Callan



Mendocino County Employees' Retirement Association

Performance Review

Quarter ended March 31, 2024

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Agenda

- Economic and Capital Markets Review
- MCERA 1Q 2024 Performance
- MCERA Forward Planning Calendar

Global Economic Update

Equity Markets Climb in 1Q, Bonds Falter

Stocks have recovered losses of 2022; bonds still have ground to make up

S&P 500 climbed 10.6% in 1Q24

- Stocks continued their momentum from the end of last year when the index surged 11.7% in 4Q23.
- The S&P 500 has fully recovered after falling 18.1% in 2022.

Fixed income faltered in 1Q24

- The Bloomberg Aggregate fell 0.8% amid rising rates in 1Q24.
- Interest rates have been volatile as the markets assess when and how swiftly the Fed will begin easing.
- CPI-U declined during 2023 but remains stalled at 3.5% in 1Q (yearover-year); the inflation index is 13% higher than it was at the start of 2022.
- Grinding out the last bit of stubborn inflation to get to the Fed's broad 2% goal may take longer than expected.

First signs of cooling for economy

 The initial estimate for 1Q24 GDP growth came in at 1.6%, failing to meet consensus expectations of 2.5% to 3%.

Returns for Periods ended 3/31/24						
			1/1/22 -			
	Quarter	1 Year	Current	5 Years	10 Years	25 Years
U.S. Equity						
Russell 3000	10.02	29.29	5.15	14.34	12.33	8.01
S&P 500	10.56	29.88	6.13	15.05	12.96	7.78
Russell 2000	5.18	19.71	-0.96	8.10	7.58	8.37
Global ex-U.S. Equity						
MSCI World ex USA	5.59	15.29	2.94	7.48	4.81	4.78
MSCI Emerging Markets	2.37	8.15	-4.65	2.22	2.95	
MSCI ACWI ex USA Small Cap	2.11	12.80	-2.48	6.24	4.74	7.20
Fixed Income						
Bloomberg Aggregate	-0.78	1.70	-4.06	0.36	1.54	3.84
90-day T-Bill	1.29	5.24	3.45	2.02	1.38	1.91
Bloomberg Long Gov/Credit	-2.41	-1.15	-11.36	-0.62	2.32	5.25
Bloomberg Global Agg ex-US	-3.21	-0.71	-7.85	-2.49	-1.38	2.34
Real Estate						
NCREIF Property	-0.98	-7.16	-1.71	3.76	6.41	7.88
FTSE Nareit Equity	-0.20	10.54	-6.56	4.15	6.61	9.48
Alternatives						
HFRI Fund Weighted	4.52	11.68	3.62	6.92	4.93	6.35
Cambridge Private Equity*	-0.42	4.17	2.69	14.59	14.27	13.87
Bloomberg Commodity	2.19	-0.56	4.01	6.38	-1.56	2.70
Gold Spot Price	8.04	12.70	9.40	11.51	5.72	8.64
CPI-U	1.82	3.48	5.18	4.20	2.83	2.58

*Cambridge PE data as of 9/30/23.

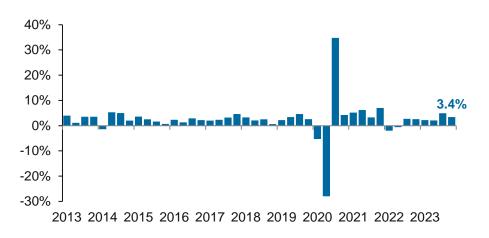
Returns greater than one year are annualized. Sources: Bloomberg, Callan, Cambridge, FTSE Russell, HFRI, MSCI, NCREIF, S&P Dow Jones Indices

Returns for Periods ended 3/31/24

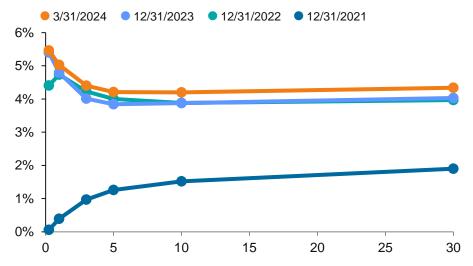
U.S. Economy—Summary

For periods ended 3/31/24 (except GDP, which is as of 12/31/23)

Quarterly Real GDP Growth

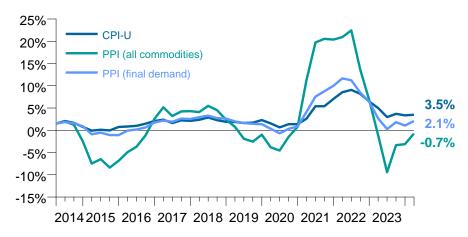


U.S. Treasury Yield Curves

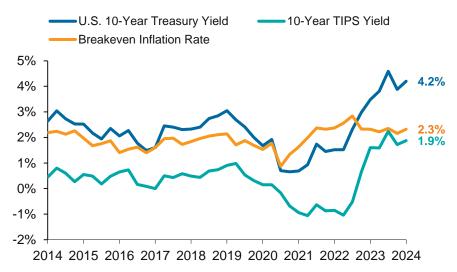


Sources: Bloomberg, Bureau of Labor Statistics, Callan

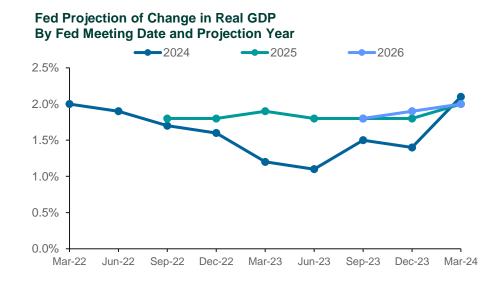
Inflation Year-Over-Year



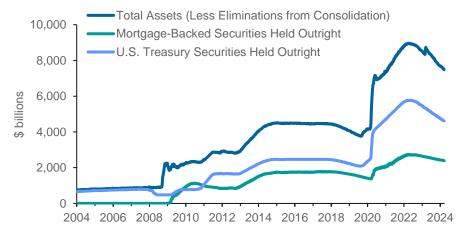
Historical 10-Year Yields



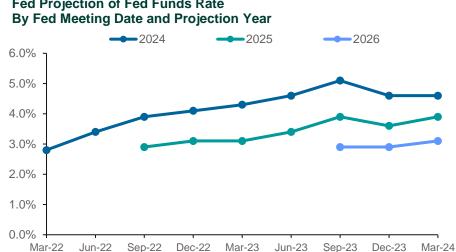
The Shifting Mindset at the Fed



Fed Balance Sheet



Sources: Federal Reserve, Financial Times



Fed Projection of Fed Funds Rate

The big swing in the Fed's GDP projection reflects the surprising nature of economic resilience.

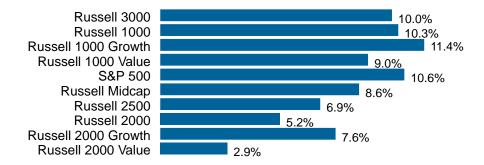
- The Fed steadily increased projections for the appropriate Fed Funds Rate in response to this economic strength.
 - Inflation down from recent highs but well above the Fed's long-term 2% target
- The Fed is also unwinding its balance sheet.
 - This has a more direct impact on longer-term rates than the Fed Funds Rate and could help to slow economic activity if it causes rates to rise.

U.S. Equity Performance: 1Q24

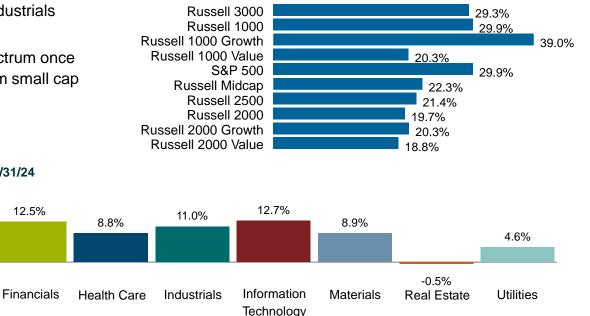
The market exhibited a strong start to 2024

- The U.S. equity markets were off to an exceptional start with the S&P 500 posting a YTD gain of 11%, its best first quarter performance since 2019. Performance was buoyed by continued optimism around a "soft landing" scenario, strong corporate earnings, and the Fed's projected interest rate cuts in mid-2024.
- Almost all of the 11 S&P 500 sectors posted gains in 1Q24.
 Real estate was the only sector that posted negative returns, which were challenged by the interest rate environment and continued negative sentiment around office real estate.
- The best-performing sector was Communication Services, which generated a nearly 16% return during the quarter. Energy, Financials, Information Technology, and Industrials also posted double-digit returns.
- Growth outpaced value across the market cap spectrum once again, and large cap stocks continued to outperform small cap stocks.

