November 2024 IC Meeting

Schedule	Friday, November 22, 2024 10:00 AM — 12:00 PM CST
Venue	4700 Mueller Blvd., Austin TX 78723
Organizer	Sarah McCleary

Agenda

1. Call roll of Committee members

Presented by Ed Van Eenoo

COAERS

COMMITTEE MEETING
Agenda Item Information Sheet

AGENDA ITEM 1:
Call roll of Committee members

AGENDA ITEM OBJECTIVE

The objective of the agenda item is to determine for the record which Trustees are present at the start of the meeting.

Please note that logging in to this meeting in real-time on Convene will automatically mark you as “present”. Sarah will indicate in the minutes if you are in person or virtual. If there are any Trustees who have not yet logged into Convene, please indicate to Sarah so she can mark you as present.

2. Review order of business and establish meeting objectives

Presented by Ed Van Eenoo

COAERS

COMMITTEE MEETING
Agenda Item Information Sheet

AGENDA ITEM 2:
Review order of business and establish meeting objectives

AGENDA ITEM OBJECTIVE
This agenda item provides Trustees the opportunity to review the order of business and to express a desire to take an agenda item out of order, and to discuss the key objectives of the meeting.

1. The Committee will review reports on quarterly investment performance including strategy, and compliance.
2. The Committee will receive an educational presentation on Private Equity.
3. The Committee will discuss and consider proposed revisions to the Investment Policy Statement.
4. The Committee will discuss and consider the request for proposal for Private Markets Consultant services.
5. The Committee will discuss and consider the proposed 2025 investment budget.
6. The Committee will discuss the development of the 2025 Committee work plan.

RELEVANCE TO STRATEGIC PLAN
This agenda item meets **COAERS Strategic Plan Goal 4: Identify and implement leading practices in board governance, pension administration, and investment management.** It is an industry best practice to establish meeting objectives and review them at the outset of each meeting.

3. Receive public comments

Presented by Ed Van Eenoo

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COMMITTEE MEETING
Agenda Item Information Sheet

AGENDA ITEM 3:
Receive public comments

AGENDA ITEM OBJECTIVE
This standing agenda item allows System members and members of the public the opportunity to provide comments to the Board.

ITEM SUMMARY
The Chair will recognize any person who wishes to comment for up to three minutes per person.

RELEVANCE TO STRATEGIC PLAN/CORE COMPETENCIES
This agenda item meets the core competency established in the **COAERS Strategic Plan** "*Transparency: Complying with open meeting and public information laws to ensure the decision-making process is clear to members and the public.*"

4. Consider approval of the August 22, 2024 Investment Committee minutes

Presented by Ed Van Eenoo

COAERS

COMMITTEE MEETING
Agenda Item Information Sheet

AGENDA ITEM 4:
Consider approval of the August 22, 2024 Investment Committee minutes

AGENDA ITEM OBJECTIVE
This standing agenda item seeks approval of the minutes from the prior Investment Committee meeting. The charter for the Investment Committee requires the Committee to keep minutes of its meetings.

RECOMMENDATION FOR COMMITTEE ACTION
Staff recommends approval of the minutes of the August 22, 2024 Investment Committee meeting.

RELEVANCE TO STRATEGIC PLAN
This agenda item meets the core competency established in the **COAERS Strategic Plan** "*Transparency: Complying with open meeting and public information laws to ensure the decision-making process is clear to members and the public."*

ATTACHMENT
1. Draft minutes of August 22, 2024 Investment Committee meeting

Investment Committee
MINUTES
Meeting held in person
4700 Mueller Blvd., Austin TX 78723
Thursday, August 22, 2024 10:00 AM CDT

Committee Member Present/(Absent)
Ed Van Eenoo, Committee Chair
Michael Granof
Dick Lavine
Brad Sinclair
Diana Thomas

Other Board Trustees Present/(Absent)
Michael Benson
(Kelly Crook)
Yuejiao Liu†
(Chris Noak)
(Leslie Pool)
Anthony Ross

<u>Others Present</u>
<u>Staff:</u>
Christopher Hanson
David Kushner
David Stafford
Ty Sorrel
Kelly Doggett
Sarah McCleary
Deverett Morrow
Yun Quintanilla

<u>Guests:</u>
Leo Festino, Meketa
Stephanie Sorg, Meketa
Aaron Lally, Meketa
Paige Saenz, General Counsel

* present telephonically
† present via videoconference

1 Call roll of Committee members

Committee Chair Van Eenoo called the meeting to order at 10:00 a.m. The following Committee members were present in person: Van Eenoo, Granof, Lavine, Sinclair, and Thomas.

2 Review order of business and establish meeting objectives

Committee Chair Van Eenoo referred Trustees to the order of business and meeting objectives. No changes were made to the order of business.

3 Receive public comments

Committee Chair Van Eenoo asked if any members of the public wished to speak, either now or during an agenda item. There were no comments.

4 Consider approval of the May 23, 2024 Investment Committee minutes

Committee Chair Van Eenoo asked the Committee to review the Investment Committee minutes. Mr. Brad Sinclair moved approval of the May 23, 2024 Investment Committee minutes. Ms. Diana Thomas seconded. The motion passed unanimously.

5 Review of total portfolio, asset class, investment manager performance, and compliance reports for the second quarter

Stephanie Sorg and Aaron Lally of Meketa presented the results from the second quarter. As of June 30, 2024, the market value of the COAERS portfolio was $3.4 billion, an increase of $34.2 million from the end of the first quarter. For the second quarter of 2024, the portfolio posted a return of 1.2%, which lagged the policy and passive benchmark returns, but exceeded the peer median performance. Ms. Sorg and Mr. Lally introduced a "report card" showing quarter-to-date, one-year, three-year, and five-year measurements. Trustees requested additional information at a future date on the appropriate peer group.

6 Receive educational presentation on fund governance, investment beliefs, and best practices

As part of the onboarding process as a new consultant, Mr. Leo Festino of Meketa presented on characteristics of effective Boards, best practices in both fund governance and roles and responsibilities and preparing a statement of investment beliefs. Mr. Festino noted that investment beliefs can make Boards more consistent in their decision-making process and that spending ample Board time on important issues is prudent. Meketa will survey each Trustee, provide more training around risk at the October workshop, and work with Staff to revise the Investment Policy Statement (IPS) by the November committee meeting.

Ms. Liu left the meeting at 11:13 a.m.

7 Discuss 2024 Investment Committee Work Plan and COAERS investment program projects

Mr. Hanson updated the Committee on changes to the Work Plan made to accommodate the time needed to fully on-board the new consultants. Trustees asked that the Investment Policy Statement still be updated by December; Staff assured them that even if a called meeting is needed, that timeline can be kept.

8 Call for future agenda items

Committee Chair Van Eenoo asked for any future agenda items.

As there were no further items to address, the meeting adjourned at 11:19 a.m.

5. Review of total portfolio, asset class, investment manager performance, and compliance reports for the second quarter

Presented by Leo Festino and Stephanie Sorg, Meketa

COAERS

COMMITTEE MEETING
Agenda Item Information Sheet

AGENDA ITEM 5:
Review of total portfolio, asset class, investment manager performance, and compliance reports for the third quarter

AGENDA ITEM OBJECTIVE
This agenda item is for the Committee to review the Fund's performance through September 30, 2024.

RECOMMENDATION FOR COMMITTEE ACTION
At the Committee's discretion.

ITEM SUMMARY
Meketa will lead a review of the Fund's performance through September 30, 2024. Additionally, Staff has provided standard quarterly reports in a consolidated fashion. Based on Trustee feedback to streamline meetings, standard quarterly reports have been included in the supplemental materials.

RELEVANCE TO STRATEGIC PLAN
This item allows the Committee to review Fund performance and assess the extent to which the System is meeting **COAERS Strategic Plan Goal 1: Achieve and maintain a funding level that ensures the long-term sustainability of the retirement system**. Long-term investment performance consistent with the investment program's goals is central to long-term system sustainability. Additionally, the agenda item allows the Committee to review the Fund goals and compliance requirements to ensure the System is fulfilling **COAERS Strategic Plan Goal 2: Responsibly Manage the Risks of the System**.

ATTACHMENTS
1. Meketa Summary of Fund Performance 2024-Q3
2. Meketa Presentation: Lagging Private Markets Performance

SUPPLEMENTAL MATERIALS PROVIDED VIA CONVENE APP
1. Additional Investment Performance Reports
2. Additional Quarterly Staff Reports

MEKETA

City of Austin Employees' Retirement System

November 22, 2024

Meeting Materials

Agenda

1. Executive Summary
2. Performance Report as of September 30, 2024

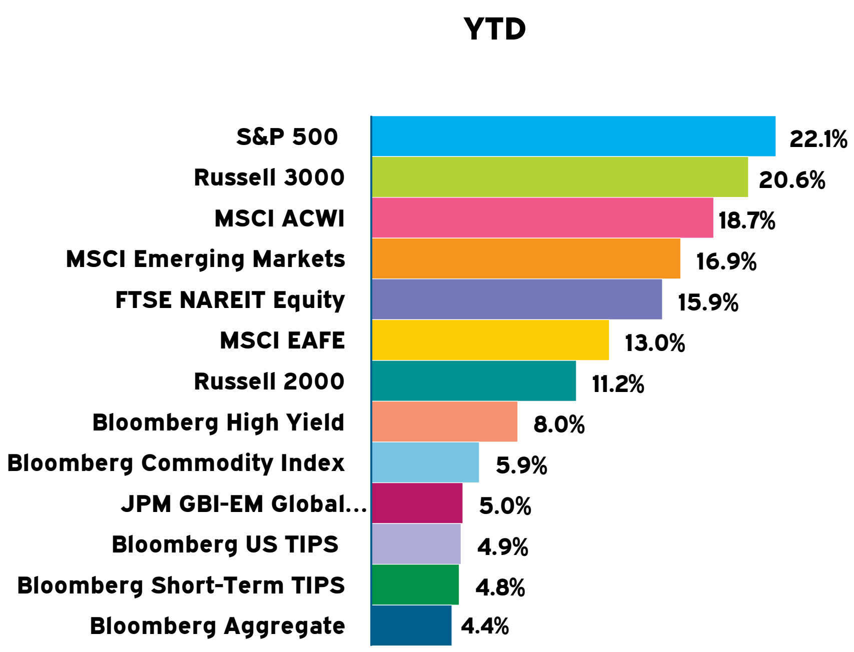
Executive Summary

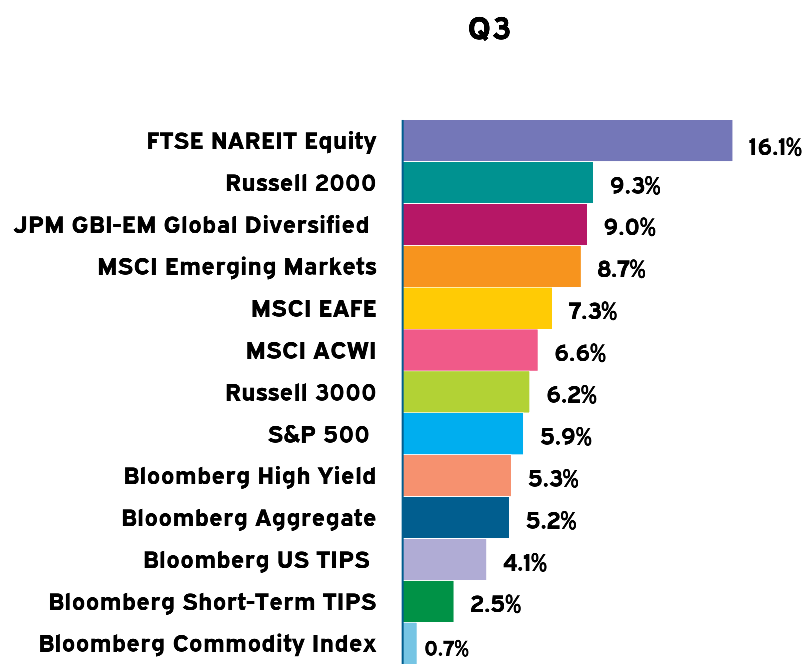
MEKETA

Economic and Market Update[1]

→ Stock and bond markets rallied despite heightened **volatility**. Gains were driven by central bank indications of future interest rate cuts given declining inflation pressures. In September, the Federal Reserve surprised many with a 50 basis point interest rate cut while the US economy and employment remained quite healthy.

→ Looking ahead, the paths of inflation, labor markets, and monetary policy, China's slowing economy and potential policy stimulus benefits, increased geopolitical tensions, and the looming US election will be key factors.





