

Callan

May 20, 2026



Mendocino County Employees' Retirement Association

Callan's Presentation to the Board

Greg DeForrest, CFA

Fund Sponsor Consulting

Claire Telleen, CFA

Fund Sponsor Consulting

Hannah Vieira

Fund Sponsor Consulting

Presentation Agenda



Team Overview & Why Callan



Callan Firm & Consulting Experience



Research Platform, Manager Oversight & Reporting



Asset Allocation & Strategic Planning



Fiduciary Education & Client Partnership



Q&A Session



Appendix

Callan Team

Presenters



Greg DeForrest, CFA

Fund Sponsor Consulting

- 28 years in the industry, 28 years with Callan
- 17 years working with MCERA
- Head of Fund Sponsor Consulting
- Member of Callan's Management Committee
- Callan Shareholder



Claire Telleen, CFA

Fund Sponsor Consulting

- 18 years in the industry, 18 years with Callan
- 8 years working with MCERA
- Callan Shareholder



Hannah Vieira

Fund Sponsor Consulting

- 8 years in the industry, 8 years with Callan
- 6 years working with MCERA
- Member of Manager Search Committee
- Callan Shareholder

The Callan MCERA Team

General Consulting



Greg DeForrest, CFA



Claire Telleen, CFA



Hannah Vieira



Gary Chang, CFA



Jay Kloepper



John Pirone, CFA, FRM, CAIA



Harrison Richardson

Capital Markets Research

Performance Measurement

Callan Global Manager Research Experts: Real Assets, Non-U.S. Equity, U.S. Equity, Fixed Income



Aaron Quach



Munir Iman



Jonathan Gould, CAIA



Nick Conant, CFA, CAIA



Paul Choi, CFA



Lauren Mathias, CFA



David Wang



Mark Wood, CFA



Nicole Wubbena



Dario Buechi, CFA

Why Callan?

1

Firm Structure

Independent, employee-owned and fully resourced. Interests are aligned with MCERA's board, staff and participants

2

Experience Working With Clients Just Like MCERA

We serve 138 Public Retainer clients with over \$1.5 trillion in assets

3

Depth of Partnership

Experienced consulting and research team with long-standing continuity

4

Philosophical Alignment and Successful Implementation

Complementary investment philosophy and approach. Successful track record of effective partnership.

5

We Have Experience Working With MCERA

We were proud to serve you for over 17 years and would be honored to serve you again

Our Understanding of MCERA's Priorities in a Consulting Partner



Independent Fiduciary Advice and Strong Conflict Management: Callan's advice is provided solely in the best interests of the Plan and its beneficiaries



Strategic Portfolio Guidance with Alternatives Expertise: sophisticated guidance for portfolio strategy in both public and private markets



Education and Partnership for Board and Staff: high-touch partnership, trustee education, and responsiveness



Strong Research Depth and Manager Due Diligence: deep institutional quality research and access to research personnel



Customized Risk Management and Asset Allocation Expertise: risk-aware asset allocation and funded status expertise

An Overview of Callan

Focus, experience, resources

Independent & Focused



- Established in 1973
- Investment consulting is primary focus
- 100% employee-owned
- Third generation of private ownership
- 129 current owner-employees

Experienced



- Over 524 funds representing \$4.7 trillion in assets
- Client-focused consultants averaging 6 retainer clients each
- Consultant tenure averages 11 years Callan / 20 years industry
- Retainer client tenure averages 13 years

Fully Resourced



- 200 employees
- 60 CFA / CAIA / FRM Charterholders and 12 CFA / CAIA / FRM candidates
- 62 advanced degrees
- Over 90 specialists
- Proprietary systems and database

As of 12/31/2025

About Callan

Mission and core values

Our mission is to advance each client's investment goals.

Core Values

Keep

client interests paramount

Support

the success of each associate

Commit

to quality and collaboration

Work

with integrity and inclusiveness

Honor

every commitment

Callan's Public Plan Client Experience

Established expertise in servicing public plans

138 Public retainer clients,
including >60 defined benefit plans



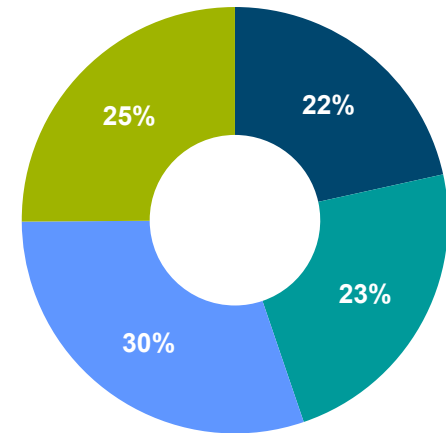
\$1.5tn Assets under advisement
for public clients



4 1937 Act California County Retirement Systems

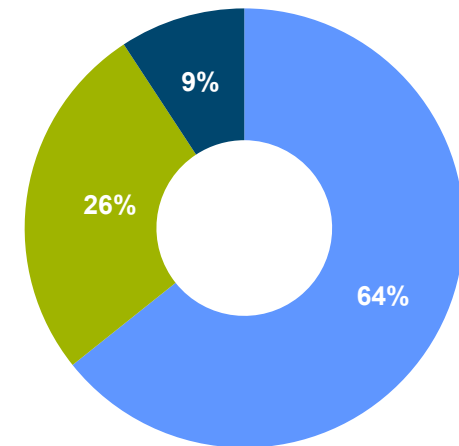
17 Years Serving MCERA

Callan Client Tenure



● 0–5 years ● 10–20 years
● 5–10 years ● 20+ years

Callan Retainer Client Sizes



● <\$1bn
● \$1 to \$10bn
● >\$10bn

Data as of 12/31/2025

Callan's Investment Beliefs

Customization and
collaboration



Risk aware portfolio
construction



Strategic asset allocation



Avoid investing fads



Open architecture



Use scale and time
horizon as an advantage



Deliberate use of
active management



Control cost and
net of fee outcomes



MCERA's Investment Beliefs

Strong Governance is Vital



Diversification Adds Value



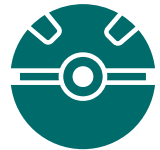
Public Investment Markets are
Largely Efficient



Understand and Manage Risk



Simple is Often Better



Focus on the Long-Run



Investment Costs Matter



Client-Focused Consulting Model

Proactively provide our collective expertise and experience to MCERA

Mendocino County Employees Retirement Association

Callan Consulting Team

Greg DeForesst, CFA | Claire Telleen, CFA | Hannah Vieira

Client Policy Review Committee

12 Senior Professionals

**Manager Search
Committee**

10 Senior Professionals

Alternatives Review Committee

11 Senior Professionals

Capital Markets Research

9 Dedicated Professionals

**Manager Research &
Monitoring**

32 Dedicated Professionals

Performance Reporting

31 Dedicated Professionals

Callan Institute

9 Dedicare Professionals

Callan's Investment Consulting Services

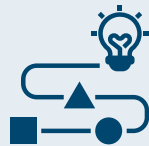
Since every institutional investor has a distinct set of circumstances, we approach each client with an open mind. We strive to build off the strengths already embedded in a client's program without taking a "one-size-fits-all" position.

