11	4.85	1.75	1.18	1.07	0.81	
Core Fixed Income Composite	619,245,345	14.19	-0.74	-0.74	2.68	1.97	-2.11	0.71	N/A	N/A	1.38	07/01/201
Bloomberg US Agg Bond Index			-0.78	-0.78	2.56	1.70	-2.46	0.36	1.06	1.54	0.89	
Difference			0.04	0.04	0.12	0.27	0.35	0.35	N/A	N/A	0.49	
Non-Core Fixed Income Composite	417,775,472	9.57	1.81	1.81	6.84	10.22	4.28	4.15	N/A	N/A	3.54	07/01/201
Custom Non-Core Fixed Income Benchmark			1.88	1.88	8.19	11.36	3.46	4.17	4.14	3.91	4.00	
Difference			-0.07	-0.07	-1.35	-1.14	0.82	-0.02	N/A	N/A	-0.46	

Performance shown is net of fees and provided by BNY Mellon. Performance is annualized for periods greater than one year. Total Fund performance excludes Treasury Cash. Indices show N/A for since inception returns when the fund contains more history than the corresponding benchmark. The fiscal year ends 06/30. Composite market values includes residual assets from liquidated managers.



	Allocation	า					Perfor	mance (%	)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Return Composite	612,112,478	14.02	1.68	1.68	6.12	7.88	10.78	8.47	N/A	N/A	7.34	07/01/2017
Consumer Price Index+4%			2.82	2.82	5.42	7.62	9.87	8.37	7.75	6.94	7.81	
Difference			-1.14	-1.14	0.70	0.26	0.91	0.10	N/A	N/A	-0.47	
Custom Real Return Benchmark			2.46	2.46	5.51	7.14	7.06	6.42	N/A	N/A	6.00	
Difference			-0.78	-0.78	0.61	0.74	3.72	2.05	N/A	N/A	1.34	
Real Estate Composite	450,912,893	10.33	-3.19	-3.19	-3.88	-6.43	11.53	9.17	9.76	10.22	6.97	04/01/2006
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			-5.00	-5.00	-9.68	-12.73	4.01	3.34	4.38	6.33	5.22	
Difference			1.81	1.81	5.80	6.30	7.52	5.83	5.38	3.89	1.75	
Private Equity Composite	576,610,427	13.21	0.84	0.84	2.95	4.48	14.32	16.14	15.76	14.56	11.06	06/01/2006
Russell 3000+3% Index (1 Qtr Lag)			12.90	12.90	20.15	29.74	11.80	18.62	16.19	14.82	12.91	
Difference			-12.06	-12.06	-17.20	-25.26	2.52	-2.48	-0.43	-0.26	-1.85	



	Allocatio	n					Perf	ormance	e (%)				
	Market Value (\$)	%	FYTD	FY 2023	FY 2022	FY 2021	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016	FY 2015	FY 2014
Total Fund Composite	4,364,873,331	100.00	6.91	7.09	0.28	25.20	-0.10	7.74	7.80	10.49	1.37	0.42	15.25
Total Fund Ex 130 Robin Hill Rd	4,354,919,417	99.77	6.94	7.20	0.43	25.24	-0.11	7.76	7.80	10.49	1.37	0.42	15.25
SBCERS Policy Benchmark			8.69	7.18	-3.59	22.97	2.99	7.29	7.77	11.47	2.28	0.97	15.72
Difference			-1.75	0.02	4.02	2.27	-3.10	0.47	0.03	-0.98	-0.91	-0.55	-0.47
SBCERS Dynamic Policy Benchmark			8.75	5.51	-4.12	25.15	1.14	6.37	7.92	11.58	0.65	0.01	16.50
Difference			-1.81	1.69	4.55	0.09	-1.25	1.39	-0.12	-1.09	0.72	0.41	-1.25
US Equity Composite	837,775,916	19.19	17.30	18.53	-11.24	41.39	6.08	11.05	15.53	14.82	3.22	6.31	25.01
Russell 3000 Index			19.29	18.95	-13.87	44.16	6.53	8.98	14.78	18.51	2.14	7.29	25.22
Difference			-1.99	-0.42	2.63	-2.77	-0.45	2.07	0.75	-3.69	1.08	-0.98	-0.21
US Large Cap Equity Composite	770,870,005	17.66	17.46	19.30	-10.88	39.45	7.64	13.54	14.95	13.48	N/A	N/A	N/A
Russell 1000 Index			19.61	19.36	-13.04	43.07	7.48	10.02	14.54	18.03	2.93	7.37	25.35
Difference			-2.15	-0.06	2.16	-3.62	0.16	3.52	0.41	-4.55	N/A	N/A	N/A
US Small Cap Equity Composite	66,905,912	1.53	15.47	12.75	-14.10	61.83	-9.34	-9.65	21.14	24.44	N/A	N/A	N/A
Russell 2000 Index			13.79	12.31	-25.20	62.03	-6.63	-3.31	17.57	24.60	-6.73	6.49	23.64
Difference			1.68	0.44	11.10	-0.20	-2.71	-6.34	3.57	-0.16	N/A	N/A	N/A
Developed Non-US Equity Composite	471,833,235	10.81	14.47	17.47	-17.41	29.60	-5.62	1.78	6.23	16.86	-6.62	-0.92	23.53
MSCI EAFE Index (USD) (Net)			12.01	18.77	-17.77	32.35	-5.13	1.08	6.84	20.27	-10.16	-4.22	23.57
Difference			2.46	-1.30	0.36	-2.75	-0.49	0.70	-0.61	-3.41	3.54	3.30	-0.04
Emerging Markets Equity Composite	276,170,598	6.33	6.38	8.71	-16.84	39.80	-11.30	5.80	5.86	22.55	-9.97	-6.02	12.12
MSCI Emg Mkts Index (USD) (Net)			7.19	1.75	-25.28	40.90	-3.39	1.21	8.20	23.75	-12.05	-5.12	14.31
Difference			-0.81	6.96	8.44	-1.10	-7.91	4.59	-2.34	-1.20	2.08	-0.90	-2.19
Core Fixed Income Composite	619,245,345	14.19	2.68	-0.50	-10.15	0.88	8.63	7.62	1.34	N/A	N/A	N/A	N/A
Bloomberg US Agg Bond Index			2.56	-0.94	-10.29	-0.34	8.74	7.87	-0.40	-0.31	6.00	1.86	4.37
Difference			0.12	0.44	0.14	1.22	-0.11	-0.25	1.74	N/A	N/A	N/A	N/A
Non-Core Fixed Income Composite	417,775,472	9.57	6.84	9.82	-6.02	10.92	-2.28	5.43	0.37	N/A	N/A	N/A	N/A
Custom Non-Core Fixed Income Benchmark			8.19	9.79	-8.81	11.11	-1.05	7.44	1.85	8.86	2.75	-1.98	8.51
Difference			-1.35	0.03	2.79	-0.19	-1.23	-2.01	-1.48	N/A	N/A	N/A	N/A

Performance shown is net of fees and provided by BNY Mellon. Total Fund performance excludes Treasury Cash. Indices show N/A for since inception returns when the fund contains more history than the corresponding benchmark. The fiscal year ends 06/30. Composite market values includes residual assets from liquidated managers.



	Allocatio	n					Perf	ormance	(%)				
	Market Value (\$)	%	FYTD	FY 2023	FY 2022	FY 2021	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016	FY 2015	FY 2014
Real Return Composite	612,112,478	14.02	6.12	6.69	12.55	23.53	-7.17	6.27	3.90	N/A	N/A	N/A	N/A
Consumer Price Index+4%			5.42	7.09	13.42	9.61	4.67	5.71	6.99	5.70	5.04	4.13	6.15
Difference			0.70	-0.40	-0.87	13.92	-11.84	0.56	-3.09	N/A	N/A	N/A	N/A
Custom Real Return Benchmark			5.51	4.87	5.71	16.86	-2.17	5.22	5.33	N/A	N/A	N/A	N/A
Difference			0.61	1.82	6.84	6.67	-5.00	1.05	-1.43	N/A	N/A	N/A	N/A
Real Estate Composite	450,912,893	10.33	-3.88	0.67	36.10	9.75	5.56	9.50	12.27	9.20	13.75	10.31	12.26
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			-9.68	-3.91	27.26	1.47	3.93	6.55	7.11	7.36	12.62	12.40	12.74
Difference			5.80	4.58	8.84	8.28	1.63	2.95	5.16	1.84	1.13	-2.09	-0.48
Private Equity Composite	576,610,427	13.21	2.95	0.25	27.41	55.88	-1.02	13.64	15.69	18.96	4.69	11.12	20.27
Russell 3000+3% Index (1 Qtr Lag)			20.15	-5.84	15.28	67.40	-6.40	12.03	17.23	21.61	2.65	15.74	26.29
Difference			-17.20	6.09	12.13	-11.52	5.38	1.61	-1.54	-2.65	2.04	-4.62	-6.02



	Allocation	n					Perfor	mance (%	6)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Equity Composite	837,775,916	19.19	9.07	9.07	17.30	26.46	9.97	14.12	13.63	12.07	11.05	01/01/1987
Russell 3000 Index			10.02	10.02	19.29	29.29	9.78	14.34	13.45	12.33	10.85	
Difference			-0.95	-0.95	-1.99	-2.83	0.19	-0.22	0.18	-0.26	0.20	
US Large Cap Equity Composite	770,870,005	17.66	9.42	9.42	17.46	27.26	10.52	14.50	14.13	N/A	14.25	06/01/2016
Russell 1000 Index			10.30	10.30	19.61	29.87	10.45	14.76	13.85	12.68	14.28	
Difference			-0.88	-0.88	-2.15	-2.61	0.07	-0.26	0.28	N/A	-0.03	
BNY Mellon HEDI (SA)	333,064,803	7.63	8.28	8.28	14.90	24.18	10.76	14.12	14.36	N/A	13.52	05/01/2019
Russell 1000 Index			10.30	10.30	19.61	29.87	10.45	14.76	13.85	12.68	14.10	
Difference			-2.02	-2.02	-4.71	-5.69	0.31	-0.64	0.51	N/A	-0.58	
IM U.S. Large Cap Core Equity (SA+CF) Median			10.55	10.55	19.65	29.51	10.31	13.88	13.01	12.05	13.27	
Rank			81	81	82	73	42	46	14	N/A	46	
BNY Mellon R1000 Index - NL (CF)	437,805,202	10.03	10.29	10.29	19.51	29.76	10.42	14.83	13.94	12.75	14.17	05/01/2019
Russell 1000 Index			10.30	10.30	19.61	29.87	10.45	14.76	13.85	12.68	14.10	
Difference			-0.01	-0.01	-0.10	-0.11	-0.03	0.07	0.09	0.07	0.07	
IM U.S. Large Cap Core Equity (SA+CF) Median			10.55	10.55	19.65	29.51	10.31	13.88	13.01	12.05	13.27	
Rank			56	56	52	47	49	29	25	24	28	
US Small Cap Equity Composite	66,905,912	1.53	5.13	5.13	15.47	19.75	5.40	10.62	9.07	N/A	10.68	06/01/2016
Russell 2000 Index			5.18	5.18	13.79	19.71	-0.10	8.10	7.73	7.58	9.58	
Difference			-0.05	-0.05	1.68	0.04	5.50	2.52	1.34	N/A	1.10	
DFA US Small Cap;I (DFSTX)	66,905,007	1.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.89	03/01/2024
Russell 2000 Index			5.18	5.18	13.79	19.71	-0.10	8.10	7.73	7.58	3.58	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.31	
IM U.S. Small Cap Core Equity (MF) Median			5.16	5.16	13.88	18.71	3.91	9.28	7.84	7.61	3.93	
Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	53	