[1] Source: Bloomberg. Data is as of September 30, 2024.

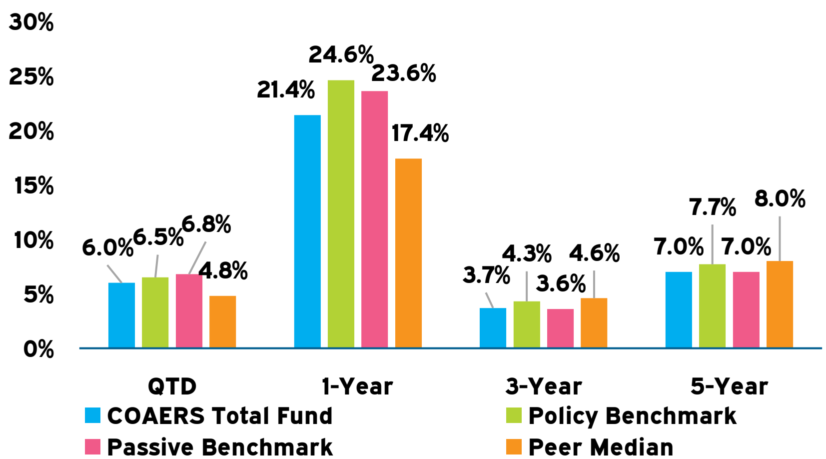
Executive Summary

→ As of September 30, 2024, the market value of the COAERS portfolio was $3.6 billion, an increase of $199.8 million from the end of the second quarter. For the third quarter of 2024, the COAERS portfolio posted a return of 6.0%, which lagged the Policy and Passive Benchmark returns, but exceeded the peer[1] median performance.

→ Over the trailing one-year period, the COAERS portfolio returned 21.4%, compared to 24.6% for the Policy Benchmark.

→ The portfolio's risk volatility, as indicated by standard deviation, was below the Policy Benchmark but above the peer group median for the trailing one-year period, at 8.3% versus 10.7% and 6.7%, respectively. The long-term risk-adjusted return of the COAERS portfolio, as indicated by the Sharpe Ratio over the past five-year period, matched the Policy Benchmark at 0.4, but was below peer group median of 0.6.

Return Summary



Summary of Cash Flows	QTD	1-Year
Beginning MV	$3,391,016,424	$2,976,657,953
Net Cash Flow	-3,115,837	-18,486,803
Net Investment Change	202,957,316	632,686,753
Ending Market Value	$3,590,857,903	$3,590,857,903

[1] InvMetrics Public DB $1B - $5B net.

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Report Card

	Results			
Category	QTD	One-Year	Three-Year	Five-Year
Total Fund Absolute Performance	Positive	Positive	Positive	Positive
Total Fund Performance vs. Policy Benchmark	Underperformed	Underperformed	Underperformed	Underperformed
Total Fund Performance vs. Peers[1]	1st Quartile	1st Quartile	4th Quartile	4th Quartile
% Active Public Managers Outperforming Benchmarks	10%	30%	13%	50%
% Active Public Managers Outperforming Peer Median	40%	70%	25%	63%
Compliance with Targets	In Compliance	In Compliance	In Compliance	In Compliance
Return in Excess of Actuarial Target (6.75%)	NM	Yes	No	Yes

→ The Total Fund generated positive absolute returns over all measurable time periods but lagged the Policy Benchmark and failed to generate performance in excess of the actuarial target (6.75%) over the trailing, three-year period.

- Underperformance versus the Policy Benchmark over the trailing five-year period is predominantly attributable to manager selection/execution within the Global Equity sleeve. This exposure represents over 50% of the Total Fund value and lagged its respective benchmark by -1.9% over the past five years (annualized), on average.

[1] InvMetrics Public DB $1B - $5B net.

Performance Drivers and Detractors

→ The portfolio's positive absolute performance during the quarter was primarily driven by strong performance within Global Equity and Multi-Asset, with each asset class returning 6.7% and 8.1%, respectively, and collectively represent 63.9% of the overall portfolio.

- Within the Multi-Asset sleeve, the Commodities & Other sub-asset class achieved a return of 13.0%, the highest within the Total Fund. The strong performance was driven by the NISA Gold Futures strategy, which is the only strategy in the Commodities & Other sub-asset class. Key contributing factors behind the rally in Gold included the Fed's 0.5% interest rate cut, China's announcement of a broad-based stimulus package, and ongoing purchases of Gold by central banks.
- Within the Global Equity asset class, US Equity recorded a quarterly return of 6.8%, while Developed Markets Equity achieved a return of 6.9%. Leading performers were the SSGA MSCI US Small Cap Index and the NT MSCI World Ex US Small Cap Index, with returns of 8.8% and 10.5%, respectively. Small Cap stocks performed strongly throughout the quarter, benefiting from the Fed's 0.5% interest rate cut, which typically provides a significant boost to small cap stocks due to their higher reliance on floating rate debt.

→ Laggards from the portfolio's quarter-to-date absolute performance included Fixed Income and Cash & Equivalents, with each asset class returning 4.1% and 1.3%, respectively.

- In the Fixed Income asset class, US Treasuries achieved a return of 3.7%. The Agincourt 1-5 YR US TIPS fund was the weakest performer within US Treasuries, returning 2.8%, as TIPS faced slight headwinds from a decline in the breakeven inflation rate.

Performance Report as of September 30, 2024

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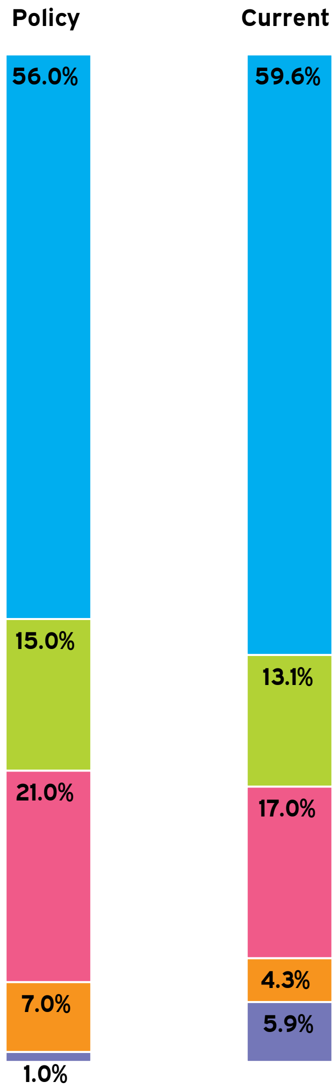
City of Austin Employees' Retirement System

Asset Allocation Compliance | As of September 30, 2024



Allocation vs. Targets and Policy

	Balance ($)	Current Allocation (%)	Policy (%)	Difference (%)	Policy Range (%)	Within IPS Range?
Global Equity	**2,141,349,517**	**59.6**	**56.0**	**3.6**	**46.0 - 66.0**	**Yes**
US Equity	1,319,113,267	36.7	34.0	2.7	22.0 - 47.0	Yes
Developed Markets Equity	575,298,237	16.0	16.0	0.0	11.0 - 20.0	Yes
Emerging Markets Equity	246,938,013	6.9	6.0	0.9	2.0 - 13.0	Yes
Real Assets	**469,983,794**	**13.1**	**15.0**	**-1.9**	**10.0 - 20.0**	**Yes**
Real Estate Equity	297,645,626	8.3	10.0	-1.7	5.0 - 15.0	Yes
Infrastructure Equity	172,338,168	4.8	5.0	-0.2	0.0 - 10.0	Yes
Fixed Income	**611,928,171**	**17.0**	**21.0**	**-4.0**	**16.0 - 33.0**	**Yes**
US Treasuries	386,121,926	10.8	13.0	-2.2	9.0 - 25.0	Yes
US Mortgages	76,269,668	2.1	4.0	-1.9	2.0 - 8.0	Yes
US Credit	149,536,577	4.2	4.0	0.2	1.0 - 10.0	Yes
Multi-Asset	**155,440,189**	**4.3**	**7.0**	**-2.7**	**2.5 - 15.0**	**Yes**
Asset Allocation	102,690,229	2.9	5.0	-2.1	2.5 - 10.0	Yes
Commodities & Other	52,749,960	1.5	2.0	-0.5	0.0 - 10.0	Yes
Cash & Equivalents	**212,156,231**	**5.9**	**1.0**	**4.9**	**-10.0 - 10.0**	**Yes**
US Dollar Instruments	160,425,819	4.5	1.0	3.5	-10.0 - 10.0	Yes
Other Currencies	51,730,413	1.4	0.0	1.4	0.0 - 2.0	Yes
Total	**3,590,857,903**	**100.0**	**100.0**	**0.0**		

Performance for Private Real Estate (Principal US Property), Private Infrastructure (IFM Global Infrastructure), and Private Credit (Blue Owl Diversified Lending Fund), as well as their respective benchmarks, are lagged by one quarter.

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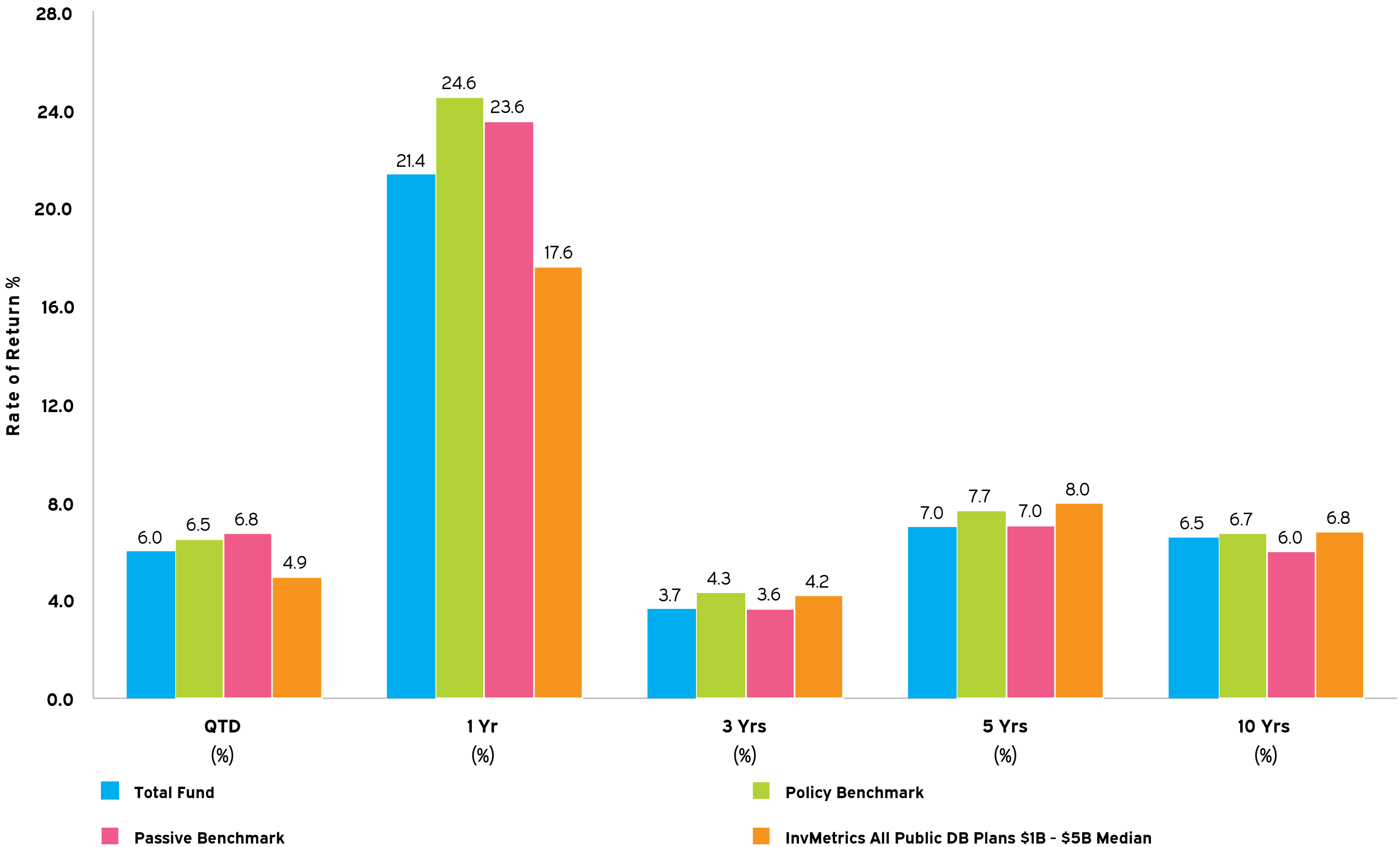
Net Return Summary