Strategic Planning

Capital Markets Research

9 dedicated professionals

(Also significantly contributes to our global manager research efforts)



Plan Implementation

Dedicated Manager Research

32 dedicated professionals

Defined Contribution Group

6 dedicated professionals

Implementation Solutions Group

3 dedicated professionals



Research & Education

Callan Institute and "Callan College"

9 dedicated professionals

Most Callan professionals participate as instructors and research writers



Monitoring & Evaluation

Client Report Services Proprietary Database

31 dedicated performance professionals

Supported by over 20 database, programming and systems professionals



Callan's Research Platform

Capital Markets Research



Jay Kloepfer
Julia Moriarty, CFA

Gary Chang, CFA
Jason Ellement, FSA, CFA, MAAA
Ric Ford, FSA, CFA, EA, MAAA
Lindsay Jones
Adam Lozinski, CFA
Kevin Machiz, CFA, FRM
John Pirone, CFA, FRM, CAIA

Public Markets Manager Research



Mark Stahl, CFA

Aaron Birman
Dario Buechi
Nick Conant, CFA, CAIA
Paul Choi, CFA
Kyle Fekete, CFA
Lauren Mathias, CFA
Erik Partida
Corey Schier
David Wang
David Welsch, CFA
Mark Wood, CFA
Nicole Wubbena
David Zee, CFA
Fanglue Zhou, CFA

Alternatives Research



Pete Keliuotis, CFA

Cos Braswell
Daniel Brown
Aidan Davison, CFA
Sarie Diloné
Francis Griffin
Ashley Kahn, CAIA
Joe McGuane, CFA
Chrissy Mehnert
Roxy Quinn
David Smith, CFA, CTP
David Welsch
David Wong, CFA

Real Assets Research



Avery Robinson, CAIA

Bernie Bazile, CAIA
Barbara Bernard
Jonathan Gould, CAIA
Munir Iman
Christine Mays
Aaron Quach
Lauren Sertich, CAIA
Kimberly Weiss
Sean Yamamoto

Implementation Solutions



Bo Abesamis

Mark Kinoshita
Alvaro Vega

Callan Client Investment Oversight Committees

Assess client investment recommendations, client deliverables, and fiduciary process

Client Policy Review



Jim Callahan, CFA

Paola Cardenales
Butch Cliff, CFA
Bill Emmett, CFA
Angel Haddad
John Jackson, CFA
Pete Keliuotis, CFA
Weston Lewis, CFA
Ann O'Bradovich
Chris Park, CFA
Bud Pellecchia
Annoesjka West
Fanglue Zhou, CFA

Manager Search



Tom Shingler

Steve Center, CFA
Greg DeForrest, CFA
Alex Ford
Elizabeth Hood, CFA
Connie Lee, CFA, CAIA
Britt Murdoch
Brad Penter, CFA, CAIA
Tim Pollard
Hannah Viera
Annoesjka West
Brienne Weymouth, CAIA

Alternatives Review



Butch Cliff, CFA
Pete Keliuotis, CFA

Alex Browning
Todd Carabasi, CFA, CAIA
Francis Griffin
Jonny Gould, CAIA
Tony Lissuzzo, CFA
John Pirone, CFA, FRM, CAIA
Kevin Schmidt
Tammy Schmidt, CFA
Lauren Sertich, CAIA
Michael Stellato
Evan Williams, CFA, CAIA
David Wong, CFA
Mark Wood, CFA

Callan

Manager Selection and Monitoring

Callan's Research Resources

Research Team by the Numbers

57 Specialty consultants

72% Callan shareholders

29 CFA and/or CAIA charterholders

21 Advanced degrees

Searches and Database by the Numbers*

1,343 Manager searches completed over the last five years

\$493bn Assets represented by these searches

2,000+ Average number of manager meetings per year

3,800+ Organizations tracked in proprietary database

22,250+ Strategies tracked in proprietary database

Commitment to dedicated resources

- Sole focus is research
- Highly valued, high-profile, career positions
- Original research, in-depth due diligence

Proprietary database and analytics

- Full control over data collection and due diligence
- Clean, detailed, and continuous data

Searches are client-driven and customized

- No buy-list
- Emphasis on both quantitative and qualitative analysis
- Thorough documentation of entire process

Oversight committee for manager searches

- Best thinking across the firm
- Ensures quality control and adherence to well-defined and robust process

As of 12/31/2025

Manager Search Process Overview

Manager Search Process

1 Client & Candidate Profiles

2 Quantitative Analysis

3 Qualitative Assessment

4 Manager Search Committee

5 Semi-finalist Review

6 Finalists

The Process:

- Every search starts from scratch, no pre-determined “approved” or “buy” lists
- Backed by extensive due diligence and accumulated knowledge of specialist and generalist consultants
- Disciplined and consistent
- Client driven, customized
- Utilizes peer review—Manager Search Committee to ensure quality control

The Outcome:

The identification of the managers and products that are the best fit for the investment program and the specific mandate

Client Participation:

- All parts of this process are transparent
- Any part of this process can be used to supplement a client’s existing search process

Manager Ratings & “Buy Lists”

Why our process is more effective compared to standardized buy lists



Manager Monitoring Summary

March 31, 2026

	Overall	Philosophy/ 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				
SSGA World Dev ex-US				
T. Rowe Price Intl Small Cap				
Brandes Intl Small Cap				
Artisan				
NinetyOne				
Fixed Income				
Dodge & Cox Income				
PIMCO				
Infrastructure				
IFM Global Infrastructure				
JP Morgan Infrastructure				
Real Estate				
RREEF America II				
Barings Core Property Fund				
Kayne Anderson				

Comments

- **Fidelity Low Priced Stock:** Notable transition in portfolio manager duties from Joel Tillinghast to new PM's Sam Chamovitz and Morgen Peck in 2023.
- **T. Rowe Price** announced firm-wide layoffs in mid-2025 as part of a broader effort to reduce controllable expenses and address continued profitability pressures. While no details were provided on the number of roles, timing, or expectations, investment professionals are expected to be minimally impacted. Back-office and operational roles may be more affected. There have been no named PM departures.
- **Barings:** Co-PM Deb Schwarz left the firm at the end of June. Deb Schwarz and Chris Berry have been co-PMs since 2018 and have worked to reposition the fund over the last few years. Chris is now the sole PM; all others on the fund team are staying in place. Underperformance driven largely by write downs on four office assets in the portfolio. The Fund has made progress in reducing office exposure and cleaning up their debt stack. **A replacement search was conducted last year; MCERA is in process of replacing Barings with LaSalle.**

Legend:

Within Expectations; no issues	Notable Status; noteworthy item but no concerns	Cautionary Status; noteworthy item and monitoring closely	Under Review Status; noteworthy item with concerns

Callan

Performance Reporting

Committed to the Science (and Art) of Performance Measurement

We invest where others outsource

Career tracks for performance measurement and database professionals

- Senior analysts with 20+ years of experience
- Robust, ongoing training program for analysts
- Strong support of pursuit of CFA, CAIA, and other continuing education

Powerful development track for career consulting professionals

- President, defined contribution practice leader, fund sponsor consulting manager, and director of research were all performance measurement or database analysts early in their careers

Committed to maintaining proprietary systems

- Provides control over quality, timeliness, and development priorities
- Insulated from organizational and pricing risk of third-party vendors

Retain intellectual capital to understand, develop, and explain complex metrics

- Data scientists and developers with (literally) hundreds of years of combined experience working on our proprietary systems

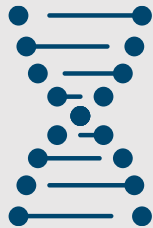
Currently making significant investment in developing our third generation of proprietary performance and risk measurement reporting system

Callan's Proprietary Data and Tools

We invest heavily in proprietary tools to improve outcomes

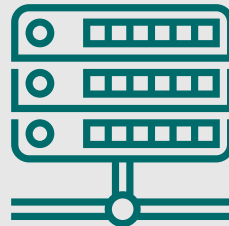
CallanDNA

Our proprietary database platform of integrated analytical tools and investment manager data, including over 40 years of live client, manager, peer group, alternative investment, and index data. Contains ESG and DEI statistics.



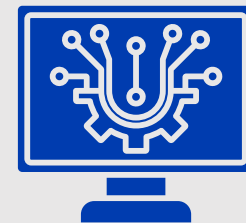
PEP and CMS

Callan's performance evaluation software, powered by our proprietary investment manager database and third-party index, peer group, and alternative investment subscriptions. Portfolio construction tool for evaluating / monitoring portfolio exposures.