U.S. Equity: Quarter Ended 3/31/24



U.S. Equity: One Year Ended 3/31/24



Industry Sector Quarterly Performance (S&P 500) as of 3/31/24

5.0%

Discretionary

7.5%

Consumer

Staples

13.7%

Energy

Sources: FTSE Russell, S&P Dow Jones Indices

15.8%

Services

Communication Consumer

Global/Global ex-U.S. Equity Performance: 1Q24

Continued optimism lifts all markets, except China

Broad market

- Broad markets delivered strong returns on the decreasing expected probability of a recession in the U.S. and continued optimism around artificial intelligence.
- Small caps once again trailed large caps in a higher interest rate environment, which tends to more negatively impact smaller companies with more significant borrowing needs.
- Japan performed well yet again, beating the S&P 500 in 1Q24, driven by continued stock buybacks, economic resiliency, and a weakening yen, which helped exports.

Emerging markets

- Emerging markets underperformed developed markets as China struggled with increased regulatory scrutiny and a continued economic slowdown.
- Exporting countries such as Peru and Colombia benefited from growing commodity prices. Turkey also performed well with a return to orthodox monetary policies after experimenting with counterintuitive methodologies.

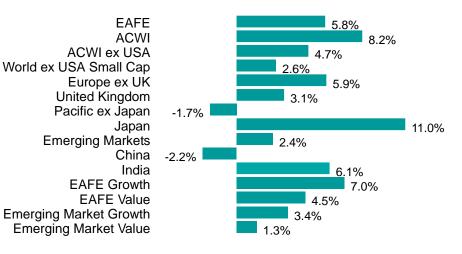
Growth vs. value

 Energy's volatility continued; after struggling in 4Q23, energy rebounded and helped deliver stronger performance in the commodity-heavy value space.

U.S. dollar strength

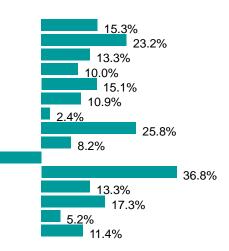
 The U.S. dollar gained in 1Q as investors recalibrated their interest rate expectations, with conventional wisdom now indicating that the U.S. may only enact one rate cut in 2024.

Global Equity Returns: Quarter Ended 3/31/24



Global Equity Returns: One Year Ended 3/31/24

EAFE ACWI ACWI ex USA World ex USA Small Cap Europe ex UK United Kingdom Pacific ex Japan Japan Emerging Markets China EAFE Growth EAFE Growth EAFE Value Emerging Market Growth Emerging Market Value



Source: MSCI

U.S. Fixed Income Performance: 1Q24

U.S. Treasury rates rose while risk appetite drove credit spreads tighter

Macro environment

- Markets' enthusiasm for multiple rate cuts starting in early 2024 was tempered by stronger-than-expected economic data.
- 10-year U.S. Treasury yield rose from 3.88% as of year-end to close the quarter at 4.21%.
- The yield curve remained inverted but less so than one year ago (2-year/10-year 42 bps vs. 57 one year ago).

Performance and drivers

- The Aggregate fell 0.8% as rates rose.
- Investment grade corporates outperformed like-duration Treasuries, while mortgages underperformed.
- Lower quality also outperformed, with high yield corporates and leveraged loans posting the highest returns.

Valuations

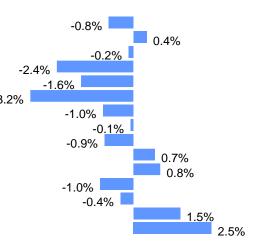
 Investment grade and high yield corporate spreads are now tighter than one standard deviation from the trailing 10-year average.

Record corporate bond issuance

- Highest first quarter of new issuance on record, with \$529 bn in investment grade corporates, surpassing 2020's \$479 bn.
- High yield quarterly issuance was just as significant with a volume of \$85 bn, a level not seen since 2021.
- Both were met with strong investor demand.

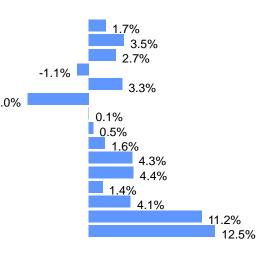
U.S. Fixed Income Returns: Quarter Ended 3/31/24

Bloomberg Aggregate Bloomberg Gov/Credit 1-3 Yr Bloomberg Intmdt Gov/Credit Bloomberg Long Gov/Credit Blmbg:Long Gov -3.2% Bloomberg Treasury Bloomberg TIPS Bloomberg Securitized Bloomberg ABS Bloomberg CMBS Bloomberg Invst Grd Credit Bloomberg High Yield Corp S&P/LSTA Leveraged Loans



U.S. Fixed Income Returns: One Year Ended 3/31/24

Bloomberg Aggregate Bloomberg Gov/Credit 1-3 Yr Bloomberg Intmdt Gov/Credit Bloomberg Long Gov/Credit Bloomberg Long Gov -6.0% Bloomberg Treasury Bloomberg TIPS Bloomberg Securitized Bloomberg ABS Bloomberg CMBS Bloomberg MBS Bloomberg Invst Grd Credit Bloomberg High Yield Corp S&P/LSTA Leveraged Loans



Sources: Bloomberg, Callan, S&P Dow Jones Indices





MCERA Plan Performance

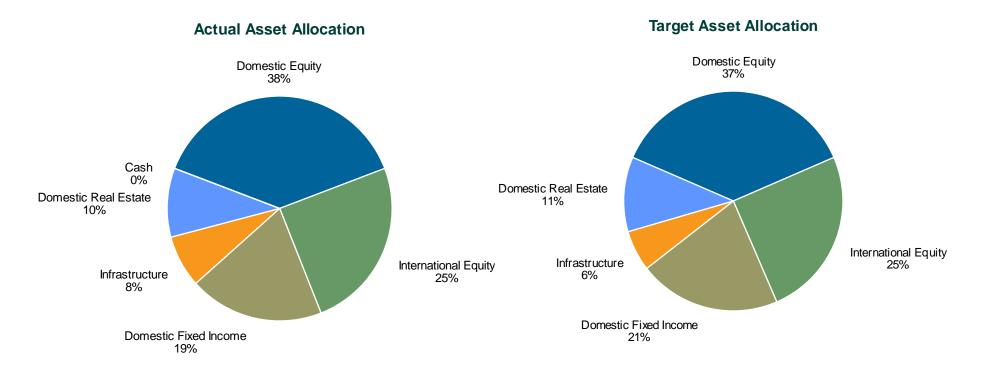
Total MCERA Plan Growth



MCERA Ending Market Value for 15 Years Ended March 31, 2024

	March 31,	2024			June 30, 2	2023
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Domestic Equities	\$273,483,471	38.43%	\$(10,687,028)	\$42,607,622	\$241,562,877	36.39%
International Equities	\$176,085,774	24.75%	\$3,206,467	\$14,073,884	\$158,805,423	23.92%
Domestic Fixed Income	\$137,797,372	19.37%	\$2,857,914	\$5,258,449	\$129,681,010	19.53%
Infrastructure	\$54,002,430	7.59%	\$(1,384,287)	\$2,965,244	\$52,421,472	7.90%
Real Estate	\$70,094,300	9.85%	\$(1,186,702)	\$(9,413,429)	\$80,694,431	12.16%
Cash	\$111,921	0.02%	\$(565,161)	\$0	\$677,082	0.10%
Total Fund	\$711,575,269	100.00%	\$(7,758,796)	\$55,491,770	\$663,842,295	100.00%

