

# Callan



**Mendocino County Employees'  
Retirement Association**

Performance Review

Quarter ended June 30, 2024

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**Greg DeForrest, CFA**

Fund Sponsor Consulting

**Claire Telleen, CFA**

Fund Sponsor Consulting

**Hannah Vieira**

Fund Sponsor Consulting

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# Agenda

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- Economic and Capital Markets Review
  - MCERA 2Q 2024 Performance
  - MCERA Forward Planning Calendar

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## Global Economic Update

## Equity and Bond Markets Mixed in 2Q

Many sectors still have ground to make up to recover losses of 2022

### S&P 500 climbed 4.3% in 2Q24

- Emerging markets and non-U.S. small cap equities also posted gains but U.S. small cap and developed non-U.S. stocks fell.

### Core fixed income eked out a gain

- The Bloomberg Aggregate rose 0.1% despite rates rising over the quarter due to coupon income offsetting price losses.
- Long duration fixed income and non-U.S. bonds fell.
- Interest rates have been volatile as the markets assess when and how swiftly the Fed will begin easing.
- CPI-U came in at 3.0% (year-over-year) in 2Q, falling sharply from last quarter's 3.5%, and improving the prospects for a rate cut later this year.

### Economy reignites in second quarter

- After a weak 1.4% rise in 1Q24, the initial estimate for 2Q24 GDP came in at a brisk 2.8%, with consumer spending and business investment fueling the climb.

Returns for Periods ended 6/30/24

	Quarter	1 Year	1/1/22 - Current	5 Years	10 Years	25 Years
<b>U.S. Equity</b>						
Russell 3000	3.22	23.13	5.96	14.14	12.15	7.82
S&P 500	4.28	24.56	7.29	15.05	12.86	7.67
Russell 2000	-3.28	10.06	-2.18	6.94	7.00	7.60
<b>Global ex-U.S. Equity</b>						
MSCI World ex USA	-0.60	11.22	2.39	6.55	4.27	4.63
MSCI Emerging Markets	5.00	12.55	-2.31	3.10	2.79	--
MSCI ACWI ex USA Small Cap	0.66	11.26	-1.98	6.13	4.44	6.74
<b>Fixed Income</b>						
Bloomberg Aggregate	0.07	2.63	-3.64	-0.23	1.35	3.88
90-day T-Bill	1.32	5.40	3.64	2.16	1.51	1.91
Bloomberg Long Gov/Credit	-1.73	-1.58	-10.91	-2.22	1.65	5.29
Bloomberg Global Agg ex-US	-2.11	-0.66	-7.88	-3.56	-1.86	2.46
<b>Real Estate</b>						
NCREIF Property	-0.26	-5.53	-1.64	3.39	6.07	7.75
FTSE Nareit Equity	0.06	7.79	-5.90	3.90	5.90	9.06
<b>Alternatives</b>						
Cambridge Private Equity*	1.17	5.16	1.70	14.58	13.47	13.37
Cambridge Senior Debt*	0.73	7.73	5.58	6.87	6.73	4.25
HFRI Fund Weighted	0.54	9.80	3.44	6.67	4.77	6.00
Bloomberg Commodity	2.89	5.00	4.79	7.25	-1.29	2.69
<b>CPI-U</b>	0.59	2.97	4.89	4.17	2.80	2.58

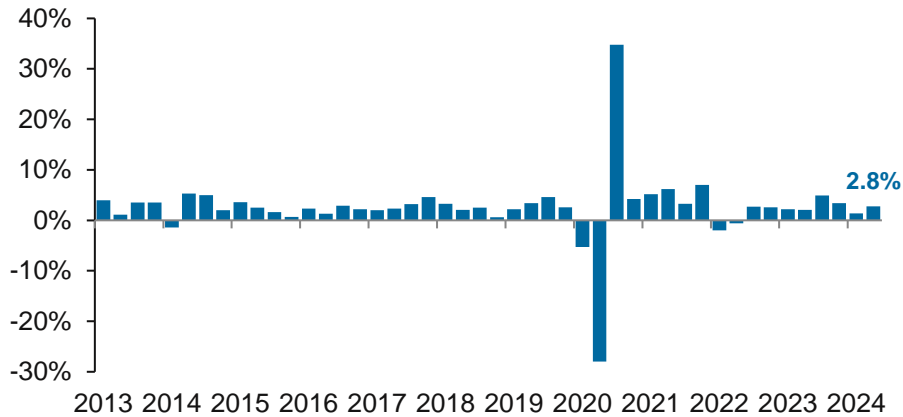
\*Cambridge Private Equity and Cambridge Senior Debt data as of 3/31/24.

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

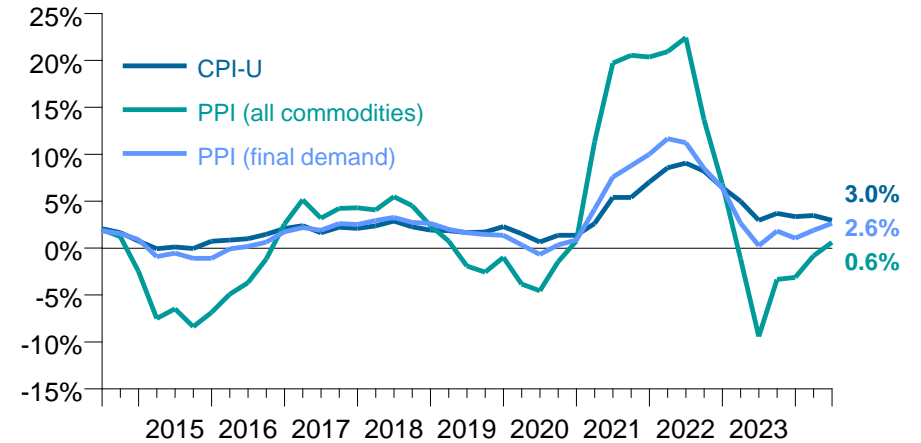
# U.S. Economy—Summary

For periods ended 6/30/24

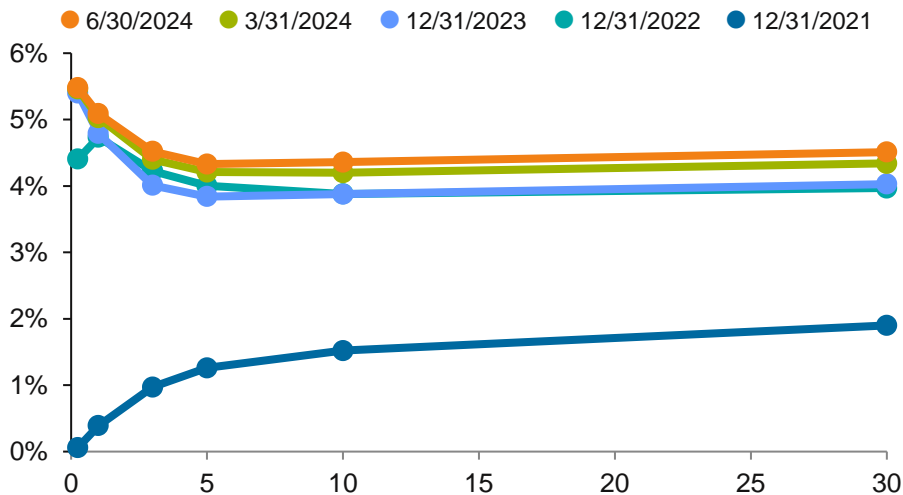
Quarterly Real GDP Growth



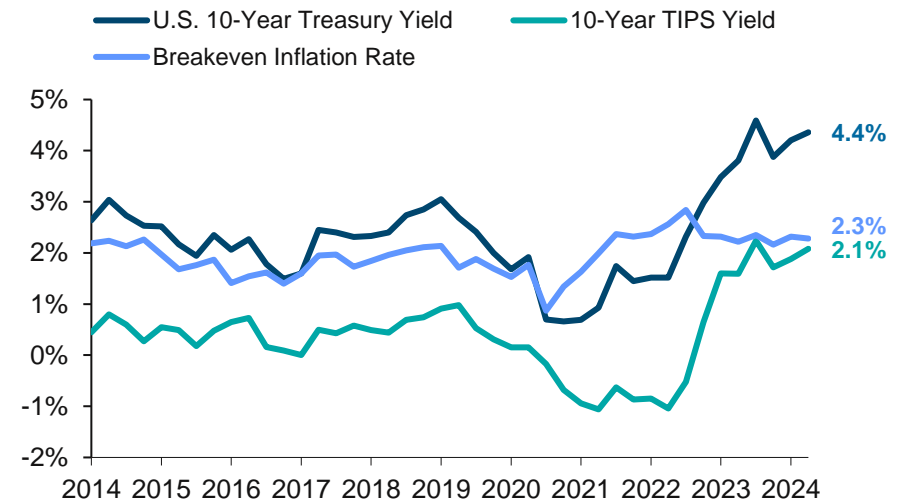
Inflation Year-Over-Year



U.S. Treasury Yield Curves



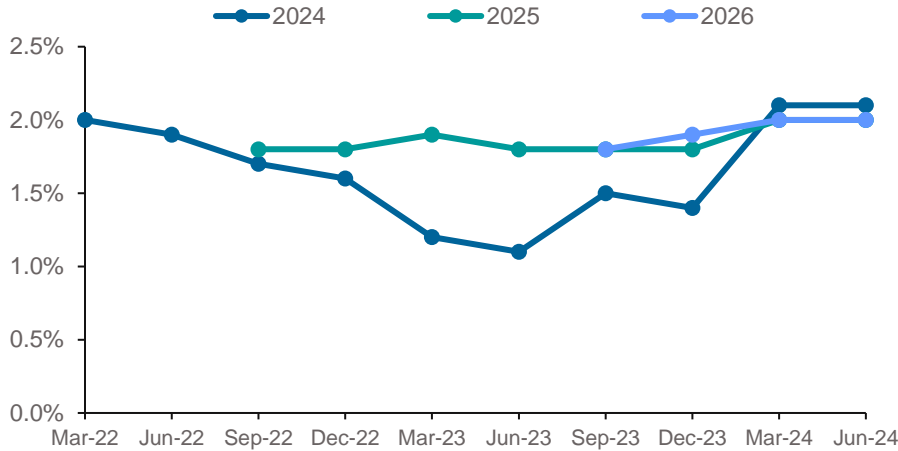
Historical 10-Year Yields



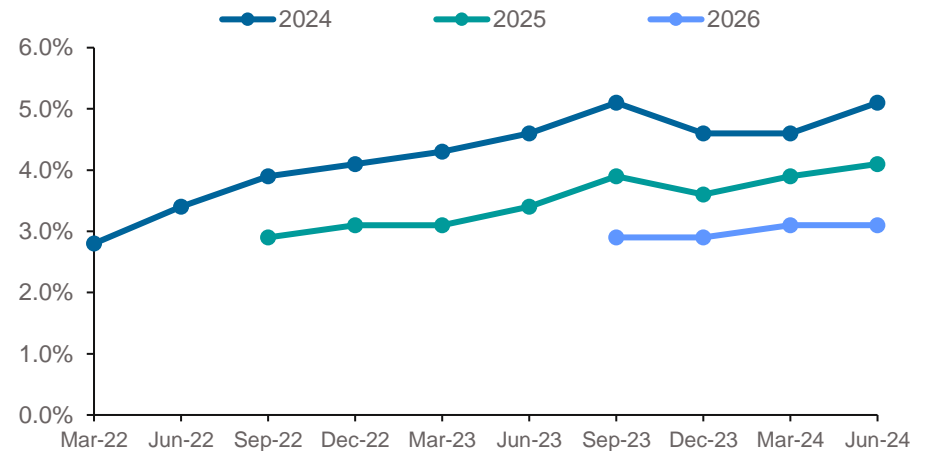
Sources: Bureau of Labor Statistics, Callan, Federal Reserve

# The Shifting Mindset at the Fed

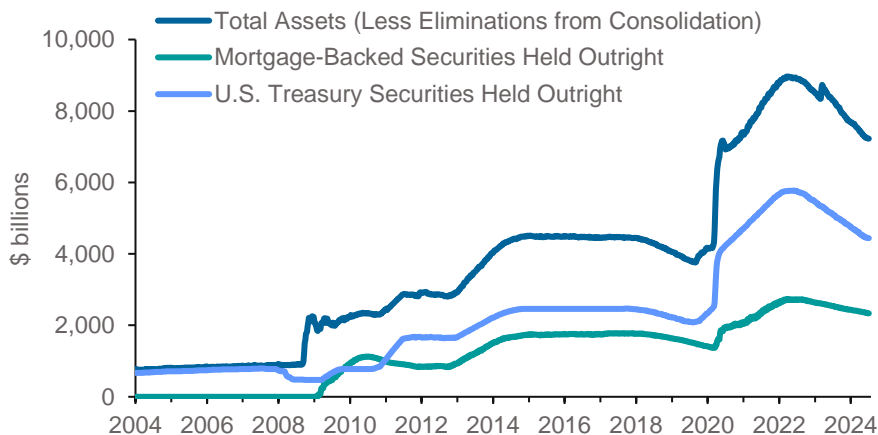
**Fed Projection of Change in Real GDP  
By Fed Meeting Date and Projection Year**