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	Allocatio	n					Perfor	mance (%	6)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Developed Non-US Equity Composite	471,833,235	10.81	8.15	8.15	14.47	17.14	5.46	7.26	6.58	5.18	7.53	07/01/2012
MSCI EAFE Index (USD) (Net)			5.78	5.78	12.01	15.32	4.78	7.33	6.70	4.80	7.15	
Difference			2.37	2.37	2.46	1.82	0.68	-0.07	-0.12	0.38	0.38	
PanAgora Dynamic International Equity (SA)	243,569,713	5.58	7.77	7.77	14.45	18.45	6.32	7.50	6.25	5.29	8.52	05/01/2009
MSCI EAFE Index (USD) (Net)			5.78	5.78	12.01	15.32	4.78	7.33	6.70	4.80	7.59	
Difference			1.99	1.99	2.44	3.13	1.54	0.17	-0.45	0.49	0.93	
IM EAFE Core (SA+CF) Median			5.55	5.55	11.45	14.63	4.35	7.29	6.67	4.96	8.37	
Rank			16	16	22	19	15	39	67	31	46	
Artisan Non-U.S. Growth (SA)	163,374,736	3.74	10.03	10.03	15.41	17.09	3.75	7.03	7.68	5.03	5.43	02/01/2014
MSCI EAFE Index (USD) (Net)			5.78	5.78	12.01	15.32	4.78	7.33	6.70	4.80	5.21	
Difference			4.25	4.25	3.40	1.77	-1.03	-0.30	0.98	0.23	0.22	
IM EAFE Growth (SA+CF) Median			5.23	5.23	7.94	10.98	2.29	8.01	7.66	5.74	6.12	
Rank			1	1	1	5	18	68	50	74	76	
Acadian Non-US Small Cap Equity (CF)	64,158,669	1.47	5.12	5.12	13.10	13.44	2.18	N/A	N/A	N/A	6.93	12/01/2020
MSCI EAFE Sm Cap Index (USD) (Net)			2.40	2.40	9.81	10.45	-1.36	4.94	5.18	4.70	2.09	
Difference			2.72	2.72	3.29	2.99	3.54	N/A	N/A	N/A	4.84	
IM International Small Cap Equity (SA+CF) Median			3.77	3.77	9.11	10.81	-0.63	5.92	5.92	4.88	2.78	
Rank			38	38	36	41	33	N/A	N/A	N/A	33	

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	Allocation	า					Perfor	mance (%	6)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Emerging Markets Equity Composite	276,170,598	6.33	1.57	1.57	6.38	10.26	-0.20	3.97	4.90	4.02	4.17	07/01/2012
MSCI Emg Mkts Index (USD) (Net)			2.37	2.37	7.19	8.15	-5.05	2.22	3.72	2.95	3.36	
Difference			-0.80	-0.80	-0.81	2.11	4.85	1.75	1.18	1.07	0.81	
DFA Emg Mkts Value;I (DFEVX)	142,118,610	3.26	2.60	2.60	10.13	15.20	3.44	4.74	4.88	4.09	3.32	05/01/2013
MSCI Emg Mkts Index (USD) (Net)			2.37	2.37	7.19	8.15	-5.05	2.22	3.72	2.95	2.49	
Difference			0.23	0.23	2.94	7.05	8.49	2.52	1.16	1.14	0.83	
MSCI Emg Mkts Val Index (USD) (Net)			1.31	1.31	8.62	11.36	-0.91	2.09	3.14	2.15	1.63	
Difference			1.29	1.29	1.51	3.84	4.35	2.65	1.74	1.94	1.69	
IM Emerging Markets Equity (MF) Median			3.05	3.05	6.89	8.97	-5.51	2.66	3.64	2.75	2.25	
Rank			59	59	26	17	5	23	28	24	29	
RBC Emerging Markets Equity (CF)	134,051,988	3.07	0.49	0.49	2.68	5.40	-3.59	3.09	4.81	N/A	5.04	09/01/2016
MSCI Emg Mkts Index (USD) (Net)			2.37	2.37	7.19	8.15	-5.05	2.22	3.72	2.95	4.50	
Difference			-1.88	-1.88	-4.51	-2.75	1.46	0.87	1.09	N/A	0.54	
MSCI Emg Mkts Grth Index (USD) (Net)			3.35	3.35	5.85	5.16	-8.85	2.24	4.17	3.63	4.73	
Difference			-2.86	-2.86	-3.17	0.24	5.26	0.85	0.64	N/A	0.31	
IM Emerging Markets Equity (SA+CF) Median			3.21	3.19	7.89	9.53	-3.76	3.26	4.44	3.65	5.15	
Rank			83	82	82	77	48	54	44	N/A	53	
Core Fixed Income Composite	619,245,345	14.19	-0.74	-0.74	2.68	1.97	-2.11	0.71	N/A	N/A	1.38	07/01/2017
Bloomberg US Agg Bond Index			-0.78	-0.78	2.56	1.70	-2.46	0.36	1.06	1.54	0.89	
Difference			0.04	0.04	0.12	0.27	0.35	0.35	N/A	N/A	0.49	
Garcia Hamilton Core Fixed Income (SA)	360,945,801	8.27	-1.35	-1.35	1.23	0.09	-2.45	0.35	N/A	N/A	0.86	09/01/2017
Bloomberg US Agg Bond Index			-0.78	-0.78	2.56	1.70	-2.46	0.36	1.06	1.54	0.71	
Difference			-0.57	-0.57	-1.33	-1.61	0.01	-0.01	N/A	N/A	0.15	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			-0.51	-0.51	2.82	2.03	-2.34	0.63	1.29	1.72	0.93	
Rank			99	99	97	97	61	75	N/A	N/A	60	
PGIM Core Plus Fixed Income (CF)	258,299,544	5.92	0.12	0.12	4.77	4.73	-1.43	1.37	N/A	N/A	2.10	06/01/2018
Bloomberg US Agg Bond Index			-0.78	-0.78	2.56	1.70	-2.46	0.36	1.06	1.54	1.07	
Difference			0.90	0.90	2.21	3.03	1.03	1.01	N/A	N/A	1.03	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			-0.17	-0.17	3.67	3.19	-1.96	1.12	1.70	2.11	1.76	
Rank			28	28	22	20	31	33	N/A	N/A	24	

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## Santa Barbara County Employees' Retirement System Asset Allocation & Performance - Net of Fees

	Allocation	1					Perfor	mance (%	6)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Non-Core Fixed Income Composite	417,775,472	9.57	1.81	1.81	6.84	10.22	4.28	4.15	N/A	N/A	3.54	07/01/2017
Custom Non-Core Fixed Income Benchmark			1.88	1.88	8.19	11.36	3.46	4.17	4.14	3.91	4.00	
Difference			-0.07	-0.07	-1.35	-1.14	0.82	-0.02	N/A	N/A	-0.46	
Wellington Blended Opportunistic EMD (CF)	111,923,116	2.56	-0.37	-0.37	5.47	8.50	-0.89	N/A	N/A	N/A	-0.28	03/01/2020
Wellington Blended Index			-0.05	-0.05	5.59	8.07	-1.47	0.46	1.26	1.41	-1.02	
Difference			-0.32	-0.32	-0.12	0.43	0.58	N/A	N/A	N/A	0.74	
IM Emerging Markets Debt (SA+CF) Median			1.84	1.84	7.78	9.62	-0.40	1.42	1.78	2.58	0.17	
Rank			72	72	68	61	67	N/A	N/A	N/A	65	
Beach Point Leveraged Loan (CF)	141,636,299	3.24	3.09	3.09	10.60	14.44	6.34	5.39	4.72	4.28	4.62	10/01/2012
Credit Suisse Lvgd Loan Index			2.52	2.52	9.00	12.40	5.82	5.30	4.92	4.56	4.75	
Difference			0.57	0.57	1.60	2.04	0.52	0.09	-0.20	-0.28	-0.13	
IM U.S. Bank Loans (SA+CF) Median			2.36	2.36	8.55	11.74	5.29	4.77	4.35	3.99	4.24	
Rank			8	8	2	1	6	15	24	24	21	
Private Credit	164,055,983	3.76	2.06	2.06	4.81	8.07	8.27	6.91	N/A	N/A	6.36	11/01/2018
Credit Suisse Lvgd Loan Index			2.52	2.52	9.00	12.40	5.82	5.30	4.92	4.56	5.00	
Difference			-0.46	-0.46	-4.19	-4.33	2.45	1.61	N/A	N/A	1.36	
SOFR Index+4%			2.34	2.34	7.15	9.56	6.80	6.10	N/A	N/A	6.13	
Difference			-0.28	-0.28	-2.34	-1.49	1.47	0.81	N/A	N/A	0.23	

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## Santa Barbara County Employees' Retirement System Asset Allocation & Performance - Net of Fees

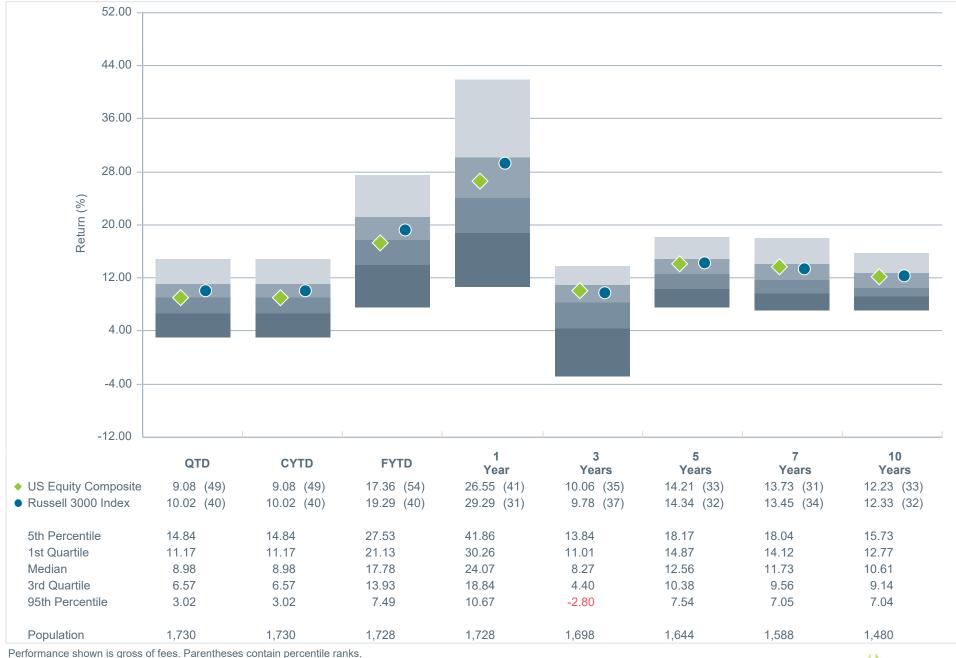
	Allocatio	n					Perfor	mance (%	6)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Return Composite	612,112,478	14.02	1.68	1.68	6.12	7.88	10.78	8.47	N/A	N/A	7.34	07/01/2017
Consumer Price Index+4%			2.82	2.82	5.42	7.62	9.87	8.37	7.75	6.94	7.81	
Difference			-1.14	-1.14	0.70	0.26	0.91	0.10	N/A	N/A	-0.47	
Custom Real Return Benchmark			2.46	2.46	5.51	7.14	7.06	6.42	N/A	N/A	6.00	
Difference			-0.78	-0.78	0.61	0.74	3.72	2.05	N/A	N/A	1.34	
Public Real Return Composite	116,726,679	2.67	1.01	1.01	5.81	5.56	3.08	4.29	N/A	N/A	4.23	07/01/2017
BNY Mellon TIPS - NL (CF)	10,329,493	0.24	-0.09	-0.09	1.01	-0.43	-1.05	2.18	2.07	2.06	2.15	05/01/2019
Bloomberg US Trsy US TIPS Index			-0.08	-0.08	1.90	0.46	-0.53	2.49	2.29	2.21	2.46	
Difference			-0.01	-0.01	-0.89	-0.89	-0.52	-0.31	-0.22	-0.15	-0.31	
IM U.S. TIPS (SA+CF) Median			-0.02	-0.02	1.84	0.37	-0.61	2.43	2.24	2.19	2.41	
Rank			75	75	97	94	81	83	80	73	83	
Cohen & Steers Real Assets Fund (CIT)	53,506,408	1.23	1.68	1.68	6.71	5.89	6.35	6.33	N/A	N/A	5.55	09/01/2017
Cohen & Steers Real Assets Custom Index			1.02	1.02	6.10	4.55	5.10	4.92	4.87	2.84	4.59	
Difference			0.66	0.66	0.61	1.34	1.25	1.41	N/A	N/A	0.96	
Nuveen Real Asset Income Fund (SA)	52,890,777	1.21	0.57	0.57	6.07	6.72	1.56	2.90	N/A	N/A	3.15	09/01/2017
Nuveen Real Asset Income Blend Index			1.07	1.07	7.80	9.44	1.69	3.19	4.01	4.23	3.25	
Difference			-0.50	-0.50	-1.73	-2.72	-0.13	-0.29	N/A	N/A	-0.10	
Private Real Return Composite	495,385,800	11.35	1.83	1.83	6.43	8.83	16.73	11.71	N/A	N/A	9.98	07/01/2017
Consumer Price Index+4%			2.82	2.82	5.42	7.62	9.87	8.37	7.75	6.94	7.81	
Difference			-0.99	-0.99	1.01	1.21	6.86	3.34	N/A	N/A	2.17	
Real Estate Composite	450,912,893	10.33	-3.19	-3.19	-3.88	-6.43	11.53	9.17	9.76	10.22	6.97	04/01/2000
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			-5.00	-5.00	-9.68	-12.73	4.01	3.34	4.38	6.33	5.22	
Difference			1.81	1.81	5.80	6.30	7.52	5.83	5.38	3.89	1.75	
Hamilton Lane Real Estate	450,912,893	10.33	-3.19	-3.19	-3.88	-6.43	N/A	N/A	N/A	N/A	-6.43	04/01/2023
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			-5.00	-5.00	-9.68	-12.73	4.01	3.34	4.38	6.33	-12.73	
Difference			1.81	1.81	5.80	6.30	N/A	N/A	N/A	N/A	6.30	
Private Equity Composite	576,610,427	13.21	0.84	0.84	2.95	4.48	14.32	16.14	15.76	14.56	11.06	06/01/2000
Russell 3000+3% Index (1 Qtr Lag)			12.90	12.90	20.15	29.74	11.80	18.62	16.19	14.82	12.91	
Difference			-12.06	-12.06	-17.20	-25.26	2.52	-2.48	-0.43	-0.26	-1.85	