AssetMax

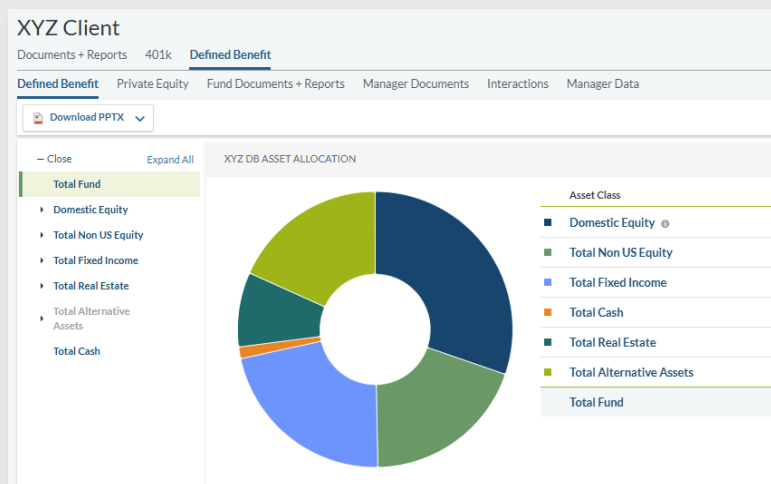
Callan's mean variance optimization and Monte Carlo simulation software, powered by our proprietary Capital Markets Assumptions.



CallanDNA: Research through the Lens of Callan's Technology

Client Reporting

- ▶ Online performance reporting and analytics
- ▶ Leverages Callan's proprietary system - used for some of the most sophisticated reports in the industry
- ▶ Drill-down to Callan's manager research database
- ▶ Exportable to PDF, PPT, and Excel
- ▶ Open to custom client requests and enhancements



Manager Research

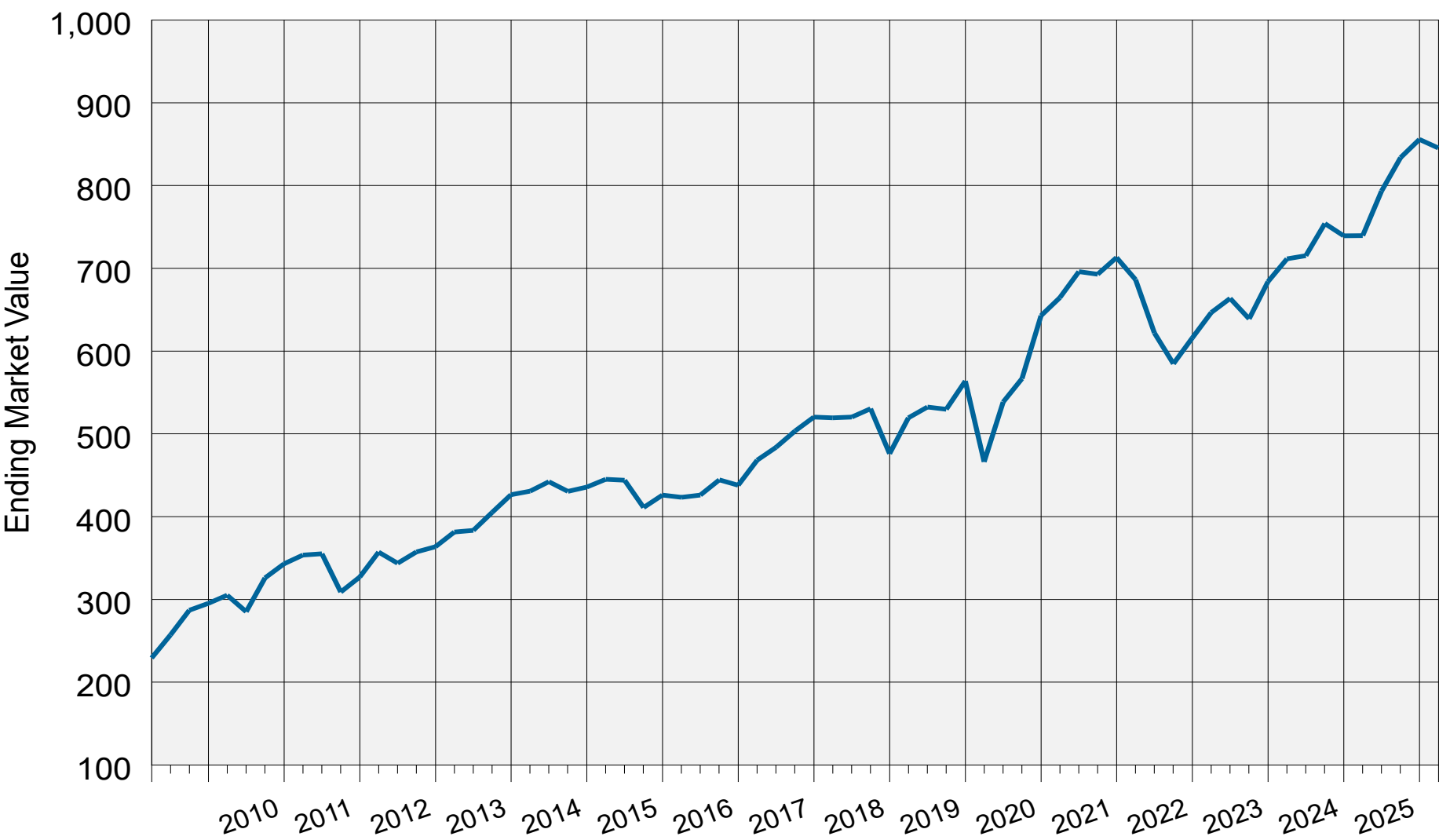
- ▶ Research new and existing managers / funds
- ▶ Access both public markets and private markets
- ▶ 45 years of history, with data back to the 1980s
- ▶ Library of Callan due diligence reports and notes
- ▶ Monitoring and spotlight reviews
- ▶ Exportable to PDF and Excel

	# Funds	# Managers
Equities	7,225	1,436
Fixed Income	3,550	555
Balanced	394	175
Alternatives	7,221	1,801
Real Assets	3,844	1,113
Target Date Funds	1,408	60
Other	205	87
Totals	23,847	4,173