**Fed Projection of Fed Funds Rate  
By Fed Meeting Date and Projection Year**



**Fed Balance Sheet**



**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 still 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.

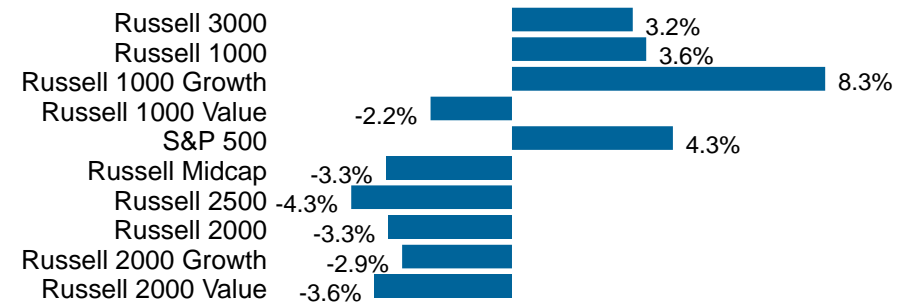
Sources: Federal Reserve, Financial Times

# U.S. Equity Performance: 2Q24

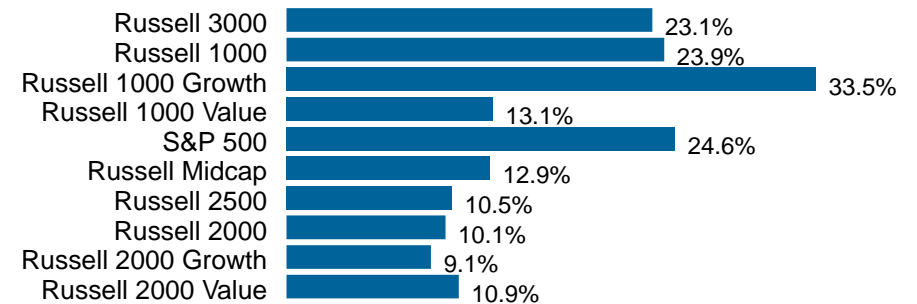
Broad indices exhibited a strong start to 2024, but performance was uneven

- The U.S. equity markets had an exceptional start with the S&P 500 hitting 31 record highs over the first six months of 2024 and gaining 15.3%.
- Index returns continue to be driven by a handful of stocks, especially the “Magnificent Seven,” which comprised 33% of the S&P 500 as of quarter-end. As a group, the cohort gained 33% in the first six months of the year, far exceeding the S&P 493 gain of only 5%.
- 2Q returns for the broad index were modest at 4.3%, but sector performance was quite mixed, ranging from -4.5% (Materials) to +13.8% (Technology), with 6 of the 11 S&P 500 sectors posting negative returns during the period.
- During 2Q, value (R1000V: -2.2%) continued to underperform growth (R1000G: +8.3%) and small cap (R2000: -3.3%) continued to underperform large cap (R1000: +3.6%).
- In the first half of 2024, the 12.5% performance difference in small cap (Russell 2000) versus large cap (Russell 1000) was the widest since 1973.

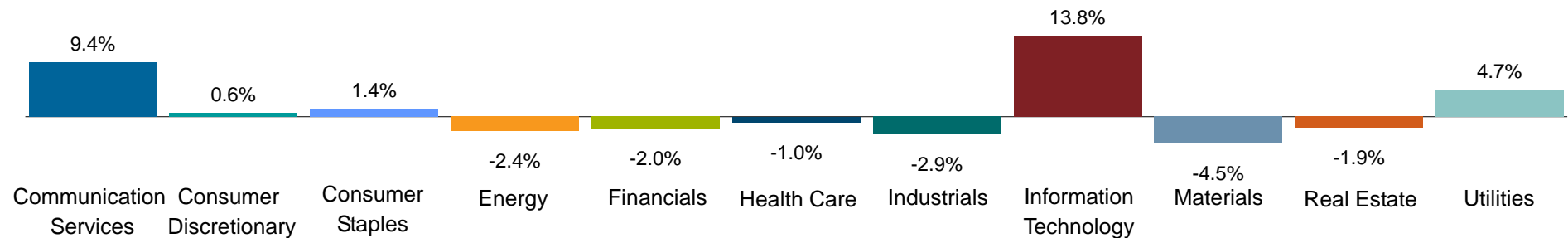
## U.S. Equity: Quarter Ended 6/30/24



## U.S. Equity: One Year Ended 6/30/24



## Industry Sector Quarterly Performance (S&P 500) as of 6/30/24



Sources: FTSE Russell, S&P Dow Jones Indices

# Global/Global ex-U.S. Equity Performance: 2Q24

Reversal as China snaps back and Japan lags; India continues to outperform

## Broad market

- The U.S. continued its lead over developed non-U.S. markets resulting in a positive ACWI return.
- Developed non-U.S. markets struggled with growing uncertainty on future economic growth, political instability, and divergent central bank policies.
- Small caps once again trailed large caps in a higher interest rate environment and amid exchange rate volatility.

## Emerging markets

- Emerging markets rebounded, snapping a two-quarter losing streak relative to developed markets as both China and India produced strong returns.
- China’s GDP growth exceeded expectations with a rebound in industrial production, manufacturing, and exports. Further, the Chinese government implemented several measures to support capital markets.

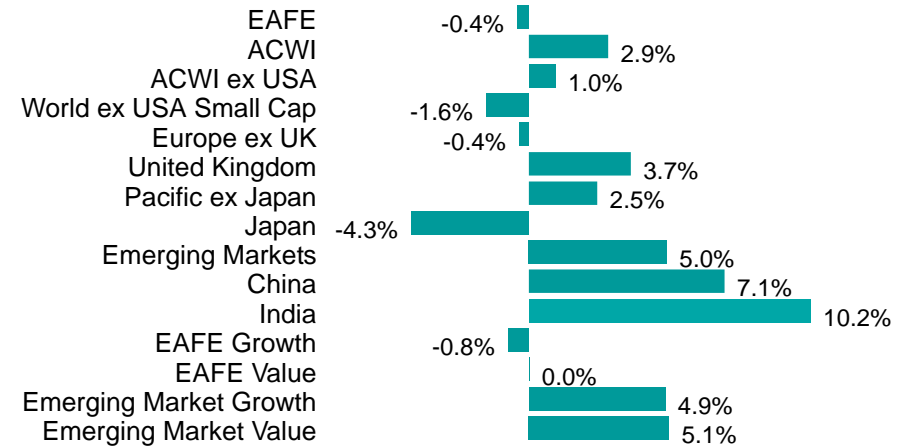
## Growth vs. value

- Growth and value saw little difference, as much of the caution was driven around macro concerns about future growth and a growing risk of a recession.

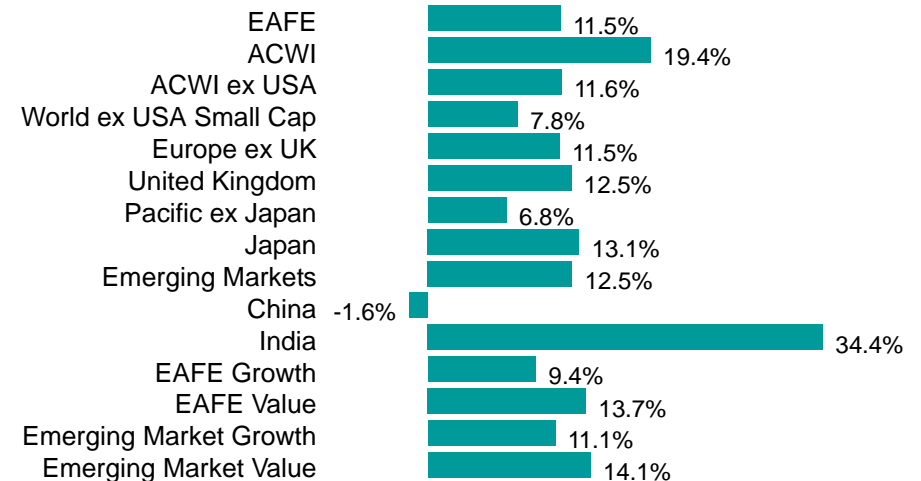
## U.S. dollar strength

- The U.S. Dollar Index (DXY), was relatively flat in 2Q due to a balancing act of increased global uncertainty but a more likely 2024 U.S. central bank rate cut.

Global Equity Returns: Quarter Ended 6/30/24



Global Equity Returns: One Year Ended 6/30/24



Source: MSCI



# U.S. Fixed Income Performance: 2Q24

## Muted performance across the board

### Macro environment

- Fed on hold awaiting more evidence that inflation is under control as economy remained resilient
- 10-year U.S. Treasury yield up modestly from 4.21% to 4.36%
- Curve remained inverted

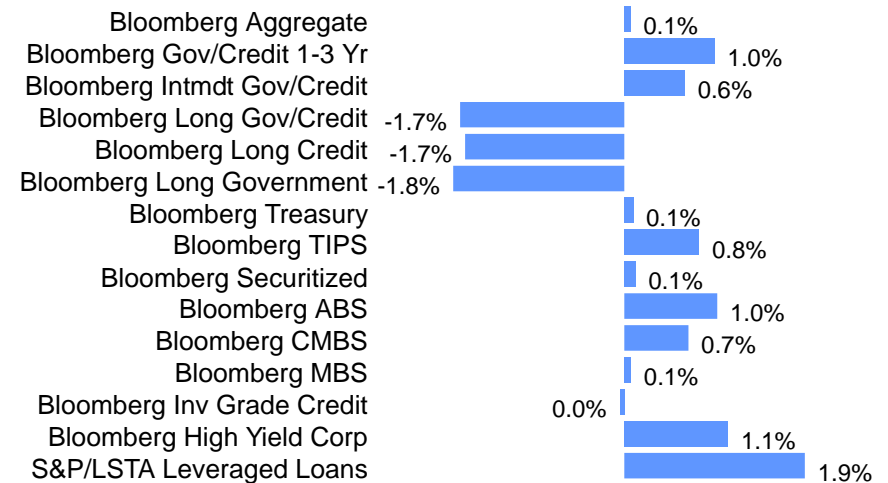
### Performance and drivers

- The Bloomberg US Aggregate Index rose 0.1% amid higher rates.
- Corporates and most securitized sectors were roughly flat vs. U.S. Treasuries on a duration-adjusted basis.
- Lower quality outperformed, with high yield corporates and leveraged loans posting the best returns.
- Longer maturity underperformed short and intermediate strategies as curve steepened from 5 years out to 30.

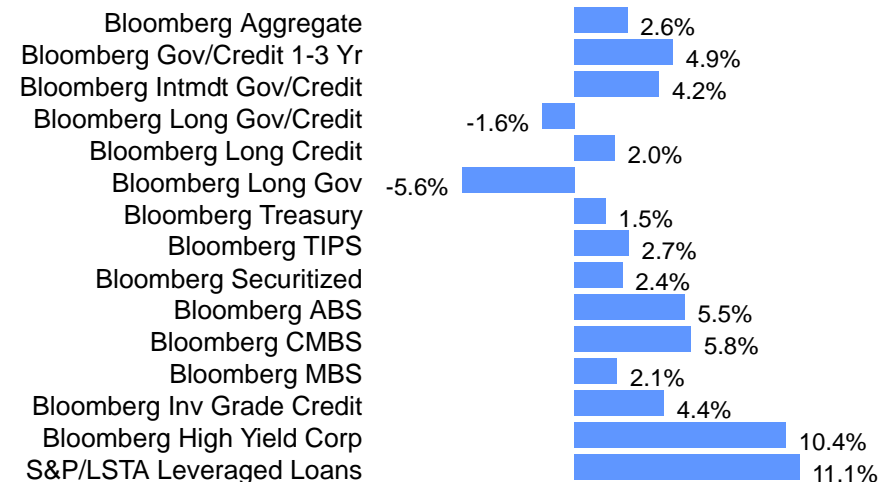
### Valuations

- Corporate credit remains rich with spreads near historical tights.
- Default rates, including distressed exchanges, fell to just 1.8% for HY and 3.1% for bank loans.
- IG corporate new issuance slowed from record highs in 1Q but remained robust with \$349 billion in new debt, bringing YTD total to \$886 billion.
- HY new issuance in 2Q nearly matched 1Q with \$83 billion, bringing YTD total to \$172 billion.
- Both were met with strong investor demand.

### U.S. Fixed Income Returns: Quarter Ended 6/30/24



### U.S. Fixed Income Returns: One Year Ended 6/30/24



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

# U.S. Private Real Estate Performance: 2Q24

Appreciation returns negative once again

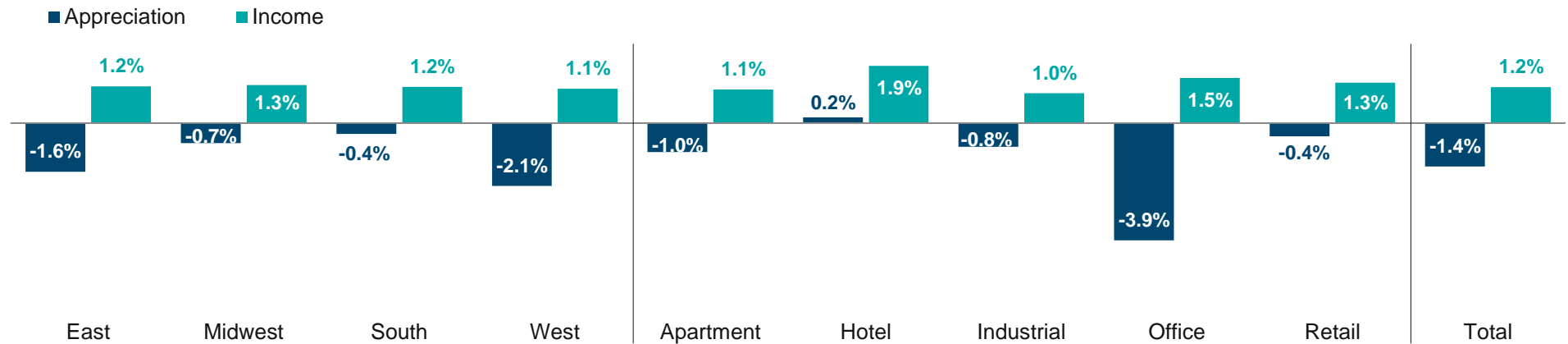
## Valuations reflect higher interest rates

- Income returns were positive across sectors and regions.
- All property sectors and regions experienced negative appreciation, except for Hotels.
- Valuations are reflective of higher interest rates, which have put upward pressure on capitalization rate and discount rate assumptions.
- Return dispersion by manager within the ODCE Index was due to the composition of underlying portfolios.