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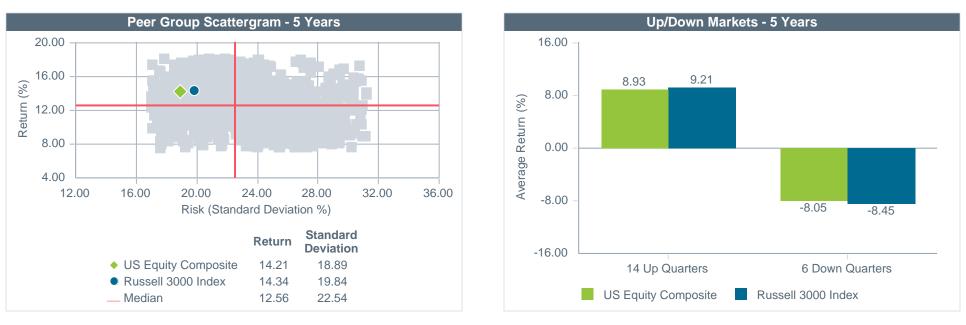


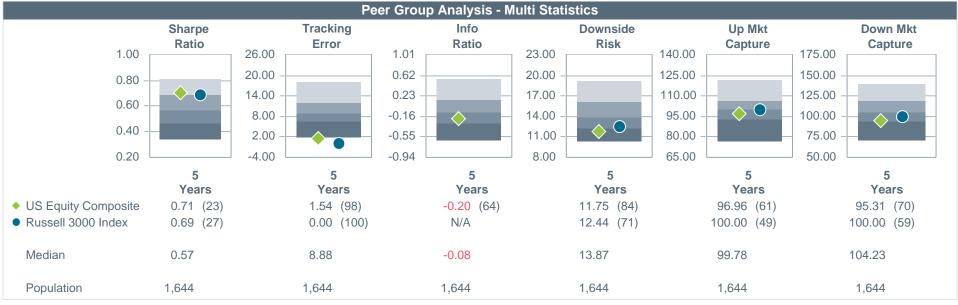
# **Composite Profiles**

## Santa Barbara County Employees' Retirement System US Equity Composite vs. IM US Equity (SA+CF) Peer Group Analysis



🙏 RVK





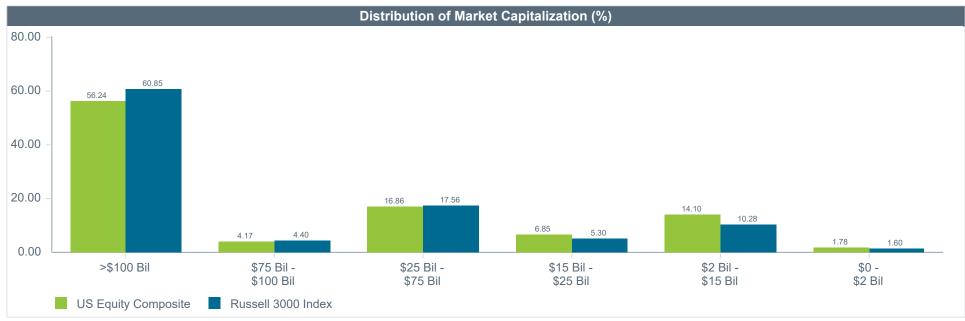
Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.



## Santa Barbara County Employees' Retirement System US Equity Composite vs. Russell 3000 Index Portfolio Characteristics

	Top Ten Eq	uity Holdings		
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Microsoft Corp	6.23	6.17	0.06	12.09
Apple Inc	4.88	4.93	-0.05	-10.82
NVIDIA Corporation	3.59	4.23	-0.64	82.47
Amazon.com Inc	2.61	3.20	-0.59	18.72
Alphabet Inc	1.79	1.77	0.02	8.05
Meta Platforms Inc	1.78	2.12	-0.34	37.33
Alphabet Inc	1.68	1.51	0.17	8.04
Berkshire Hathaway Inc	1.36	1.52	-0.16	17.91
Eli Lilly and Co	1.15	1.30	-0.15	33.69
Visa Inc	1.01	0.88	0.13	7.40
% of Portfolio	26.08	27.63	-1.55	

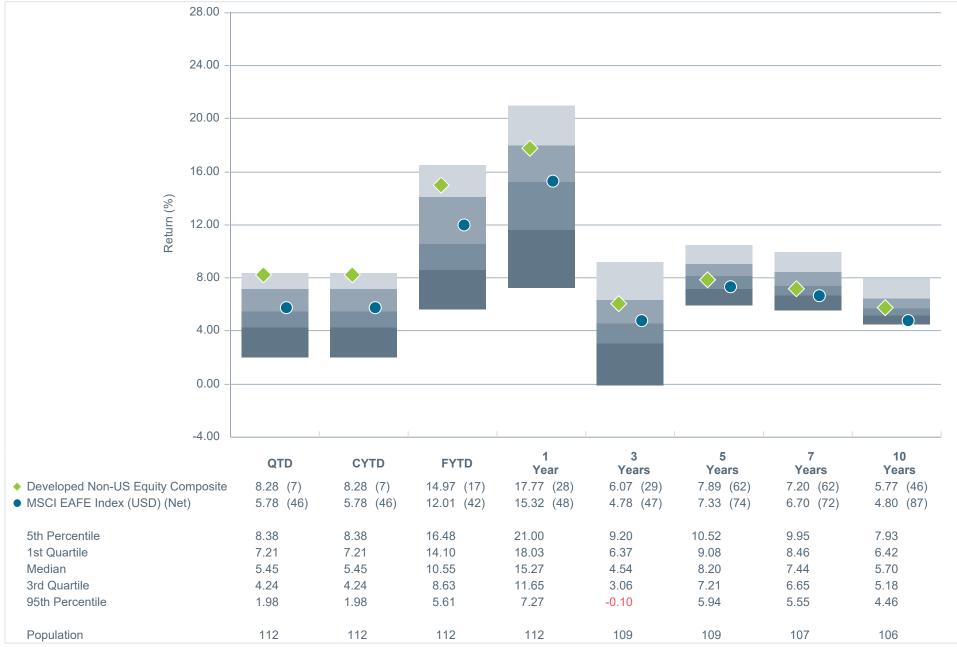
Portfolio Characteristics						
	Portfolio	Benchmark				
Wtd. Avg. Mkt. Cap (\$M)	654,150	689,318				
Median Mkt. Cap (\$M)	2,564	2,222				
Price/Earnings Ratio	24.82	24.80				
Price/Book Ratio	4.59	4.38				
5 Yr. EPS Growth Rate (%)	14.16	15.05				
Current Yield (%)	1.39	1.38				
Beta (5 Years, Monthly)	0.95	1.00				
Number of Securities	2,645	2,949				



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

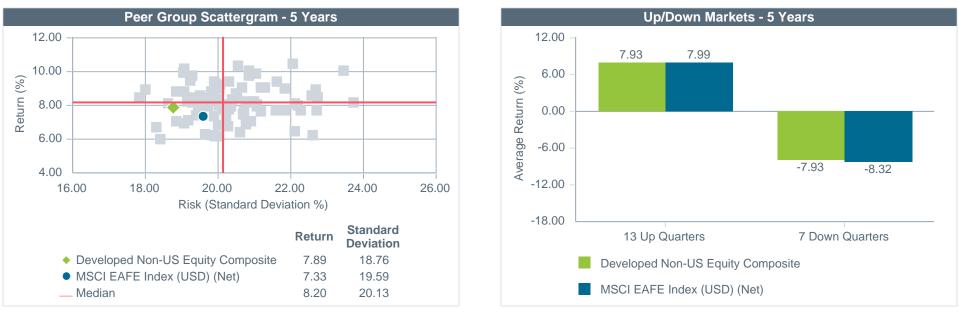


## Santa Barbara County Employees' Retirement System Dev'd Mkt. Non-US Equity Composite vs. IM All EAFE (SA+CF) Peer Group Analysis



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





		Peer Group Analy	sis - Multi Stati	stics		
0.50	Sharpe Ratio	Tracking Error	Info Ratio	Downside Risk	Up Mkt Capture	Down Mkt Capture
0.56		.00 0.98 .00 0.64		18.00 140 16.00 125	4	40.00
0.40 -		.00 - 0.30		14.00 - 110	0.00	10.00
0.32 -	-1.	.00 - 0.38	3 -	12.00 - 95	5.00 00.3	80.00 -
0.24	4. 5	.00 -0.72 5	5	10.00 80 5	5	65.00 <b>5</b>
	э Years	э Years	э Years	э Years	э Years	э Years
<ul> <li>Developed Non-US Equity Composite</li> </ul>	0.40 (48)	2.86 (81)	0.13 (68)	12.84 (74)	99.23 (85)	95.31 (78)
<ul> <li>MSCI EAFE Index (USD) (Net)</li> </ul>	0.36 (71)	0.00 (100)	N/A	13.21 (57)	100.00 (81)	100.00 (50)
Median	0.40	4.86	0.23	13.38	105.47	99.92
Population	109	109	109	109	109	109

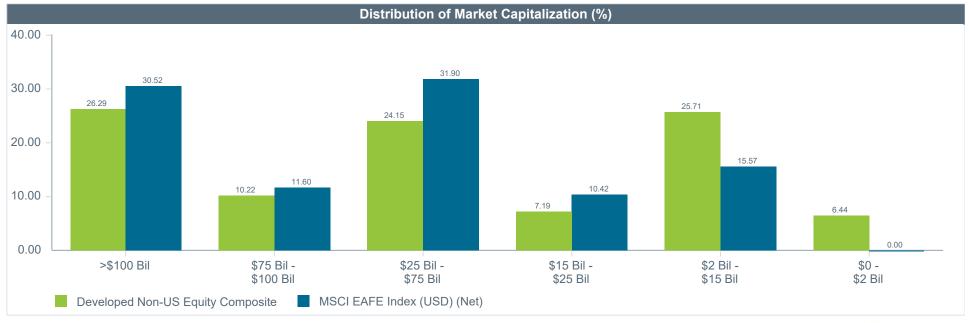
Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.