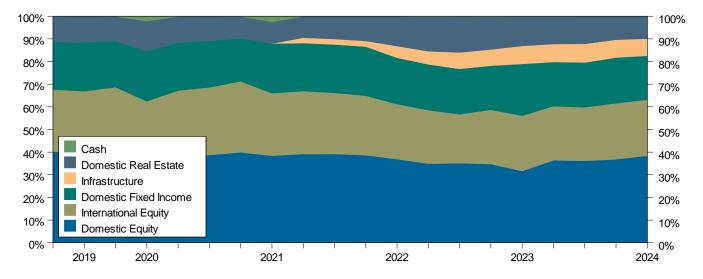
MCERA Actual vs Target Asset Allocation as of March 31, 2024



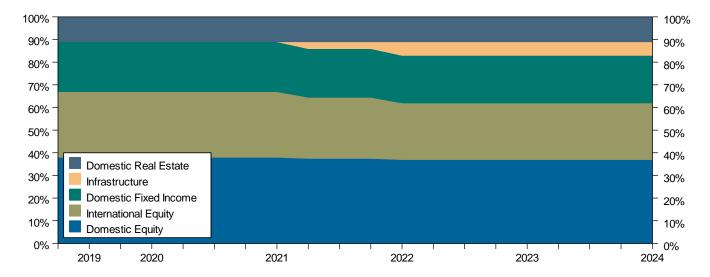
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	273,483	38.4%	37.0%	1.4%	10,201
International Equity	176,086	24.7%	25.0%	(0.3%)	(1,808)
Domestic Fixed Income	137,797	19.4%	21.0%	(1.6%)	(11,633)
Infrastructure	54,002	7.6%	6.0%	1.6%	11,308
Domestic Real Estate	70,094	9.9%	11.0%	(1.1%)	(8,179) 112
Cash	112	0.0%	0.0%	0.0%	112
Total	711,575	100.0%	100.0%		

MCERA Actual vs Target Historical Asset Allocation

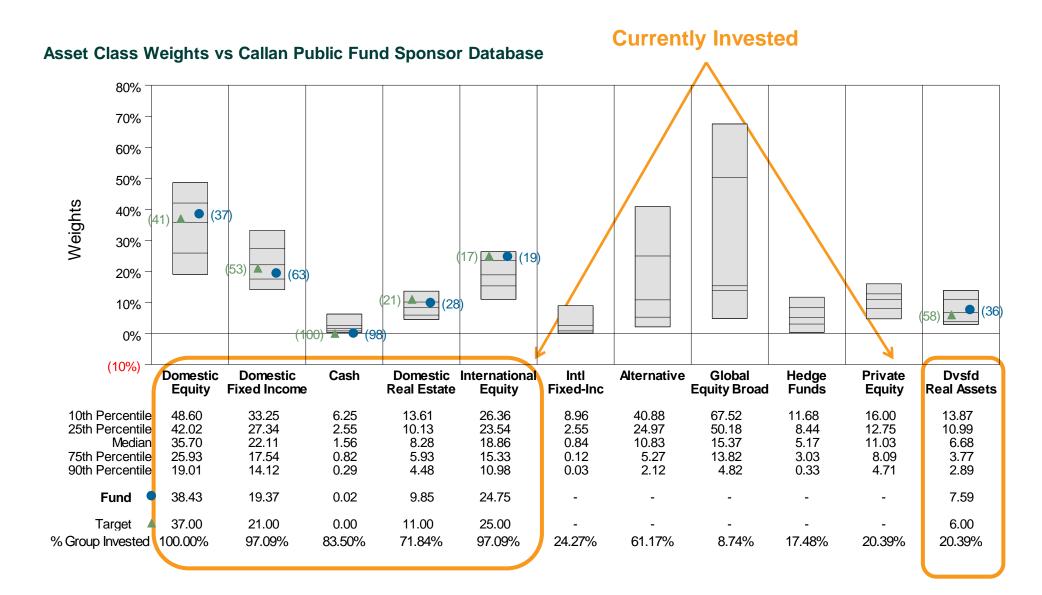
Actual Historical Asset Allocation



Target Historical Asset Allocation



MCERA Asset Class Weights vs Callan Public Fund Sponsor Database



Asset Allocation as of March 31, 2024

	March 31,	March 31, 2024				l, 2023
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Domestic Equities	\$273,483,471	38.43%	\$(2,360,613)	\$23,785,672	\$252,058,412	36.85%
Large Cap Equities	\$187,730,837	26.38%	\$(1,938,700)	\$18,056,679	\$171,612,858	25.09%
Vanguard S&P 500 Index	187,730,837	26.38%	(1,938,700)	18,056,679	171,612,858	25.09%
Mid Cap Equities	\$42,146,568	5.92%	\$0	\$3,278,035	\$38,868,533	5.68%
Fidelity Low Price Stocks	20,176,145	2.84%	0	1,547,134	18,629,011	2.72%
Janus Enterprise	21,970,423	3.09%	0	1,730,902	20,239,522	2.96%
Small Cap Equities	\$43,606,066	6.13%	\$(421,913)	\$2,450,958	\$41,577,022	6.08%
Prudential Small Cap Value	21,456,967	3.02%	(421,913)	351,196	21,527,684	3.15%
AB Small Cap Growth	22,149,099	3.11%	0	2,099,762	20,049,337	2.93%
International Equities	\$176,085,774	24.75%	\$0	\$6,694,601	\$169,391,173	24.77%
EuroPacific	30,800,702	4.33%	0	2,133,042	28,667,660	4.19%
Harbor International	35,189,951	4.95%	0	2,073,545	33,116,406	4.84%
Oakmark International	32,995,467	4.64%	0	0	32,995,467	4.82%
Mondrian International	32,319,795	4.54%	0	712,188	31,607,607	4.62%
T. Rowe Price Intl Small Cap	28,211,717	3.96%	0	1,159,386	27,052,331	3.96%
NinetyOne	16,568,142	2.33%	0	616,440	15,951,702	2.33%
Domestic Fixed Income	\$137,797,372	19.37%	\$0	\$(233,319)	\$138,030,691	20.18%
Dodge & Cox Income	68,696,955	9.65%	0	(222,205)	68,919,160	10.08%
PIMCO	69,100,418	9.71%	0	(11,114)	69,111,531	10.10%
Infrastructure	\$54,002,430	7.59%	\$(316,309)	\$477,998	\$53,840,741	7.87%
IFM Global Infrastructure	26,566,922	3.73%	0	(295,013)	26,861,934	3.93%
JP Morgan Infrastructure	27,435,508	3.86%	(316,309)	773,011	26,978,807	3.94%
Real Estate	\$70,094,300	9.85%	\$0	\$(415,171)	\$70,509,472	10.31%
RREEF Private Fund	37,278,736	5.24%	0	(101,747)	37,380,483	5.47%
Barings Core Property Fund	31,468,564	4.42%	0	(313,425)	31,781,989	4.65%
625 Kings Court	1,347,000	0.19%	0	0	1,347,000	0.20%
Cash	\$111,921	0.02%	\$(31,282)	\$0	\$143,203	0.02%
Total Fund	\$711,575,269	100.0%	\$(2,708,204)	\$30,309,781	\$683,973,693	100.0%