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
<b>NCREIF ODCE</b>	-0.7%	-10.0%	1.0%	2.3%	5.5%
Income	0.8%	3.1%	2.8%	2.9%	3.2%
Appreciation	-1.5%	-12.8%	-1.8%	-0.7%	2.2%
<b>NCREIF Property Index</b>	-0.3%	-5.5%	2.3%	3.4%	6.1%
Income	1.2%	4.6%	4.2%	4.3%	4.5%
Appreciation	-1.4%	-9.8%	-1.8%	-0.8%	1.5%

Returns are geometrically linked

## NCREIF Property Index Quarterly Returns by Region and Property Type



Source: NCREIF; ODCE return is net

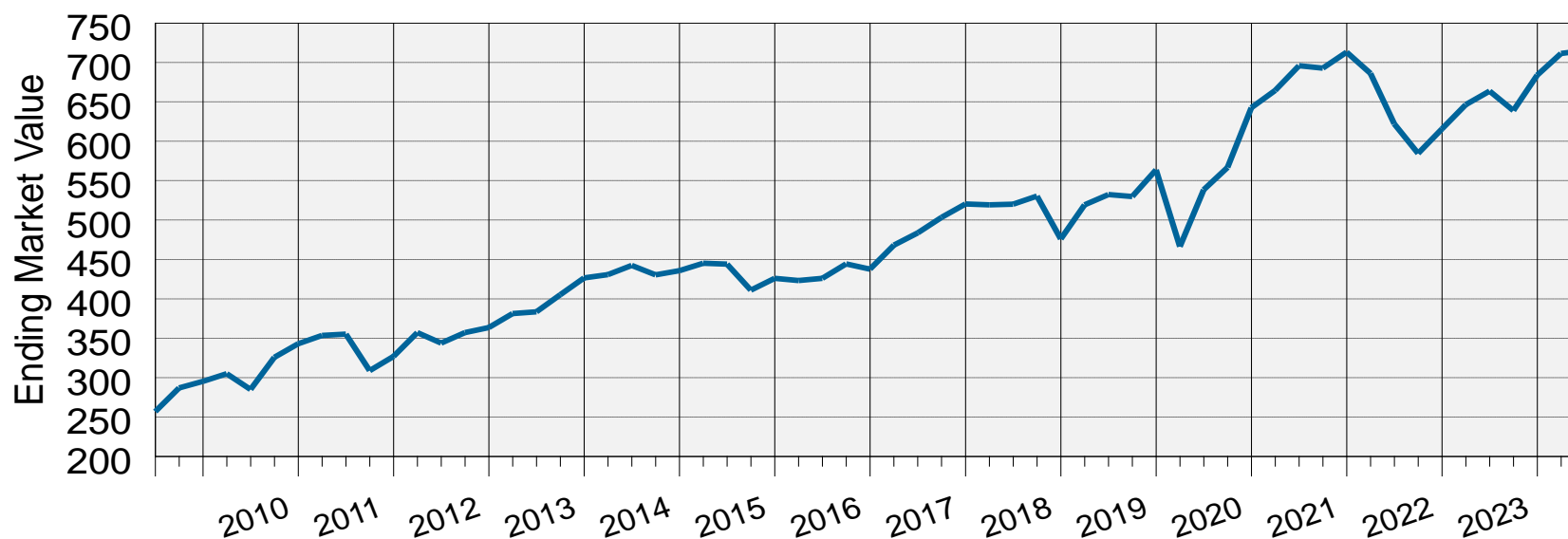
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**MCERA Plan Performance**

# Total MCERA Plan Growth

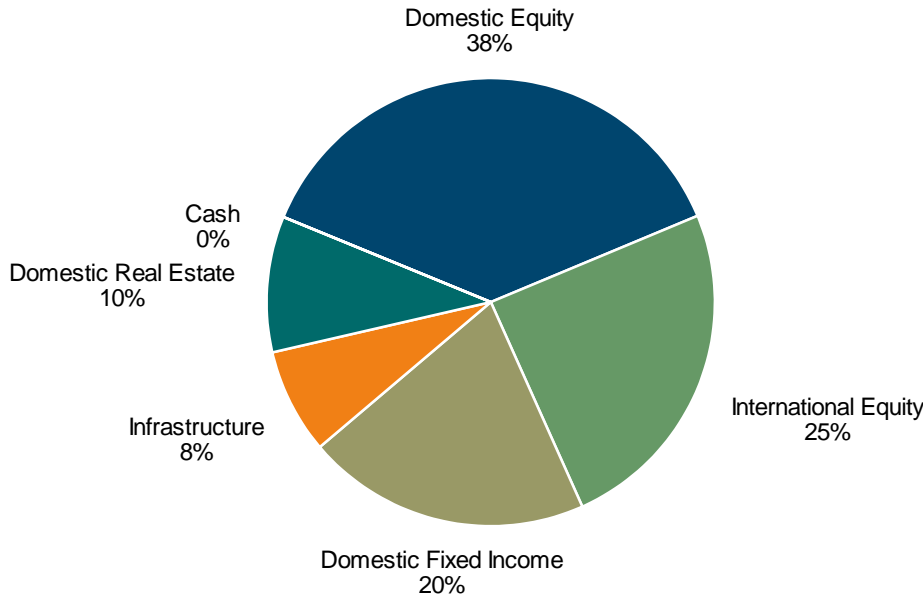
MCERA Ending Market Value for 15 Years Ended June 30, 2024



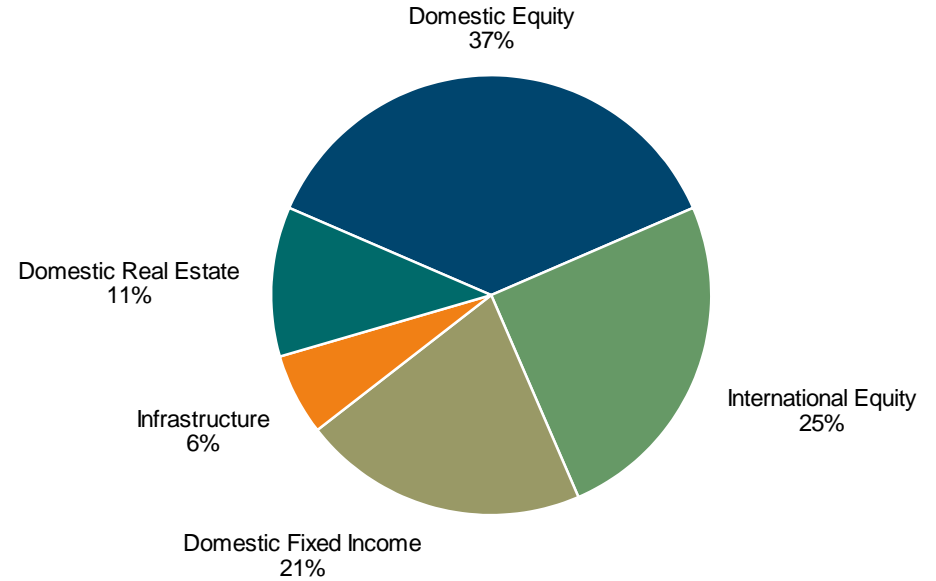
	June 30, 2024				June 30, 2023	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Domestic Equities	\$268,290,061	37.50%	\$(21,187,028)	\$47,914,212	\$241,562,877	36.39%
International Equities	\$175,757,412	24.57%	\$3,206,467	\$13,745,523	\$158,805,423	23.92%
Domestic Fixed Income	\$146,448,403	20.47%	\$10,857,914	\$5,909,480	\$129,681,010	19.53%
Infrastructure	\$54,548,246	7.62%	\$(1,758,852)	\$3,885,625	\$52,421,472	7.90%
Real Estate	\$70,126,185	9.80%	\$(1,519,608)	\$(9,048,638)	\$80,694,431	12.16%
Cash	\$221,593	0.03%	\$(455,489)	\$0	\$677,082	0.10%
<b>Total Fund</b>	<b>\$715,391,901</b>	<b>100.00%</b>	<b>\$(10,856,596)</b>	<b>\$62,406,201</b>	<b>\$663,842,295</b>	<b>100.00%</b>

# MCERA Actual vs Target Asset Allocation as of June 30, 2024

Actual Asset Allocation



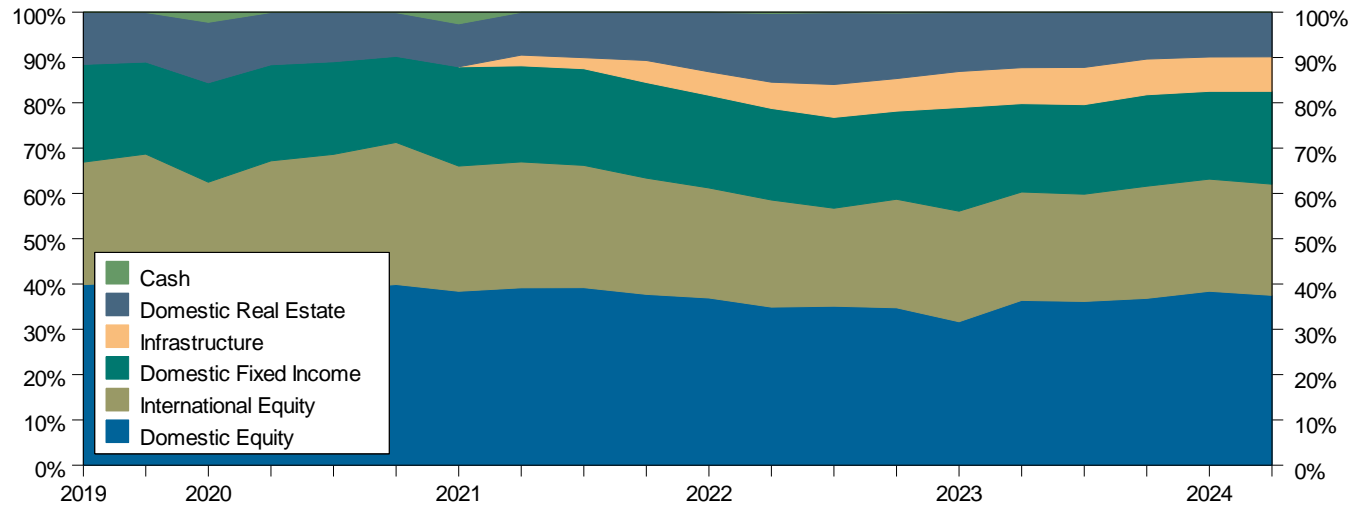
Target Asset Allocation



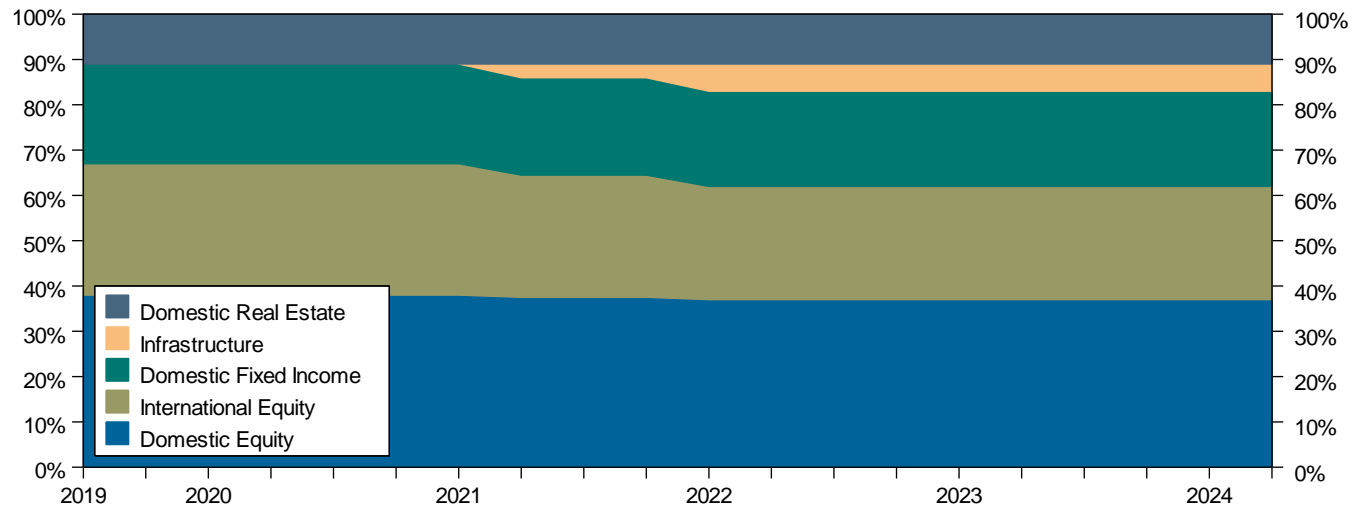
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	268,290	37.5%	37.0%	0.5%	3,595
International Equity	175,757	24.6%	25.0%	(0.4%)	(3,091)
Domestic Fixed Income	146,448	20.5%	21.0%	(0.5%)	(3,784)
Infrastructure	54,548	7.6%	6.0%	1.6%	11,625
Domestic Real Estate	70,126	9.8%	11.0%	(1.2%)	(8,567)
Cash	222	0.0%	0.0%	0.0%	222
<b>Total</b>	<b>715,392</b>	<b>100.0%</b>	<b>100.0%</b>		