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City of Austin Employees' Retirement System

Total Portfolio Net Performance | As of September 30, 2024

	Market Value $	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Total Fund	**3,590,857,903**		**6.0**	**11.8**	**21.4**	**3.7**	**7.0**	**6.5**	**9.5**	**Jun-82**
Policy Benchmark			*6.5*	*12.4*	*24.6*	*4.3*	*7.7*	*6.7*	*--*	
Passive Benchmark			*6.8*	*12.5*	*23.6*	*3.6*	*7.0*	*6.0*	*--*	
Global Equity	**2,141,349,517**		**6.7**	**15.8**	**28.7**	**5.3**	**10.0**	**8.6**	**9.1**	**Jun-88**
MSCI AC World IMI Index (Net)			*6.8*	*17.8*	*31.0*	*7.4*	*11.9*	*9.2*	*--*	
US Equity	**1,319,113,267**		**6.8**	**17.9**	**31.6**	**7.9**	**12.3**	**11.0**	**10.9**	**Jun-88**
US Equity Benchmark			*6.1*	*21.6*	*36.0*	*10.7*	*15.5*	*12.9*	*11.1*	
Developed Markets Equity	**575,298,237**		**6.9**	**11.4**	**24.2**	**2.7**	**8.2**	**6.7**	**5.5**	**Jan-08**
Developed Market Equity Benchmark			*8.1*	*13.5*	*25.4*	*5.8*	*8.4*	*5.7*	*3.4*	
Emerging Markets Equity	**246,938,013**		**5.9**	**15.5**	**24.4**	**-0.9**	**4.2**	**3.3**	**1.9**	**Mar-08**
Emerging Markets Equity Benchmark			*8.2*	*16.3*	*25.5*	*0.3*	*5.7*	*4.0*	*2.5*	
Real Assets	**469,983,794**		**6.6**	**5.7**	**11.0**	**3.5**	**4.6**	**5.7**	**6.0**	**Sep-04**
Real Assets Benchmark			*7.1*	*8.4*	*23.9*	*3.9*	*4.3*	*6.4*	*7.8*	
Real Estate Equity	**297,645,626**		**6.7**	**5.0**	**9.7**	**1.7**	**4.3**	**7.0**	**6.5**	**Sep-04**
Real Estate Equity Benchmark			*7.0*	*6.9*	*24.2*	*2.3*	*3.8*	*7.3*	*8.1*	
Infrastructure Equity	**172,338,168**		**6.2**	**6.4**	**12.9**	**7.1**	**--**	**--**	**3.8**	**Jan-20**
Infrastructure Equity Benchmark			*7.3*	*11.0*	*22.9*	*6.7*	*--*	*--*	*4.0*	

The Policy Benchmark includes the Real Assets Benchmark, which incorporates the MSCI Burgiss Infrastructure Funds Benchmark as of 7/1/2024. The MSCI Burgiss Infrastructure Funds index is released quarterly, with returns lagging by one quarter.

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City of Austin Employees' Retirement System

Total Portfolio Net Performance | As of September 30, 2024

	Market Value $	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Fixed Income	611,928,171		4.1	5.1	11.7	-1.7	-0.4	1.6	5.0	Feb-91
Global Fixed Income Benchmark			*5.2*	*1.9*	*10.1*	*-3.6*	*-1.2*	*0.9*	*4.7*	
US Treasuries	386,121,926		3.7	3.5	9.3	-2.4	-0.7	--	1.0	May-19
Blmbg. U.S. Treasury Index			*4.7*	*3.8*	*9.7*	*-1.8*	*-0.2*	--	*0.9*	
US Mortgages	76,269,668		5.4	5.3	12.9	-0.8	0.2	--	0.4	Aug-19
Blmbg. U.S. Mortgage Backed Securities			*5.5*	*4.5*	*12.3*	*-1.2*	*0.0*	--	*0.2*	
US Credit	149,536,577		4.6	9.8	19.3	0.1	2.2	--	2.7	Aug-19
Blmbg. U.S. Credit Index			*5.7*	*5.2*	*13.8*	*-1.1*	*1.1*	--	*1.5*	
Multi-Asset	155,440,189		8.1	16.9	28.4	6.8	8.5	6.1	6.4	Feb-14
Multi-Asset Benchmark			*6.8*	*12.5*	*23.6*	*3.6*	*6.9*	*5.9*	*6.0*	
Asset Allocation	102,690,229		5.8	12.3	22.6	4.8	--	--	9.2	May-20
Multi-Asset Benchmark			*6.8*	*12.5*	*23.6*	*3.6*	--	--	*9.6*	
Commodities & Other	52,749,960		13.0	27.1	41.5	13.0	--	--	9.7	Apr-20
Bloomberg Commodity Index Total Return			*0.7*	*5.9*	*1.0*	*3.7*	--	--	*14.2*	
Cash & Equivalents	212,156,231		1.3	4.0	5.4	3.6	2.3	--	--	Jul-17
Blmbg. U.S. Treasury Bills: 1-3 Months			*1.4*	*4.1*	*5.5*	*3.6*	*2.3*	--	*2.2*	
US Dollar Instruments	160,425,819		1.4	4.0	5.4	3.6	2.3	--	--	Jun-88
Blmbg. U.S. Treasury Bills: 1-3 Months			*1.4*	*4.1*	*5.5*	*3.6*	*2.3*	*1.6*	--	
Other Currencies	51,730,413		1.3	4.0	5.5	--	--	--	3.8	Dec-21
Blmbg. U.S. Treasury Bills: 1-3 Months			*1.4*	*4.1*	*5.5*	--	--	--	*3.8*	

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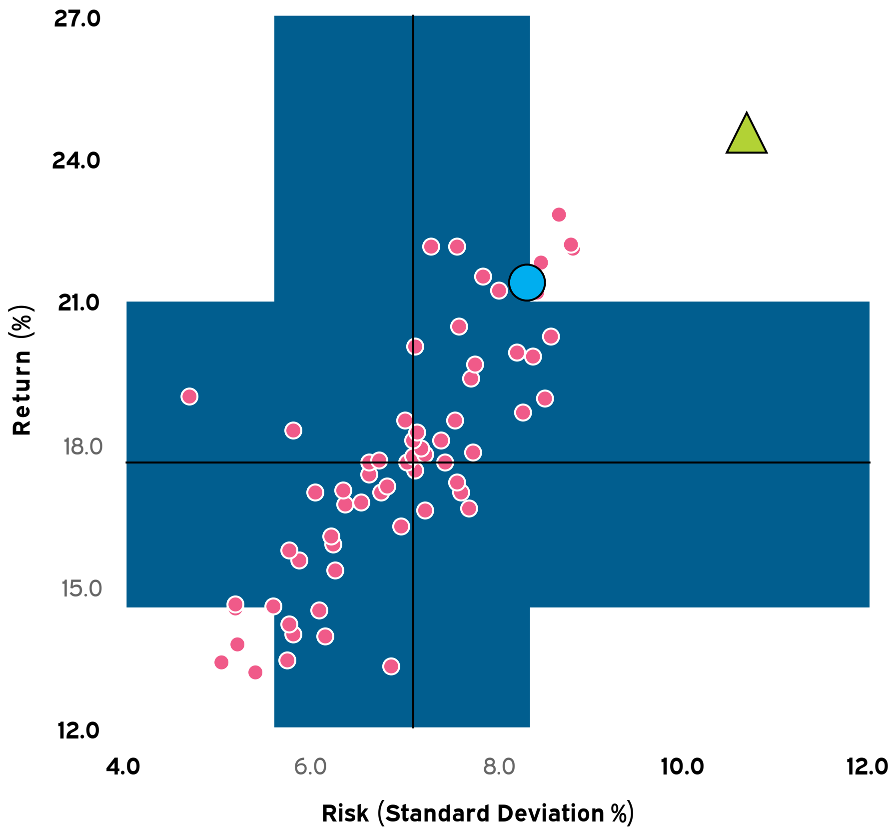
City of Austin Employees' Retirement System

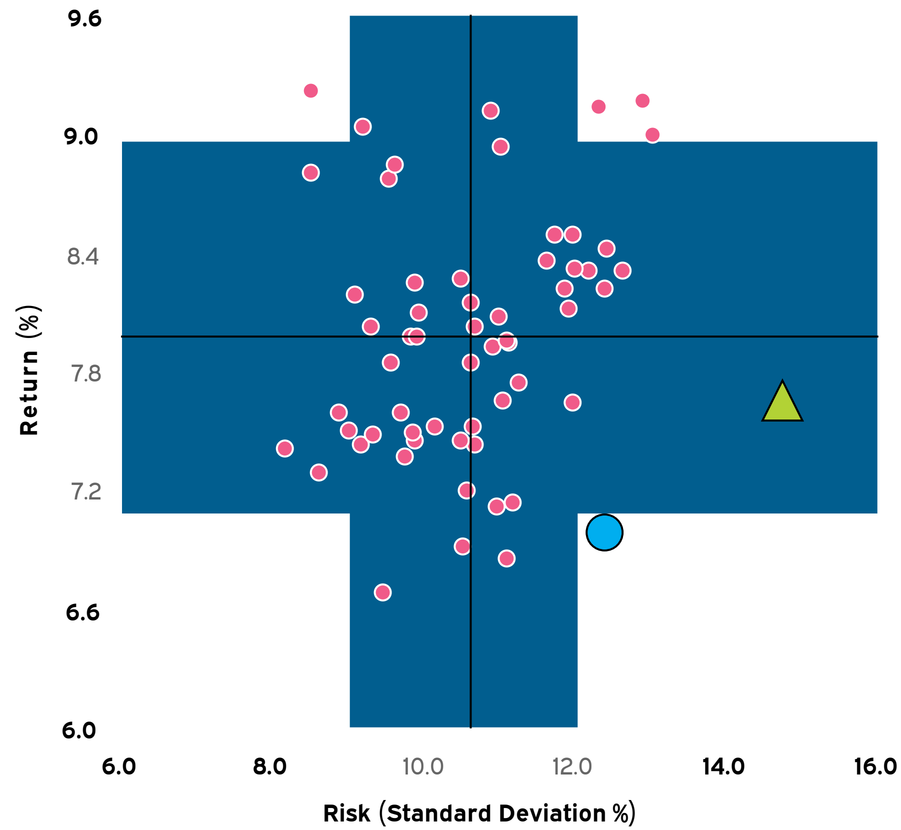
Total Fund | As of September 30, 2024

Annualized Return vs. Annualized Standard Deviation
1 Year Ending September 30, 2024



	Return	Standard Deviation
Total Fund	21.4	8.3
Policy Benchmark	24.6	10.7
— Median	17.6	7.1
68% Confidence Interval		

Annualized Return vs. Annualized Standard Deviation
5 Years Ending September 30, 2024



	Return	Standard Deviation
Total Fund	7.0	12.4
Policy Benchmark	7.7	14.7
— Median	8.0	10.6
68% Confidence Interval		

Peer Universe is InvMetrics All Public DB Plans $1B - $5B.