*Represents Unique Organizations

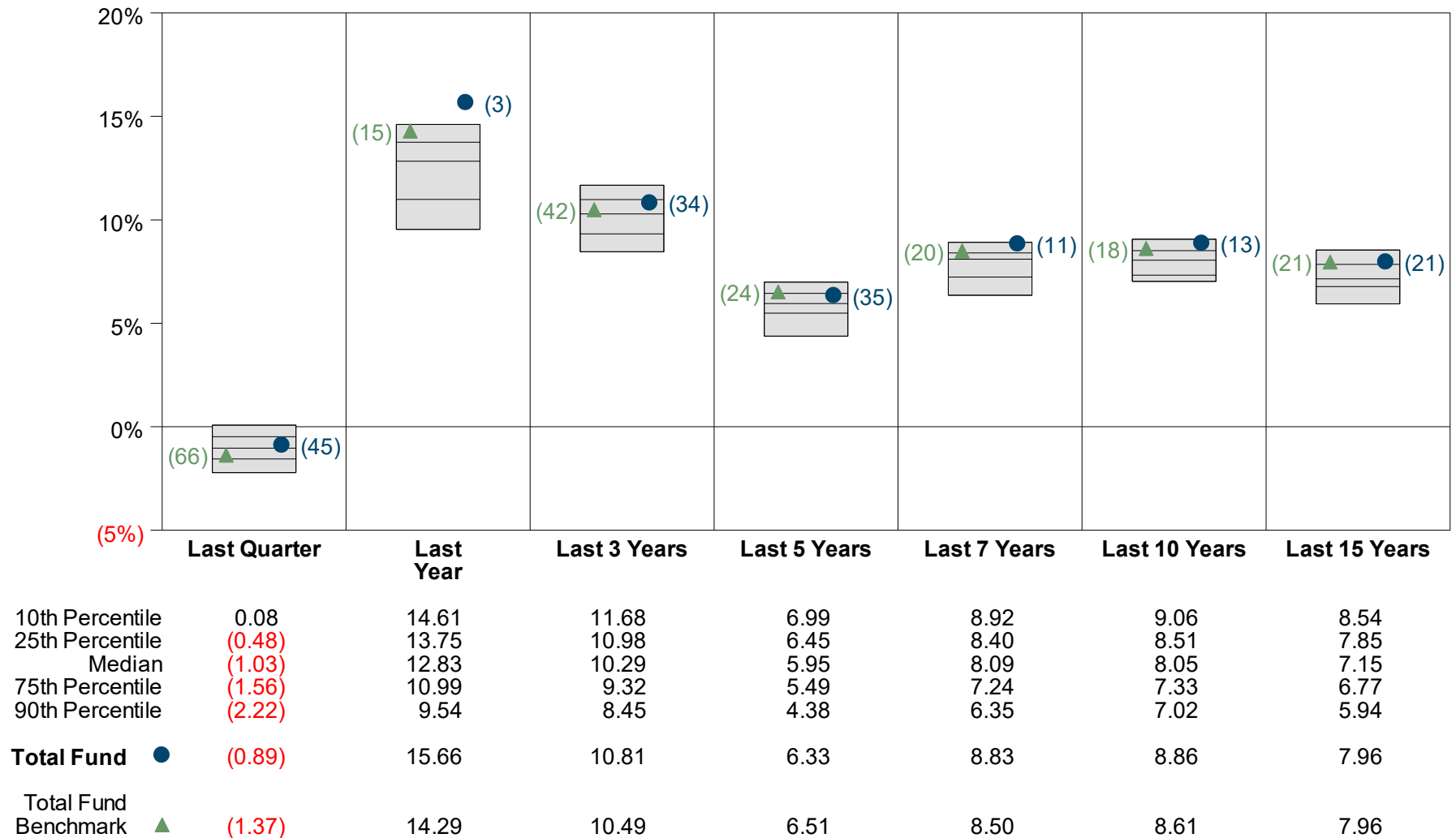
Total MCERA Plan Growth

MCERA Ending Market Value for 17 Years Ended March 31, 2026



MCERA Total Fund Performance as of March 31, 2026

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

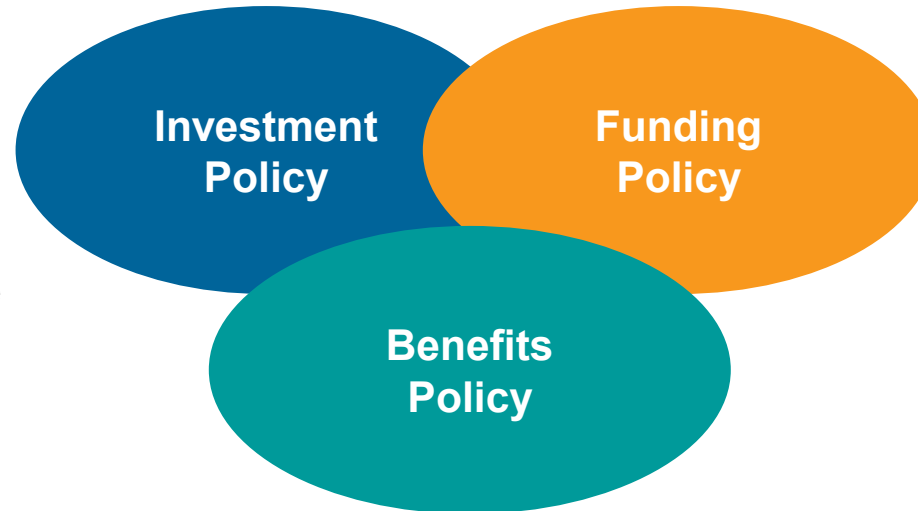
Asset Allocation and Strategic Planning

Where Does Asset Allocation Fit In?

Evaluate the interaction of three key policies to identify an appropriate investment policy

Investment Policy

- 62% Public Equity
- 21% Fixed Income
- 17% Real Assets
 - 11% Real Estate
 - 6% Infrastructure



Funding Policy

- Normal Cost plus Amortization of unfunded liability
- Amortization of 2012 unfunded liability (11 years remaining as of the 2022 valuation for reset layer)
- FY25 contributions = ~\$46 m
 - Employer contribution = 40% of payroll
 - Employees contribution = 10% of payroll

Benefits Policy

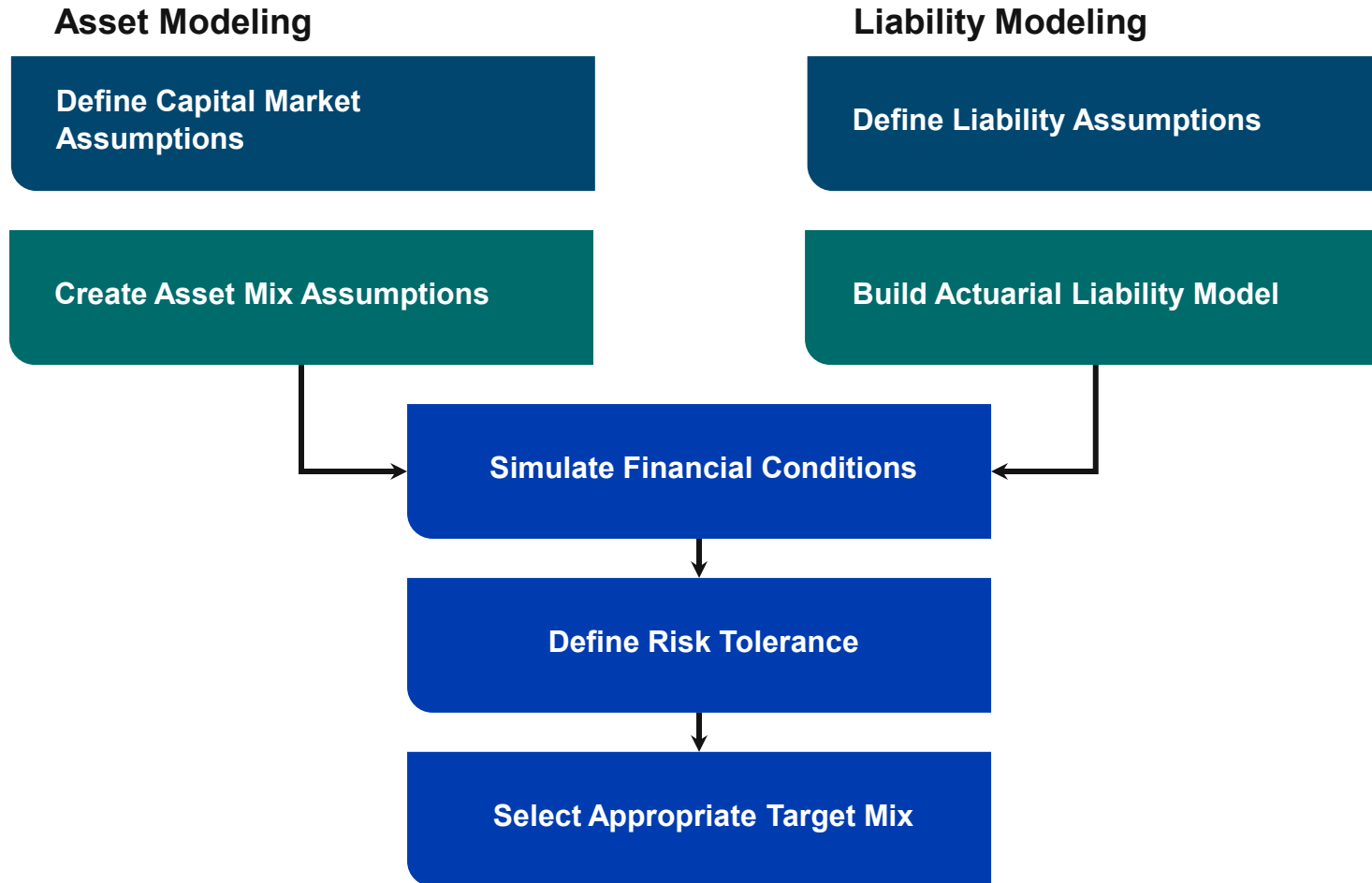
- ~\$40m per year
- ~6-8% of the market value of assets
- Cost of Living Adjustments for applicable members

Discount Rate: 6.50%

$$\text{Contributions} + \text{Investment Earnings} = \text{Benefits Paid} + \text{Expenses}$$

Asset-Liability Process

Assets and liabilities are evaluated and tested separately, then integrated into a single model



2026 Capital Market Projections – MCERA Target

Expected Return on Assets – Assuming Passive Implementation

Asset Class	MCERA Target
Broad US Equity	37%
Global ex-US Equity	25%
Core US Fixed	21%
Core Real Estate	11%
Private Infrastructure	6%
Totals	100%