## Santa Barbara County Employees' Retirement System Developed Non-US Equity Composite vs. MSCI EAFE Index (USD) (Net) Portfolio Characteristics

То	p Ten Equit	y Holdings		
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Novo Nordisk A/S	2.89	2.46	0.43	24.24
UBS Group AG	2.16	0.60	1.56	-0.68
L'Air Liquide SA	2.08	0.65	1.43	7.05
ASML Holding NV	1.87	2.30	-0.43	28.18
BAE Systems PLC	1.84	0.31	1.53	20.42
Amazon.com Inc	1.83	0.00	1.83	18.72
Linde Plc	1.63	0.00	1.63	13.97
RELX PLC	1.48	0.48	1.00	9.10
Nestle SA, Cham Und Vevey	1.16	1.68	-0.52	-8.24
CRH PLC	1.15	0.35	0.80	25.24
% of Portfolio	18.09	8.83	9.26	

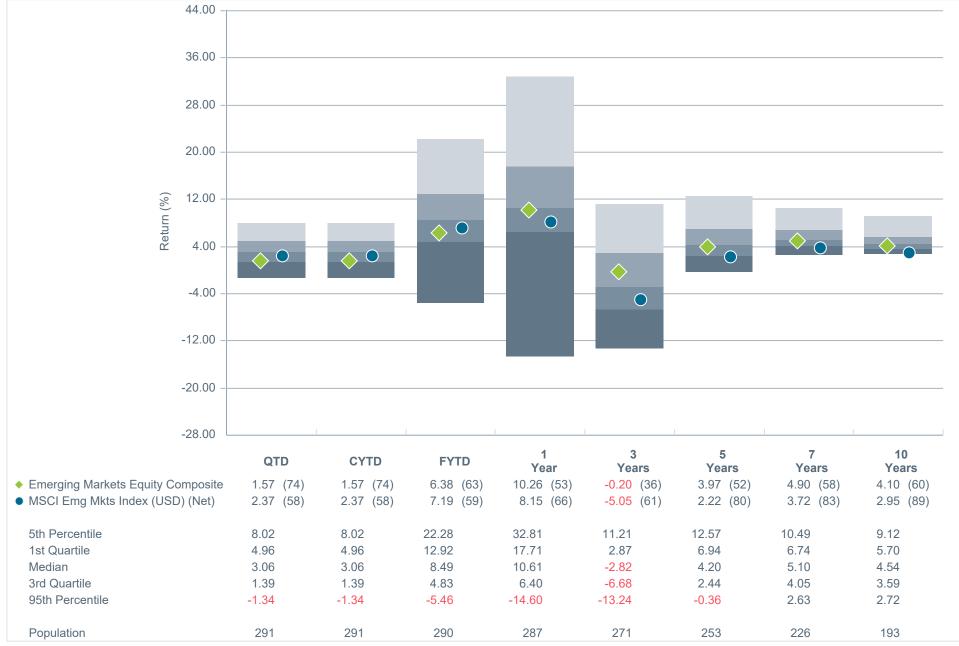
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	118,577	99,234
Median Mkt. Cap (\$M)	775	13,873
Price/Earnings Ratio	16.21	15.64
Price/Book Ratio	2.77	2.68
5 Yr. EPS Growth Rate (%)	11.19	8.53
Current Yield (%)	2.78	3.15
Beta (5 Years, Monthly)	0.92	1.00
Number of Securities	1,987	768





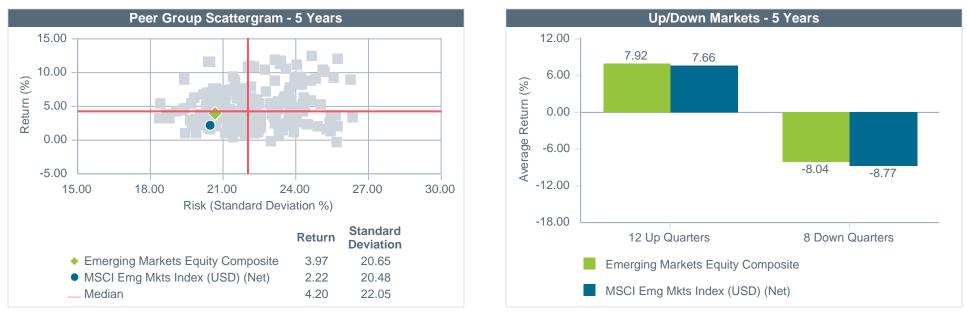
As of March 31, 2024

## Santa Barbara County Employees' Retirement System Emerging Mkt. Equity Composite vs. IM Emerging Markets Equity (SA+CF) Peer Group Analysis



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





		Peer Group	o Analysis - Multi S	atistics		
	Sharpe Ratio	Tracking Error	Info Ratio	Downside Risk	Up Mkt Capture	Down Mkt Capture
0.80		20.00	1.76	18.00	150.00	140.00
0.60 -		15.00	1.23 -	16.00	125.00	120.00
0.40 - 0.20 -		10.00	0.70 - 0.17 -	14.00 🔶 🔵	100.00 🔶 🔵	100.00
0.00 -		0.00	-0.36	12.00	75.00 -	60.00
-0.20		-5.00	-0.89	10.00	50.00	40.00
	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years
<ul> <li>Emerging Markets Equity Composite</li> </ul>	0.20 (52)	4.06 (77)	0.45 (49)	14.43 (60)	103.48 (73)	91.63 (58)
<ul> <li>MSCI Emg Mkts Index (USD) (Net)</li> </ul>	0.11 (82)	0.00 (100)	N/A	13.89 (74)	100.00 (78)	100.00 (40)
Median	0.21	6.55	0.42	14.67	111.87	96.58
Population	253	253	253	253	253	253

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



## Santa Barbara County Employees' Retirement System

Emerging Markets Equity Composite vs. MSCI Emg Mkts Index (USD) (Net) Portfolio Characteristics

Top Ten	Equity Hol	ldings		
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Taiwan Semiconductor Mfg	4.29	8.33	-4.04	26.55
H D F C Bank Ltd	3.04	0.68	2.36	-15.48
Antofagasta PLC	2.29	0.00	2.29	20.31
Tencent Holdings LTD	2.27	3.57	-1.30	3.24
Mahindra & Mahindra Ltd	2.08	0.30	1.78	10.85
Tata Consultancy Services Ltd	2.04	0.58	1.46	2.65
Fomento Economico Mex. SAB de CV	2.02	0.35	1.67	-0.06
SK Hynix Inc	1.96	1.03	0.93	23.72
Reliance Industries Ltd	1.89	1.51	0.38	14.70
Alibaba Group Holding Ltd	1.69	2.03	-0.34	-7.29
% of Portfolio	23.57	18.38	5.19	

Portfolio Characteristics						
	Portfolio	Benchmark				
Wtd. Avg. Mkt. Cap (\$M)	80,822	121,494				
Median Mkt. Cap (\$M)	805	7,229				
Price/Earnings Ratio	12.09	14.82				
Price/Book Ratio	2.30	2.59				
5 Yr. EPS Growth Rate (%)	11.63	11.78				
Current Yield (%)	3.18	2.86				
Beta (5 Years, Monthly)	0.94	1.00				
Number of Securities	3,272	1,376				





As of March 31, 2024

## Santa Barbara County Employees' Retirement System Fixed Income Composite vs. IM Global Fixed Income (SA+CF) Peer Group Analysis



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



### Santa Barbara County Employees' Retirement System

### Core Fixed Income Composite vs. Bloomberg US Agg Bond Index Portfolio Characteristics

	Portfolio	Benchmark
Avg. Maturity	8.02	8.44
Avg. Quality	Aa2	Aa2/Aa3
Convexity	0.73	0.58
Coupon Rate (%)	3.58	3.20
Current Yield (%)	3.97	N/A
ffective Duration	6.48	6.21
íeld To Maturity (%)	5.29	4.85
/ield To Worst (%)	5.26	4.85

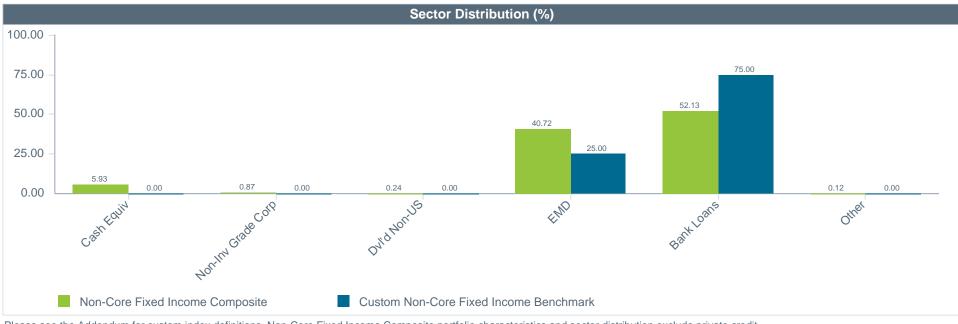




## Santa Barbara County Employees' Retirement System

Non-Core Fixed Income Composite vs. Custom Non-Core Fixed Income Benchmark Portfolio Characteristics

Portfolio Characteristics						
	Portfolio	Benchmark				
Avg. Maturity	6.51	5.49				
Avg. Quality	Ba1	Ba2				
Coupon Rate (%)	5.64	8.27				
Current Yield (%)	8.39	8.61				
Modified Duration	N/A	N/A				
Yield To Maturity (%)	8.40	8.67				



Please see the Addendum for custom index definitions. Non-Core Fixed Income Composite portfolio characteristics and sector distribution exclude private credit funds. Allocation to "Other" represents equities and preferred securities.



### Santa Barbara County Employees' Retirement System Alternative Investment Private Credit Fund Performance Listing

Fund Name	Vintage	e Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Index IRR (%)	Fund Multiple
AG Direct Lending III LP	2018	Private Credit - Direct Lending	25,000,000	23,035,117	17,316,575	15,147,409	9.98	4.98	1.41
First Eagle Direct Lending IV	2019	Private Credit - Direct Lending	20,000,000	39,631,483	30,080,466	13,899,269	6.97	5.96	1.11
PIMCO Private Income LLC	2019	Private Credit - Direct Lending	20,000,000	20,000,000	0	27,445,089	8.72	7.07	1.37
AG Direct Lending IV LP	2020	Private Credit - Direct Lending	20,000,000	18,629,726	3,452,125	20,273,067	13.17	5.64	1.27
Deerpath Capital V LP	2020	Private Credit - Direct Lending	20,000,000	20,000,000	3,878,337	20,522,817	8.36	6.11	1.22
Deerpath Capital VI LP	2021	Private Credit - Direct Lending	20,000,000	16,936,350	2,378,973	17,223,951	8.72	6.21	1.16
First Eagle Direct Lending V-B	2021	Private Credit - Direct Lending	20,000,000	27,599,216	13,347,590	16,976,824	9.40	6.16	1.10
AG Direct Lending Evergreen LP	2022	Private Credit - Direct Lending	22,083,331	12,583,331	0	13,231,034	5.03	11.59	1.05
Ares Pathfinder Core LP	2022	Private Credit - Specialty Finance	20,000,000	20,000,000	0	20,622,343	N/M	N/M	1.03
KKR US Direct Lending Evergreen Fund	2023	Private Credit - Direct Lending	25,000,000	0	0	0	N/M	N/M	
Marathon Dislocation Credit Fund II LP	2023	Private Credit - Distressed/Special Situations	25,000,000	0	0	0	N/M	N/M	
			237,083,331	198,415,223	70,454,066	165,341,803	9.18	6.16	1.19

Certain valuations (marked with a <sup>\*\*</sup>) 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 Credit Suisse Lygd Loan Index 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.