MCERA Total Fund Performance as of March 31, 2024

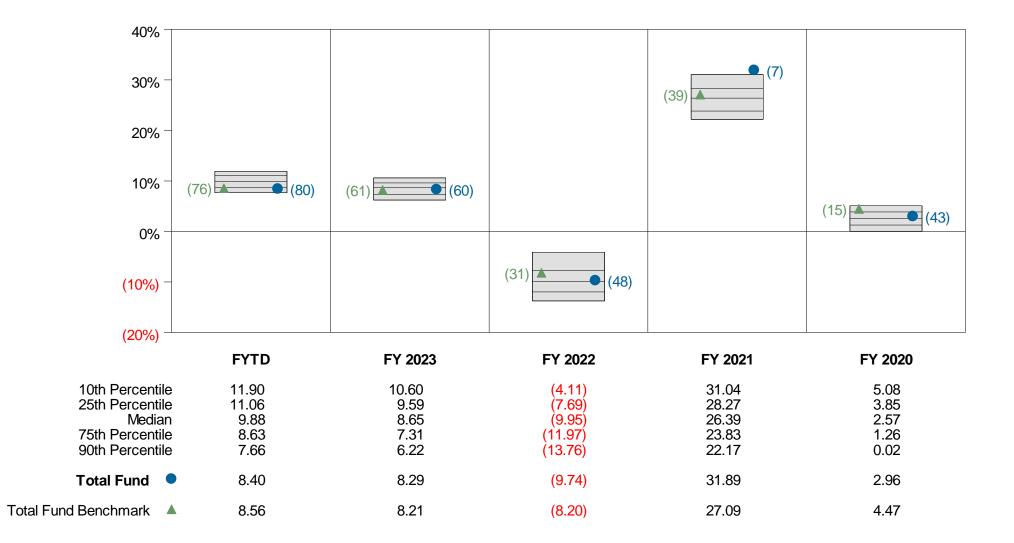
Performance vs Callan Public Fund Sponsor Database (Net)



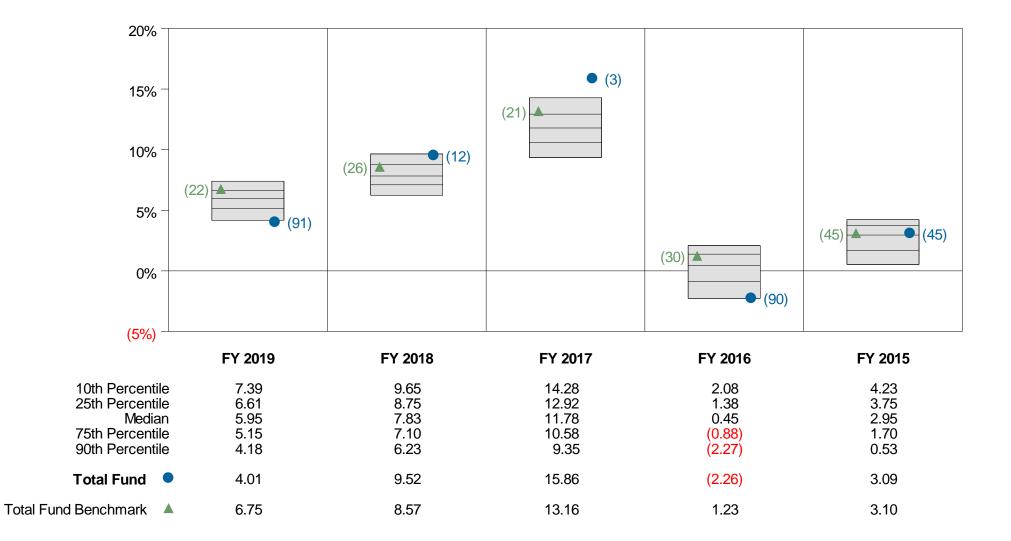
The Callan Public Fund Sponsor Database consists of public employee pension total funds including both Callan LLC client and surveyed non-client funds. Returns greater than one year are annualized.

Callan Knowledge. Experience. Integrity.

MCERA Total Fund Fiscal Year Performance as of March 31, 2024

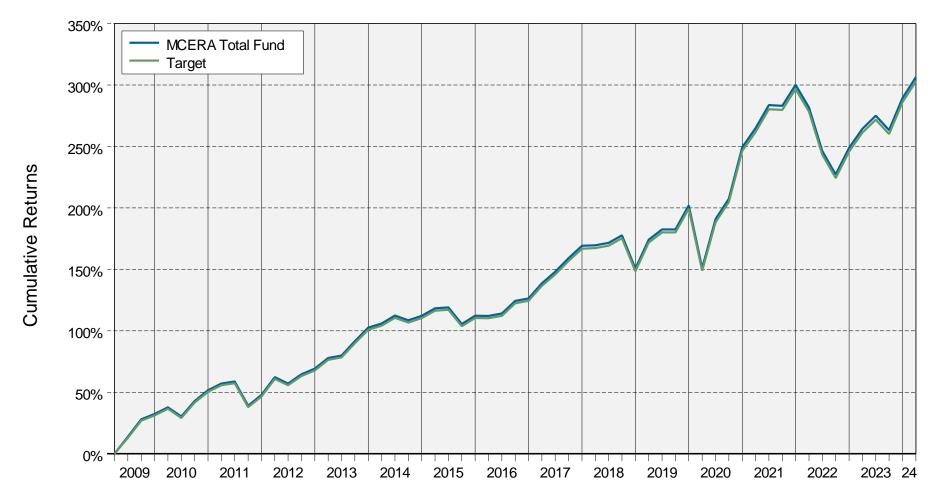


MCERA Total Fund Fiscal Year Performance

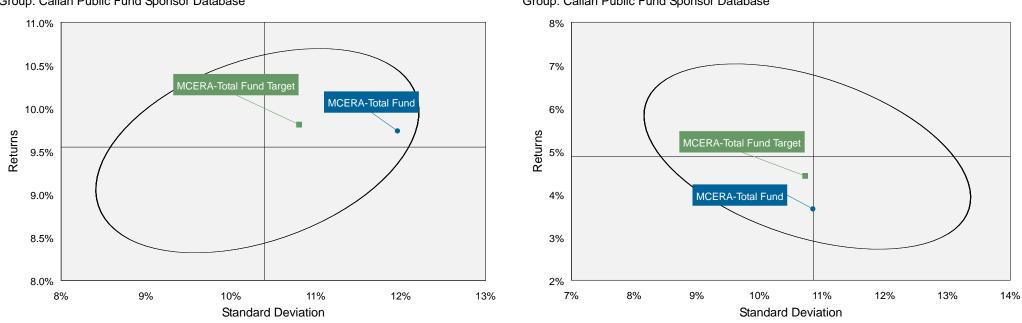


MCERA Cumulative Total Fund Performance For 15 Years Ended March 31, 2024

Fifteen Year Cumulative Returns



MCERA Annualized Return vs Risk



15 Years Ended March 31, 2024 Group: Callan Public Fund Sponsor Database

3 Years Ended March 31, 2024 Group: Callan Public Fund Sponsor Database

- The charts above plot 15 year and 3-year annualized return vs standard deviation of the MCERA Total Fund and the Total Fund Target.
 - The trailing 3-year period represents the time since the MCERA infrastructure allocation was initiated.
- Over the trailing 15-year period the MCERA Total Fund has achieved an annualized return in line with the Total Fund Target with higher volatility.

Total Fund Relative Attribution

March 31, 2024

Relative Attribution Effects for the Quarter Ended March 31, 2024

	Effective	Effective					Total
Assat Olass	Actual	Target	Actual	Target	Manager	Asset	Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	Return
Domestic Equity	37%	37%	9.47%	10.02%	(0.20%)	(0.01%)	(0.21%)
Domestic Fixed Income	20%	21%	(0.17%)	(0.78%)	0.12%	0.04%	0.16%
Domestic Real Estate	10%	11%	(0.59%)	(2.38%)	0.18%	0.05%	0.23%
International Equity	25%	25%	3.90%	4.81%	(0.23%)	(0.00%)	(0.23%)
Infrastructure	8%	6%	0.89%	(2.38%)	0.26%	(0.13%)	0.13%
Cash	0%	0%	0.00%	0.00%	0.00%	0.00%	0.00%
Total			4.43% :	= 4.34% +	0.14% -	(0.05%)	0.08%