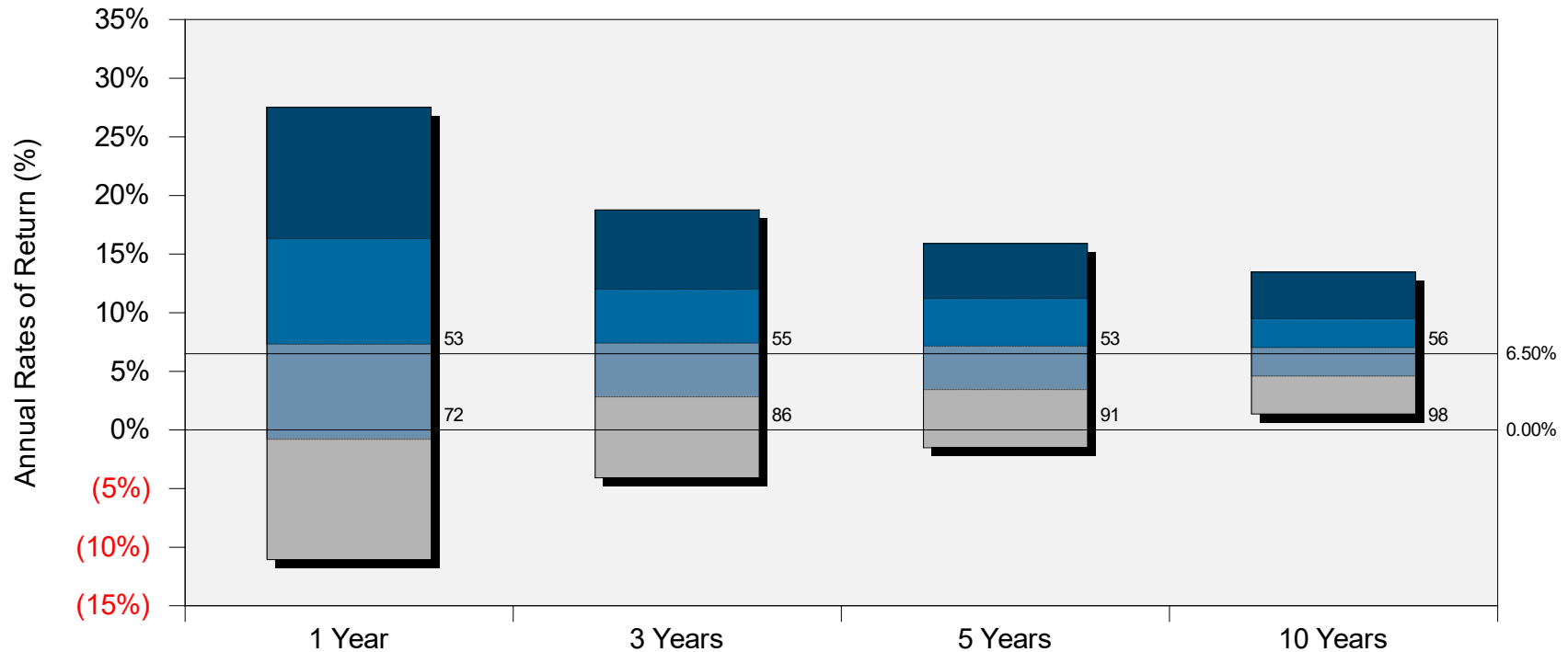
2026 10-Year Capital Market Forecast

Expected Return	7.1%
Expected Risk (Standard Deviation)	12.4%
Projected Arithmetic Return	7.8%

2026 Capital Market Projections – MCERA Target

MCERA Policy

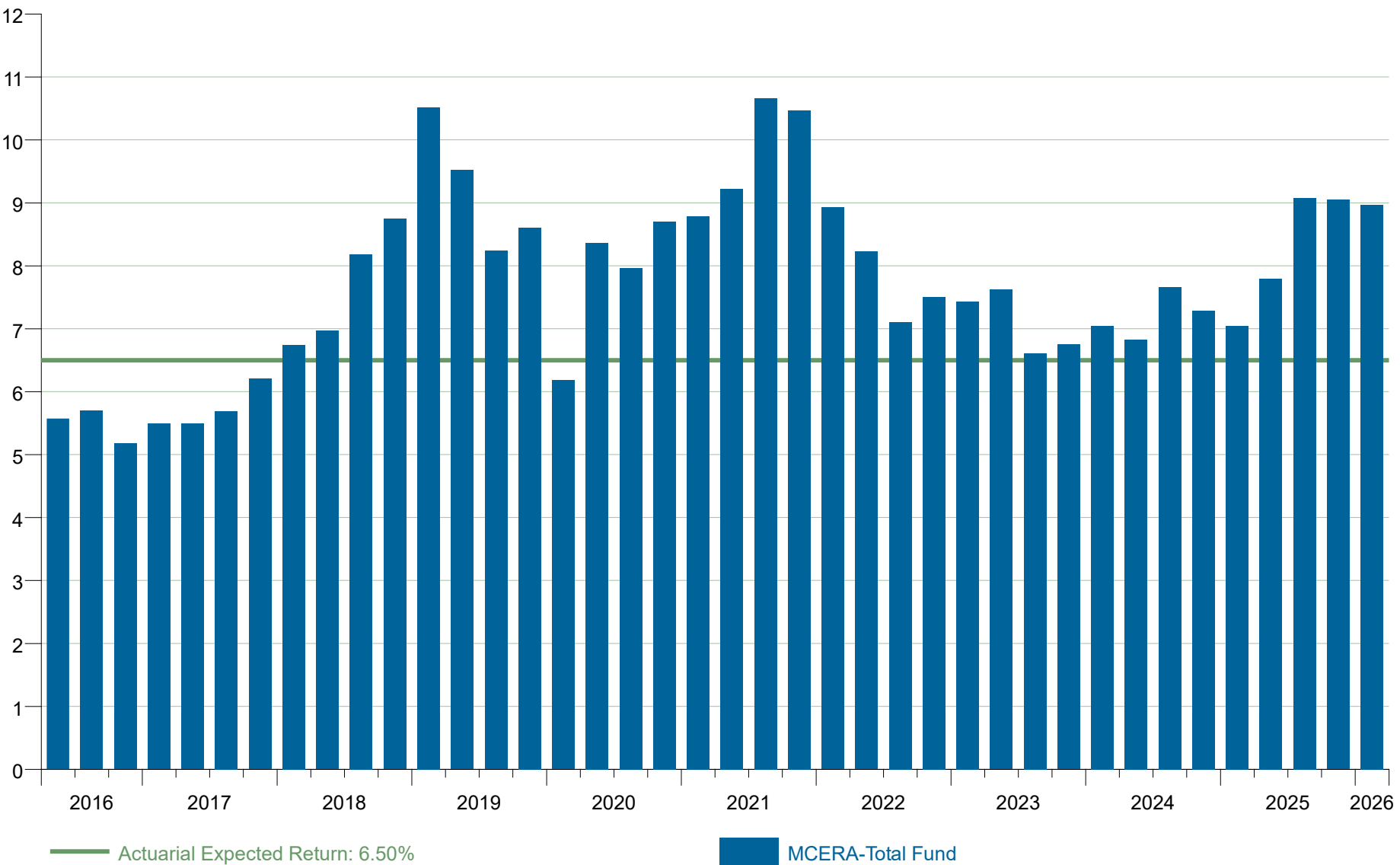
Range of Projected Rates of Return
MCERA Target



5th Percentile	27.5%	18.8%	15.9%	13.5%
25th Percentile	16.3%	12.0%	11.2%	9.5%
Median	7.3%	7.4%	7.1%	7.0%
75th Percentile	(0.8%)	2.8%	3.4%	4.6%
95th Percentile	(11.1%)	(4.1%)	(1.5%)	1.4%
Prob > 6.50%	52.7%	54.7%	53.1%	56.0%
Prob > 0.00%	72.0%	85.7%	91.4%	97.5%

Based on 2026 Callan CMA's

Annualized 10 Year Total Fund Returns (Quarterly Roll)



Callan

Fiduciary Education

Callan Institute: Fiduciary Education

Established in 1980, the Callan Institute is widely recognized as one of the leading research and education forums for the investment industry. Our goal is to provide high-quality events, research, and education to create a more informed, transparent, and integrated investment community.