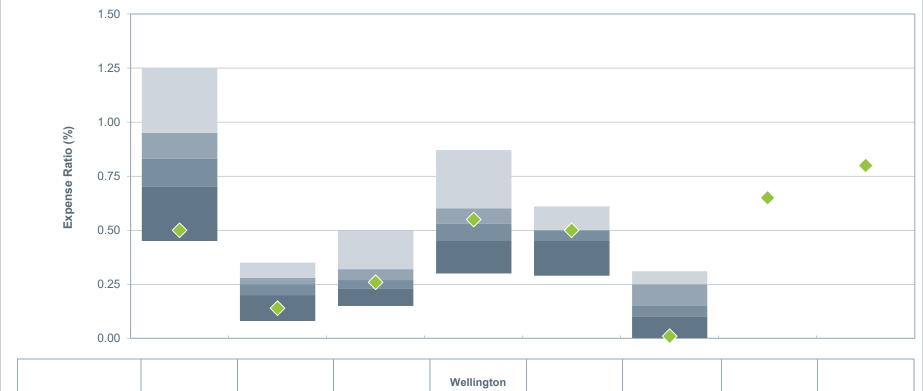


Fund Expense Ratios are intuitively ranked (i.e., a lower expense ratio yields a better percentile rank than a higher expense ratio).

The fee peer groups consist of only institutional share classes.

Peer group data is sourced from eVestment & Morningstar.





	Fund	RBC Emerging Markets Equity (CF)	Garcia Hamilton Core Fixed Income (SA)	PGIM Core Plus Fixed Income (CF)	Wellington Blended Opportunistic EMD (CF)	Beach Point Leveraged Loan (CF)	BNY Mellon TIPS - NL (CF)	Cohen & Steers Real Assets Fund (CIT)	Nuveen Real Asset Income Fund (SA)
	Peer Group	Emerging Market Equity (SA+CF)	U.S. Broad Market Core Fixed Income (SA+CF)	U.S. Broad Market Core+ Fixed Income (SA+CF)	Emerging Markets Debt (SA+CF)	U.S Bank Loans (SA+CF)	U.S. TIPS (SA+CF)		
•	Fund Expense Ratio	0.50	0.14	0.26	0.55	0.50	0.01	0.65	0.80
	Median Expense Ratio	0.83	0.25	0.27	0.53	0.50	0.15	N/A	N/A
	Percentile Rank	7	10	45	63	82	6	N/A	N/A
	Population	397	375	271	172	59	36	N/A	N/A

Fund Expense Ratios are intuitively ranked (i.e., a lower expense ratio yields a better percentile rank than a higher expense ratio). The fee peer groups consist of only institutional share classes. Peer group data is sourced from eVestment & Morningstar.



# **Investment Manager Profiles**

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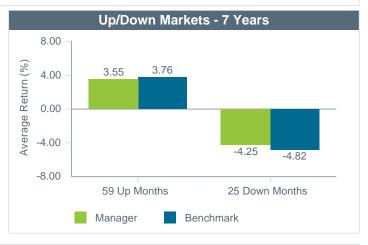
## Manager: BNY Mellon HEDI (SA)

## Benchmark: Russell 1000 Index

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

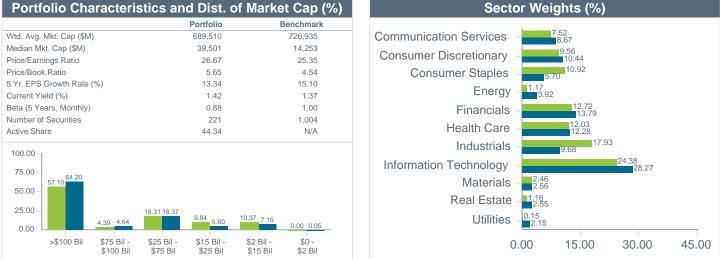
Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019	
Manager	8.28	24.22	10.81	14.17	14.43	N/A	22.10	-15.07	25.37	18.63	32.61	
Benchmark	10.30	29.87	10.45	14.76	13.85	12.68	26.53	-19.13	26.45	20.96	31.43	
Difference	-2.02	-5.65	0.36	-0.59	0.58	N/A	-4.43	4.06	-1.08	-2.33	1.18	
Peer Group Median	10.82	30.01	11.04	14.75	13.76	12.74	24.68	-16.54	27.74	17.65	30.06	
Rank	82	76	57	62	29	N/A	65	40	69	44	21	
Population	173	173	168	162	156	143	204	218	221	237	263	







#### 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. Performance prior to 04/11/2019 is represented by Rhumbline HEDI (SA).



## Manager: BNY Mellon R1000 Index - NL (CF)

Benchmark: Russell 1000 Index **Peer Group:** IM U.S. Large Cap Core Equity (SA+CF)

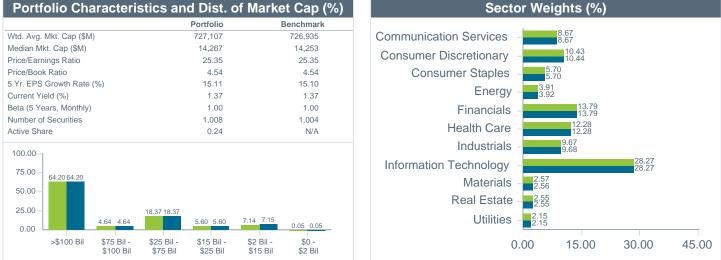
Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019	
Manager	10.29	29.91	10.46	14.75	13.85	12.67	26.56	-19.14	26.46	20.91	31.42	
Benchmark	10.30	29.87	10.45	14.76	13.85	12.68	26.53	-19.13	26.45	20.96	31.43	
Difference	-0.01	0.04	0.01	-0.01	0.00	-0.01	0.03	-0.01	0.01	-0.05	-0.01	
Peer Group Median	10.82	30.01	11.04	14.75	13.76	12.74	24.68	-16.54	27.74	17.65	30.06	
Rank	57	51	63	50	50	54	34	76	60	29	35	
Population	173	173	168	162	156	143	204	218	221	237	263	







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



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



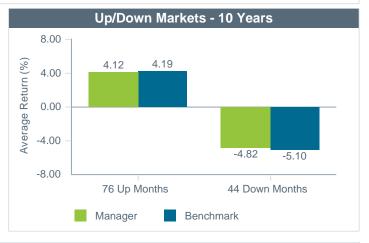
## Manager: DFA US Small Cap;I (DFSTX)

Benchmark: Russell 2000 Index

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

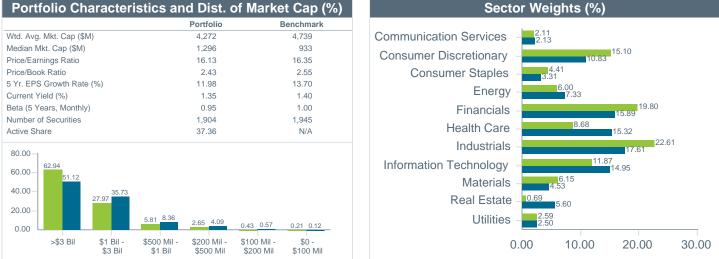
Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019	
Manager	5.06	19.82	5.65	10.94	8.87	8.52	17.64	-13.53	30.61	11.17	21.75	
Benchmark	5.18	19.71	-0.10	8.10	7.73	7.58	16.93	-20.44	14.82	19.96	25.53	
Difference	-0.12	0.11	5.75	2.84	1.14	0.94	0.71	6.91	15.79	-8.79	-3.78	
Peer Group Median	5.16	18.71	3.91	9.28	7.84	7.61	15.99	-15.77	25.12	9.89	23.94	
Rank	53	40	23	19	21	22	31	32	19	43	74	
Population	671	655	635	602	550	427	666	683	703	722	742	







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



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

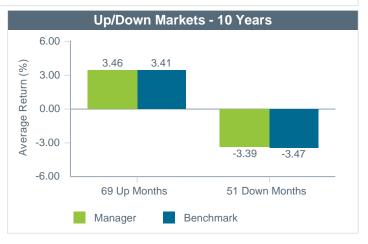


## Manager: PanAgora Dynamic International Equity (SA)

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

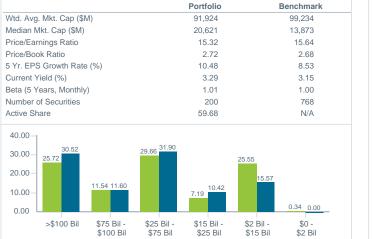
Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019	
Manager	7.85	18.78	6.65	7.84	6.59	5.63	19.76	-13.32	13.94	6.62	17.67	
Benchmark	5.78	15.32	4.78	7.33	6.70	4.80	18.24	-14.45	11.26	7.82	22.01	
Difference	2.07	3.46	1.87	0.51	-0.11	0.83	1.52	1.13	2.68	-1.20	-4.34	
Peer Group Median	5.79	15.44	4.96	7.95	7.39	5.65	18.49	-14.44	11.79	8.70	23.71	
Rank	16	24	17	56	81	52	33	30	26	71	94	
Population	65	65	62	62	61	60	70	71	72	80	85	



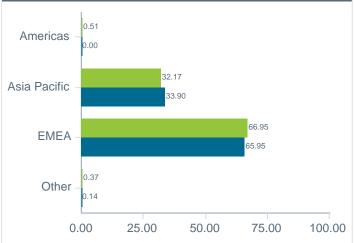




#### Portfolio Characteristics and Dist. of Market Cap (%)



## Region Weights (%)



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "Other" represents Bermuda.



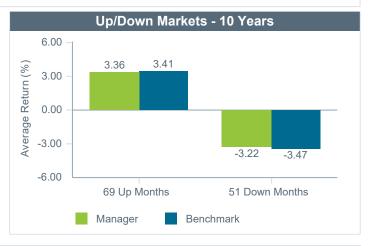
## Manager: Artisan Non-U.S. Growth (SA)

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

Peer Group: IM EAFE Growth (SA+CF)

Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019	
Manager	10.20	17.84	4.46	7.75	8.40	5.76	16.42	-18.72	10.33	6.93	30.66	
Benchmark	5.78	15.32	4.78	7.33	6.70	4.80	18.24	-14.45	11.26	7.82	22.01	
Difference	4.42	2.52	-0.32	0.42	1.70	0.96	-1.82	-4.27	-0.93	-0.89	8.65	
Peer Group Median	5.29	12.05	2.76	8.32	8.24	6.35	16.32	-20.71	12.69	20.07	26.99	
Rank	1	5	13	68	45	68	50	37	79	95	19	
Population	28	28	27	27	27	27	30	30	35	36	37	



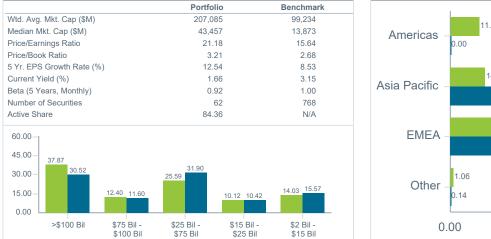




0.28

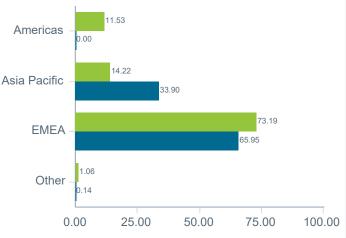
#### Portfolio Characteristics and Dist. of Market Cap (%)

Median



**Region Weights (%)** 

0.39



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "Other" represents Jersey.