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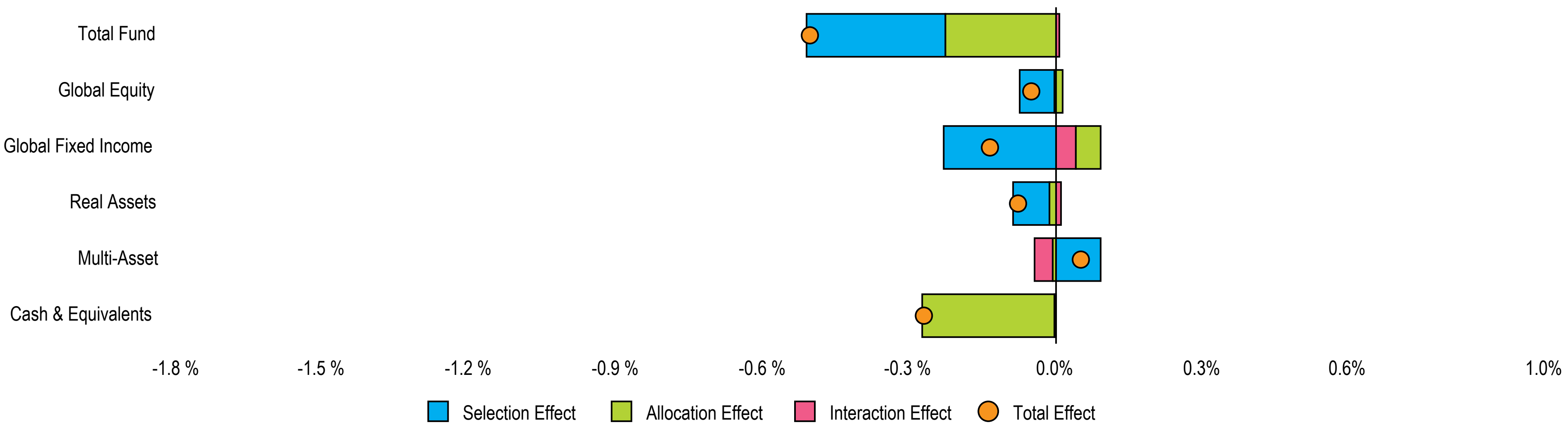
City of Austin Employees' Retirement System

Total Fund Attribution | 1 Quarter Ending September 30, 2024

Attribution Effects
1 Quarter Ending September 30, 2024



Attribution Summary
1 Quarter Ending September 30, 2024

	Wtd. Actual Return (%)	Wtd. Index Return (%)	Excess Return (%)	Selection Effect (%)	Allocation Effect (%)	Interaction Effect (%)	Total Effect (%)
Global Equity	6.7	6.8	-0.1	-0.1	0.0	0.0	-0.1
Global Fixed Income	4.1	5.2	-1.1	-0.2	0.1	0.0	-0.1
Real Assets	6.6	7.1	-0.5	-0.1	0.0	0.0	-0.1
Multi-Asset	8.1	6.8	1.3	0.1	0.0	0.0	0.0
Cash & Equivalents	1.3	1.4	0.0	0.0	-0.3	0.0	-0.3
Total Fund	**6.0**	**6.5**	**-0.5**	**-0.3**	**-0.2**	**0.0**	**-0.5**

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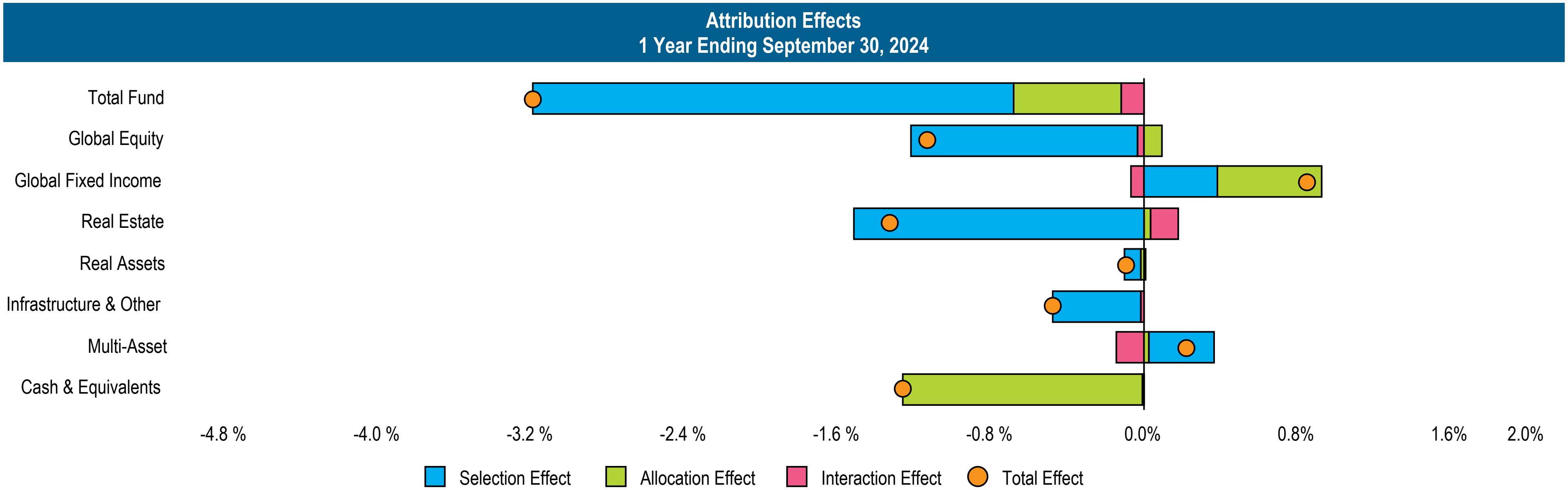
City of Austin Employees' Retirement System

Total Fund Attribution | 1 Year Ending September 30, 2024



Attribution Summary
1 Year Ending September 30, 2024

	Wtd. Actual Return (%)	Wtd. Index Return (%)	Excess Return (%)	Selection Effect (%)	Allocation Effect (%)	Interaction Effect (%)	Total Effect (%)
Global Equity	28.7	31.0	-2.2	-1.2	0.1	0.0	-1.1
Global Fixed Income	11.7	10.1	1.6	0.4	0.5	-0.1	0.9
Real Estate	2.8	16.1	-13.3	-1.5	0.0	0.1	-1.3
Real Assets	6.6	7.1	-0.5	-0.1	0.0	0.0	-0.1
Infrastructure & Other	6.3	14.6	-8.2	-0.5	0.0	0.0	-0.5
Multi-Asset	28.4	23.6	4.8	0.3	0.0	-0.1	0.2
Cash & Equivalents	5.4	5.5	-0.1	0.0	-1.2	0.0	-1.3
Total Fund	**21.4**	**24.6**	**-3.2**	**-2.5**	**-0.6**	**-0.1**	**-3.2**

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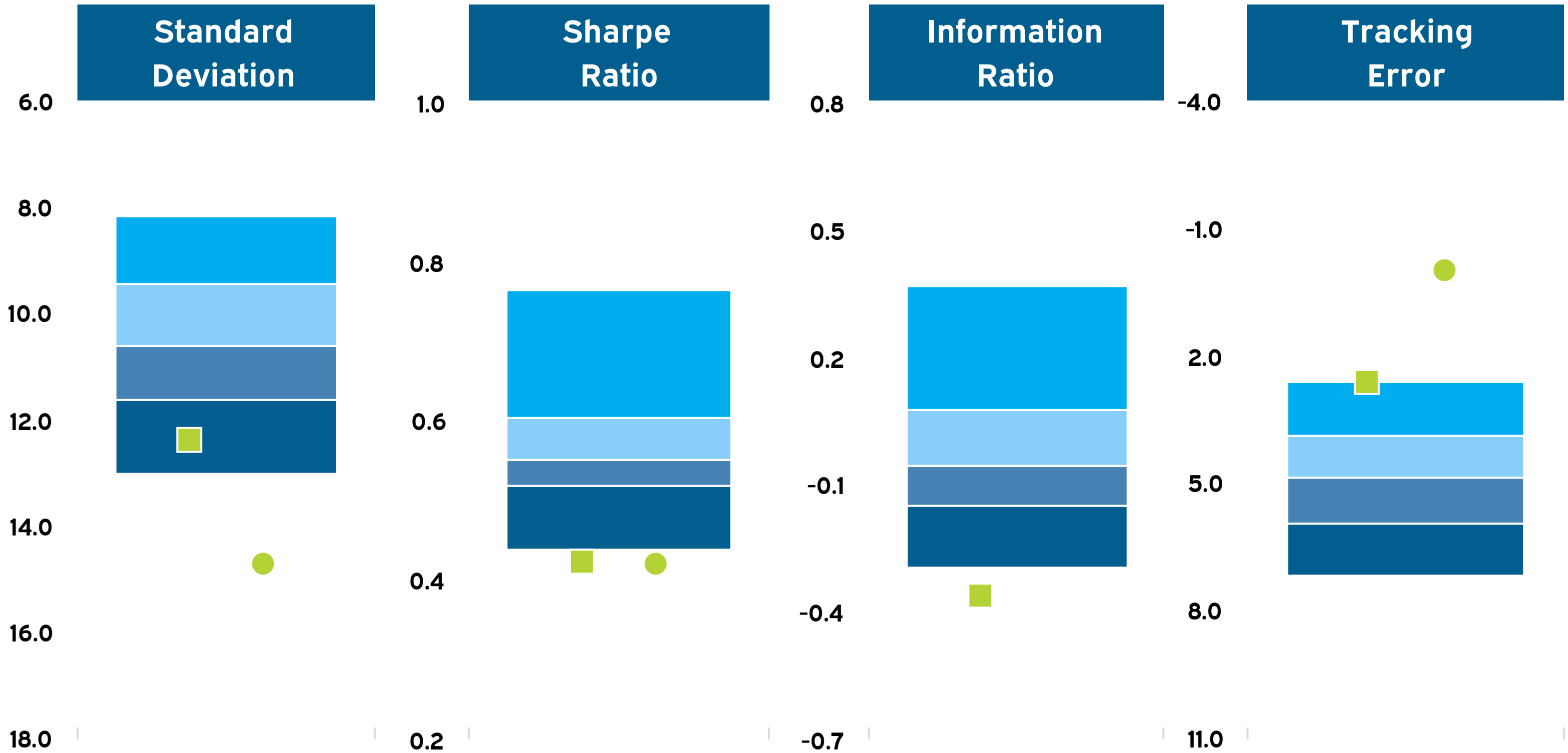
City of Austin Employees' Retirement System

Total Fund Risk Statistics vs. Peer Universe | As of September 30, 2024



	Standard Deviation 5 Yrs (%)	Sharpe Ratio 5 Yrs (%)	Information Ratio 5 Yrs (%)	Tracking Error 5 Yrs (%)
Total Fund	12.4 (88)	0.4 (96)	-0.4 (98)	2.6 (4)
Policy Benchmark	14.7 (100)	0.4 (97)	-	0.0 (1)
5th Percentile	8.2	0.8	0.4	2.6
1st Quartile	9.5	0.6	0.1	3.9
Median	10.6	0.6	-0.1	4.9
3rd Quartile	11.7	0.5	-0.1	6.0
95th Percentile	13.0	0.4	-0.3	7.2

Parentheses contain percentile rankings. Calculation based on monthly periodicity. Peer Universe is InvMetrics All Public DB Plans $1B - $5B.

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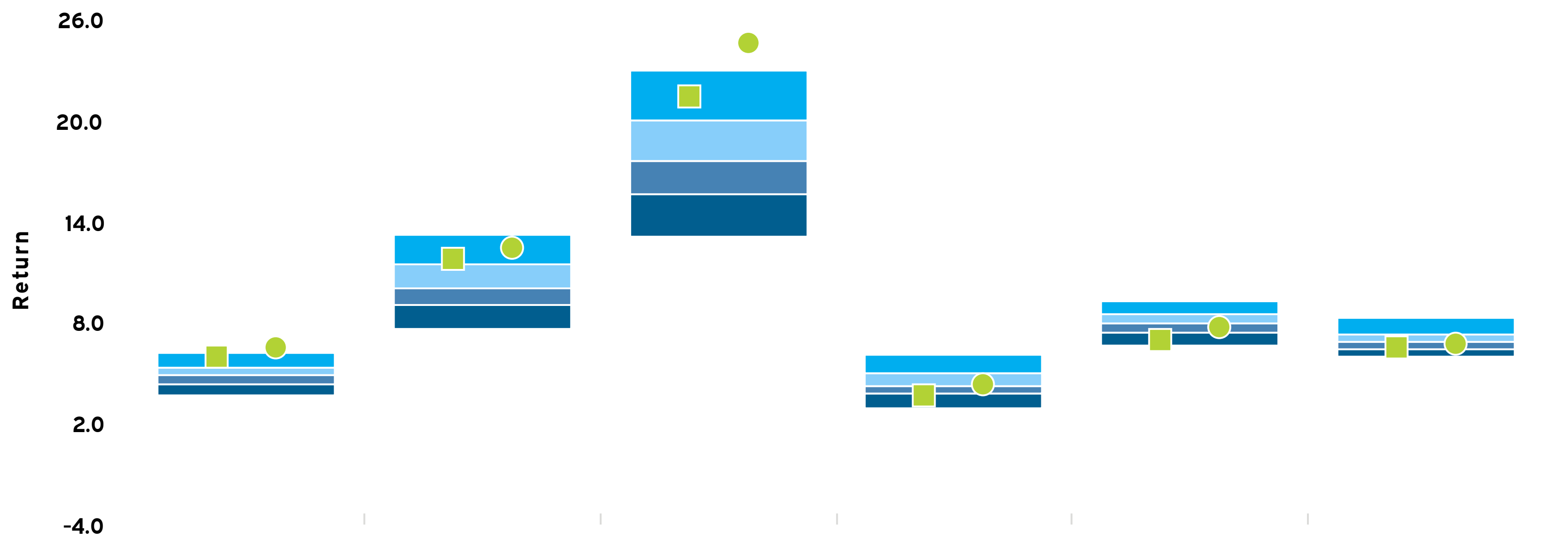
InvMetrics All Public DB Plans $1B - $5B Net



	QTD (%)		YTD (%)		1 Yr (%)		3 Yrs (%)		5 Yrs (%)		10 Yrs (%)	
Total Fund	6.0	(10)	11.8	(22)	21.4	(18)	3.7	(80)	7.0	(91)	6.5	(72)
Policy Benchmark	6.5	(3)	12.4	(12)	24.6	(1)	4.3	(48)	7.7	(60)	6.7	(61)
5th Percentile	6.1		13.2		23.0		6.1		9.3		8.2	
1st Quartile	5.3		11.4		20.0		5.0		8.5		7.3	
Median	4.9		10.0		17.6		4.2		8.0		6.8	
3rd Quartile	4.4		9.0		15.6		3.8		7.4		6.5	
95th Percentile	3.7		7.6		13.1		2.8		6.7		5.9	
Population	75		75		75		73		73		70	

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

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City of Austin Employees' Retirement System

November 22, 2024

Lagging Private Market Performance

Private Market Returns are Often Lagged

→ Valuation Frequency: Unlike public markets, which are marked to market daily, private market valuations are updated less frequently, typically on a quarterly basis.