# MCERA Actual vs Target Historical Asset Allocation

## Actual Historical Asset Allocation



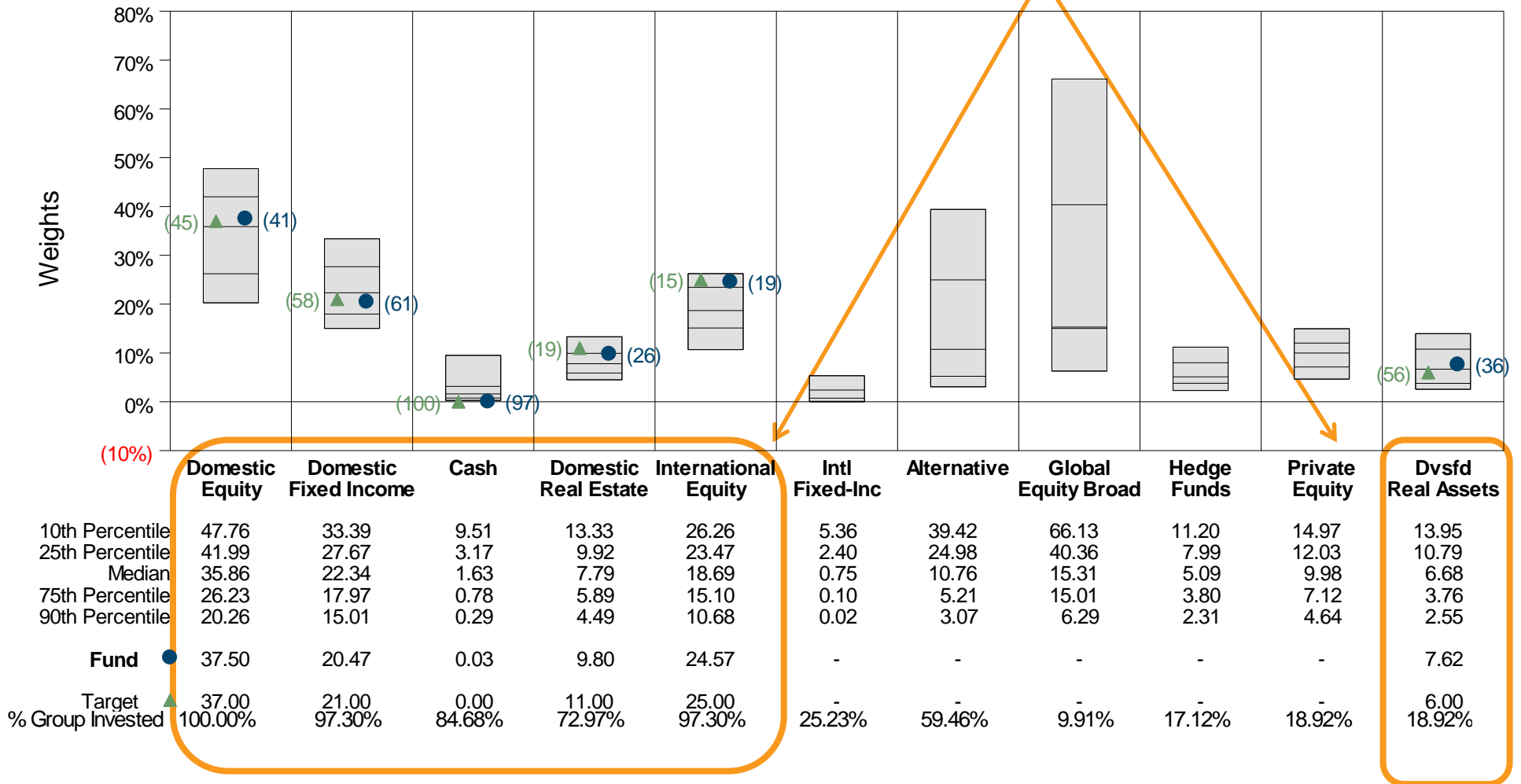
## Target Historical Asset Allocation



# MCERA Asset Class Weights vs Callan Public Fund Sponsor Database

## Asset Class Weights vs Callan Public Fund Sponsor Database

Currently Invested



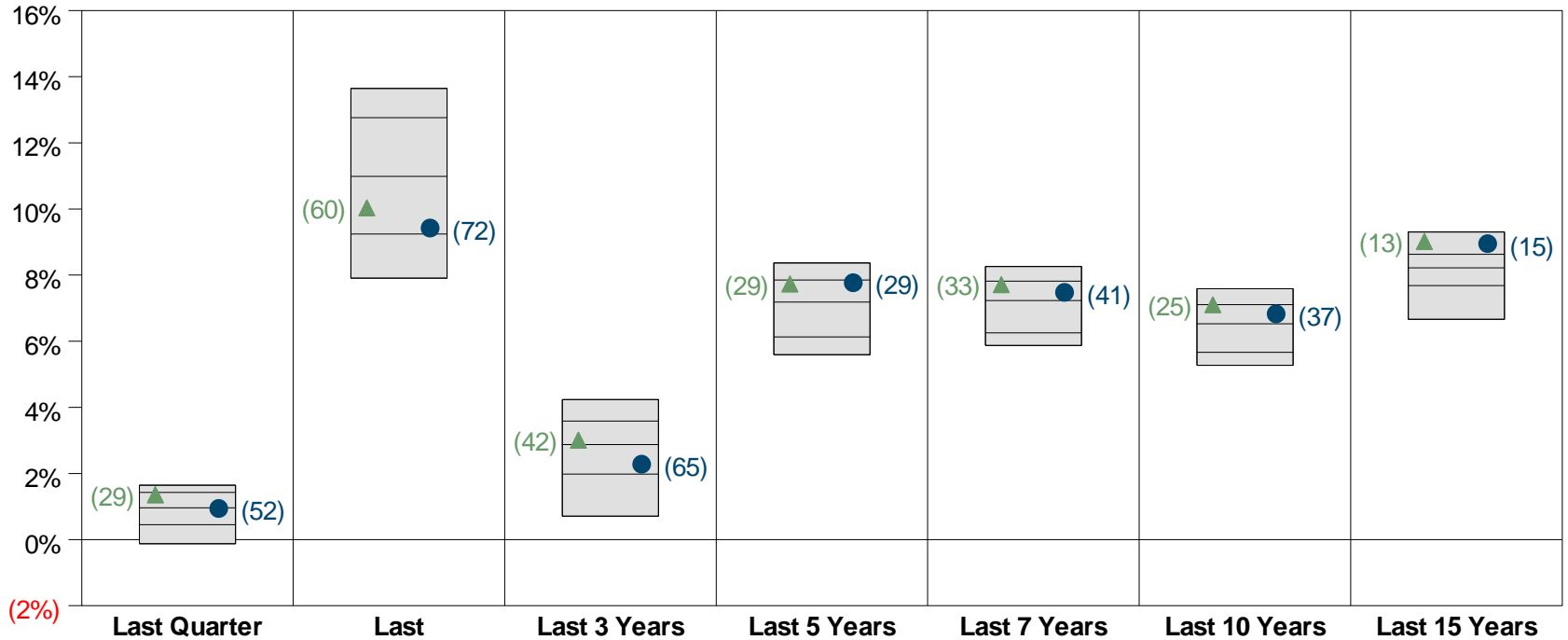
# Asset Allocation as of June 30, 2024

	June 30, 2024				March 31, 2024	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
<b>Domestic Equities</b>	<b>\$268,290,061</b>	<b>37.50%</b>	<b>\$(10,500,000)</b>	<b>\$5,306,589</b>	<b>\$273,483,471</b>	<b>38.43%</b>
<b>Large Cap Equities</b>	<b>\$187,568,240</b>	<b>26.22%</b>	<b>\$(8,100,000)</b>	<b>\$7,937,403</b>	<b>\$187,730,837</b>	<b>26.38%</b>
Vanguard S&P 500 Index	187,568,240	26.22%	(8,100,000)	7,937,403	187,730,837	26.38%
<b>Mid Cap Equities</b>	<b>\$39,924,646</b>	<b>5.58%</b>	<b>\$(1,200,000)</b>	<b>\$(1,021,923)</b>	<b>\$42,146,568</b>	<b>5.92%</b>
Fidelity Low Price Stocks	19,787,248	2.77%	0	(388,897)	20,176,145	2.84%
Janus Enterprise	20,137,398	2.81%	(1,200,000)	(633,026)	21,970,423	3.09%
<b>Small Cap Equities</b>	<b>\$40,797,175</b>	<b>5.70%</b>	<b>\$(1,200,000)</b>	<b>\$(1,608,891)</b>	<b>\$43,606,066</b>	<b>6.13%</b>
Prudential Small Cap Value	20,007,387	2.80%	(600,000)	(849,580)	21,456,967	3.02%
AB Small Cap Growth	20,789,789	2.91%	(600,000)	(759,310)	22,149,099	3.11%
<b>International Equities</b>	<b>\$175,757,412</b>	<b>24.57%</b>	<b>\$0</b>	<b>\$(328,362)</b>	<b>\$176,085,774</b>	<b>24.75%</b>
EuroPacific	30,728,374	4.30%	0	(72,328)	30,800,702	4.33%
Harbor International	34,790,323	4.86%	0	(399,629)	35,189,951	4.95%
Oakmark International	31,577,769	4.41%	0	(1,417,698)	32,995,467	4.64%
Mondrian International	32,702,472	4.57%	0	382,677	32,319,795	4.54%
T. Rowe Price Intl Small Cap	28,245,816	3.95%	0	34,100	28,211,717	3.96%
NinetyOne	17,712,658	2.48%	0	1,144,516	16,568,142	2.33%
<b>Domestic Fixed Income</b>	<b>\$146,448,403</b>	<b>20.47%</b>	<b>\$8,000,000</b>	<b>\$651,031</b>	<b>\$137,797,372</b>	<b>19.37%</b>
Dodge & Cox Income	73,057,573	10.21%	4,000,000	360,618	68,696,955	9.65%
PIMCO	73,390,831	10.26%	4,000,000	290,413	69,100,418	9.71%
<b>Infrastructure</b>	<b>\$54,548,246</b>	<b>7.62%</b>	<b>\$(374,565)</b>	<b>\$920,381</b>	<b>\$54,002,430</b>	<b>7.59%</b>
IFM Global Infrastructure	26,828,224	3.75%	0	261,303	26,566,922	3.73%
JP Morgan Infrastructure	27,720,021	3.87%	(374,565)	659,078	27,435,508	3.86%
<b>Real Estate</b>	<b>\$70,126,185</b>	<b>9.80%</b>	<b>\$(154,569)</b>	<b>\$186,454</b>	<b>\$70,094,300</b>	<b>9.85%</b>
RREEF Private Fund	37,294,601	5.21%	(88,599)	104,465	37,278,736	5.24%
Barings Core Property Fund	31,484,584	4.40%	(65,970)	81,990	31,468,564	4.42%
625 Kings Court	1,347,000	0.19%	0	0	1,347,000	0.19%
<b>Cash</b>	<b>\$221,593</b>	<b>0.03%</b>	<b>\$109,672</b>	<b>\$0</b>	<b>\$111,921</b>	<b>0.02%</b>
<b>Total Fund</b>	<b>\$715,391,901</b>	<b>100.0%</b>	<b>\$(2,919,462)</b>	<b>\$6,736,094</b>	<b>\$711,575,269</b>	<b>100.0%</b>



# MCERA Total Fund Performance as of June 30, 2024

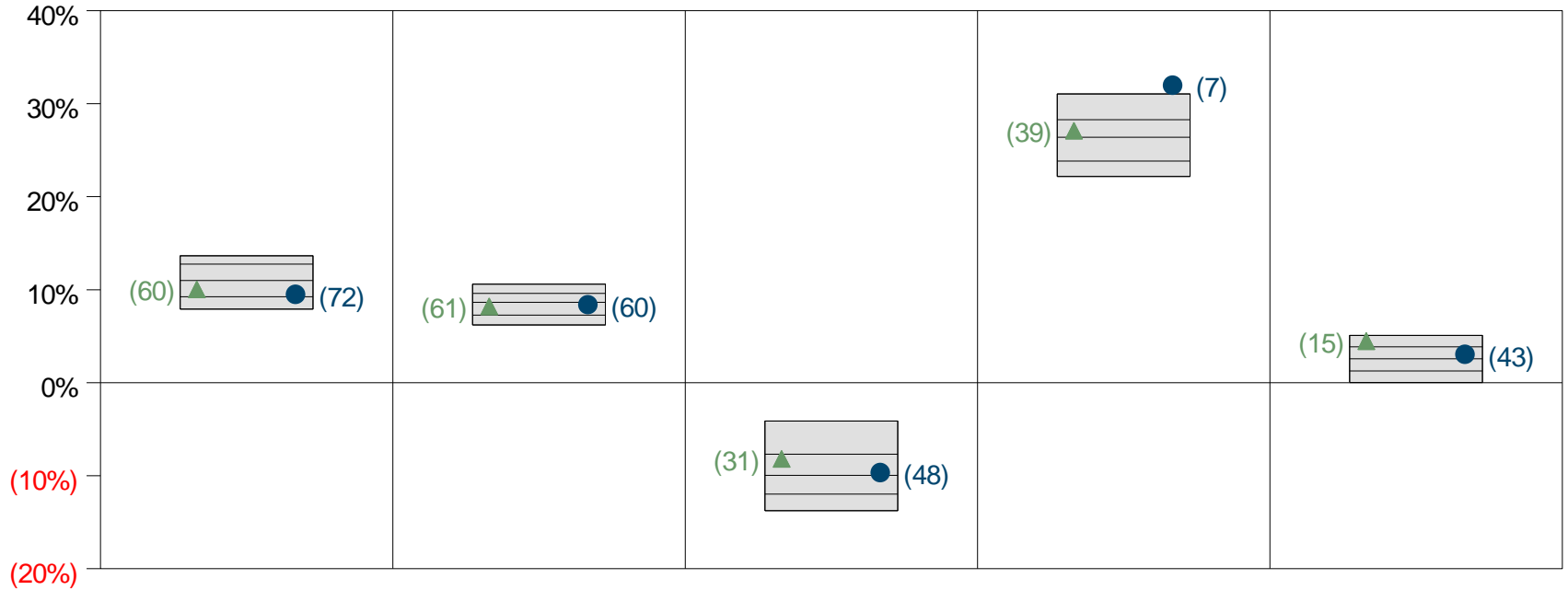
## Performance vs Callan Public Fund Sponsor Database (Net)