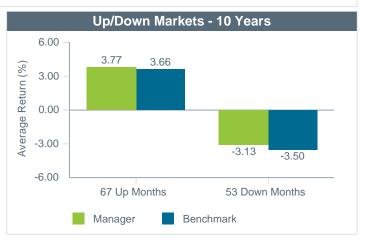
10.14

## Manager: Acadian Int'l Sm Cap (CF)

## Benchmark: MSCI EAFE Sm Cap Index (USD) (Net) Peer Group: IM International Small Cap Equity (SA+CF)

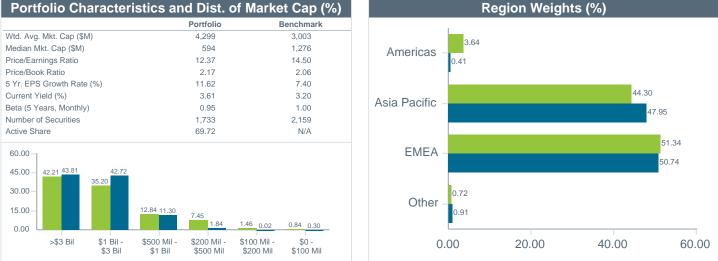
Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019	
Manager	5.86	14.91	3.22	9.04	8.37	7.56	15.04	-18.38	20.63	14.27	23.71	
Benchmark	2.40	10.45	-1.36	4.94	5.18	4.70	13.16	-21.39	10.10	12.34	24.96	
Difference	3.46	4.46	4.58	4.10	3.19	2.86	1.88	3.01	10.53	1.93	-1.25	
Peer Group Median	3.84	11.50	0.20	7.20	6.82	6.10	15.03	-21.52	13.74	13.95	24.61	
Rank	30	36	29	25	23	18	50	35	11	49	56	
Population	105	105	101	94	89	70	108	123	121	131	132	







#### 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. Allocation to "Other" represents Bermuda, Jersey, Isle Of Man, and Luxembourg.



## Manager: DFA Emg Mkts Value;I (DFEVX)

## Benchmark: MSCI Emg Mkts Index (USD) (Net) Peer Group: IM Emerging Markets Equity (MF)

Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019	
Manager	2.67	15.28	3.46	4.76	4.86	4.08	16.49	-10.74	12.41	2.73	9.64	
Benchmark	2.37	8.15	-5.05	2.22	3.72	2.95	9.83	-20.09	-2.54	18.31	18.42	
Difference	0.30	7.13	8.51	2.54	1.14	1.13	6.66	9.35	14.95	-15.58	-8.78	
Peer Group Median	3.05	8.97	-5.51	2.66	3.64	2.75	10.91	-22.45	-1.60	17.68	20.17	
Rank	58	17	5	23	28	25	18	4	9	92	91	
Population	779	763	668	605	525	385	771	774	765	781	822	







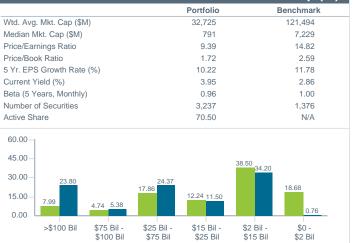
-0.02

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

5.35

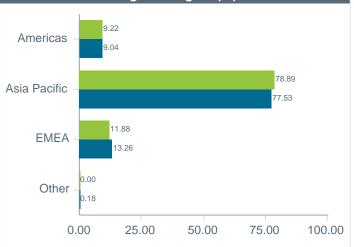
2.90

Median



**Region Weights (%)** 

0.16



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



11.60

## Manager: RBC GAM Emg Mkts Equity (CF)

## Benchmark: MSCI Emg Mkts Index (USD) (Net)

Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019	
Manager	0.64	6.69	-2.91	3.80	N/A	N/A	12.27	-13.25	-3.56	17.39	18.93	
Benchmark	2.37	8.15	-5.05	2.22	3.72	2.95	9.83	-20.09	-2.54	18.31	18.42	
Difference	-1.73	-1.46	2.14	1.58	N/A	N/A	2.44	6.84	-1.02	-0.92	0.51	
Peer Group Median	3.10	10.61	-2.82	4.20	5.10	4.54	12.87	-19.54	0.94	18.29	20.15	
Rank	83	74	51	55	N/A	N/A	55	23	70	56	58	
Population	286	287	271	253	226	193	312	323	331	357	377	







#### 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.



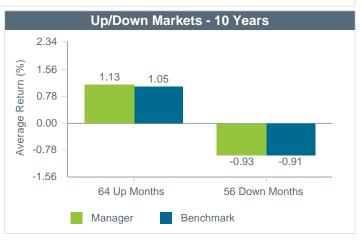
## Manager: Garcia Hamilton Core Fixed Income (SA)

## Benchmark: Bloomberg US Agg Bond Index

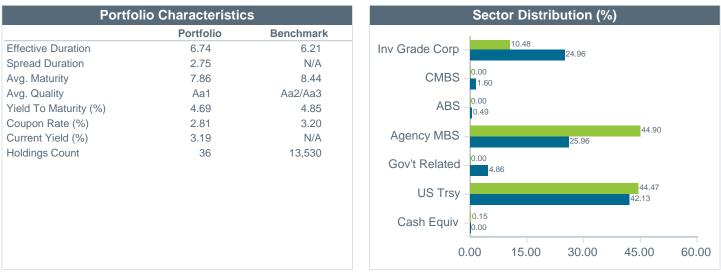
Peer Group: IM U.S. Broad Market Core Fixed Income (SA+CF)

=					. ,							
Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019	
Manager	-1.32	0.21	-2.31	0.50	1.27	1.91	5.15	-11.28	-2.20	8.59	7.56	
Benchmark	-0.78	1.70	-2.46	0.36	1.06	1.54	5.53	-13.01	-1.55	7.51	8.72	
Difference	-0.54	-1.49	0.15	0.14	0.21	0.37	-0.38	1.73	-0.65	1.08	-1.16	
Peer Group Median	-0.47	2.25	-2.11	0.91	1.56	2.01	5.99	-12.95	-1.24	8.36	9.17	
Rank	100	98	67	81	79	62	95	10	100	45	95	
Population	130	128	128	126	124	119	137	146	152	160	162	





Peer Group Analysis - Multi Statistics - 10 Years (Excess Return vs. Risk Free) Tracking Info **Excess** Sharpe **Downside** Return Error Ratio Ratio **Risk** 2.12 2.86 1.31 0.40 3.80 1.66 2.12 0.98 0.30 3.50 1.20 1.38 0.65 0.20 3.20  $\bigcirc$ 0.74 0.64 0.32 0.10 2.90 0.28 -0.10 -0.01 -0.84 -0.34 0.00 2.60 -0.18 3.31 (13) 0.66 (61) 1.19 (30) 0.33 (76) 0.13 Manager (67) Benchmark 0.00 (100) N/A 0.06 (96) 0.27 (96) 3.13 (56) Median 0.72 0.90 0.54 0.15 3.14



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



## Manager: PGIM Core Plus Bond Qualified (CF)

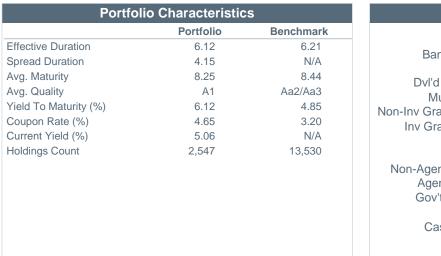
Peer Group: IM U.S. Broad Market Core+ Fixed Income (SA+CF)

Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019	
Manager	0.18	5.01	-1.17	1.63	2.44	2.98	8.23	-14.31	-0.66	9.55	11.67	
Benchmark	-0.78	1.70	-2.46	0.36	1.06	1.54	5.53	-13.01	-1.55	7.51	8.72	
Difference	0.96	3.31	1.29	1.27	1.38	1.44	2.70	-1.30	0.89	2.04	2.95	
Peer Group Median	-0.06	3.52	-1.60	1.49	2.06	2.45	6.86	-12.91	-0.24	8.96	9.94	
Rank	28	20	32	39	24	22	17	92	67	37	15	
Population	142	142	139	135	130	120	157	163	166	170	173	

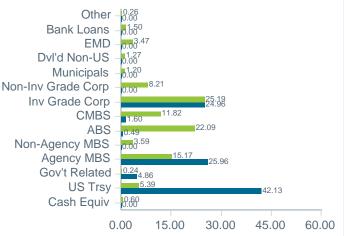










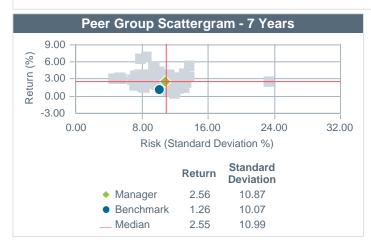


Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "Other" consists of equity and swaps.



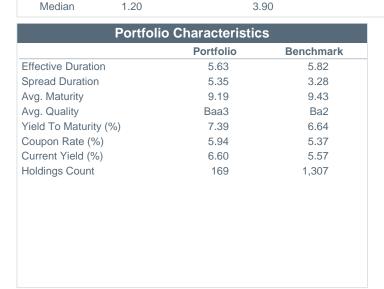
## Manager: Wellington Opportunistic EMD (CF)

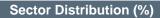
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019
Manager	-0.21	9.19	<b>-0.2</b> 1	1.98	2.56	N/A	13.97	-13.45	-5.10	6.62	17.23
Benchmark	-0.05	8.07	-1.47	0.46	1.26	1.41	11.92	-14.75	-5.32	4.02	14.31
Difference	-0.16	1.12	1.26	1.52	1.30	N/A	2.05	1.30	0.22	2.60	2.92
Peer Group Median	1.97	10.41	0.21	2.09	2.55	3.18	12.61	-12.08	-2.13	6.71	14.30
Rank	72	63	65	57	49	N/A	34	59	70	52	6
Population	120	120	120	115	111	96	130	138	145	154	163

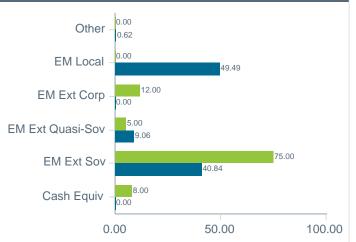












Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



## Manager: Beach Point Leveraged Loan (CF)

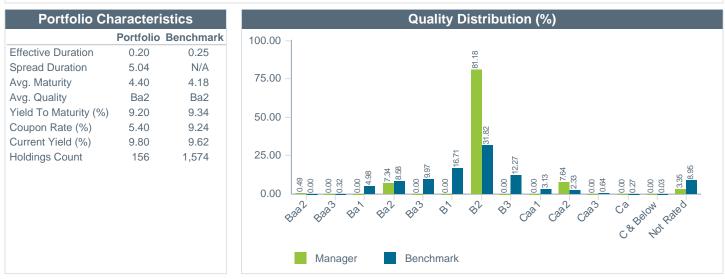
**Benchmark:** Credit Suisse Lvgd Loan Index **Peer Group:** IM U.S. Bank Loans (SA+CF)

	Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019	
Manager	3.34	15.27	6.99	6.14	5.46	5.06	15.85	-1.27	5.12	3.36	9.28	
Benchmark	2.52	12.40	5.82	5.30	4.92	4.56	13.04	-1.06	5.40	2.78	8.17	
Difference	0.82	2.87	1.17	0.84	0.54	0.50	2.81	-0.21	-0.28	0.58	1.11	
Peer Group Median	2.52	12.32	5.84	5.32	4.92	4.55	13.22	-0.87	5.37	2.70	8.74	
Rank	7	1	5	13	19	18	3	66	57	31	34	
Population	50	50	49	49	49	47	51	56	58	60	63	









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



## Manager: BNY Mellon TIPS - NL (CF) Benchmark: Bloomberg US Trsy US TIPS Index

Peer Group: IM U.S. TIPS (SA+CF)

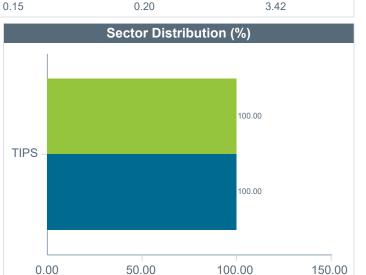
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019
Manager	-0.09	0.45	-0.47	2.52	2.33	2.24	3.90	-11.83	6.14	10.97	8.43
Benchmark	-0.08	0.46	-0.53	2.49	2.29	2.21	3.90	-11.85	5.96	10.99	8.43
Difference	-0.01	-0.01	0.06	0.03	0.04	0.03	0.00	0.02	0.18	-0.02	0.00
Peer Group Median	0.03	0.49	-0.45	2.55	2.45	2.30	4.01	-11.74	5.92	11.01	8.44
Rank	87	63	58	60	70	63	73	61	19	52	58
Population	28	28	27	26	26	26	32	34	33	35	36







	Portfolio	Benchmark
Effective Duration	6.71	4.58
Spread Duration	0.00	4.58
Avg. Maturity	7.35	7.34
Avg. Quality	Aa1	Aa1
Yield To Maturity (%)	4.31	4.61
Coupon Rate (%)	0.84	0.84
Current Yield (%)	0.91	N/A
Holdings Count	48	48



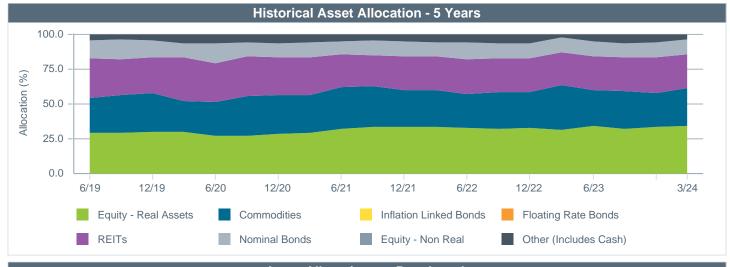
Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Performance prior to 05/2019 is represented by BNY Mellon TIPS - SL (CF).