Five Year Annualized Relative Attribution Effects

	Effective Actual	Effective Target	Actual	Target	Manager	Asset	Total Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	Return
Domestic Equity	37%	37%	14.11%	14.34%	(0.05%)	(0.07%)	(0.12%)
Domestic Fixed Income	e 21%	21%	1.34%	0.36%	0.19%	(0.03%)	0.16%
Domestic Real Estate	12%	11%	1.80%	2.98%	(0.16%)	(0.10%)	(0.26%)
International Equity	26%	27%	6.17%	6.48%	0.03%	(0.03%)	(0.00%)
Infrastructure	3%	3%	-	-	0.45%	(0.21%)	0.24%
Cash	0%	0%	(0.00%)	(0.00%)	0.00%	0.05%	0.05%
			, , , , , , , , , , , , , , , , , , ,				
Total			8.19% =	8.14% +	0.44% H	(0.39%)	0.05%

Investment Manager Returns for Periods Ended March 31, 2024

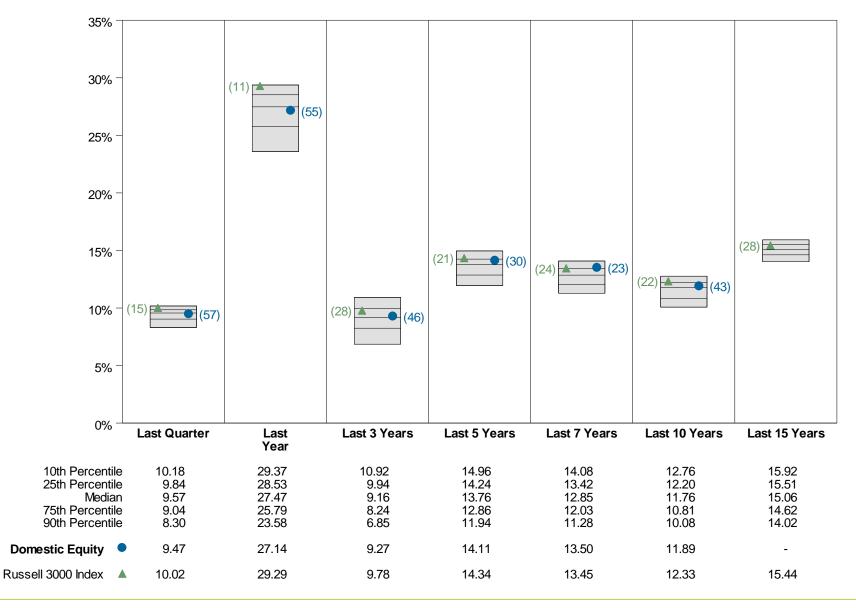
			Last	Last	Last	Last	Last
	Last	Last	3	5	7	10	15
	Quarter	Year	Years	Years	Years	Years	Years
Domestic Equities	9.47%	27.14%	9.27%	14.11%	13.50%	11.89%	15.58%
Russell 3000 Index	10.02%	29.29%	9.78%	14.34%	13.45%	12.33%	15.44%
Large Cap Equities							
Vanguard S&P 500 Index	10.55%	29.90%	11.47%	15.03%	14.06%	-	-
S&P 500 Index	10.56%	29.88%	11.49%	15.05%	14.09%	-	-
Mid Cap Equities							
Fidelity Low Priced Stock	8.30%	22.47%	8.47%	12.57%	10.88%	9.39%	14.12%
Russell MidCap Value Idx	8.23%	20.40%	6.80%	9.94%	8.41%	8.57%	14.20%
Janus Enterprise (1)	8.55%	18.13%	6.47%	11.87%	13.46%	12.69%	16.47%
Russell MidCap Growth Idx	9.50%	26.28%	4.62%	11.82%	12.87%	11.35%	15.64%
Small Cap Equities							
Prudential Small Cap Value (2)	1.70%	23.73%	5.66%	9.16%	6.07%	-	-
MSCI US Small Cap Value Idx	3.62%	20.47%	5.81%	9.37%	7.47%	-	-
Russell 2000 Value Index	2.90%	18.75%	2.22%	8.17%	6.55%	-	-
AB US Small Growth (3)	10.47%	18.90%	(5.26%)	8.59%	12.29%	9.77%	16.17%
Russell 2000 Growth Index	7.58%	20.35%	(2.68%)	7.38%	8.40%	7.89%	13.39%

Investment Manager Returns for Periods Ended March 31, 2024 (continued)