10th Percentile	1.65	13.65	4.23	8.37	8.26	7.59	9.30
25th Percentile	1.42	12.76	3.58	7.85	7.82	7.10	8.63
Median	0.96	10.99	2.87	7.18	7.23	6.53	8.22
75th Percentile	0.45	9.24	1.98	6.13	6.25	5.67	7.68
90th Percentile	(0.13)	7.90	0.71	5.59	5.87	5.27	6.66
<b>Total Fund</b> ●	0.92	9.40	2.26	7.75	7.45	6.80	8.92
Total Fund Benchmark ▲	1.36	10.04	3.01	7.73	7.71	7.11	9.01

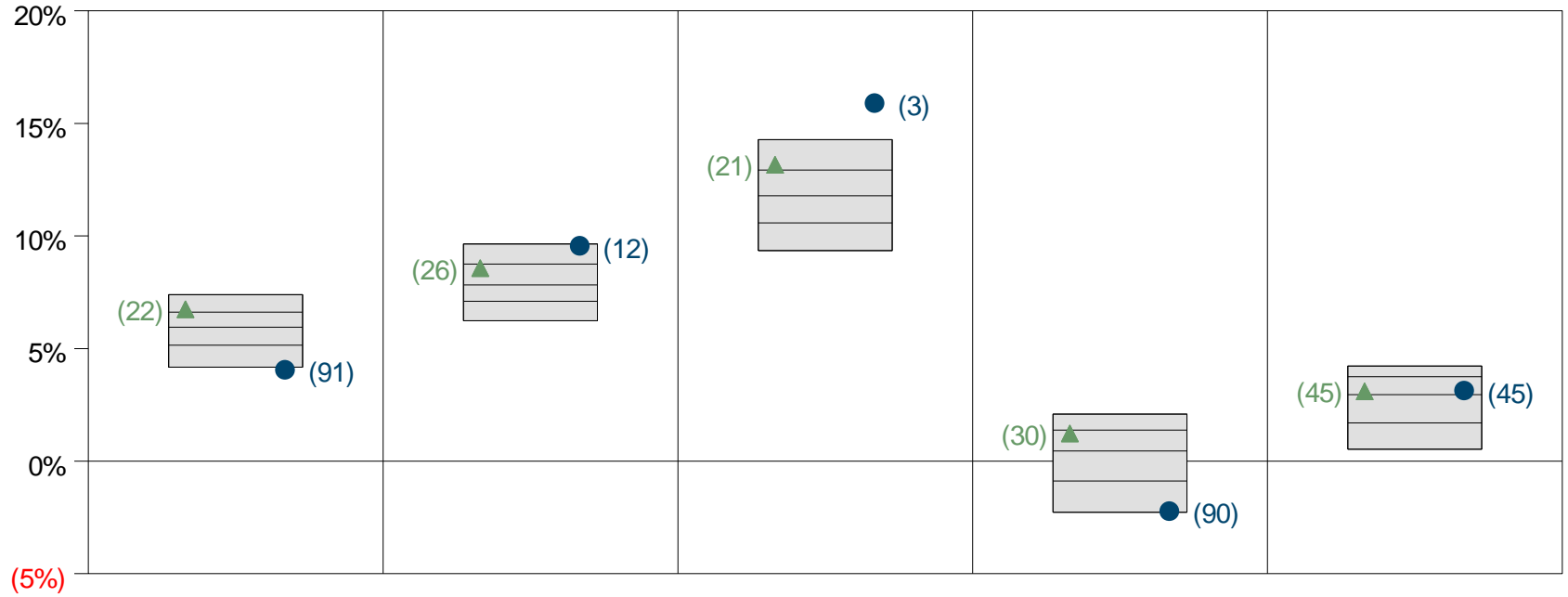
The Callan Public Fund Sponsor Database consists of public employee pension total funds including both Callan LLC client and surveyed non-client funds. Returns greater than one year are annualized.

# MCERA Total Fund Fiscal Year Performance as of June 30, 2024



	FYTD	FY 2023	FY 2022	FY 2021	FY 2020
10th Percentile	13.65	10.60	(4.11)	31.04	5.08
25th Percentile	12.76	9.59	(7.69)	28.27	3.85
Median	10.99	8.65	(9.95)	26.39	2.57
75th Percentile	9.24	7.28	(11.97)	23.83	1.26
90th Percentile	7.90	6.22	(13.76)	22.17	0.02
<b>Total Fund</b> ●	9.40	8.29	(9.74)	31.89	2.96
Total Fund Benchmark ▲	10.04	8.21	(8.20)	27.09	4.47

# MCERA Total Fund Fiscal Year Performance

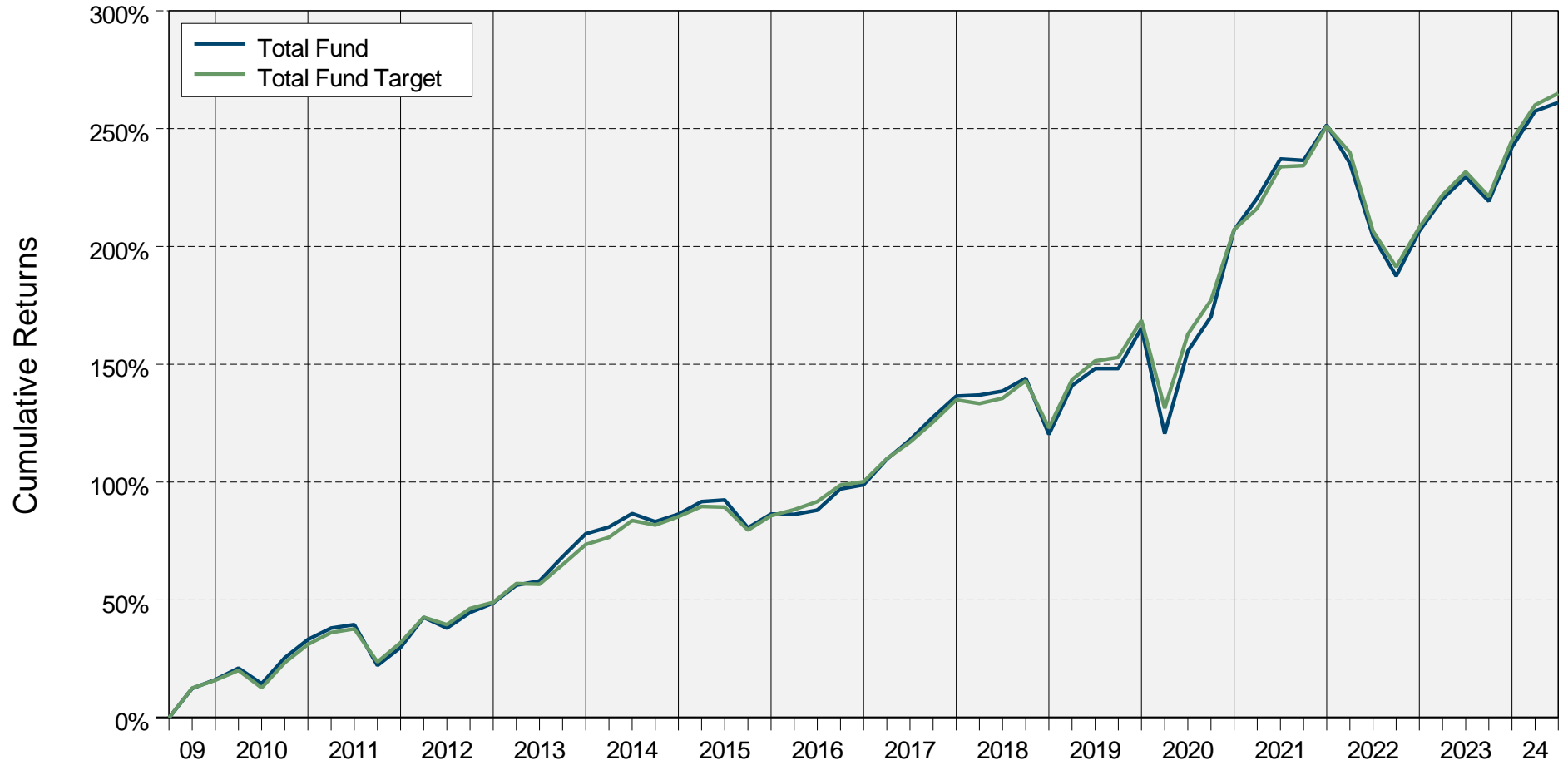


	FY 2019	FY 2018	FY 2017	FY 2016	FY 2015
10th Percentile	7.39	9.65	14.28	2.08	4.23
25th Percentile	6.61	8.75	12.92	1.38	3.75
Median	5.95	7.83	11.78	0.45	2.95
75th Percentile	5.15	7.10	10.58	(0.88)	1.70
90th Percentile	4.18	6.23	9.35	(2.27)	0.53
<b>Total Fund</b> ●	4.01	9.52	15.86	(2.26)	3.09
Total Fund Benchmark ▲	6.75	8.57	13.16	1.23	3.10

# MCERA Cumulative Total Fund Performance

For 15 Years Ended June 30, 2024

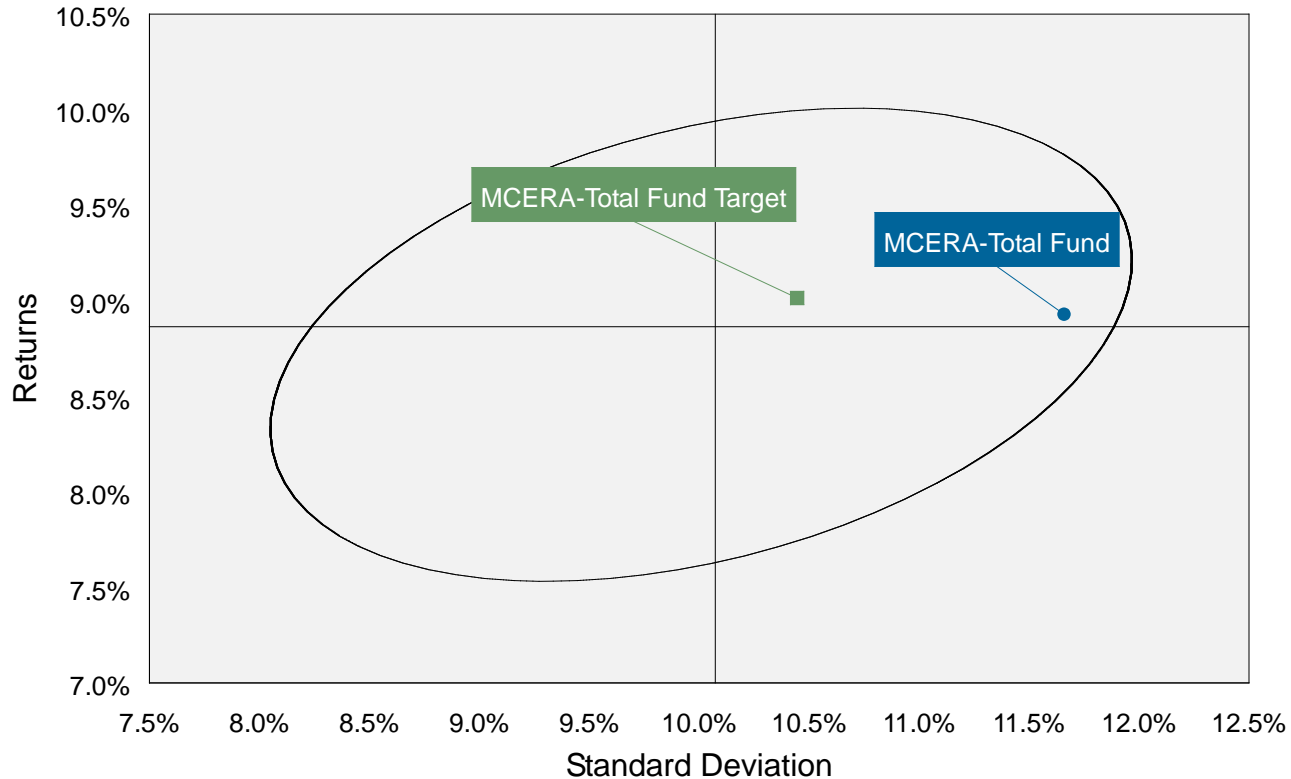
## Cumulative Returns Actual vs Target



# MCERA Annualized Return vs Risk

15 Years Ended June 30, 2024

Group: Callan Public Fund Sponsor Database



- The chart above plots 15-year annualized return vs standard deviation of the MCERA Total Fund and the Total Fund Target.
- 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