Events and Education

National Conference

Consists of general sessions with presentations by world, political, arts, science, and investment industry speakers.

The general sessions are followed by smaller breakout sessions on timely industry topics led by Callan specialists.

Workshops

Workshops focus on a particular investment topic or issue (virtual & in-person).

Our investment workshops and sessions encourage in-depth discussions with industry colleagues and Callan professionals.

Callan College

Provides clients and investment professionals across the industry with basic-to-intermediate-level instruction (virtual & in-person).

CODE: Callan On-Demand Education

CODE offers a flexible, self-paced learning platform with interactive courses designed for investment professionals of all levels, providing the BIC with continuing education credits, the ability to enhance fiduciary skills, and the opportunity to learn from Callan's investment experts anytime, anywhere.

Published Research

Our original research explores the questions and issues important to today's institutional investors, providing timely insights and data on a variety of investment topics in easily digestible formats. Clients receive exclusive updates and invitations to our webinars.

Callan On-Demand Education (CODE)

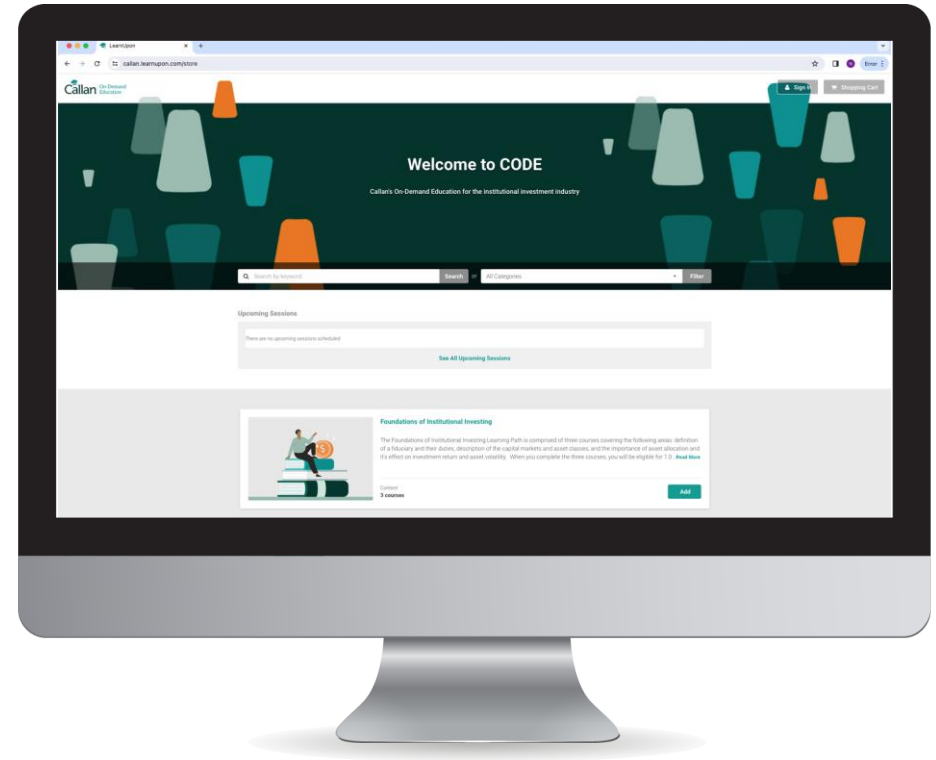


- ▶ Variety of educational courses
- ▶ Interactive and engaging
- ▶ Self-guided modules
- ▶ Eligible for continuing education credits
- ▶ Learning at your own pace

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

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

Callan

Work Plan

Work Plan

2026-2027 Fiduciary Calendar

Last Completed	AB/AC23A22A8/AB22A8A8/AB23	1Q26	2Q26	3Q26	4Q26	1Q27	2Q27	3Q27	4Q27
Strategic Planning & Implementation									
Oct-23	Review Investment Policy Statement								
Jan-26	Capital Market Projections								
Feb-23	Asset Liability Study								
Aug-22	Discuss Alternative Asset Classes								
Oct-23	Domestic Equity Structure								
Aug-24	International Equity Structure								
May-25	Real Assets Structure								
Feb-26	Fixed Income Structure								
Aug-25	Manager Searches (as needed)								
Monitoring & Evaluation									
Mar-26	Quarterly Performance Reviews	4Q25	1Q26	2Q26	3Q26	4Q26	1Q27	2Q27	3Q27
Apr-26	Monthly "Flash" Report								
May-26	Ongoing Monitoring and Qualitative Review								
Research & Education									
May-26	Research Papers and Publications								
Mar-26	"Callan College"								
Oct-25	Regional Workshops								
Apr-26	National Client Conference								

Why Callan?

1

Firm Structure

Independent, employee-owned and fully resourced. Interests are aligned with MCERA's board, staff and participants

2

Experience Working With Clients Just Like MCERA

We serve 138 Public Retainer clients with over \$1.5 trillion in assets

3

Depth of Partnership

Experienced consulting and research team with long-standing continuity

4

Philosophical Alignment and Successful Implementation

Complementary investment philosophy and approach. Successful track record of effective partnership.

5

We Have Experience Working With MCERA

We were proud to serve you for over 17 years and would be honored to serve you again

Callan

Appendix

Callan

Alternatives Consulting

Alternative Investment Consulting Philosophy

Combine a long-term perspective with proven investments

We help clients...



Achieve success

by integrating unique and compelling opportunities with a customized plan.



Improve Returns

by selectively targeting high-quality investments, negotiating fees, and avoiding fads.



Control Risk

through rigorous due diligence, prudent diversification and comprehensive monitoring.

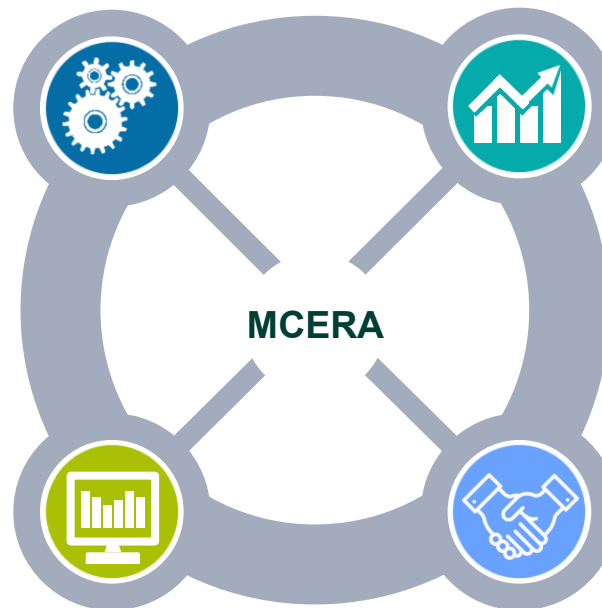
Through an implementation approach focusing on...

Program Design

Design bespoke private markets program based on MCERA's unique attributes and risk/return objectives.

Monitoring & Reporting

Closely monitor managers post-closing; report progress towards program goals through quarterly reporting.



Investment Planning

Oversee private market allocations and annual pacing to private equity, private debt, and private real assets.

Manager Selection

Consider the current allocations of MCERA'S private markets funds and select resilient and differentiated direct managers to complement these exposures.

Access to Alternatives Investment Opportunities

Callan Access

- ▶ Multi-year relationships with high quality alternative investment firms.
- ▶ Recognizable brand name, helping us get in front of in-demand investment opportunities.
- ▶ Customized solutions for clients ranging in size from **\$200 million** to over **\$600 billion**.
- ▶ Focus on gaining meaningful allocations with desired managers.

Alternatives Team

20 investment professionals dedicated to alternative investments.

- ▶ Seasoned team with direct experience allocating for endowments, pensions, trusts, and fund-of-funds.
- ▶ Senior professionals collectively have nearly **400** years of industry experience with **18** years on average.
- ▶ Over **90%** of underwritings are for primary funds and co-investments, not funds-of-funds.