→ Reporting Delays: Funds typically report their valuations with a delay of 60-90 days, and sometimes up to 120 days, relative to the reference date.

→ Industry Standard: The industry standard is to report valuations on a "one quarter cash flow adjusted" basis.

Meketa Report	Manager NAV Used	+/- Cash Flows in These Months	Value in Meketa Report
12/31	9/30	Oct., Nov., Dec.	9/30 + Capital Calls - Distributions
9/30	6/30	July, Aug., Sept.	6/30 + Capital Calls - Distributions
6/30	3/31	April, May, June	3/31 + Capital Calls - Distributions

Performance Reporting and Impact

Performance Reporting: Lagging 1-Quarter

→ Synchronized Reporting: Lagging private market performance by a quarter allows for synchronized reporting of total portfolio performance, incorporating finalized data from all asset classes.

→ Consistency: This approach provides a consistent and comparable performance measurement period across different investment types.

Short-Term vs. Long-Term Impact

→ Short-Term: Lagging performance by one quarter can impact short-term performance comparisons, particularly during periods of heightened market volatility.

→ Long-Term: Over longer periods, the impact of lagging performance by one quarter tends to diminish, providing a more accurate picture of overall performance.

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COAERS Performance Reporting Updates

→ **Real Estate:** Effective July 1, 2024, performance for Private Real Estate[1] and its benchmark will be reported to reflect performance as of the previous quarter end. As a result, the 2024 Q3 report reflects 2024 Q2 returns for both the Principal US Property Account and its benchmark, resulting in a double counting of those returns just for this one quarter. Moving forward, performance for all Private Real Estate funds and their respective benchmarks will adhere to this industry standard and be reported with a one quarter lag.

→ **Infrastructure:** Effective July 1, 2024, performance for Private Infrastructure[2] will be reported to reflect performance as of the previous quarter end. As a result, the 2024 Q3 report reflects Q2 performance for the IFM Global Infrastructure, resulting in a double counting of those returns. Moving forward, performance for all Private Infrastructure funds and their respective benchmarks will adhere to this industry standard and be reported to reflect performance as of the previous quarter end, consistent with the MSCI Burgiss Global Infrastructure Funds Index, which is released quarterly with returns already lagged to reflect previous quarter end performance.

→ **Private Credit:** Effective July 1, 2024, the benchmark for Private Credit was changed to reflect performance as of the previous quarter end. As a result, the Q3 2024 report will use Q2 2024 performance, leading to a double counting of the benchmark performance. However, the returns for the Blue Owl Diversified Lending Fund already reflect the performance as of the previous quarter end. Moving forward, the performance for all Private Credit funds and their respective benchmarks will adhere to this industry standard and continue to be reported to reflect performance as of the previous quarter end.

[1] Includes open end and closed end funds and excludes REITs.
[2] Includes open end closed end funds and excludes public market infrastructure investments.

COAERS Performance Reporting Updates (continued)

Fund/Benchmark Name	Old	New	Q2 Performance Double Counted in Q3 report?
Principal US Property Account	Current Performance	Lagged 1-Quarter	Yes
NCREIF ODCE Index	Current Performance	Lagged 1-Quarter	Yes
IFM Global Infrastructure	Current Performance	Lagged 1-Quarter	Yes
MSCI Burgiss Infrastructure	Lagged 1-Quarter	Lagged 1-Quarter	No
Blue Owl Diversified Lending	Lagged 1-Quarter	Lagged 1-Quarter	No
M.Star LSTA Leveraged Loan + 2%	Current Performance	Lagged 1-Quarter	Yes

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Impact on Quarterly Performance

	Old (%)	New (%)	Difference (%)
Total Fund	6.1	6.0	-0.1
Policy Benchmark	6.5	6.5	0.0
Principal US Property	-0.2	-0.9	-0.7
NCREIF ODCE Index	0.0	-0.7	-0.7
IFM Global Infrastructure	3.6	1.0	-2.6
MSCI Burgiss Infrastructure	2.1	2.1	0.0
Blue Owl Diversified Lenidng	2.9	2.9	0.0
M.Star LSTA Leveraged Loan + 2%	2.6	2.4	-0.2

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6. Receive educational presentation on private equity

Presented by Leo Festino, Meketa

COAERS

COMMITTEE MEETING
Agenda Item Information Sheet

AGENDA ITEM 6:
Receive educational presentation on private equity

***This agenda item is considered in-house training provided by COAERS, an accredited sponsor of Minimum Educational Training (MET) for purposes of fulfilling the Pension Review Board's MET Program requirements.*

AGENDA ITEM OBJECTIVE
The Committee will receive a presentation designed to provide a broad overview of the private equity asset class to better inform Trustees in various considerations for these investments.

RECOMMENDATION FOR COMMITTEE ACTION
At the Committee's discretion.

ITEM SUMMARY
At the October Board Workshop, Meketa presented a potential asset allocation mix which included an allocation to private equity. Meketa will lead this educational presentation to discuss various considerations for these investments including but not limited to returns, risk, market size, costs and manager selection.

This session will be counted toward PRB educational requirements for continuing education.

RELEVANCE TO STRATEGIC PLAN
This item meets **COAERS Strategic Goal 4: Identify and implement leading practices in Board governance, pension administration and investment management.** In pursuing new strategies or approaches in the Fund's Strategic Asset Allocation, it is a best practice to thoughtfully consider the outlook for any such investments.

ATTACHMENTS
1. Meketa presentation: Private Equity Primer
2. Evaluation Form for Pension Review Board credit

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City of Austin Employees' Retirement System

November 22, 2024

Private Equity Primer

Topics

→ What is Private Equity?

→ Discretionary vs non-discretionary model, governance structures related to this

→ Private Equity Valuation

- Industry standard for valuation
- Impact on financial statement reporting

→ Cost of investment in private markets

→ Terminology

What is Private Equity?

→ Private Equity ("PE") investments are investments in privately held companies

→ PE funds are generally structured as partnerships

- Usually consist of 10 to 20 equity investments in individual companies
- Managed by a General Partner (GP) and investors are known as Limited Partners (LPs)

→ Unlike publicly traded stocks, PE funds are not priced daily by a market

- So, apparent price volatility is lower and correlation to other asset classes is less

→ There are many more private companies than public ones (estimated ratio 1000:1)

- PE market provides a large arena for investing

→ Private equity investments may be domestic or international and come in many forms

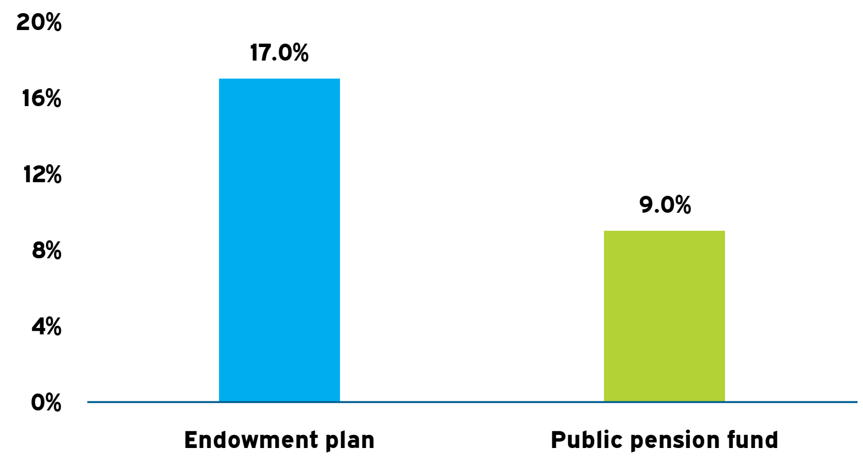
- Buyouts
- Growth Equity
- Venture Capital
- Special Situations

Who Invests in Private Equity & How Much?

→ The vast majority of capital allocated to private equity is comprised of institutional investors, such as pension funds, endowments, and foundations

→ The median target allocation to PE by endowments and public pension funds is approximately 13%[1]

Median Private Equity Target Allocation by Investor Type (as a % of AUM)[2]



[1] Source: Preqin, "Private Equity Q1 2024 Quarterly Update."
[2] Source: Preqin, "Private Equity Q1 2024 Quarterly Update."

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How Large is the Private Equity Universe?

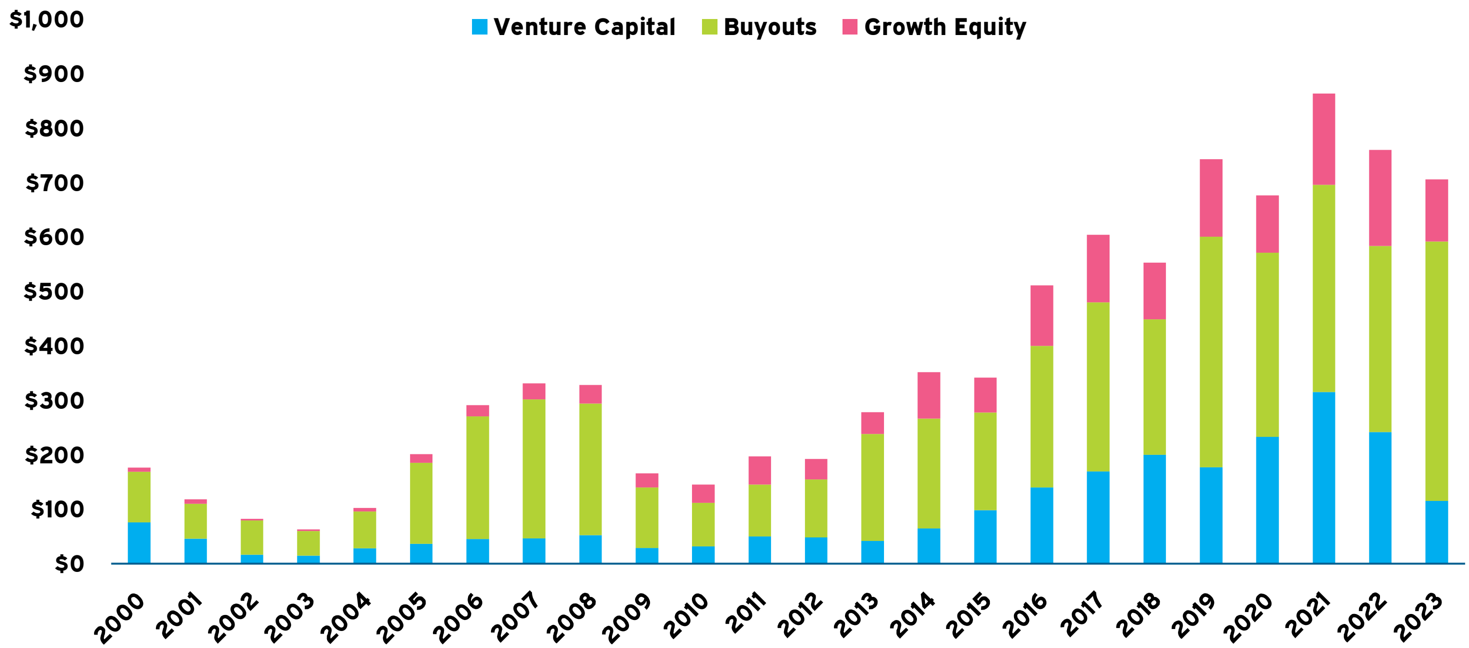
→ The PE marketplace has become increasingly developed and sophisticated

- It has reached a size that should not be ignored by most institutional investors of sufficient scale

→ While annual commitments to PE declined in the wake of the GFC, they have since been on a steady rise

- Fundraising in recent years has been more than double that of pre-GFC levels

Aggregate Capital Raised Globally by Vintage Year (bn USD)[1]



[1] Source: Preqin, as of December 31, 2023. Data pulled on April 13, 2024.