June 30, 2024

### Relative Attribution Effects for the Quarter Ended June 30, 2024

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	38%	37%	2.00%	3.22%	(0.46%)	0.01%	(0.44%)
Domestic Fixed Income	20%	21%	0.44%	0.07%	0.08%	0.01%	0.09%
Domestic Real Estate	10%	11%	0.05%	(0.82%)	0.09%	0.02%	0.11%
International Equity	25%	25%	(0.24%)	1.17%	(0.35%)	0.00%	(0.35%)
Infrastructure	8%	6%	1.70%	(0.82%)	0.19%	(0.04%)	0.16%
Cash	0%	0%	0.00%	0.00%	0.00%	(0.00%)	(0.00%)
<b>Total</b>			<b>0.92%</b>	<b>= 1.36%</b>	<b>+ (0.46%)</b>	<b>+ 0.01%</b>	<b>(0.44%)</b>

### Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	37%	37%	13.75%	14.14%	(0.11%)	(0.06%)	(0.18%)
Domestic Fixed Income	21%	21%	0.83%	(0.23%)	0.21%	(0.02%)	0.19%
Domestic Real Estate	12%	11%	1.46%	2.58%	(0.16%)	(0.09%)	(0.25%)
International Equity	26%	27%	5.54%	6.05%	(0.02%)	(0.03%)	(0.05%)
Infrastructure	4%	3%	-	-	0.49%	(0.22%)	0.27%
Cash	0%	0%	(0.00%)	(0.00%)	0.00%	0.05%	0.05%
<b>Total</b>			<b>7.75%</b>	<b>= 7.73%</b>	<b>+ 0.39%</b>	<b>+ (0.38%)</b>	<b>0.01%</b>

## Investment Manager Returns for Periods Ended June 30, 2024

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 15 Years
<b>Domestic Equities</b>	<b>2.00%</b>	<b>20.68%</b>	<b>7.41%</b>	<b>13.75%</b>	<b>13.23%</b>	<b>11.76%</b>	<b>14.35%</b>
Russell 3000 Index	3.22%	23.13%	8.05%	14.14%	13.48%	12.15%	14.49%
<b>Large Cap Equities</b>							
Vanguard S&P 500 Index	4.28%	24.53%	9.99%	15.03%	14.25%	-	-
S&P 500 Index	4.28%	24.56%	10.01%	15.05%	14.28%	-	-
<b>Mid Cap Equities</b>							
Fidelity Low Priced Stock	(1.93%)	16.68%	6.04%	11.82%	10.06%	5.58%	12.50%
Russell MidCap Value Idx	(3.40%)	11.98%	3.65%	8.49%	7.67%	7.60%	12.50%
Janus Enterprise (1)	(2.81%)	10.26%	3.85%	9.69%	11.99%	12.06%	14.74%
Russell MidCap Growth Idx	(3.21%)	15.05%	(0.08%)	9.93%	11.69%	10.51%	13.95%
<b>Small Cap Equities</b>							
Prudential Small Cap Value (2)	(3.98%)	14.25%	2.73%	8.75%	5.59%	-	-
MSCI US Small Cap Value Idx	(3.95%)	11.75%	2.88%	8.31%	6.84%	-	-
Russell 2000 Value Index	(3.64%)	10.90%	(0.53%)	7.07%	5.89%	-	-
AB US Small Growth (3)	(3.41%)	8.44%	(7.83%)	6.37%	10.79%	9.33%	14.44%
Russell 2000 Growth Index	(2.92%)	9.14%	(4.86%)	6.17%	7.28%	7.39%	11.59%

## Investment Manager Returns for Periods Ended June 30, 2024 (continued)

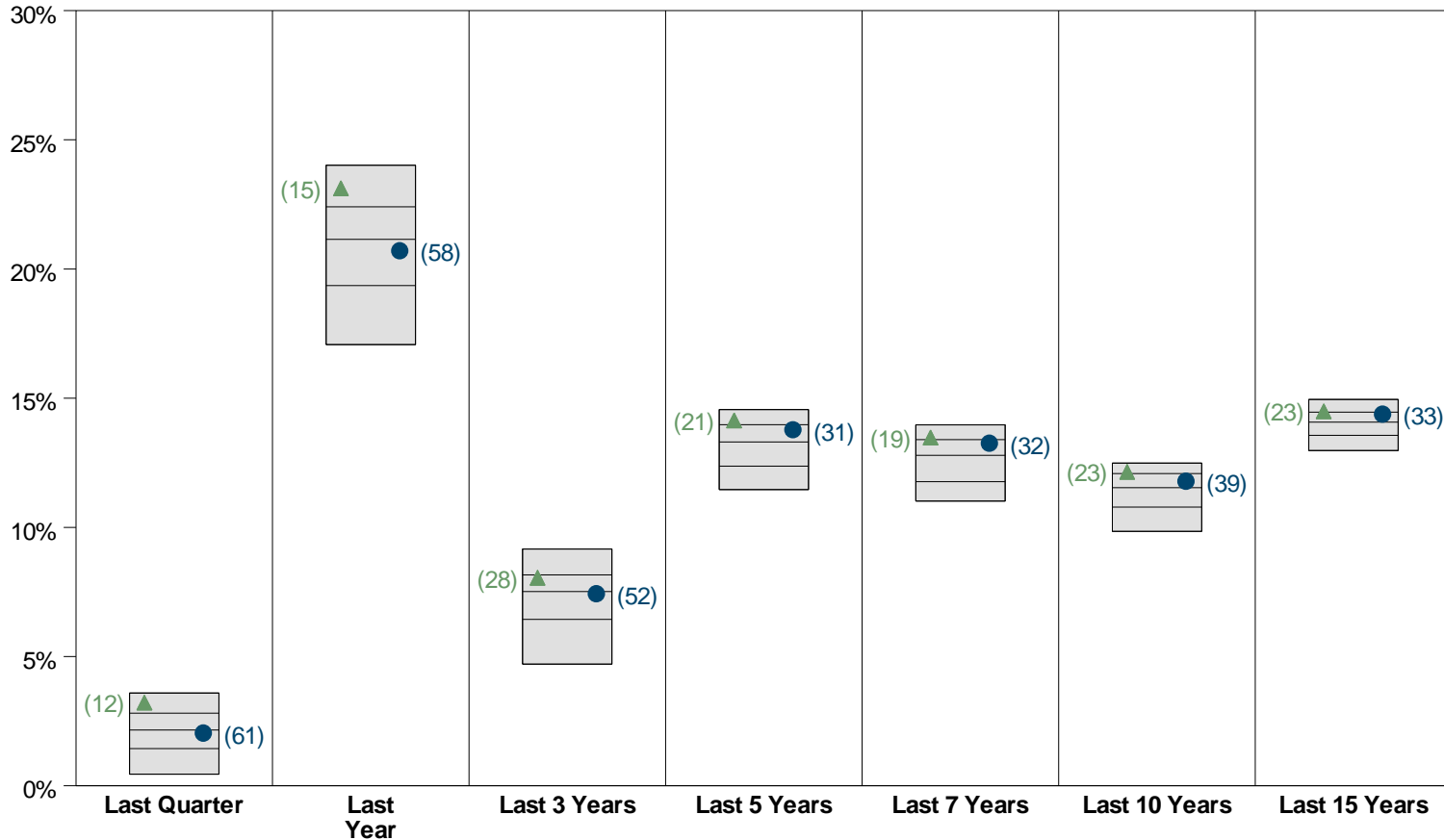
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 15 Years
<b>International Equities</b>	<b>(0.24%)</b>	<b>8.18%</b>	<b>(1.73%)</b>	<b>5.54%</b>	<b>4.47%</b>	<b>3.32%</b>	<b>6.36%</b>
MSCI ACWI ex-US Index	1.17%	12.17%	0.97%	6.05%	5.68%	4.34%	6.32%
EuroPacific	(0.23%)	10.82%	(2.46%)	6.05%	5.91%	5.25%	7.45%
Harbor International (1)	(1.14%)	10.19%	1.75%	6.87%	4.59%	3.18%	6.54%
Oakmark International (2)	(4.30%)	(3.14%)	(2.94%)	4.05%	2.43%	2.85%	7.41%
Mondrian International	0.98%	9.61%	1.07%	4.28%	3.76%	2.47%	-
MSCI EAFE Index	(0.42%)	11.54%	2.89%	6.46%	5.73%	4.33%	6.76%
MSCI ACWI ex-US Index	1.17%	12.17%	0.97%	6.05%	5.68%	4.34%	6.70%
T. Rowe Price Intl Small Cap	0.12%	11.11%	(6.29%)	6.61%	-	-	-
MSCI ACWI ex US Small Cap	0.66%	11.26%	(1.45%)	6.13%	4.92%	-	-
NinetyOne	6.69%	15.49%	(4.97%)	3.27%	3.62%	-	-
MSCI Emerging Markets Index	5.00%	12.55%	(5.07%)	3.10%	3.54%	-	-
<b>Domestic Fixed Income</b>	<b>0.44%</b>	<b>4.43%</b>	<b>(2.10%)</b>	<b>0.83%</b>	<b>1.67%</b>	<b>1.98%</b>	<b>3.36%</b>
Bloomberg Aggregate Index	0.07%	2.63%	(3.02%)	(0.23%)	0.86%	1.35%	2.50%
Dodge & Cox Income	0.51%	4.54%	(1.41%)	1.43%	2.13%	2.35%	3.83%
PIMCO	0.38%	4.33%	(2.79%)	0.20%	1.18%	1.60%	3.17%
Bloomberg Aggregate Index	0.07%	2.63%	(3.02%)	(0.23%)	0.86%	1.35%	2.50%
<b>Infrastructure</b>	<b>1.70%</b>	<b>7.52%</b>	<b>9.22%</b>	-	-	-	-
IFM Global Infrastructure	0.98%	3.23%	-	-	-	-	-
JP Morgan Infrastructure	2.40%	11.87%	10.66%	-	-	-	-
NFI-ODCE Equal Weight Net	(0.82%)	(10.32%)	1.14%	2.58%	3.78%	-	-
<b>Real Estate</b>	<b>0.05%</b>	<b>(11.67%)</b>	<b>(0.66%)</b>	<b>1.46%</b>	<b>3.04%</b>	<b>5.03%</b>	<b>7.96%</b>
Real Estate Custom Benchmark (3)	(0.82%)	(10.32%)	1.14%	2.58%	3.78%	5.67%	8.83%
RREEF Private	0.04%	(8.66%)	2.11%	3.23%	4.33%	6.29%	7.70%
Barings Core Property Fund	0.05%	(15.44%)	(3.44%)	(0.68%)	1.39%	3.82%	-
NFI-ODCE Equal Weight Net	(0.82%)	(10.32%)	1.14%	2.58%	3.78%	5.80%	6.69%
625 Kings Court	0.00%	1.69%	(4.50%)	5.99%	8.09%	10.27%	8.95%
<b>Total Fund</b>	<b>0.92%</b>	<b>9.40%</b>	<b>2.26%</b>	<b>7.75%</b>	<b>7.45%</b>	<b>6.80%</b>	<b>8.92%</b>
Total Fund Benchmark*	1.36%	10.04%	3.01%	7.73%	7.71%	7.11%	9.01%



# MCERA Domestic Equity Composite Performance

For Periods Ended June 30, 2024

## Performance vs Public Fund - Domestic Equity (Net)



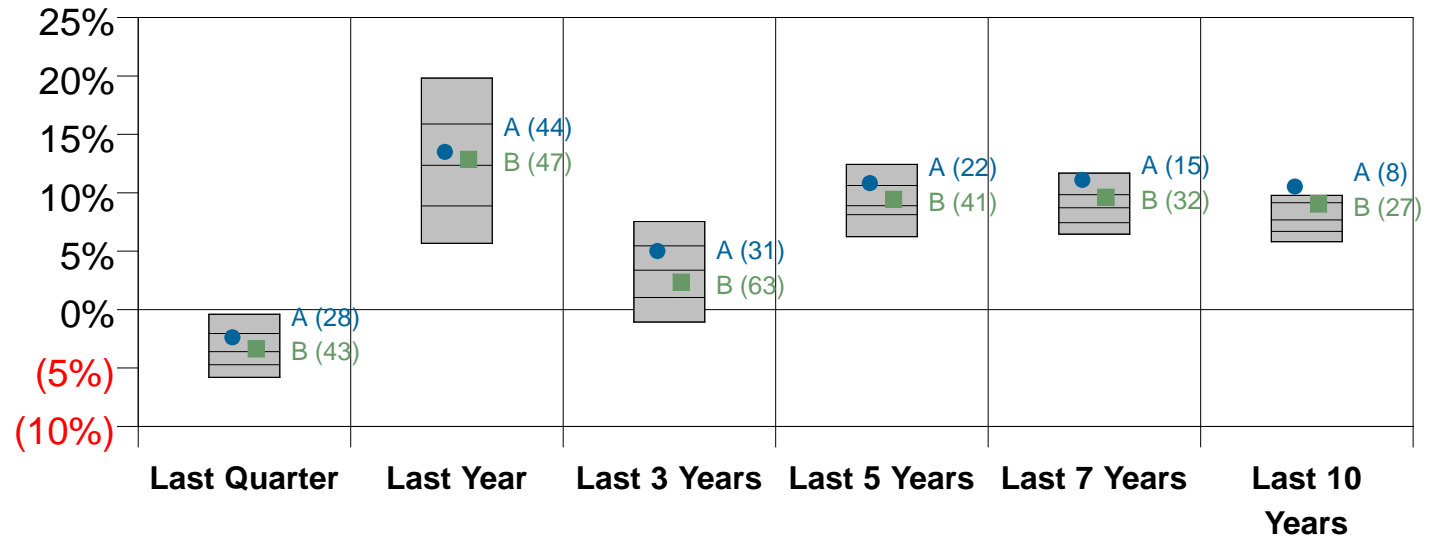
10th Percentile	3.59	24.01	9.16	14.56	13.97	12.49	14.95
25th Percentile	2.81	22.41	8.16	13.97	13.39	12.08	14.46
Median	2.16	21.15	7.52	13.31	12.79	11.54	14.07
75th Percentile	1.44	19.36	6.44	12.37	11.77	10.79	13.56
90th Percentile	0.45	17.08	4.71	11.47	11.02	9.85	12.97