MSCI ACWI ex-US Index 4.81% 13.83% 2.44% 6.48% EuroPacific 7.44% 13.49% (0.16%) 6.91% Harbor International (1) 6.26% 14.86% 3.69% 7.72% Oakmark International (2) (0.00%) 3.99% (0.10%) 5.76% Mondrian International 2.05% 12.02% 2.17% 4.31% MSCI EAFE Index 5.78% 15.32% 4.78% 7.33% MSCI ACWI ex-US Index 4.81% 13.83% 2.44% 6.48% T. Rowe Price Intl Small Cap 4.29% 12.49% (4.25%) 7.22% MSCI ACWI ex US Small Cap 2.11% 12.80% 0.38% 6.24% NinetyOne 3.66% 8.65% (5.56%) 2.13% MSCI Emerging Markets Index 2.37% 8.15% (5.05%) 2.22%	Last 7 Years 5.44% 6.38% 7.08%	Last 10 Years 3.76% 4.75%	Last 15 <u>Years</u> 8.21%
Quarter Year Years International Equities 3.90% 11.01% 0.05% 6.17% MSCI ACWI ex-US Index 4.81% 13.83% 2.44% 6.48% EuroPacific 7.44% 13.49% (0.16%) 6.91% Harbor International (1) 6.26% 14.86% 3.69% 7.72% Oakmark International (2) (0.00%) 3.99% (0.10%) 5.76% Mondrian International 2.05% 12.02% 2.17% 4.31% MSCI EAFE Index 5.78% 15.32% 4.78% 7.33% MSCI ACWI ex-US Index 4.81% 13.83% 2.44% 6.48% T. Rowe Price Intl Small Cap 4.29% 12.49% (4.25%) 7.22% MSCI ACWI ex US Small Cap 2.11% 12.80% 0.38% 6.24% NinetyOne 3.66% 8.65% (5.56%) 2.13% MSCI Emerging Markets Index 2.37% 8.15% (5.05%) 2.22% Domestic Fixed Income (0.77%) 3.69% (1.58%) 1.3	Years 5.44% 6.38% 7.08%	Years 3.76%	Years 8.21%
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MSCI ACWI ex-US Index 4.81% 13.83% 2.44% 6.48% EuroPacific 7.44% 13.49% (0.16%) 6.91% Harbor International (1) 6.26% 14.86% 3.69% 7.72% Oakmark International (2) (0.00%) 3.99% (0.10%) 5.76% Mondrian International 2.05% 12.02% 2.17% 4.31% MSCI ACWI ex-US Index 5.78% 15.32% 4.78% 7.33% MSCI ACWI ex-US Index 4.81% 13.83% 2.44% 6.48% T. Rowe Price Intl Small Cap 4.29% 12.49% (4.25%) 7.22% MSCI ACWI ex US Small Cap 2.11% 12.80% 0.38% 6.24% NinetyOne 3.66% 8.65% (5.56%) 2.13% MSCI Emerging Markets Index 2.37% 8.15% (5.05%) 2.22% Domestic Fixed Income (0.17%) 3.69% (1.58%) 1.34% Blmbg Aggregate Index (0.78%) 1.70% (2.46%) 0.36% PIMCO (0.02%) 3.27% (2.24%) 0.75%	6.38% 7.08%		
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Mondrian International 2.05% 12.02% 2.17% 4.31% MSCI EAFE Index 5.78% 15.32% 4.78% 7.33% MSCI ACWI ex-US Index 4.81% 13.83% 2.44% 6.48% T. Rowe Price Intl Small Cap 4.29% 12.49% (4.25%) 7.22% MSCI ACWI ex US Small Cap 2.11% 12.80% 0.38% 6.24% NinetyOne 3.66% 8.65% (5.56%) 2.13% MSCI Emerging Markets Index 2.37% 8.15% (5.05%) 2.22% Domestic Fixed Income (0.17%) 3.69% (1.58%) 1.34% Dodge & Cox Income (0.32%) 4.09% (0.93%) 1.89% PIMCO (0.02%) 3.27% (2.24%) 0.75%	5.75%	3.64%	8.31%
MSCI EAFE Index 5.78% 15.32% 4.78% 7.33% MSCI ACWI ex-US Index 4.81% 13.83% 2.44% 6.48% T. Rowe Price Intl Small Cap 4.29% 12.49% (4.25%) 7.22% MSCI ACWI ex US Small Cap 2.11% 12.80% 0.38% 6.24% NinetyOne 3.66% 8.65% (5.56%) 2.13% MSCI Emerging Markets Index 2.37% 8.15% (5.05%) 2.22% Domestic Fixed Income (0.17%) 3.69% (1.58%) 1.34% Dodge & Cox Income (0.32%) 4.09% (0.93%) 1.89% PIMCO (0.2%) 3.27% (2.24%) 0.75%	4.00%	3.45%	9.81%
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T. Rowe Price Intl Small Cap MSCI ACWI ex US Small Cap 4.29% 2.11% 12.49% 12.80% (4.25%) 0.38% 7.22% 6.24% NinetyOne MSCI Emerging Markets Index 3.66% 2.37% 8.65% 8.15% (5.56%) 5.05% 2.13% 2.22% Domestic Fixed Income Blmbg Aggregate Index (0.17%) (0.78%) 3.69% 1.70% (1.58%) (2.46%) 1.34% 0.36% Dodge & Cox Income PIMCO (0.32%) (0.02%) 4.09% 3.27% (0.93%) (2.24%) 1.89% 0.75%	6.70%	4.80%	8.41%
MSCI ACWI ex US Small Cap 2.11% 12.80% 0.38% 6.24% NinetyOne 3.66% 8.65% (5.56%) 2.13% MSCI Emerging Markets Index 2.37% 8.15% (5.05%) 2.22% Domestic Fixed Income (0.17%) 3.69% (1.58%) 1.34% Blmbg Aggregate Index (0.78%) 1.70% (2.46%) 0.36% Dodge & Cox Income (0.32%) 4.09% (0.93%) 1.89% PIMCO (0.02%) 3.27% (2.24%) 0.75%	6.38%	4.75%	8.38%
NinetyOne 3.66% 8.65% (5.56%) 2.13% MSCI Emerging Markets Index 2.37% 8.15% (5.05%) 2.22% Domestic Fixed Income (0.17%) 3.69% (1.58%) 1.34% Blmbg Aggregate Index (0.78%) 1.70% (2.46%) 0.36% Dodge & Cox Income (0.32%) 4.09% (0.93%) 1.89% PIMCO (0.02%) 3.27% (2.24%) 0.75%	-	-	
MSCI Emerging Markets Index 2.37% 8.15% (5.05%) 2.22% Domestic Fixed Income Blmbg Aggregate Index (0.17%) (0.78%) 3.69% 1.70% (1.58%) 1.34% 0.36% Dodge & Cox Income PIMCO (0.32%) (0.02%) 4.09% 3.27% (0.93%) (2.24%) 1.89% 0.75%	5.74%	-	-
MSCI Emerging Markets Index 2.37% 8.15% (5.05%) 2.22% Domestic Fixed Income Blmbg Aggregate Index (0.17%) (0.78%) 3.69% 1.70% (1.58%) 1.34% 0.36% Dodge & Cox Income PIMCO (0.32%) (0.02%) 4.09% 3.27% (0.93%) (2.24%) 1.89% 0.75%	-		
Domestic Fixed Income (0.17%) 3.69% (1.58%) 1.34% Blmbg Aggregate Index (0.78%) 1.70% (2.46%) 0.36% Dodge & Cox Income (0.32%) 4.09% (0.93%) 1.89% PIMCO (0.02%) 3.27% (2.24%) 0.75%	3.72%	-	-
Blmbg Aggregate Index (0.78%) 1.70% (2.46%) 0.36% Dodge & Cox Income (0.32%) 4.09% (0.93%) 1.89% PIMCO (0.02%) 3.27% (2.24%) 0.75%			
BImbg Aggregate Index (0.78%) 1.70% (2.46%) 0.36% Dodge & Cox Income (0.32%) 4.09% (0.93%) 1.89% PIMCO (0.02%) 3.27% (2.24%) 0.75%	1.85%	2.17%	3.75%
PIMČO (0.02%) 3.27% (2.24%) 0.75%	1.06%	1.54%	2.62%
PIMČO (0.02%) 3.27% (2.24%) 0.75%	2.28%	2.52%	4.32%
	1.39%	1.80%	3.46%
	1.06%	1.54%	2.62%
Infrastructure 0.89% 8.23% 8.78% -			
IFM Global Infrastructure (1.10%) 4.81%	-	-	-
JP Morgan Infrastructure 2.87% 11.67% 10.14% -	-	-	-
0	- 4.12%	-	-
NFI-ODCE Equal Weight Net (2.38%) (12.33%) 2.81% 2.98%	4.12%	_	
Real Estate (0.59%) (14.89%) 0.70% 1.80%	3.30%	5.36%	8.08%
Real Estate Custom Benchmark (3)(4) (2.38%) (12.33%) 2.81% 2.98%	4.12%	6.12%	9.49%
RREEF Private (0.27%) (10.59%) 3.34% 3.54%	4.12%	6.52%	7.80%
Barings Core Property Fund (0.27%) (10.35%) 3.34% 3.34% (0.39%) (19.20%) (2.39%) (0.39%)	4.55%	4.07%	-
NFI-ODCE Equal Weight Net (2.38%) (19.20%) (2.38%) (0.39%)	4.12%	6.15%	5.99%
625 Kings Court 0.00% (21.62%) 5.73% 8.35%	4.12%	10.38%	8.82%
025 Nings Court 0.00% (21.02%) 5.73% 8.35%	10.00%	10.30%	0.02 %
Total Fund 4.43% 11.56% 3.68% 8.19%	7.90%	7.04%	9.80%
Total Fund Benchmark* 4.34% 11.90% 4.43% 8.14%	8.01%	7.39%	9.81%

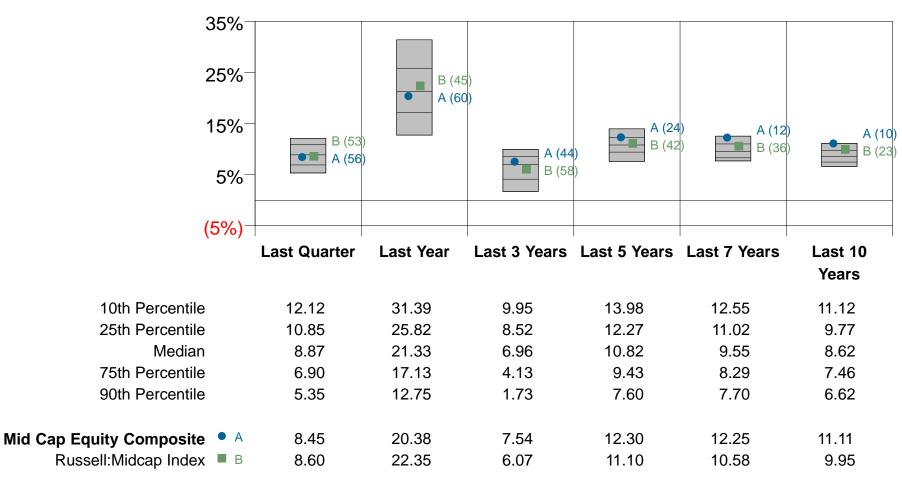
MCERA Domestic Equity Composite Performance For Periods Ended March 31, 2024

Performance vs Public Fund - Domestic Equity (Net)