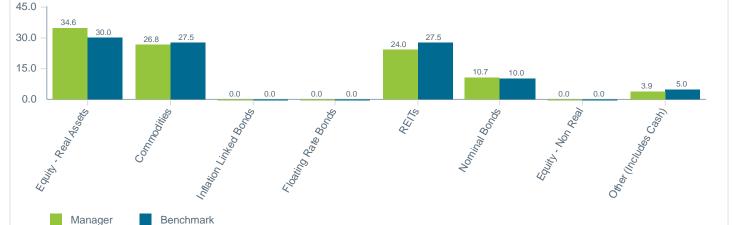
#### Manager: Cohen & Steers Real Assets Multi-Strategy B (CF) Benchmark: Cohen & Steers Real Assets Custom Index

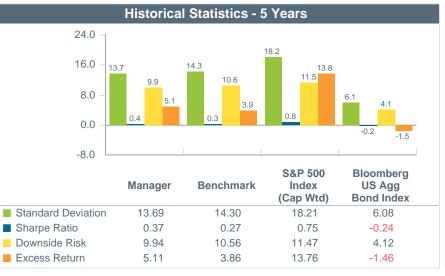
## As of March 31, 2024

Selectionary. Collect & Steels Real Assets Custom Index												
	Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019	
Manager	1.68	6.01	6.35	6.33	N/A	N/A	4.04	-2.12	23.63	-0.50	17.57	
Benchmark	1.02	4.55	5.10	4.92	4.87	2.84	3.23	-3.01	21.23	-2.00	16.53	
Difference	0.66	1.46	1.25	1.41	N/A	N/A	0.81	0.89	2.40	1.50	1.04	









## Actual Correlation - 5 Years

	Actual Correlation
Benchmark	0.99
S&P 500 Index (Cap Wtd)	0.81
Russell 2000 Index	0.79
MSCI EAFE Index (USD) (Net)	0.86
MSCI Emg Mkts Index (USD) (Net)	0.76
Bloomberg US Agg Bond Index	0.38
Bloomberg US Trsy US TIPS Index	0.54
Wilshire US REIT Index	0.84
HFRI FOF Comp Index	0.75
Bloomberg Cmdty Index (TR)	0.80
ICE BofAML 3 Mo US T-Bill Index	-0.19
Cons Price Index (Unadjusted)	0.03

Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Primary Real Return strategies and asset classes are represented by the colored shades. Allocation to Equity – Real Assets includes listed infrastructure and natural resource equities. Allocation to "Other" includes gold and cash equivalents. Please see the Addendum for custom index definitions.

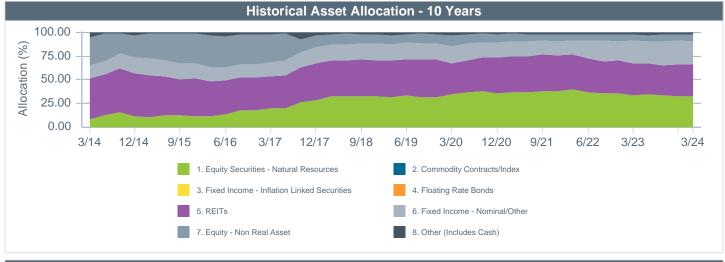


## Manager: Nuveen Real Asset Income Fund (SA)

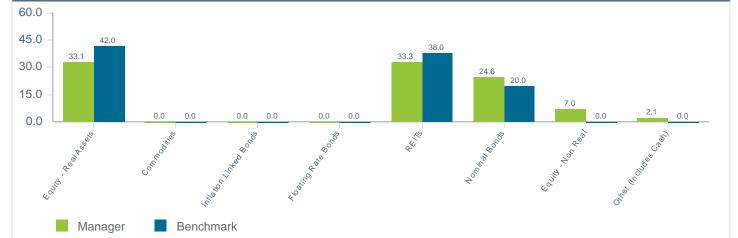
## As of March 31, 2024

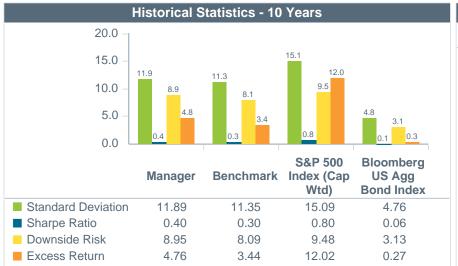
Benchmark: Nuveen Real Asset Income Blend Index

	Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019	
Manager	0.76	7.60	2.41	3.75	4.55	5.52	9.03	-11.19	13.05	-2.24	24.25	
Benchmark	1.07	9.44	1.69	3.19	4.01	4.23	11.49	-14.24	11.22	0.81	20.01	
Difference	-0.31	-1.84	0.72	0.56	0.54	1.29	-2.46	3.05	1.83	-3.05	4.24	



## Asset Allocation vs. Benchmark





## **Actual Correlation - 10 Years**

	Actual Correlation
Benchmark	0.98
S&P 500 Index (Cap Wtd)	0.79
Russell 2000 Index	0.74
MSCI EAFE Index (USD) (Net)	0.81
MSCI Emg Mkts Index (USD) (Net)	0.73
Bloomberg US Agg Bond Index	0.52
Bloomberg US Trsy US TIPS Index	0.62
Wilshire US REIT Index	0.84
HFRI FOF Comp Index	0.77
Bloomberg Cmdty Index (TR)	0.47
ICE BofAML 3 Mo US T-Bill Index	-0.10
Cons Price Index (Unadjusted)	-0.02

Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Primary Real Return strategies and asset classes are represented by the colored shades and are denoted by categories 1 through 5. Historical asset allocation prior to client inception is represented by Nuveen Real Asset Inc;I (NRIIX). Please see the Addendum for custom index definitions.



# Addendum & Glossary

# Santa Barbara County Employees' Retirement System Addendum

## Performance Related Comments

- RVK, Inc. began monitoring the assets of the Santa Barbara County Employees' Retirement System in 06/2016. Prior historical data was provided by the previous investment consultant.
- Inception dates shown represent the first full month following initial funding.
- Performance is annualized for periods greater than one year.
- Total Fund performance excludes Treasury Cash.
- Performance shown is provided by BNY Mellon.
- Historical performance prior to 04/11/2019 for BNY Mellon HEDI (SA), BNY Mellon R1000 Index NL (CF), and BNY Mellon TIPS - NL (CF) is represented by RhumbLine HEDI (SA), SSgA Russell 1000 Index - NL (CF), and BlackRock TIPS (CF), respectively.
- In 04/2023, ORG Real Estate was changed to Hamilton Lane Real Estate to reflect the change in consultant. Prior to 04/01/2023, performance shown for the Real Estate Composite is representative of ORG Real Estate.

## **Custom Index Comments**

- RVK began calculating the SBCERS Policy Benchmark on 04/01/2016. Historical performance was provided be the previous consultant. The passive **Policy Benchmark** currently consists of 19% Russell 3000 Index, 11% MSCI EAFE Index (USD) (Net), 7% MSCI Emg Mkts Index (USD) (Net), 17% Bloomberg US Agg Bond Index, 11% Custom Non-Core Fixed Income Benchmark, 15% Consumer Price Index+4%, 10% NCREIF ODCE Index (AWA) (Net) (Monthly) (1 Qtr Lag), and 10% Russell 3000 Index+3% (1 Qtr Lag).
- The active **SBCERS Dynamic Policy Benchmark** is calculated monthly using beginning of month manager weights applied to each corresponding primary benchmark return.
- The passive **Custom Non-Core Fixed Income Benchmark** currently consists of 25% Wellington Blended Benchmark and 75% CS Lvg'd Loan Index. Prior to 09/01/2022 the benchmark consisted of 33.3% Wellington Blended Benchmark, and 66.6% CS Lvg'd Loan Index. Prior to 12/01/2020 the benchmark consisted of 33.3% Bloomberg US Corp Hi Yld Index, 33.3% Wellington Blended Benchmark, and 33.3% CS Lvg'd Loan Index.
- The passive **Wellington Blended Benchmark** currently consists of 50% JPM GBI-EM GbI Dvf'd Index (USD) (TR) (Unhedged) and 50% JPM Emg Mkts Bond Glb Dvf'd Index (TR).
- The active **Custom Real Return Benchmark** is calculated monthly using beginning of month manager weights within the Real Return Composite applied to each corresponding primary benchmark return.
- The passive **Cohen & Steers Real Assets Custom Index** is a custom benchmark created by the manager and currently consists of 27.5% FTSE EPRA/NAREIT Dvld Index (USD) (Net), 27.5% Bloomberg Cmdty Index (TR), 15% S&P Gbl Natural Res Sect Index (TR), 15% DJ Brookfield Gbl Infrastructure Index, 10% ICE BofAML 1-3 Yr US Corp Index, and 5% Gold Spot Per Ounce Index. Prior to 9/30/2013 benchmark consisted of 30% FTSE EPRA/NAREIT Dvld Index (USD) (Net), 30% Bloomberg Cmdty Index (TR), 20% S&P Gbl Natural Res Sect Index (TR), 12.5% ICE BofAML 1-3 Yr Corp Index, and 7.5% Gold Spot Per Ounce Index.
- The passive **Nuveen Real Asset Income Blend Index** is a custom benchmark created by the manager and currently consists of 22% S&P Global Infrastructure Index (Net), 25% FTSE EPRA/NAREIT Devl'd Index (USD) (Net), 20% Bloomberg US Corp Hi Yld Index, 13% FTSE NAREIT Preferred Stock Index, and 20% ICE Hybrid & Preferred Infrastructure 7% Issuer Constrained Custom Index. Prior to 4/01/2021 benchmark consisted of 28% S&P Gbl Infrastructure Index, 21% FTSE EPRA/NAREIT Dvl'd Index (USD) (Net), 18% Wells Fargo Hybrid & Preferred Securities REIT Index, 15% Bloomberg Global Capital Securities Index and 18% Bloomberg US Corp Hi Yld Index.