<b>Domestic Equity</b> ●	2.00	20.68	7.41	13.75	13.23	11.76	14.35
Russell 3000 Index ▲	3.22	23.13	8.05	14.14	13.48	12.15	14.49

# MCERA Domestic Mid Cap Equity Composite Performance

For Periods Ended June 30, 2024

## Performance vs Callan Mid Cap Mutual Funds (Net)



10th Percentile	(0.39)	19.83	7.54	12.45	11.69	9.79
25th Percentile	(2.04)	15.89	5.46	10.64	9.86	9.16
Median	(3.58)	12.37	3.39	8.91	8.72	7.69
75th Percentile	(4.72)	8.89	1.06	8.13	7.46	6.70
90th Percentile	(5.79)	5.68	(1.05)	6.26	6.46	5.83

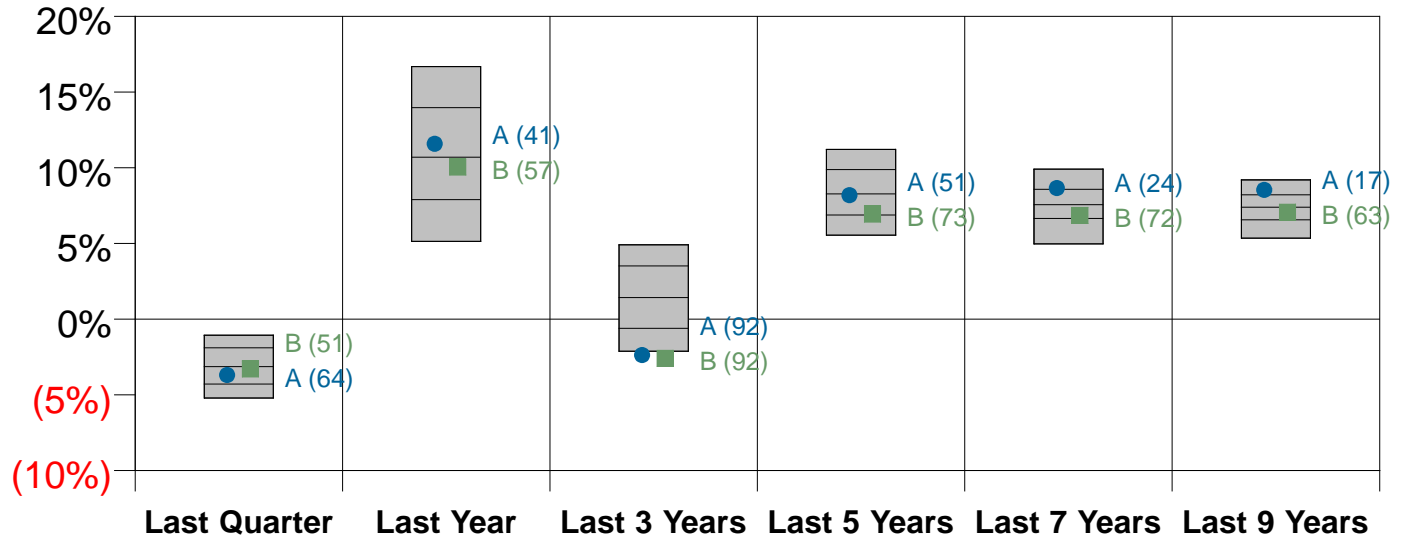
<b>Mid Cap Equity Composite</b>	● A	(2.36)	13.51	5.01	10.83	11.11	10.53
Russell:Midcap Index	■ B	(3.35)	12.88	2.37	9.46	9.63	9.04

MCERA Mid Cap Equity portfolio leads the Russell Midcap Index and ranks above peer median over all time periods shown.

# MCERA Domestic Small Cap Equity Composite Performance

For Periods Ended June 30, 2024

## Performance vs Callan Small Cap Mutual Funds (Net)



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 9 Years
10th Percentile	(1.05)	16.70	4.92	11.22	9.92	9.21
25th Percentile	(1.89)	13.97	3.52	9.89	8.59	8.23
Median	(3.13)	10.71	1.44	8.29	7.58	7.40
75th Percentile	(4.28)	7.91	(0.60)	6.89	6.66	6.56
90th Percentile	(5.21)	5.14	(2.11)	5.55	4.97	5.35

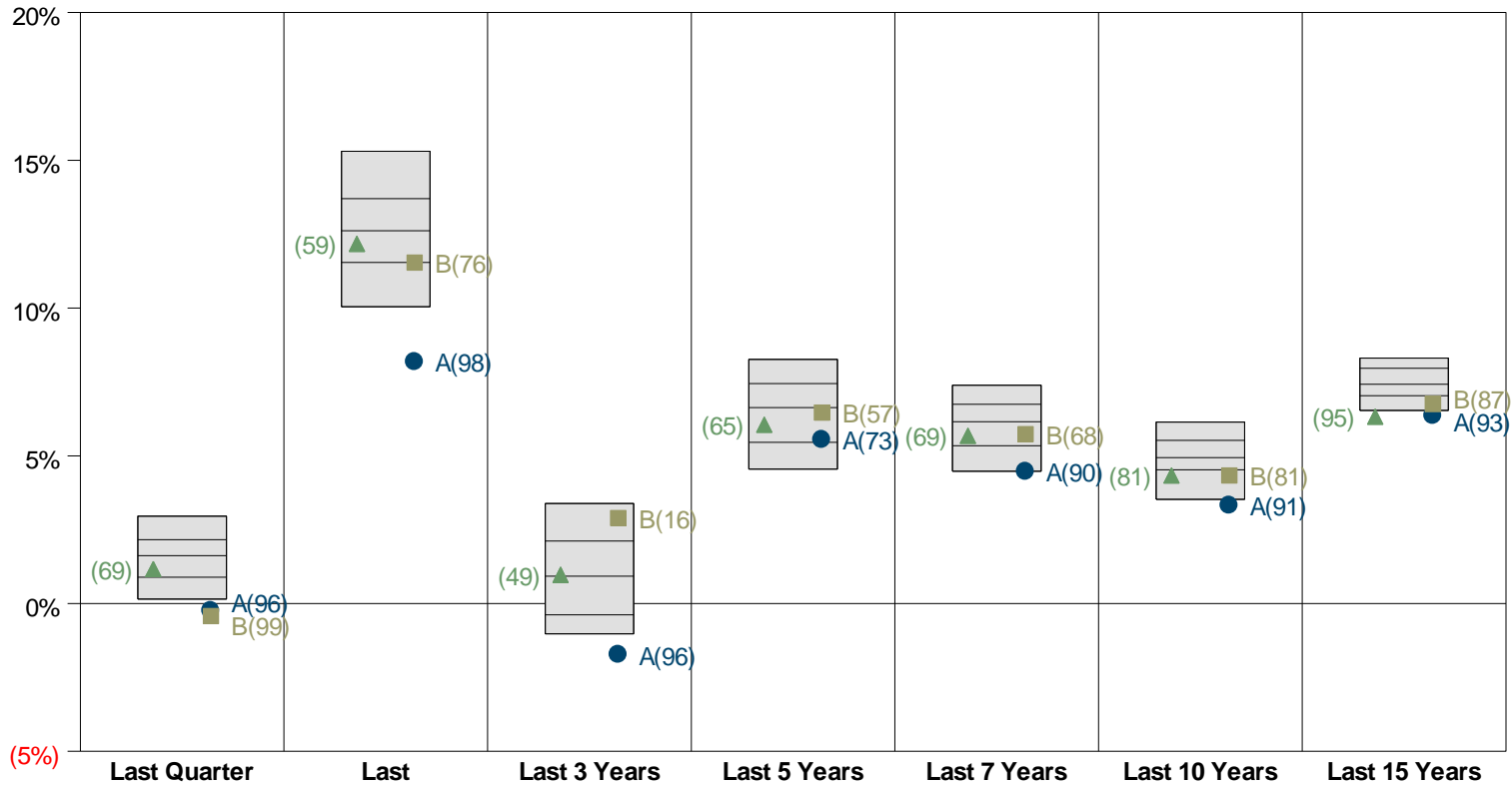
<b>Small Cap Equity Composite</b>	● A	(3.69)	11.58	(2.37)	8.20	8.67	8.54
Russell:2000 Index	■ B	(3.28)	10.06	(2.58)	6.94	6.85	7.06

MCERA Small Cap Equity portfolio leads the Russell 2000 Index the intermediate- and long-term. The Portfolio is at or above peer median for the trailing 1-, 5-, 7-, and 9-year periods.

# MCERA International Equity Composite Performance

For Periods Ended June 30, 2024

## Performance vs Public Fund - International Equity (Net)

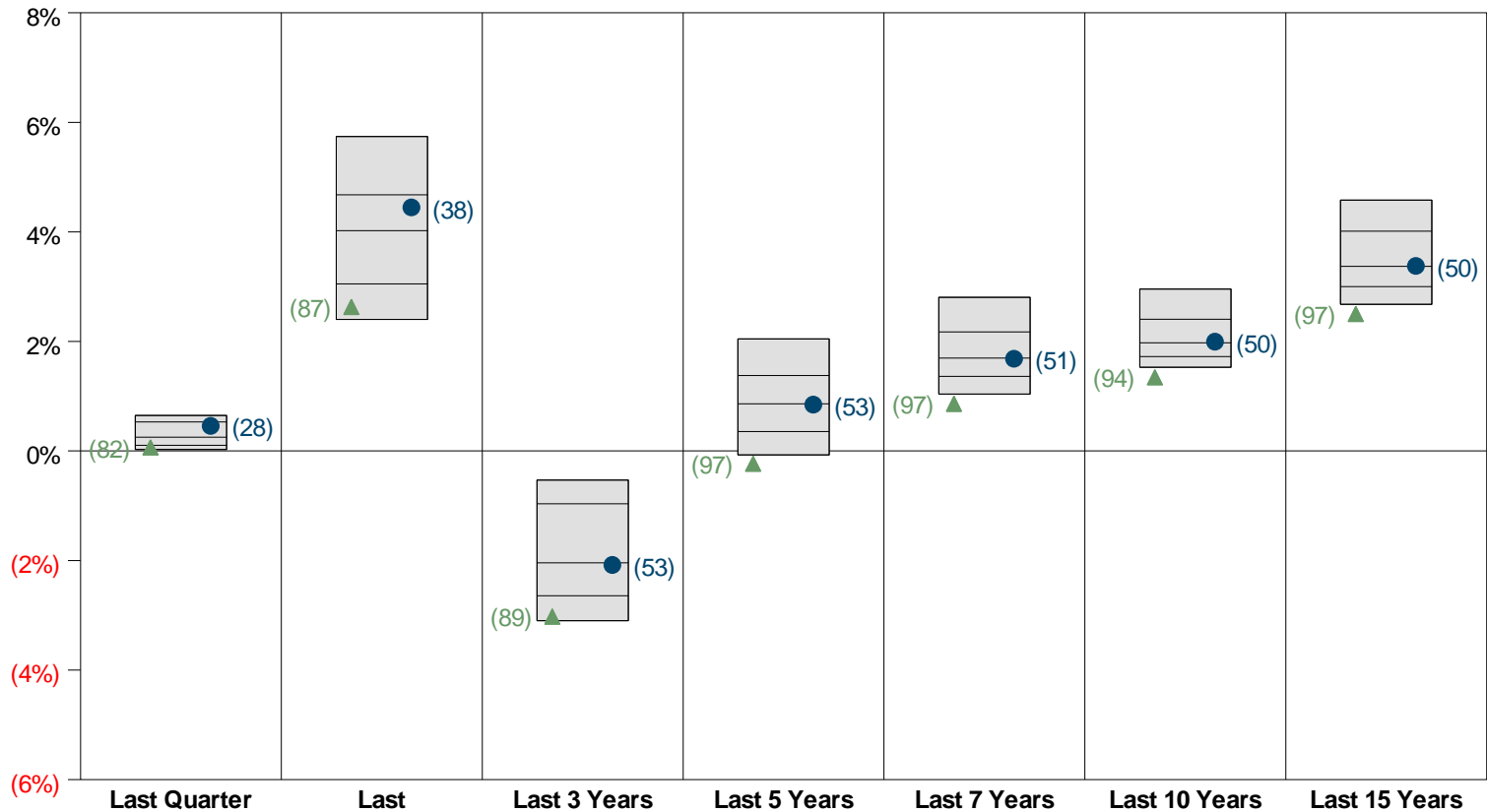


10th Percentile		2.96	15.30	3.39	8.27	7.39	6.14	8.31
25th Percentile		2.16	13.70	2.12	7.44	6.74	5.52	7.97
Median		1.62	12.62	0.93	6.63	6.15	4.94	7.42
75th Percentile		0.89	11.54	(0.38)	5.46	5.34	4.53	7.04
90th Percentile		0.15	10.04	(1.03)	4.55	4.48	3.53	6.53
International Equity	● A	(0.24)	8.18	(1.73)	5.54	4.47	3.32	6.36
MSCI EAFE Index	■ B	(0.42)	11.54	2.89	6.46	5.73	4.33	6.76
MSCI ACWI ex-US Index	▲	1.17	12.17	0.97	6.05	5.68	4.34	6.32