MCERA Domestic Mid Cap Equity Composite Performance

For Periods Ended March 31, 2024

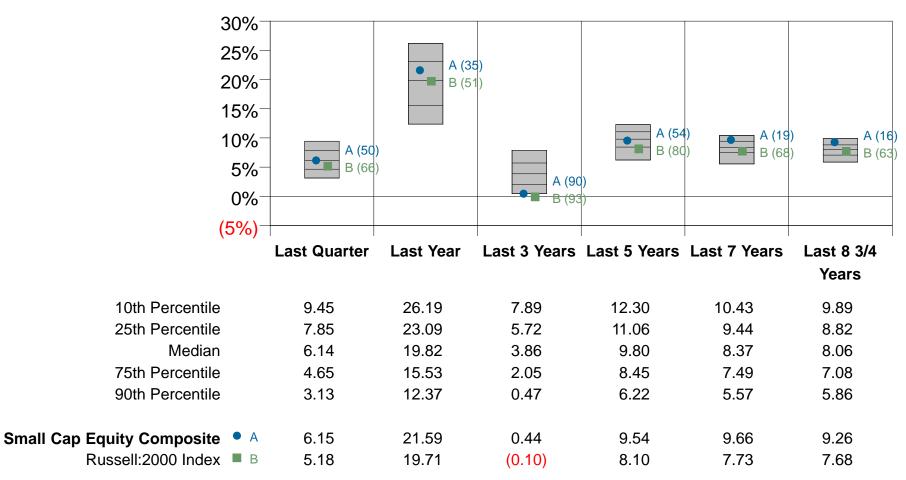


Performance vs Callan Mid Cap Mutual Funds (Net)

MCERA Mid Cap Equity portfolio leads the Russell Midcap Index in the intermediate- and long-term. The Portfolio is above peer median for trailing 1-, 3-, 5-, 7- and 10-year periods.

MCERA Domestic Small Cap Equity Composite Performance

For Periods Ended March 31, 2024

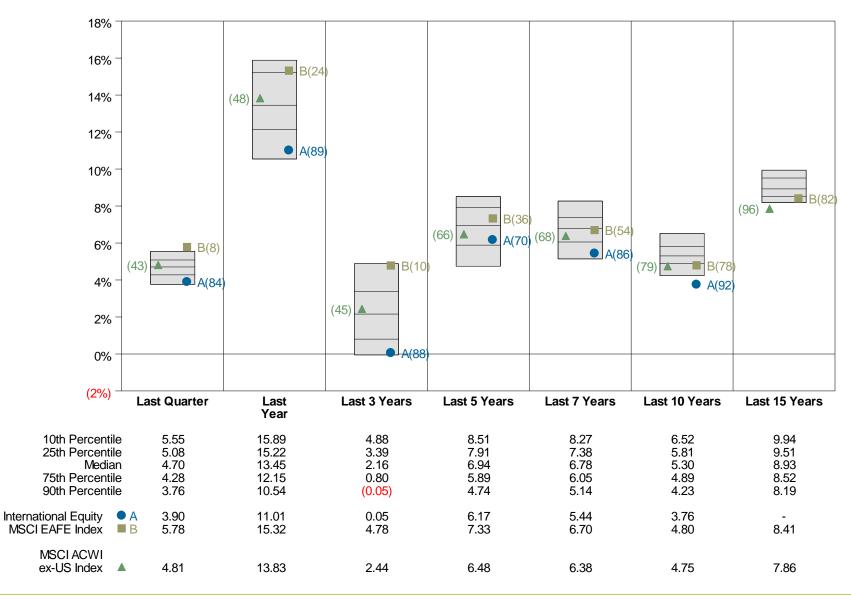


Performance vs Callan Small Cap Mutual Funds (Net)

MCERA Small Cap Equity portfolio leads the Russell 2000 Index over all time periods shown. The Portfolio is at or above peer median for the trailing quarter, 1-, 7-, and 8.75-year periods.

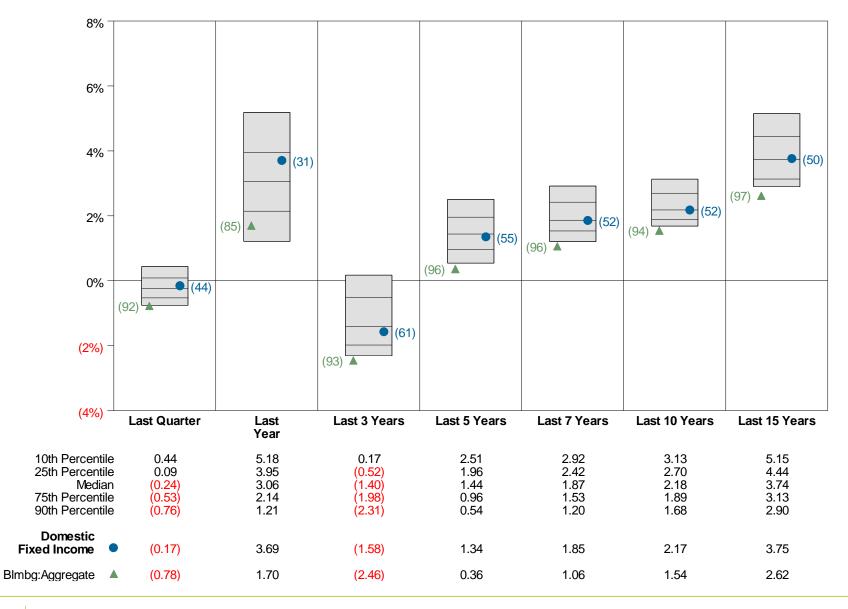
MCERA International Equity Composite Performance For Periods Ended March 31, 2024

Performance vs Public Fund - International Equity (Net)



MCERA Fixed Income Composite Performance For Periods Ended March 31, 2024

Performance vs Public Fund - Domestic Fixed (Net)



Callan Knowledge. Experience. Integrity.

MCERA Real Estate Composite Performance For Periods Ended March 31, 2024

Performance vs Callan Open End Core Cmmingled Real Est (Net)



Callan Knowled

Knowledge. Experience. Integrity.

Manager Monitoring Summary

March 31, 2024

		Philosophy	1	
	Overall	Process	Org/Team	Performance
Domestic Equity				
Vanguard S&P 500 Index				
Fidelity Low Priced Stock				
Janus Enterprise				
Prudential Small Cap Value				
AB US Small Growth				
Non-US Equity				
EuroPacific Growth				
Harbor International				
Oakmark International				
Mondrian International				
T. Rowe Price Intl Small Cap				
NinetyOne				
Fixed Income				
Dodge & Cox Income				
PIMCO				
Infrastructure				
IFM Global Infrastructure				
JP Morgan Infrastructure				
Real Estate				
RREEF America II				
Barings Core Property Fund				

- Fidelity Low Priced Stock: Notable transition in portfolio manager duties from Joel Tillinghast to new PM's Sam Chamovitz and Morgen Peck in 2023.
- **Prudential QMA Small Cap Value:** The deep value orientation of this strategy came back into favor in 2021 and it has outpaced the Russell 2000 Value Index in 2022 and 2023. Callan continues to monitor the organization and team following turnover in 2021.
- AllianceBernstein Small Cap Growth: Bruce Aronow, Co-Chief Investment Officer (CIO) for the US Small and SMID Cap Growth Equities strategies, retired at the end of 2023. Samantha Lau, previous co-CIO for the US Small and SMID Cap Growth Equities strategies, became the sole CIO.
- Harbor International (Marathon): The Fund's process and style are extremely flexible which can lead to significant deviations from the benchmark and result in extended periods of under and out performance.
- **Mondrian:** Strategy provides downside protection but has experienced longer term performance struggles during strong up market.
- **Dodge & Cox Income:** Tom Dugan, Director of Fixed Income, retired at the end 2023 an is succeeded by Lucy Johns, previously Associate Director of Fixed Income.
- PIMCO: Lead PM Scott Mather announced leave of absence in 2022, which culminated in his retirement. Qi Wang and Dan Ivascyn were subsequently added to the team.
- **Barings:** Underperformance driven largely by write downs on four office assets in the portfolio.