Organizational Scale

\$4.7 trillion in assets under advisement.

524 institutional client funds across endowments, foundations, pensions, and insurance companies.

- ▶ General partners often seek Callan as a partner of choice given our blue-chip client base.

\$233
billion

Alternative commitments
recommended 2023–2025

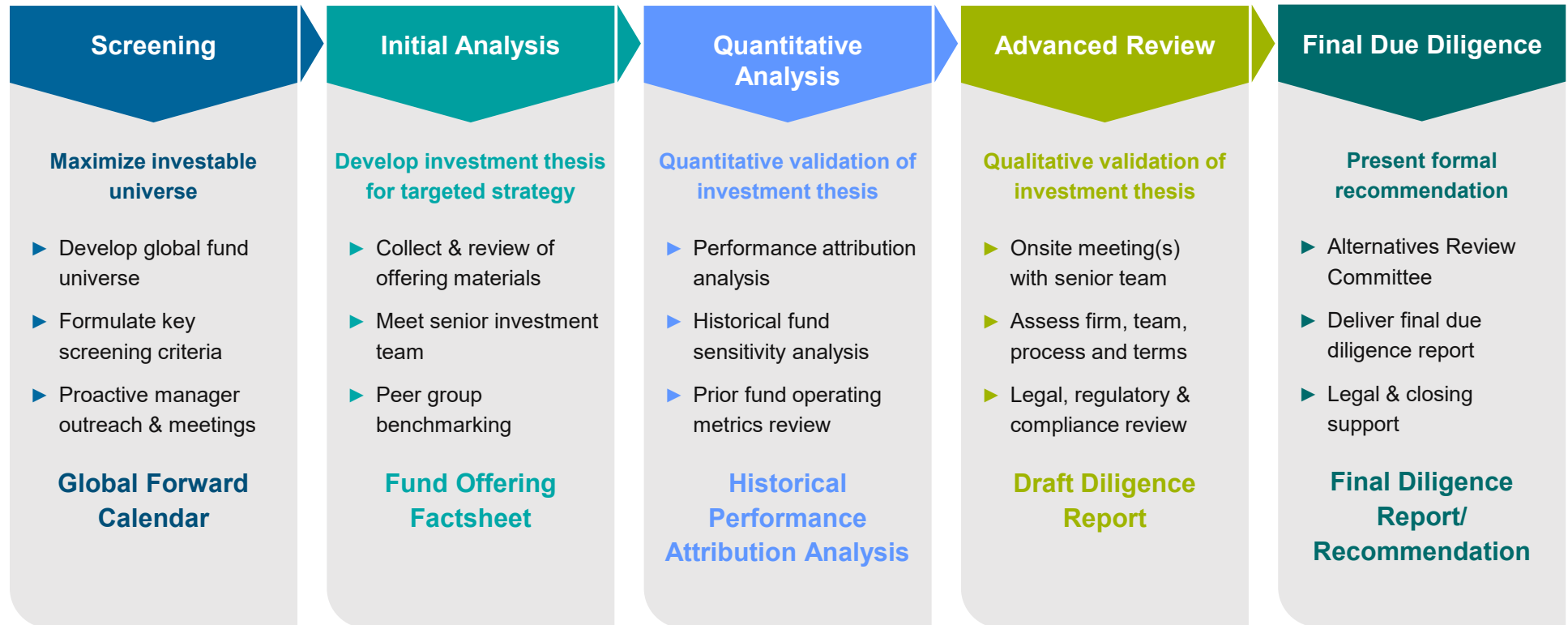
of Fund Allocations by Alternative Asset Class



Data as of December 31, 2025

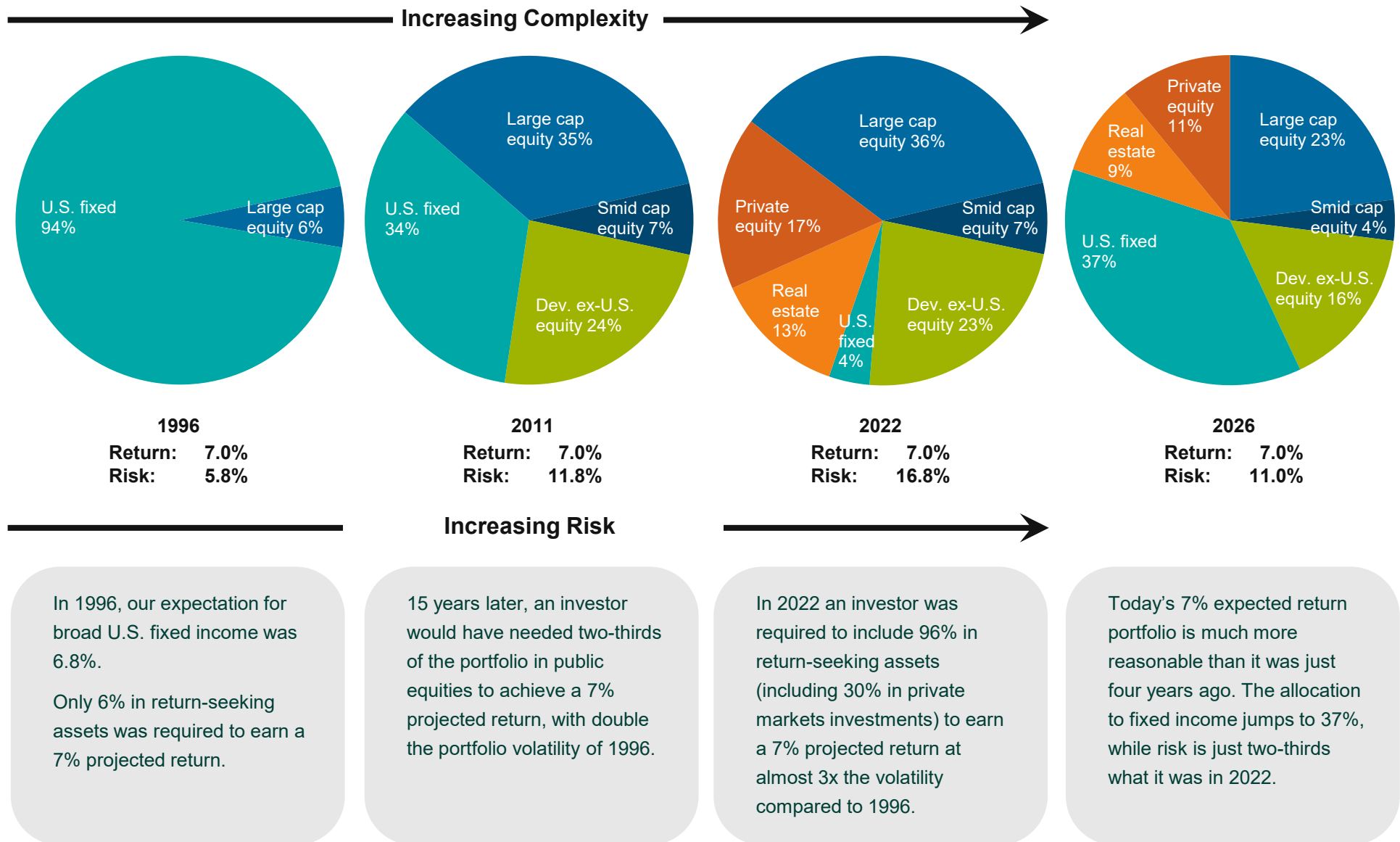
Alternatives Due Diligence Process

Callan follows a consistent and thorough due diligence process



- Callan maintains a focus list of about 1,100 strategies across Alternatives, based on our proprietary forward calendar of over 5,000 fund series. This includes closed-end funds, open-end funds, and funds-of-funds.
- Client-sourced opportunities are welcomed and undergo the same due diligence process