## Santa Barbara County Employees' Retirement System Fee Schedule for Public Investment Managers

	Fee Schedule	Market Value As of 03/31/2024 (\$)	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Total Fund Public Assets		2,671,204,314	7,147,414	0.27
U.S. Equity Composite BNY Mellon HEDI (SA)	0.02 % of Assets	333,064,803	66,613	0.02
BNY Mellon R1000 Index - NL (CF)	0.01 % of Assets	437,805,202	43,781	0.01
DFA US Small Cap;I (DFSTX)	0.27 % of Assets	66,905,007	180,644	0.27
<b>Dev'd Mkt. Non-U.S. Equity Composite</b> PanAgora Dynamic International Equity (SA)	0.33 % of First \$100 M 0.30 % of Next \$100 M 0.25 % Thereafter	243,569,713	738,924	0.30
Artisan Non-U.S. Growth (SA)	0.80 % of First \$50 M 0.60 % Thereafter	163,374,736	1,080,248	0.66
Acadian Non-US Small Cap Equity (CF)	0.75 % of Assets	64,158,669	481,190	0.75
Emerging Mkt. Equity Composite DFA Emg Mkts Value;I (DFEVX)	0.44 % of Assets	142,118,610	625,322	0.44
RBC Emerging Markets Equity (CF)	0.50 % of Assets	134,051,988	670,260	0.50
<b>Core Fixed Income Composite</b> Garcia Hamilton Core Fixed Income (SA)	0.25 % of First \$25 M 0.20 % of Next \$25 M 0.15 % of Next \$50 M 0.14 % of Next \$100 M 0.10 % Thereafter	360,945,801	488,446	0.14
PGIM Core Plus Fixed Income (CF)	0.26 % of Assets	258,299,544	671,579	0.26
Non-Core Fixed Income Composite Wellington Blended Opportunistic EMD (CF)	0.55 % of Assets	111,923,116	615,577	0.55
Beach Point Leveraged Loan (CF)	0.50 % of Assets	141,636,299	708,181	0.50
Public Real Return Composite BNY Mellon TIPS - NL (CF)	0.01 % of Assets	10,329,493	1,033	0.01
Cohen & Steers Real Assets Fund (CIT)	0.65 % of Assets	53,506,408	347,792	0.65
Nuveen Real Asset Income Fund (SA)	0.80 % of First \$50 M 0.75 % of Next \$50 M 0.65 % Thereafter	52,890,777	421,681	0.80



Mutual fund fees are sourced from Morningstar and/or the investment manager.

## Santa Barbara County Employees' Retirement System Fee Schedule for Private Credit Managers

Fund	Vintage	Commitment (\$M)	Management Fee	Carry	Hurdle	Target Return (Net)
AG Direct Lending III LP	2018	\$25	1.00%	15.00%	7.00%	10% to 13% Levered
First Eagle Direct Lending Fund IV	2019	\$20	0.85%	15.00%	6.00%	7% to 9% Unlevered
PIMCO Private Income Fund, LLC	2019	\$20	1.00%	12.50%	5.00%	8% to 12% Levered
AG Direct Lending IV LP	2020	\$20	0.93%	15.00%	7.00%	10% to 13% Levered
Deerpath Capital V LP	2020	\$20	1.00%	10.00%	5.00%	6% to 9% Unlevered
Deerpath Capital VI LP	2021	\$20	1.00%	10.00%	4.00%	5% to 8% Unlevered
First Eagle Direct Lending Fund V-B	2021	\$20	0.50%	15.00%	8.00%	8% to 11% Levered
AG Direct Lending Evergreen LP	2022	\$20	0.72%	15.00%	7.00%	10% to 13% Levered
Ares Pathfinder Core LP	2022	\$20	1.05%	15.00%	6.00%	8% to 10% Unlevered
Marathon Dislocation Credit II LP	2023	\$25	1.00%	15.00%	8.00%	15% to 20% Unlevered
KKR US Direct Lending Evergreen LP	2023	\$25	0.65%	N/A	N/A	8.50% to 10.50% Unlevered



#### Santa Barbara County Employees' Retirement System Addendum Underlying Indices of SBCERS Policy Index

Time Period		Composition	Time Period		Composition	Time Perio		Composition
11/01/1999-	45.0%	Russell 3000 Index	06/01/2012-	21.0%	Russell 3000 Index	04/01/201	6- 23.0%	Russell 3000 Index
12/31/2001	20.0%	MSCI EAFE	04/30/2013	2.0%	HFRI Composite	06/30/201	7 9.0%	MSCI EAFE Index (USD) (Net)
	28.5%	Lehman Aggregate		9.0%	MSCI EAFE		10.0%	MSCI Emerging Markets Index (USD) (Net)
	4.5%	SB World Gov Bond		10.0%	MSCI Emerging Markets		1.0%	MSCI Frontier Markets Index (USD) (Net)
	2.0%	CG 3-Month U.S. T-Bill		1.0%	MSCI Frontier Markets		10.0%	Bloomberg US Aggregate Bond Index
				10.0%	Barclays Capital Aggregate		4.0%	JP Morgan Global Government Bond Excluding US Index
01/01/2002-	49.0%	Russell 3000 Index		4.0%	JPM GBI Global ex. U.S.		3.0%	Stone Harbor Blended Benchmark
12/31/2006	19.0%	MSCI AC WId ex U.S.		3.0%	JPM GBI - Emerging Global Diversified		7.0%	Bloomberg US Treasury: US TIPS Index
	27.0%	Lehman Universal		7.0%	Barclays Capital U.S. Tips		4.0%	Bloomberg US Corporate: High Yield Index
	4.0%	DJ Wilshire REIT Full Cap		4.0%	Barclays High Yield		2.0%	Credit Suisse Leveraged Loan Index
	1.0%	CG 3-Month U.S. T-Bill		2.0%	CSFB Leveraged Loan Index		3.0%	Bloomberg Commodity Index (Total Return)
				3.0%	Dow Jones-UBS Commodity Index		2.0%	S&P Glbl Lq Mid Cap Commodity & Resources Index (USD) (Gross)
01/01/2007-	48.0%	Russell 3000 Index		2.0%	S&P Global Large Mid Comm and NR		3.0%	Consumer Price Index+4% (1 Qtr Lag)
12/31/2008	19.0%	MSCI ACWI ex U.S.		3.0%	CPI+4% Lagged		2.0%	Dow Jones Brookfield Global Infrastructure Composite Index (Net)
	26.0%	Lehman Universal		2.0%	Dow Jones Brookfield Glabal Infra.		2.0%	Consumer Price Index+4%
	2.0%	Russell 3000+3%		2.0%	CPI+4% Lagged		7.0%	Russell 3000 Index+3% (1 Qtr Lag)
	4.0%	NCREIF / T-Bill+3% (50/50)		7.0%	Russell 3000+3% Lagged		6.0%	NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)
	1.0%	CG 3-Month U.S. T-Bill		6.0%	NCREIF ODCE Lagged		2.0%	FTSE NAREIT All Equity REITs Total Return Index (1 Qtr Lag)
	1.070	CG 5-Month 0.5. 1-Dill		2.0%	NAREIT Equity REITs Lagged		0.0%	ICE BofA Merrill Lynch 3 Month US Treasury Bill Index
01/01/2009-	47.0%	Russell 3000 Index		0.0%	90 Day T-Bills		0.070	TOE BOILT MICHINE LYNCH O MIONALLOO THEASARY DIA MICEX
02/28/2009	18.0%	MSCI ACWI ex U.S.		0.076	50 Day 1-Bills			
02/20/2000	25.0%	BC U.S. Universal	05/01/2013-	23.0%	Russell 3000 Index	07/01/201	7- 19.0%	Russell 3000 Index
	4.0%	Russell 3000+3% Index	03/31/2016	9.0%	MSCI EAFE	Present	11.0%	MSCI EAFE Index (USD) (Net)
	5.0%	NCREIF / T-Bill+3% (50/50)	00/01/2010	10.0%	MSCI Emerging Markets	1100011	7.0%	MSCI Emerging Markets Index (USD) (Net)
	1.0%	CG 3-Month U.S. T-Bill		1.0%	MSCI Frontier Markets		17.0%	Bloomberg US Aggregate Bond Index
	1.070	CG 5-Month 0.5. 1-Dill		10.0%	Barclays Capital Aggregate		11.0%	Custom Non-Core Fixed Income Benchmark
03/01/2009-	37.0%	Russell 3000 Index		4.0%	JPM GBI Global ex. U.S.		15.0%	Consumer Price Index+4%
06/30/2010	18.0%	MSCI ACWI ex U.S.		3.0%	JPM GBI - Emerging Global Diversified		10.0%	NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)
00/00/2010	32.0%	BC U.S. Universal		7.0%	Barclays Capital U.S. Tips		10.0%	Russell 3000 Index+3% (1 Qtr Lag)
	4.0%	T-Bill Lag 1 Qtr Lag		4.0%	Barclays High Yield		10.070	
	4.0%	NCREIF Index Lag 1 QTR		2.0%	CSFB Leveraged Loan Index			
	3.0%	Russell 3000 Lag 1 QTR		3.0%	Dow Jones-UBS Commodity Index			
	2.0%	CG 3-Month U.S. T-Bill		2.0%	S&P Global Large Mid Comm and NR			
	2.070	CG 5-Month 0.5. 1-Dill		3.0%	CPI+4% Lagged			
07/01/2010-	37.0%	Russell 3000 Index (includes 2% Covered Calls)		2.0%	Dow Jones Brookfield Glabal Infra.			
02/28/2011	18.0%	MSCI ACW ex U.S.		2.0%	CPI+4% Lagged			
02/20/2011	32.0%	BC U.S. Universal		7.0%	Russell 3000+3% Lagged			
	4.0%	T-Bill Lag 1 QTR (Real Return)		6.0%	NCREIF ODCE Lagged			
	4.0%	NCREIF Index Lag 1 QTR		2.0%	NAREIT Equity REITs Lagged			
	3.0%	Russell 3000 Lag 1 QTR (Private Equity)		0.0%	90 Day T-Bills			
	2.0%	CG 3-Month U.S. Bill		0.070	50 Day 1-Dills			
	2.070	OG O-MORTO.O. Dill						
03/01/2011-	37.0%	Russell 3000 Index (includes 2% Covered Calls)						
05/31/2012	18.0%	MSCI ACW ex U.S.						
	18.0%	BC U.S. Universal						
	4.0%	T-Bill Lag 1 QTR (Real Return)						
	4.0%	5 ( )						
	4.0%	NCREIF Index Lag 1 QTR						
		Russell 3000 Lag 1 QTR (Private Equity)						
	2.0%	CG 3-Month U.S. Bill						

RVK, Inc. began calculating performance for the SBCERS Policy Index in 06/2016. Prior performance data was provided by the previous investment consultant.



The following work plan outlines RVK's proposed action items for Santa Barbara County Employees' Retirement System. The proposed timing for future meetings is intended to correspond with anticipated meeting dates for the Board.

Action Item	Anticipated Presentation	Status	Comments
Q4 Performance Report	February 2024	Completed	
PanAgora Commingled Fund Proposal	February 2024	Completed	
Capital Market Expectations	April 2024	Completed	
Asset Allocation Study	April 2024	Completed	
Q1 Performance Report	May 2024	In Progress	
Private Credit Recommendation	May 2024	In Progress	
Real Return Structure Study - Part 1	May 2024	In Progress	
Strategic Plan	June 2024	In Progress	
Private Credit Pacing Plan	June 2024	In Progress	
Q2 Performance Report	August 2024		



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

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

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

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

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

<u>S&amp;P</u>	<u>Moody's</u>	Explanation	<u>S&amp;P</u>	<u>Moody's</u>	Explanation	
Higher Cı	edit Quality – I	nvestment Grade	Lower Cr	Lower Credit Quality – Below Investment Grade		
AAA	Aaa	Prime/Highest credit quality	BB+	Ba1	Speculative/Low credit quality	
AA+	Aa1	High credit quality	BB	Ba2		
AA	Aa2	0	BB-	Ba3		
AA-	Aa3		B+	B1	Highly speculative	
A+	A1	Upper-medium credit quality	В	B2	0 7 1	
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 9	CCC-	Caa3	5	
BBB-	Baa3		CC	Ca	Vulnerable to default	
			С	Ca		
			D	С	In default	

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

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

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

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

Sector - Attribution is calculated using the Global Industry Classification Standard (GICS), which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector as defined by S&P Capital IQ data. 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 "EMEA" represents securities based in Europe, the Middle East, and Africa. 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 4<sup>th</sup> percentile within the IM US Equity Large-Cap Growth Funds (MF) Peer Group for the Sharpe Ratio. Within the IM US Equity Large-Cap Growth Funds peer group, 4% of the other funds performed better than American Funds AMCP;R-4 (RAFEX), while 96% of the funds performed worse.

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

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

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

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

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

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

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

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

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

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

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

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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