Legend:

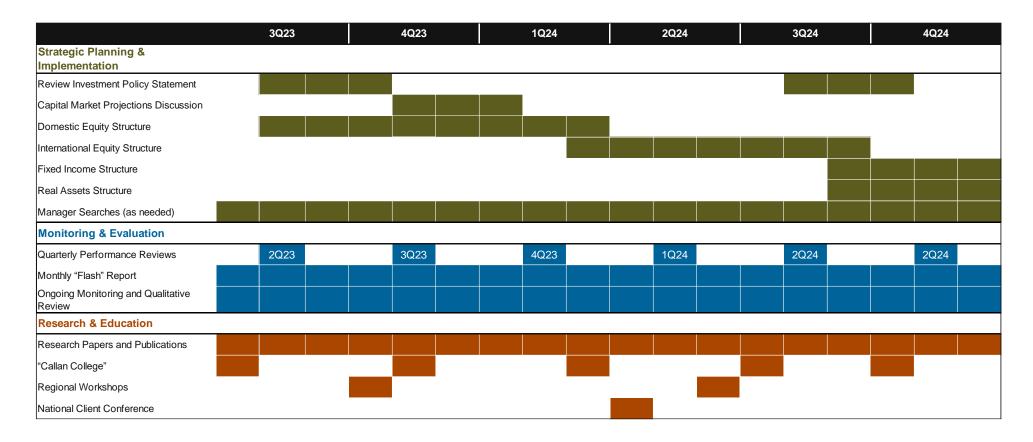
Appendix

MCERA Forward Planning Calendar

2023-2024

Following the completion of the Asset Liability study in the first half of 2023, we are in the process of working through investment structure studies for each of Domestic Equity, Non-US Equity, Fixed Income and Real Assets.

The Domestic Equity review was completed in March 2024. International Equity will be reviewed next.



MCERA Asset Allocation and Asset Class Reviews – Progress Thus Far

2023-2024

February 15, 2023 Agenda Item 3b) Discussion and Possible Action Regarding Asset/Liability Study **Board Action**: Motion was made and approved to adopt Asset Allocation Mix 3 as presented within the MCERA 2023 Asset/Liability Study prepared by Callan.

April 19, 2023 Agenda Item 4b) Portfolio Structure Discussion Regarding Reconsideration of Investment Allocation **Board Action**: Motion was made to reconsider the Board's February 15, 2023 action and adopt asset allocation mix 4. The motion was approved.

August 16, 2023 Agenda Item 3e) Educational Presentation Regarding Domestic Equity
 Review of Current MCERA Domestic Equity Structure & Consideration of Alterative Structures.
 Board Direction: Staff and Callan will bring back alternative investment mixes for further discussion at a future meeting.

October 18, 2023 Agenda Item 2c) Fiduciary Review and Domestic Equity Manager Review Callan provided Fiduciary education, alternative investment mixes, and a deep-dive on MCERAs active domestic equity managers with research specialist, Mark Wood.

Board Direction: Callan will conduct a SMID Cap Manager search and will present the results at a future meeting.

In January 2024 MCERA staff and Callan worked together to review SMID strategies.

March 20, 2024 Agenda Item 4c) Small and Mid-Cap (SMID) Investment Manager Review Staff and Callan recommended retaining the current domestic equity structure.

An asset liability study for the MCERA Plan is typically conducted every 3-5 years. Prior to 2023, the last asset liability study was reviewed by the MCERA Board in 2019, followed by reviews of each asset category in the portfolio 2020-2021.

MCERA Investment Beliefs

1. Focus on the Long-Run

- MCERA is a long-term investor and holds a 50+ year investment horizon
- · Asset allocation decision is the single most important determinant of long-term investment returns

2. Diversification Adds Value

- Diversification is prudent and provides value by reducing volatility
- · Lower investment volatility leads to more stable contribution rates

3. Understand and Manage Risk

- Willing to accept risk that is understood for which they receive compensation
- · Seek to avoid risk that is not understood, or for which there is insufficient compensation

4. Simple is Often Better

- · Research has shown that complexity in the investment program often provides no net benefit to the plan
- · Avoid overly complex investment structure or vehicles

5. Public Investment Markets are Largely Efficient

• Utilize index funds in efficient market segments

6. Investment Costs Matter

· Evaluate value provided by various experts that require expenditure of funds

7. Strong Governance is Vital

· Implement and maintain documented governance policies and monitor said policies



Callan Update

Published Research Highlights: 1Q24



Recent Blog Posts

SEC Releases Final Climate Disclosure Rule	A Strong Finish to 2023 Bodes Well for Hedge Funds in 2024	The Magnificent Seven and Large Cap Portfolios
Kristin Bradbury	Joe McGuane	Nicole Wubbena

Additional Reading

Alternatives Focus quarterly newsletter Active vs. Passive quarterly charts *Capital Markets Review* quarterly newsletter Monthly Updates to the Periodic Table *Market Pulse Flipbook* quarterly markets update *Real Estate Indicators* market outlook

Callan Institute Events

Upcoming conferences, workshops, and webinars

Callan College

Intro to Investments—Learn the Fundamentals

This course is for institutional investors, including trustees and staff members of public plans, corporate plans, and nonprofits. This session familiarizes trustees and staff with basic investment theory, terminology, and practices.

- June 18-19, 2024 In-Person Session in Chicago
- September 24-26, 2024 Virtual Session via Zoom

Intro to Alternatives

This course is for institutional investors, including trustees and staff members of public plans, corporate plans, and nonprofits. This session familiarizes trustees and staff with alternative investments like private equity, hedge funds, and real estate, and how they can play a key role in any portfolio. You will learn about the importance of allocations to alternatives and how to consider integrating, evaluating, and monitoring them.

- August 21-22, 2024 - Virtual Session via Zoom

Please visit our website at <u>callan.com/events-education</u> as we add dates to our 2024 calendar!

Mark Your Calendar

2024 Regional Workshops

June 25, 2024 – Atlanta June 27, 2024 – San Francisco October 22, 2024 – Denver October 23, 2024 – Chicago

Watch your email for further details and an invitation.

Webinars & Research Café Sessions

Webinar: Market Intelligence April 26, 2024 – Virtual Session via Zoom Webinar: Fee Study Results (National Conference) May 16, 2024 – Virtual Session via Zoom

Callan

Introducing CODE: Callan On-Demand Education

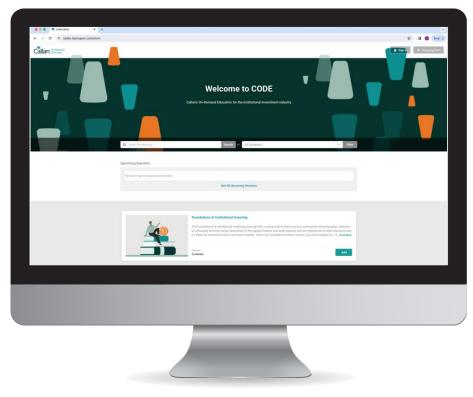


- Variety of educational courses
- Interactive and engaging
- Self-guided modules
- Eligible for continuing education credits
- Learning at your own pace

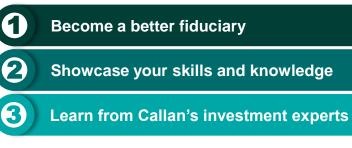
CODE courses are designed for investment professionals of all levels—and they're self-guided. Access them anytime, from anywhere, and get continuing education credits for each completed course.

CODE is for you, your colleagues, your new hires, and your interns. It's for anyone interested in learning about institutional investing.

callan.com/code



3 Reasons to Take CODE Courses



Callan Updates

Firm updates by the numbers, as of March 31, 2024

Total Associates: ~210

Ownership

- 100% employees
- ~70% of employees are equity owners
- ~55% of shareholders identify as women or minority

Total General and Investment Consultants: 50+ Total Specialty and Research Consultants: 60+ Total CFA/CAIA/FRMs: 55+ Total Institutional Investor Clients: 475+ Provides advisory services to institutional investor clients with assets over \$4+ trillion

Introducing CODE: Callan On-Demand Education

Launched an online education platform featuring courses on a broad range of institutional investing topics Learn more at <u>callan.com/CODE</u>

"Our philosophy with this platform is to make the whole industry more educated and have a better understanding of how decisions actually happen. If we can do that, we'll get better outcomes for stakeholders and beneficiaries."

 CEO and Chief Research Officer Greg Allen on why we built the Callan On-Demand Education (CODE) platform



Callan

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