7% Expected Returns Over Past 30 Years



2026–2035 Capital Market Assumptions

		PROJECTED RETURN			PROJECTED RISK	
		1-Year Arithmetic	10-Year Geometric*	Real	Standard Deviation	
Asset Class	Index					Projected Yield
Equities						
Broad US Equity	Russell 3000	8.70%	7.35%	4.85%	17.35%	1.45%
Large Cap US Equity	S&P 500	8.50%	7.25%	4.75%	17.00%	1.50%
Smid Cap US Equity	Russell 2500	9.60%	7.45%	4.95%	22.00%	1.25%
Global ex-US Equity	MSCI ACWI ex USA	9.45%	7.45%	4.95%	21.25%	3.20%
Developed ex-US Equity	MSCI World ex USA	9.05%	7.25%	4.75%	20.15%	3.25%
Emerging Market Equity	MSCI Emerging Markets	10.30%	7.45%	4.95%	25.65%	3.05%
US REITS	NAREIT All Equity	8.90%	6.95%	4.45%	20.90%	4.20%
Fixed Income						
Short Duration Gov't/Credit	Bloomberg 1-3 Year Gov/Credit	3.95%	3.90%	1.40%	2.40%	3.65%
Core US Fixed	Bloomberg Aggregate	4.85%	4.75%	2.25%	4.45%	4.55%
Global ex-US Fixed	Bloomberg Global Agg ex US	3.35%	2.90%	0.40%	9.80%	2.85%
TIPS	Bloomberg TIPS	4.65%	4.50%	2.00%	5.40%	4.20%
Long Gov't/Credit	Bloomberg Long Gov/Credit	5.85%	5.20%	2.70%	11.70%	5.40%
High Yield	Bloomberg High Yield	6.55%	5.90%	3.40%	11.75%	8.05%
Bank Loans	S&P/LSTA Leveraged Loan Index	6.45%	6.00%	3.50%	9.90%	7.95%
Emerging Market Sovereign Debt	EMBI Global Diversified	5.55%	5.00%	2.50%	10.70%	7.25%
Alternatives						
Core Real Estate	NCREIF ODCE	7.15%	6.25%	3.75%	14.00%	4.00%
Private Infrastructure	MSCI Glb Infra/FTSE Dev Core 50/50	7.40%	6.35%	3.85%	15.20%	4.90%
Private Equity	Cambridge Private Equity	11.80%	8.50%	6.00%	27.60%	0.00%
Private Credit	Cambridge Senior Debt Index	8.35%	7.25%	4.75%	15.70%	7.25%
Hedge Funds	Callan Hedge FOF Database	6.00%	5.70%	3.20%	8.20%	0.00%
Commodities	Bloomberg Commodity	5.40%	3.90%	1.40%	18.05%	3.00%
Cash Equivalents	90-Day T-Bill	3.00%	3.00%	0.50%	0.90%	3.00%
Inflation	CPI-U		2.50%		1.60%	

* Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).

2026–2035 Callan Capital Markets Assumptions Correlations

Large Cap U.S. Equity	1.00																					
Smid Cap U.S. Equity	0.86	1.00																				
Dev ex-U.S. Equity	0.70	0.81	1.00																			
Emerging Market Equity	0.74	0.81	0.89	1.00																		
Short Duration	0.07	0.03	0.06	0.01	1.00																	
Core U.S. Fixed	0.14	0.08	0.11	0.06	0.80	1.00																
Long Government	0.07	0.05	0.08	0.05	0.67	0.83	1.00															
Long Credit	0.40	0.35	0.35	0.35	0.64	0.81	0.72	1.00														
TIPS	0.02	0.00	0.01	-0.02	0.55	0.75	0.56	0.54	1.00													
High Yield	0.73	0.73	0.70	0.73	0.13	0.15	0.05	0.45	0.06	1.00												
Global ex-U.S. Fixed	0.15	0.14	0.17	0.13	0.50	0.53	0.43	0.53	0.40	0.16	1.00											
EM Sovereign Debt	0.61	0.62	0.63	0.67	0.17	0.23	0.13	0.46	0.11	0.62	0.17	1.00										
Core Real Estate	0.38	0.31	0.33	0.28	0.17	0.21	0.10	0.30	0.13	0.30	0.15	0.22	1.00									
Private Infrastructure	0.47	0.45	0.45	0.43	0.14	0.18	0.10	0.33	0.08	0.34	0.18	0.32	0.65	1.00								
Private Equity	0.79	0.76	0.75	0.73	-0.02	0.02	-0.06	0.26	-0.07	0.55	0.10	0.45	0.44	0.52	1.00							
Private Credit	0.65	0.64	0.62	0.63	0.04	0.00	-0.02	0.31	-0.05	0.55	0.11	0.47	0.26	0.27	0.65	1.00						
Hedge Funds	0.62	0.58	0.55	0.55	0.28	0.41	0.27	0.52	0.26	0.50	0.25	0.48	0.20	0.31	0.42	0.47	1.00					
Commodities	0.20	0.20	0.20	0.20	-0.04	-0.05	-0.10	0.05	0.00	0.18	0.05	0.15	0.16	0.15	0.16	0.14	0.17	1.00				
Cash Equivalents	-0.02	-0.07	-0.08	-0.08	0.27	0.16	0.12	0.04	0.14	-0.03	0.10	-0.02	0.02	-0.04	-0.04	-0.04	0.00	-0.02	1.00			
Inflation	0.00	0.02	0.00	0.02	-0.20	-0.22	-0.30	-0.20	0.25	-0.03	-0.12	-0.04	0.20	0.10	0.04	-0.04	-0.01	0.35	0.02	1.00		
	Large Cap	Smid Cap	Dev ex-US	EM Equity	Short Dur	Core Fix	Long Gov	Long Credit	TIPS	High Yield	Gl ex-US Fixed	EMD	Core RE	Pvt Infra	Pvt Equity	Pvt Credit	Hedge Fund	Comm	Cash Eq	Inflation		

Source: Callan

Biographies



Greg DeForrest, CFA, is an executive vice president and head of Fund Sponsor Consulting. Greg works with a variety of clients, including corporate and public defined benefit plans, corporate defined contribution plans, insurance companies, taxable trusts, endowments, and foundations to develop, implement, and monitor their plan-specific objectives.

Greg is a member of Callan's Management Committee, Manager Search Committee, and Institute Advisory Committee. He is also a shareholder of the firm.

Greg joined Callan in 1998 as a member of Callan's Client Report Services. He then joined the Global Manager Research group in 2001 as a fixed income specialist and went on to manage the group in 2007. In 2009, he joined the West Coast consulting team as an investment consultant and became the group's manager in 2014. He became the head of Fund Sponsor Consulting in 2023.

Greg received a BA from Villanova University. He is a holder of the right to use the Chartered Financial Analyst® designation and is a member of CFA Institute and CFA Society San Francisco.



Claire Telleen, CFA, is a senior vice president and investment consultant on Callan's West Coast consulting team. Based in the San Francisco office, she works with a variety of clients, including public defined benefit plans, corporate defined benefit plans and corporate defined contribution plans. Claire provides client service and support in the areas of investment manager monitoring and reviews, performance measurement, strategic planning, and additional client projects. Claire is a member of Callan's Defined Contribution Committee, Corporate Defined Benefit Focus Group, and is a shareholder of the firm.

Claire joined Callan in 2008. Prior to becoming a consultant in 2011, she was a senior analyst in the Client Report Services group, where she was responsible for calculating investment returns, preparing monthly and quarterly performance measurement reports, training new analysts, and handling special client requests.

Claire earned a BA in mathematics with a minor in economics from Boston College. Claire is a holder of the right to use the Chartered Financial Analyst® designation and is a member of CFA Institute and CFA Society San Francisco.

Biographies



Hannah Vieira is a vice president in Callan's West Coast consulting office. She works with a diverse range of clients, including corporate and public defined contribution and defined benefit plans, as well as nonprofit organizations. Hannah supports clients in the areas of performance evaluation, strategic planning and implementation, investment manager research and due diligence, and the coordination of special projects and ad-hoc requests. She is a member of Callan's ESG Team and Manager Search Committee and is a shareholder of the firm.

Hannah joined Callan in 2018 as an analyst in the Global Manager Research group and became a member of the West Coast consulting team in 2020 before relocating to New York in 2023.

Hannah graduated cum laude from the University of Massachusetts Amherst's Commonwealth Honors College, earning a Bachelor of Science in mathematics with dual concentrations in actuarial science and pure mathematics, along with a secondary major in economics. She has passed Level I of the CFA Program.

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