Higher Expected Returns

→ Private equity has the highest expected return among firms that produce capital markets expectations

- Horizon Actuarial Services annually publishes a survey of capital market assumptions collected from various investment advisors (shown below)
- PE's average expected return is higher than any other asset class, both over the 10-year and 20-year horizon

Expected Returns for Equity-like Asset Classes[1]

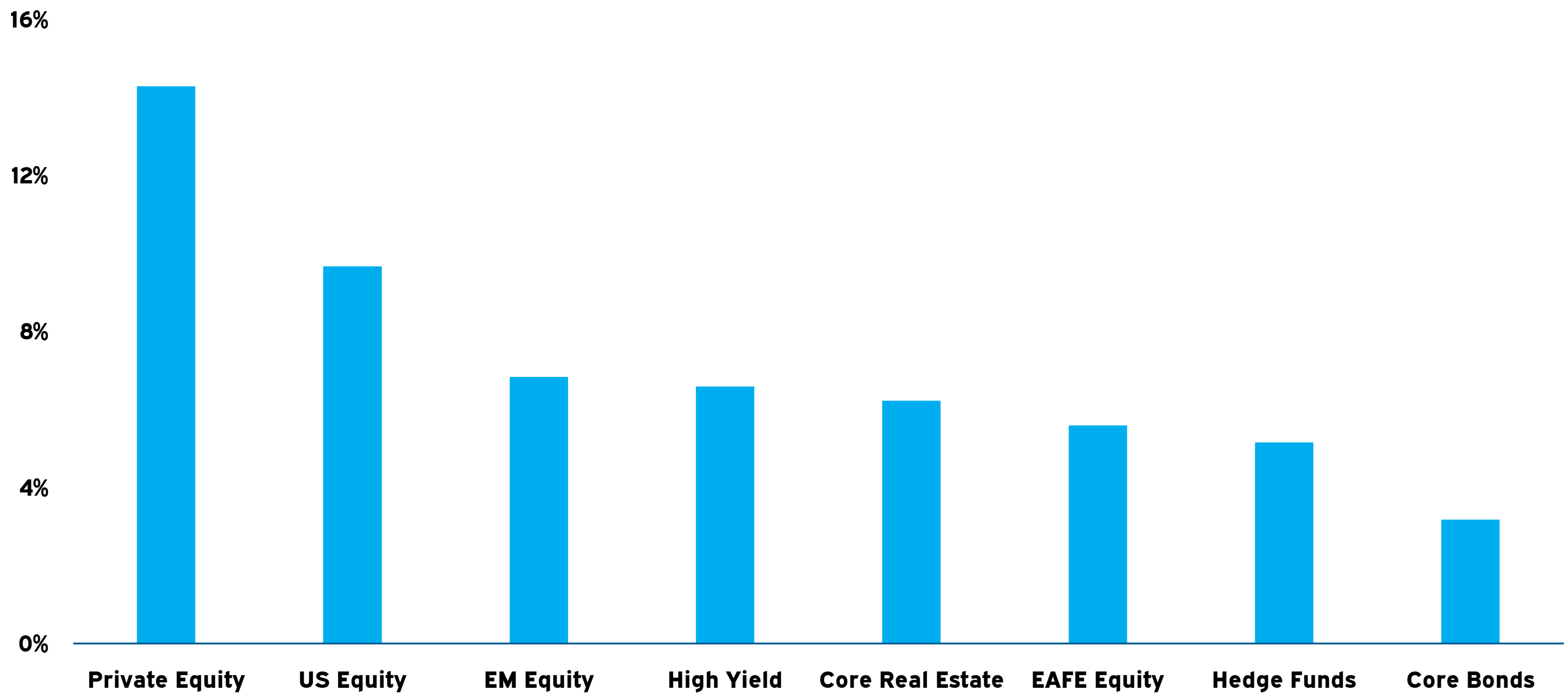
Asset Class	10-Year Average (%)	20-Year Average (%)
US Equity (Large Cap)	6.9	7.4
Developed Non-US Equity	7.5	7.8
Emerging Non-US Equity	8.2	8.6
Real Estate	6.0	6.3
Hedge Funds	6.0	6.2
Private Equity	9.5	10.1

[1] The survey by Horizon Actuarial Services is published annually and is the most comprehensive survey of capital markets expectations of which we are aware. In the 2023 survey, the 10-year horizon included all 42 respondents and the 20-year horizon included 27 respondents.

Higher Historical Returns

→ Over the past twenty years, private equity has been the best performing major asset class

Trailing 20-year Performance[1]



[1] Source: Bloomberg and Cambridge Associates via IHS Markit as of December 31, 2023. Private Equity is annualized quarterly pooled IRRs, Core Real Estate is annualized quarterly returns, all others are annualized monthly returns. Indices used: Cambridge Private Equity & Venture Capital Composite, Russell 3000, MSCI EM, Bloomberg US Corporate High Yield Bond, NCREIF ODCE Equal Weighted Net Total Return, MSCI EAFE, HFRI Weighted Composite, Bloomberg US Aggregate Bond Index. Note that private markets performance presented in this chart is net of fees.

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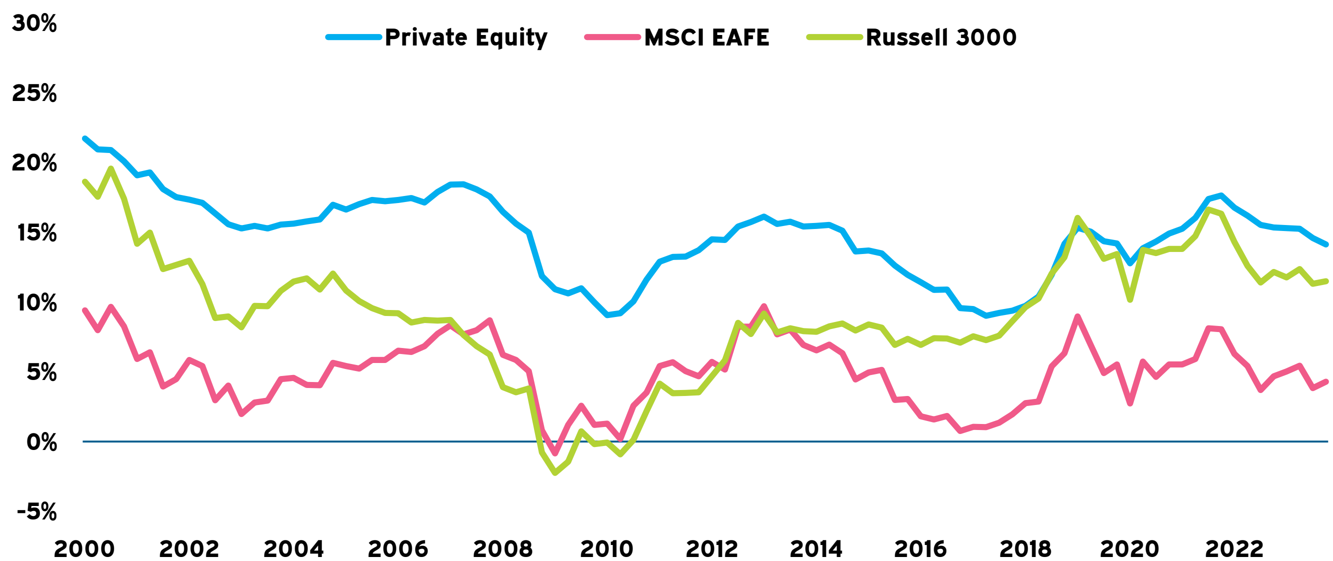
Higher Historical Returns, Continued

Rolling 10-Year Annualized Quarterly Pooled IRR[1]



→ Historically, PE investors have earned 2% to 5% per year more than investors in comparable common stocks, even after paying substantial management fees and other costs

→ Over the last decade, excess PE returns have shrunk relative to US equities

- A primary reason has been the influx of capital being invested in the space

[1] Cambridge Associates via IHS Markit as of 12/31/2023. Returns are annualized quarterly pooled IRRs. Indices used: Cambridge PE Composite, Cambridge MSCI EAFE Index, Cambridge Russell 3000 Index. Note that historical performance presented in this chart is net of fees.

Why Have Private Equity Returns Been So Strong?

→ PE investors can "sell" unneeded liquidity to capital-needy businesses

→ GPs can create a better alignment of interests between the owners and management

- There is an inherent agency problem with most public companies

→ GPs can improve the value of the asset by being a "control" investor

- Being a "Control" investor allows for significant influence over strategic and management decisions
- PE managers have expertise in generating new wealth through growth

→ GPs can take advantage of mispricing opportunities

- These tend to be larger and more frequent than in public markets

→ GPs can use leverage to a greater extent

- Financial engineering can help boost a fund's returns

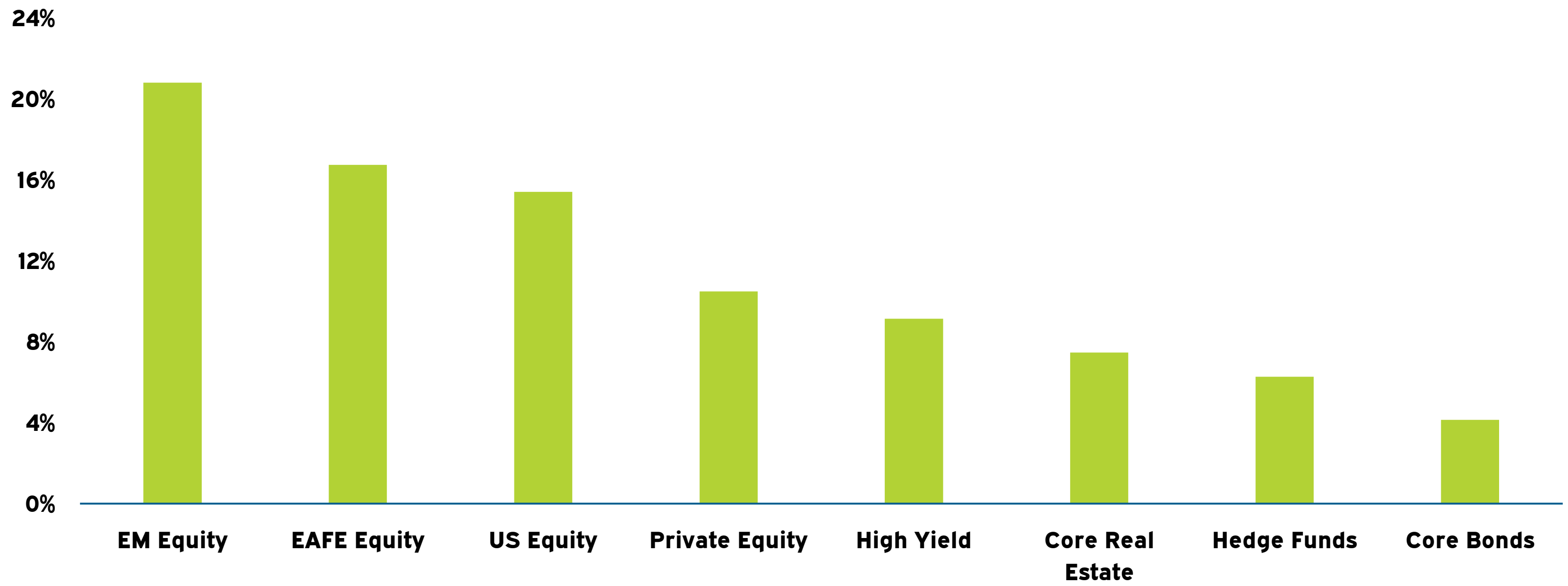
→ Lower regulatory and compliance costs

- Higher degree of regulation increase the cost of a public company, and may have contributed to the decline in the number of public firms

Lower Observed Volatility

→ Private equity returns have been much less volatile than have those for public equities

Trailing 20-year Volatility[1]



→ This lower observed volatility does *not* mean these assets are less risky; it is often quite the contrary

- PE portfolios tend to be more concentrated, and the underlying companies more highly leveraged with less diverse revenue streams than their public counterparts

[1] Source: Bloomberg and Cambridge Associates via IHS Markit as of December 31, 2023. Private Equity is annualized quarterly pooled IRRs, Core Real Estate is annualized quarterly returns, all others are annualized monthly returns. Indices used: Cambridge Private Equity & Venture Capital Composite, Russell 3000, MSCI EM, Bloomberg US Corporate High Yield Bond, NCREIF ODCE Equal Weighted Net Total Return, MSCI EAFE, HFRI Weighted Composite, Bloomberg US Aggregate Bond Index. Note that private markets performance presented in this chart is net of fees.