# MCERA Fixed Income Composite Performance

For Periods Ended June 30, 2024

## Performance vs Public Fund - Domestic Fixed (Net)

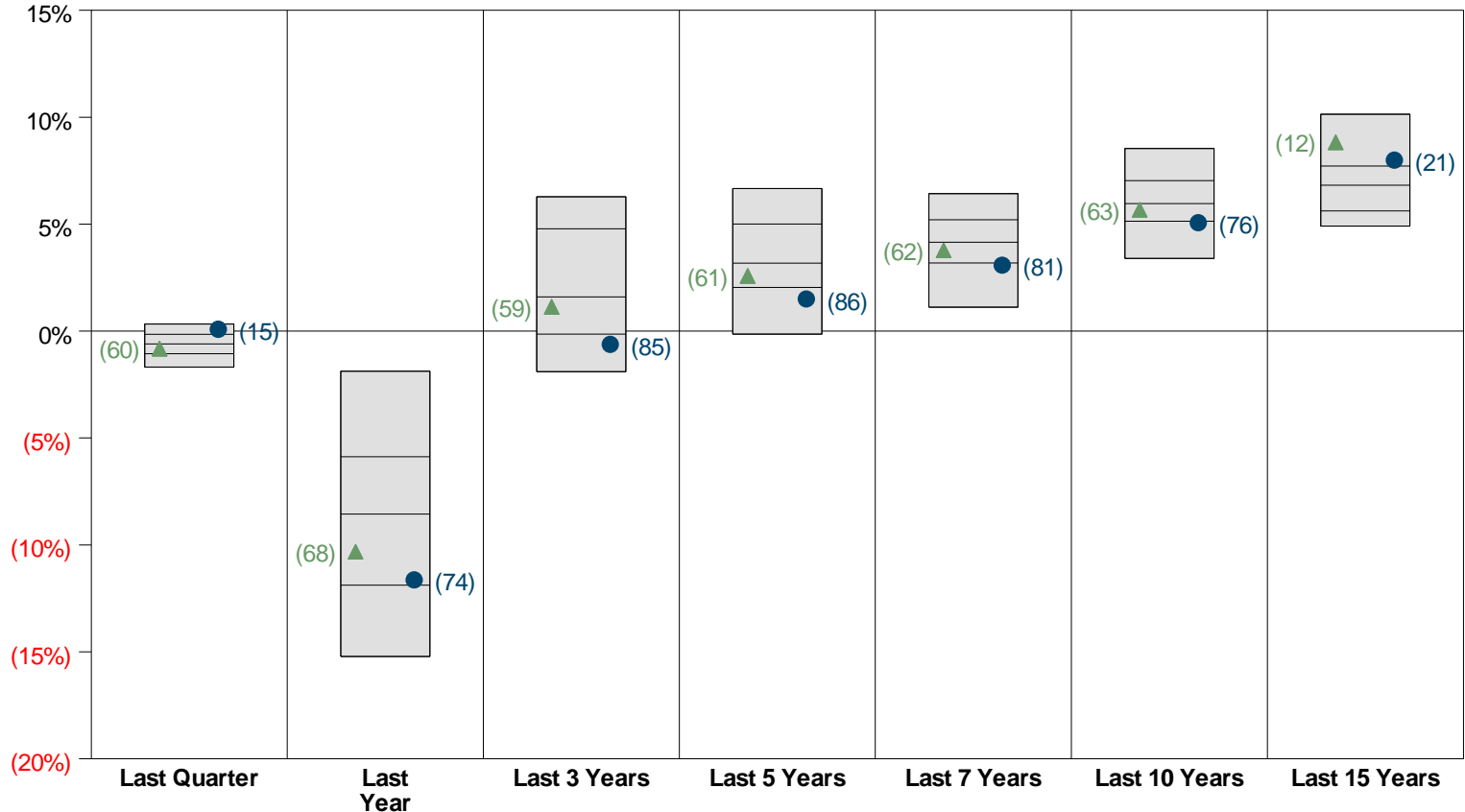


10th Percentile	0.65	5.74	(0.53)	2.05	2.81	2.96	4.58	
25th Percentile	0.53	4.68	(0.96)	1.38	2.17	2.40	4.01	
Median	0.25	4.02	(2.04)	0.86	1.70	1.97	3.37	
75th Percentile	0.10	3.05	(2.64)	0.35	1.36	1.72	3.00	
90th Percentile	0.03	2.40	(3.10)	(0.07)	1.04	1.53	2.68	
<b>Domestic Fixed Income</b>	●	0.44	4.43	(2.10)	0.83	1.67	1.98	3.36
Blmbg:Aggregate	▲	0.07	2.63	(3.02)	(0.23)	0.86	1.35	2.50

# MCERA Real Estate Composite Performance

For Periods Ended June 30, 2024

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



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 15 Years
10th Percentile	0.33	(1.88)	6.28	6.66	6.43	8.54	10.14
25th Percentile	(0.15)	(5.88)	4.78	5.01	5.20	7.03	7.72
Median	(0.60)	(8.55)	1.60	3.18	4.16	5.96	6.82
75th Percentile	(1.06)	(11.88)	(0.15)	2.04	3.19	5.13	5.61
90th Percentile	(1.69)	(15.22)	(1.90)	(0.14)	1.12	3.39	4.91
<b>Real Estate</b> ●	0.05	(11.67)	(0.66)	1.46	3.04	5.03	7.96
Real Estate Custom Benchmark ▲	(0.82)	(10.32)	1.14	2.58	3.78	5.67	8.83

# Manager Monitoring Summary

June 30, 2024

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

- 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 and 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.

# Manager Monitoring Criteria

Noteworthy items may include but are not limited to:

## Org/Team:

- Change in key decision maker or portfolio manager team
- New decision makers added/taken off portfolio management team; change of responsibilities
- Announced future investment team transitions
- Parent/ownership change; M&A activity
- C-suite and personnel turnover
- Declining assets under management impacting financial stability
- Reduction of head count or other cost saving measures
- Legal, compliance, or SEC violations and examinations
- New teams/strategies/offices added to the overall organization
- Change/reduction in central/dedicated analyst staff
- Additional responsibilities given to team members that take time away from portfolio management

## Performance:

- Underperformance relative to the appropriate market index and/or peer group over a reasonable period
- Unexpected results given market conditions, and currently losing or at risk of losing clients/assets

## Product/Philosophy/Process:

- Change of underlying process and/or implementation
- Performance pattern does not match philosophy/process/portfolio holdings
- Concerns with portfolio construction guidelines
- Investment Team cannot express a concise philosophy of what they are trying to accomplish/competitive advantage
- Notable strategy asset increase or decrease movements
- Notable changes to portfolio characteristics (number of securities, portfolio turnover, weighting scheme, duration, relative index sector/industry/country guidelines, etc)
- Change in strategy/platform assets under management and client concentration
- Vehicle specific considerations (securities lending, liquidity, availability)
- Fees

## Overall:

- Any of the criteria listed or combination thereof

● *Positive status; no issues*   ● *Notable status; noteworthy item but no concerns*   ● *Cautionary status; noteworthy item and monitoring closely*  
● *Under Review status; noteworthy item with concerns*



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## Appendix

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# 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

# 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.

	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24
<b>Strategic Planning &amp; Implementation</b>						
Review Investment Policy Statement						
Capital Market Projections Discussion						
Domestic Equity Structure						
International Equity Structure						
Fixed Income Structure						
Real Assets Structure						
Manager Searches (as needed)						
<b>Monitoring &amp; Evaluation</b>						
Quarterly Performance Reviews	2Q23	3Q23	4Q23	1Q24	2Q24	2Q24
Monthly "Flash" Report						
Ongoing Monitoring and Qualitative Review						
<b>Research &amp; Education</b>						
Research Papers and Publications						
"Callan College"						
Regional Workshops						
National Client Conference						

# 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 Alternative 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.

Callan

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**Callan Update**

# Published Research Highlights: 2Q24

## Quantifying Sequence-of-Returns Risk



## Sector-Specialist Strategies and Large LPs' Portfolios



## 2024 Asset Manager DEI Study



## 2024 Defined Contribution Trends Survey



## Recent Blog Posts

**Commercial Real Estate Capital Markets and Institutional Investors**

Christine Mays

**A Look at How We Did With Our Capital Markets Assumptions**

Greg Allen and Julia Moriarty

**Is This a Time for Active Managers to Shine?**

Tony Lissuzzo

## Additional Reading

Active vs. Passive quarterly charts

*Capital Markets Review* quarterly newsletter

Monthly Updates to the Periodic Table

*Market Pulse Flipbook* quarterly markets update

Market Intelligence (clients-only)

*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.

– September 24-26, 2024 – Virtual Session via Zoom

Please visit our website at [callan.com/events-education](https://callan.com/events-education) as we add dates to our 2024 calendar!

## Mark Your Calendar

### 2024 Regional Workshops

October 22, 2024 – Denver

October 23, 2024 – Chicago

*Watch your email for further details and an invitation.*

## 2025 National Conference

### Mark your calendars for this event in Scottsdale on April 27-29, 2025

Our annual conference will feature mainstage speakers and Callan lead workshops on a variety of topics.

This year we welcome Zanny Minton Beddoes to the stage.

*Registration for this event will open in January 2025!*

# Introducing CODE: Callan On-Demand Education

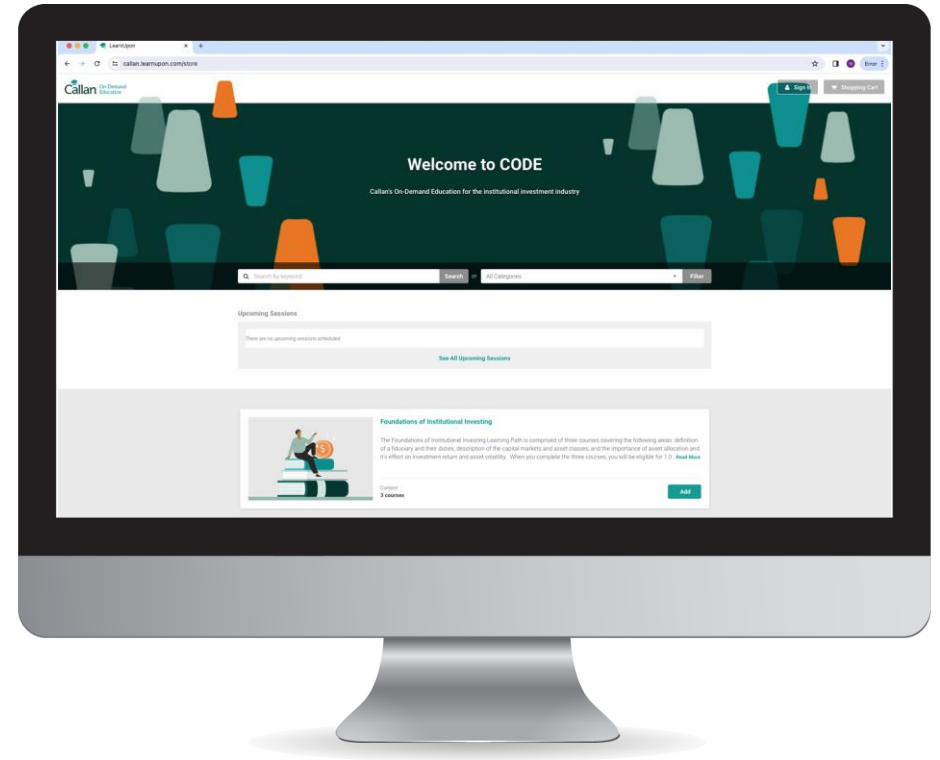


- ▶ Variety of educational courses
- ▶ Interactive and engaging
- ▶ Self-guided modules
- ▶ Eligible for continuing education credits
- ▶ Learning at your own pace

**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](https://callan.com/code)



## 3 Reasons to Take CODE Courses

- 1 Become a better fiduciary
- 2 Showcase your skills and knowledge
- 3 Learn from Callan's investment experts



## Callan Updates

Firm updates by the numbers, as of June 30, 2024

**Total Associates:** ~200

**Company 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: 65+

Total CFA/CAIA/FRMs: 60+

Total Institutional Investor Clients: 475+

Provides advisory services to institutional investor clients with assets over \$4+ trillion

### **OUT NOW: Callan's First Diversity, Equity & Belonging (DEB) Advancement Report**

Our inaugural report highlights Callan's commitment to advancing diversity, equity, and belonging (DEB) within the institutional investment community. While we've achieved many milestones in this area since the firm's founding over five decades ago, our recent work is a testament to our steadfast dedication to promoting DEB in all aspects of our business.

**“Not only is our DEB initiative critical to Callan’s success, but we hope it will ultimately influence our entire industry. Supporting this initiative from the position of CEO is the best way for me to ensure its success. As the executive sponsor, I can make sure our team has the support and resources to effect real change.”**

— Greg Allen, CEO, Chief Research Officer and the executive sponsor of Callan's DEB program



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Past performance is no guarantee of future results.