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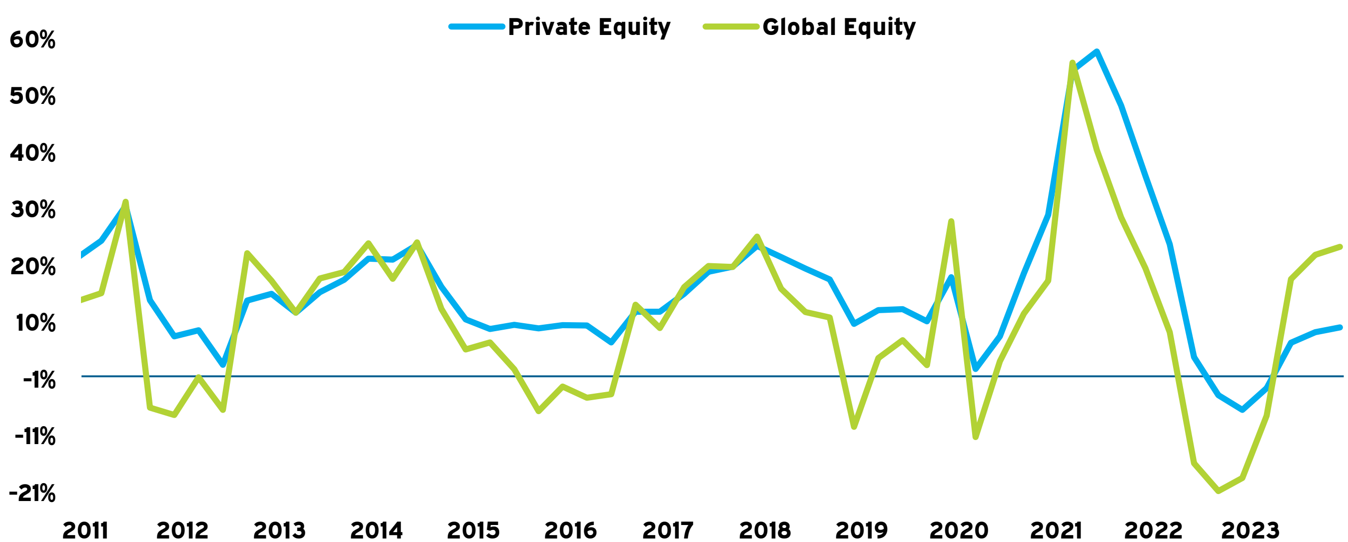
If Returns are Higher, Why is Volatility Lower?

→ Unlike public market securities, private equity assets are not priced daily

- They are valued quarterly, and managers have fairly wide latitude in valuation methodologies
- Price changes tend to be reflected on a lagged basis in reporting, and can take as long as two quarters

→ The result is a "smoothing" of the returns experienced by PE investors

Rolling 1-Year Annualized Quarterly Pooled IRR[1]



[1] Cambridge Associates via IHS Markit as of 12/31/2023. Returns are annualized quarterly pooled IRRs. Indices used: Cambridge PE Composite, Cambridge MSCI ACWI Index. Note that historical performance presented in this chart is net of fees.

How Important is Manager Selection?

→ Private equity is a much more inefficient asset class than public equity

- It is worth noting that private markets databases are often smaller, and with more limited history, than public market counterparts
- PE funds also tend to have more concentrated portfolios, so more dispersion should be expected

→ Direct exposure to PE is not available via passive vehicles, but only through active management

- Investors cannot "fall back" on mimicking the returns of a private equity index

→ Manager selection is critical as there is much value to be gained (lost) from picking a manager that is above (below) average

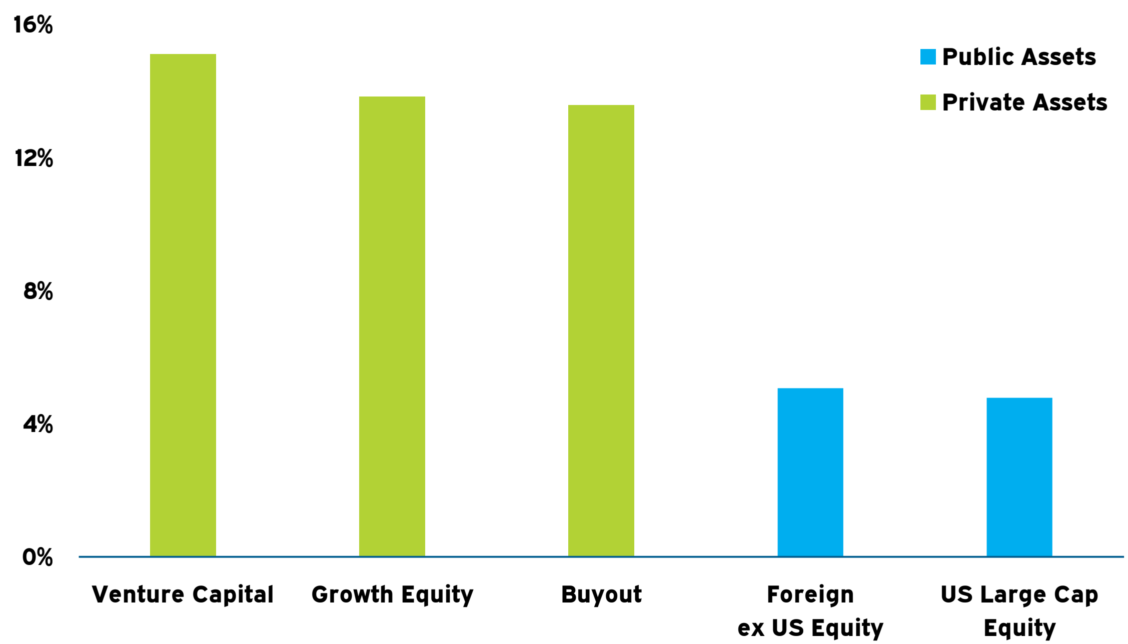
- Demand for managers with top historical performance is so high that access to their funds is often quite limited
- Access to these top funds can be a critical component for investors whose PE programs outperform their peers

What About Alpha?

→ Interquartile spreads can be interpreted as how much potential value lies in selecting superior active managers

→ PE asset classes such as buyouts, growth equity, and venture capital show considerably higher performance dispersion, as measured by interquartile spreads

Trailing 10-Year Interquartile Spread[1]



[1] Source: eVestment and Cambridge Associates via IHS Markit, as of December 31, 2023. Private Markets data pulled on 5/20/2024. Public Markets data pulled on 4/11/2024. Public Markets 10 Year interquartile spreads are evaluated by taking the difference between the geometric average of the 75th percentile return and the 25th percentile over a rolling 12-month period. Private Markets 10 Year interquartile spreads are Cambridge's provided vintage year quartile spreads that we then take an average of. Private Markets 2022 & 2023 vintage years are excluded as they are too recent.

What Risks Can Investors Expect?

→ A lack of liquidity, as investors are generally unable to pull capital from a fund once it has been invested

- Too much in illiquid assets may inhibit an investor from being able to meet its obligations in a worst-case scenario
- Illiquid assets cannot be rebalanced in the interim, which can lead to unintended deviations from a policy benchmark

→ Execution risk – the success of many distressed, turnaround, and buy & build strategies are predicated on significant operational improvements

→ Poor vintage year timing - missing out on a particularly good year or overcommitting to a particularly bad one will harm performance

→ Higher leverage (in buyouts) reduces the margin for error and can lead to a potentially higher risk of insolvency

→ "Alpha" can be negative, and at a greater magnitude than in public markets

→ A general lack of transparency makes it harder to conduct due diligence on managers

How Do Private Equity Partnerships Work?

→ A partnership is the legal structure through which most institutions invest in private equity

→ A GP creates the legal framework of the partnership, prepares a private placement memorandum ("PPM"), and raises commitments from institutional investors who become the LPs

- A PPM defines the type of investments planned to be made but does not specify actual investments
- Due to this uncertainty, the partnership is known as a "blind pool"

→ When enough capital has been committed (not yet invested), the GP "closes" the partnership and begins investing

- The investment period is the usual three-to-five-year period where the GP makes its investments
- The GP may purchase stakes in 10 to 20 different underlying firms; thus partnerships are a collection (portfolio) of individual investments, not a single investment

→ Investors may experience a small negative return in the beginning that typically turns positive with time

- This makes the graph of returns J-shaped, or a "J-curve," and is normal and to be expected

→ All PE partnerships are self-liquidating, generally over a period of about 8 to 12 years

→ PE partnerships are not SEC-registered, and GPs typically do not accept the role of fiduciary as defined by ERISA

- Many investors use an investment advisor who serves as a fiduciary to select these partnerships

What is the Difference between Committed and Invested Capital?

→ PE partnerships require an advanced commitment of capital, which does not need to be sourced all at once when the legally binding commitment is made

→ The majority of the commitment is drawn down ("called") by the GP over a period of usually three to five years

- During this time, the cumulative invested capital is less than the committed amount
- Normally, the GP holds a portion of the commitment as "reserves" for the future financing of the portfolio companies acquired during the investment period
- While one commitment is being drawn down, other partnerships may be paying off, effectively reducing exposure to the asset class

→ To maintain a fixed level of exposure to PE, it is often necessary to make a greater commitment than the targeted increase in allocation

- Because committed capital is called only gradually, it takes a number of years for PE investments to ramp up to their target allocation

What are Vintage Years & How do they Help Diversify?

→ To remain prudently invested, both public and private equity portfolios must be diversified across many different individual investments, including investments in companies:

- Of different sizes;
- Situated in different geographic areas; and
- Involved in different business activities

→ Unlike public equity portfolios, private equity investments should be diversified across time as well

- Since individual partnerships have finite lifespans, new partnerships are created every year

→ The year in which a partnership forms or closes to new investors is known as its "vintage year"

- Depending upon macro-economic events and available opportunities, some vintage years result in better performance than others
- Therefore, investments should be timed to provide diversification across vintage years

What about Short-Term Liquidity?

→ PE partnerships do not typically offer short-term liquidity

→ During and after the GFC, many institutional investors sought liquidity for PE positions

- This was in an effort to help rebalance portfolios when public markets declined, causing overweighs to private equity holdings

→ Since then, there has been a growing secondary market for PE partnerships

- This creates liquidity for investors but comes at a price, as most buyers will expect to purchase the assets at a discount to their net asset value ("NAV")

→ The secondary market offers new investors in PE the chance to "buy into" seasoned, existing funds

- This can help accelerate an otherwise lengthy startup period

→ The secondary market has become more prominent in the past decade as performance has increased

- As of September 2023, AUM in the global secondary market had grown by over 9x since 2008[1]

[1] Source: Preqin, as of September 2023. Data pulled on May 6, 2024.

How Does an Allocator Invest Prudently in Private Equity?

→ PE funds should be selected by professionals and carefully structured and monitored

→ Working closely with their PE manager(s), trustees should take the following steps:

- Specify in advance their fund's long-term allocation to private equity investments, being mindful of the fund's tolerance for illiquidity
- Develop an investment policy and set of investment guidelines, including targets for performance and diversification (e.g., by geography and partnership type)
- Conduct a cash flow analysis to plan how the target allocation will be achieved and maintained
- Construct a portfolio of individual private equity funds that is consistent with these objectives
- Scrutinize each fund closely, to identify its unique characteristics and risks
  - Note that the analysis, due diligence, and legal review of these partnerships are significantly more complex and comprehensive than that entailed in public security manager searches
- Monitor all private equity funds, to help ensure that assets are invested prudently and as intended
- Control PE allocation by reinvesting distributions into additional future PE partnerships

How Does a Fund Stay Invested?

→ Unlike public equity funds, private equity partnerships typically are self-liquidating

- Once the partnership's designated lifetime ends, the fund is generally liquidated within a few years

→ While the maximum length of each partnership's lifespan is known in advance,[1] the actual pattern of interim cash flows cannot be predicted precisely

- A partnership may make a number of early dispositions, causing much of the original commitment to be returned to the LPs sooner than expected
- Conversely, PE funds can take longer than expected to return capital, potentially causing LPs to become over-allocated to private equity

→ The average time to liquidation has been rising across all areas of private equity, while annual distribution rates (as a percentage of unrealized value) have been falling[2]

- It is increasingly common to take longer than the typical terms of 10 to 12 years to be fully liquidated

→ GPs are using continuation funds to provide liquidity at or near the time a fund should be liquidating to mitigate the lack of return of capital

→ An intensive, ongoing reinvestment program is needed with PE to maintain a specified target allocation

- When distributions are earlier than expected, PE investors must seek new partnerships to reinvest the liquidation proceeds
- When distributions take longer than expected, investors may need to taper future commitments somewhat or even consider secondary sales of their LP stakes

[1] Although fund terms may be extended through approved revisions to Limited Partnership Agreements.
[2] Source: Hamilton Lane, "Acceleration of Trends: SPACs, GP-Leds, and the Case of the Longer Hold," April 2021.

Discretionary vs Non-Discretionary Model

	Discretionary Management	Non-Discretionary Advisory
Flexible Annual Commitment Budgeting	Yes	Yes
Custom Program Design and Exposures	Yes	Yes
Flexible, Severable Contract	Yes	Yes
Investment Decisions	Made by account manager	Made by LP
Legal Documentation	Executed by account manager	Executed by LP legal counsel
Cash Transfer Management	Executed by account manager	Executed by advisor or by LP
Performance Reporting	Executed by account manager	Executed by advisor
Cost Structure	All costs associated with program covered by contract with account manager	Advisor costs Legal documentation costs Possible Fund staffing costs for cash transfer management

- → Both models can offer lower fee structures than what is typically available through use of Fund of Funds
- → The non-discretionary model delegates authority for Private Markets fund selection to the Fund's board or staff
- → The discretionary model is operationally simple as all investment management, legal, operational, and administrative functions are outsourced to the account manager
- → Oversight of the discretionary manager is conducted by a client (Board and/or Staff), or a third party firm may be hired to monitor this manager

How are Costs and Fees Structured?

→ Private equity fees come in two forms

- A management fee
- A performance fee ("carried interest")

→ The management fee typically ranges from 1.8% to 2.1% per year,[1] depending on fund types, fund sizes, etc.

- The fee is applied to committed capital during the investment period and net invested capital (invested capital less cost of realized investments and write-offs) thereafter

→ Carried interest is a performance incentive fee for the GP typically set at 20% (30% for top venture capital funds)

- Once the GP produces a baseline annual net return for the LPs (a "preferred return"), all future profits are divided between the GP and the LPs
- Buyout funds have an 8% preferred return while many venture capital funds have no return hurdle

→ Funds with a preferred return often implement a "GP catch-up"

- This is where the GP takes a larger share of the profits (usually 50%-100%) until receiving a proportion of profits equal to its carried interest

→ PE fees are higher than those for investing in public equity funds

- Fortunately, the higher fees may be offset by the higher potential returns

[1] Source: Preqin "The 2023 Preqin Private Capital Fund Terms Advisor," October 2023. Represents the mean fee for the three main PE strategies, vintage years 2019 through 2023.

How is Private Equity Different Administratively?

→ Maintaining Target Allocations

- Because of their illiquid nature, PE investments cannot be bought or sold easily
- Therefore, an allocation to PE cannot be finely tuned with periodic rebalancing and there is potential it may deviate from the target

→ Management of Cash Flows

- PE cash flows are unpredictable, there is little advance notice of capital calls (outflows), distributions of cash proceeds (inflows), or the receipt of securities in-kind (inflows)

→ Performance Reporting

Delayed Valuations

- No market valuation mechanism exists for PE investments
- PE investments typically exhibit modest changes in value until a formal transaction (i.e., additional financing or a disposition) results in a realized gain or loss on the investment
- Valuations from the GP are typically not available until well after those of public market portfolios, and year-end valuations are usually not available until Q2 of the following year
- Delayed valuations typically require performance reports to reflect private equity funds' performance on a one-quarter lag (i.e., a fund's Q2 performance is shown as the quarter-to-date return in a Q3 report)

How is Private Equity Different Administratively? (continued)

- One-quarter lagged valuations are often cash flow adjusted, meaning a fund's market value is increased/decreased from the lagged valuation by the exact amount of any capital calls/distributions in the current quarter (e.g., the June valuation +/- July/August/September cash flows = reported September valuation)
- It is often helpful to maintain a consistent one-quarter lag in valuations across all private equity funds, despite some GPs providing valuations on less of a delay than others

Performance Methodologies & Metrics

- Internal rate of return (IRR) is a preferred calculation methodology for evaluating private equity funds over time-weighted returns (TWR) because the former incorporates GP cash flow timing decisions instead of neutralizing their impact
- TWR are calculated for private equity funds in order for their performance to "roll up" into the total fund return in standard monthly and quarterly performance reports
- IRR, distributed to paid-in capital (DPI), total value to paid-in (TVPI), and other important performance metrics are often produced in a separate private equity report to provide more insight into each fund's performance

What are the Criticisms & Mitigating Factors?

→ **PE's outperformance relative to public equity has declined over time**

- Some of this is driven by the post-GFC bull market for US stocks, and there is still strong evidence that PE generates attractive absolute returns while outperforming public market equivalents

→ **PE asset valuations are frothy and are near all-time highs**

- This argues for lower absolute PE returns, but not necessarily for lower relative returns (i.e., private equity does not appear to be any more expensive to its own history than public equities do).

→ **Benchmarking PE performance is challenging because it does not conform to standard approaches**

- Performance analysis can often still be performed by comparing aggregate returns to a peer and/or public market equivalent (i.e., "PME") benchmark

→ **PE managers charge high fees, including the standard "2 and 20" fee structure**

- Despite these high fees, PE has still produced strong absolute and relative returns on a net basis

→ **For very large investors, there are some limits on their ability to deploy a meaningful amount of capital in PE**

- These challenges can usually be addressed with things such as capital pacing, separately managed accounts ("SMAs"), and co-investment programs

→ **There can be headline risk, particularly for institutions or assets in the public spotlight**

- There is evidence that PE-owned businesses exhibited better job growth statistics than publicly owned corporations and that PE has a positive effect on productivity and job growth in the US[1]

[1] Sources: "Economic contribution of the US private equity sector in 2020," May 2021, prepared by Ernst & Young prepared for the American Investment Council; "The Impact of Private Equity Buyouts on Productivity and Jobs," August 2020, prepared by the Committee on Capital Markets Regulation.

Key Terminology

→ Limited Partners ("LPs")

- Investors who provide capital to a private equity fund but do not have a role in managing the investments.

→ General Partners ("GPs")

- Managers in the private equity fund who make investment decisions and manage the portfolio.

→ Carried Interest

- A share of the profits that GPs receive as compensation, typically after a certain threshold is met.

→ Committed Capital

- Refers to the total amount of money that investors have pledged to a private equity fund. This capital is typically drawn down over time as the fund identifies and invests in opportunities.

→ Contributed Capital

- The amount of capital called by a fund manager against the commitment amount. Contributions may be used for new or follow-on investments, fees, and expenses, as outlined in each fund's limited partnership agreement.

→ Distributed

- The amount of capital returned from a fund manager for returns of invested capital, profits, interest, and other investment related income.

Key Terminology (continued)

→ Vintage Year

- Refers to the year when a private equity fund begins making significant investments or when the committed capital is first deployed. This year is crucial for evaluating and comparing the performance of different funds, as it reflects the market conditions and economic environment at the time of the fund's inception.

→ Internal Rate of Return ("IRR")

- A performance metric used to estimate the profitability of potential investments. IRR is a discount rate that makes the net present value (NPV) of all cash flows equal to zero in a discounted cash flow analysis. Generally speaking, the higher an internal rate of return, the more desirable an investment is to undertake.

→ Distributed-to-Paid-In ("DPI")

- A performance metric that measures the total capital returned to investors relative to the amount of capital they have invested. Essentially, it represents the cumulative distributions made by a private equity fund to its limited partners divided by the total capital called from those partners.

→ Multiple on Invested Capital ("MOIC")

- A measure of the total value returned to investors relative to the amount of capital invested. It is calculated by dividing the total value received from an investment (including both realized and unrealized gains) by the total capital invested.

Key Terminology (continued)

→ Public Market Equivalent ("PME")

- A calculation methodology that seeks to compare the performance of a portfolio of private market investments with public market indices. These figures represent a net IRR value based on the actual timing and size of the private market program's daily cash flows and the daily appreciation or depreciation of an equivalent public market index.

MEKETA

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COAERS

Course Evaluation Form

Minimum Required Educational Training (MET)

Course Name: Private Equity Primer: November 22, 2024

You have completed a Minimum Educational Training (MET) program offered by the City of Austin Employees' Retirement System (COAERS), a Pension Review Board accredited sponsor. All accredited sponsors must provide participants with a process for evaluating the quality of the course.

Course Objectives:
The objectives of this course were to familiarize yourself with the following key concepts:

- What is Private Equity?
- Discretionary vs. non-discretionary models and governance structures
- Private Equity Valuation – Industry standard for valuation and impact on financial statement reporting
- Cost of investment in private markets
- Terminology

Evaluation:

Please take some time to provide a rating on the items below. You may also leave any additional comments that you think may be helpful for future courses.

Please provide a rating on these items	I strongly agree	I agree	I disagree	I strongly disagree
1. These course objectives were met.	○	○	○	○
2. The facilities and technology were satisfactory.	○	○	○	○
3. The instructor was effective.	○	○	○	○
4. The program content was relevant and up-to-date.	○	○	○	○

Additional Comments:

Thank you for your feedback.

7. Discuss and consider COAERS investment policy statement and strategic asset allocation

COAERS

COMMITTEE MEETING
Agenda Item Information Sheet

AGENDA ITEM 7:
Discuss and consider COAERS investment policy statement and strategic asset allocation

AGENDA ITEM OBJECTIVE
The Committee will discuss and consider formally adopting changes to policy and a new Strategic Asset Allocation into the Investment Policy Statement.

RECOMMENDATION FOR COMMITTEE ACTION
Meketa and Staff recommend adopting the proposed revisions to the Investment Policy Statement and revoking the Investment Implementation Policy adopted March 30, 2023.

ITEM SUMMARY
Meketa will review the appropriateness of the strategic asset allocation previously approved by the Board through an updated asset allocation study.

Additionally, Meketa and Staff have drafted a new Investment Policy Statement (IPS) which incorporates prior Board action in 2024, including the restructuring of several asset classes and their respective allocation targets, rebalancing of the portfolio for market drift only, and updates to the Board's Investment Beliefs based on Meketa's survey of Trustees presented at the October workshop. The proposed draft is significantly condensed, focusing on key policy requirements and avoiding overly prescriptive policy language. The accompanying Staff memo provides more detail on the proposed changes, and the accompanying Meketa memo summarizes the process to create the new IPS.

RELEVANCE TO STRATEGIC PLAN
This agenda item meets **COAERS Strategic Plan Goal 4: Identify and implement leading practices in board governance, pension administration, and investment management.** It is an industry best practice to review policies on a regular basis.

ATTACHMENTS
1. Meketa Strategic Asset Allocation Memo
2. Meketa Investment Policy Statement Memo
3. Staff Investment Policy Statement Memo
4. Draft Investment Policy Statement Revisions
5. Meketa Strategic Asset Allocation Study

SUPPLEMENTAL MATERIALS
1. Investment Policy Statement as adopted
2. Investment Implementation Policy as adopted

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MEMORANDUM

TO: Trustees, City of Austin Employees Retirement System
FROM: Leandro A. Festino, Stephanie Sorg, Aaron Lally, Meketa Investment Group
DATE: November 12, 2024
RE: Strategic Asset Allocation – Review and Reaffirmation

Executive Summary

Meketa and Staff have evaluated COAERS strategic asset allocation policy with Meketa's 2024 Capital Market Expectations and compared the existing policy against alternative asset mixes.

Recommendation

Meketa recommends that COAERS maintain its current policy allocation while evaluating the potential inclusion of private equity. The current policy is well-positioned for the System to achieve the long-term objectives.

Key Takeaways

The existing strategic asset allocation policy has an expected return of 8.2% (forecasted over a twenty-year period) with an expected volatility (as measured by standard deviation) of 12.0%. The policy has a 71% probability of achieving a 6.75% return (or greater) over the next twenty years. While the policy discussed at the October Board Workshop (the one that includes an 8% target to private equity) is expected to generate a slightly higher expected return and fall slightly closer to the efficient frontier, it will take many years to achieve the desired target weight to private equity. The current policy is well-positioned for the System to achieve its long-term objectives while the appropriate measures can be discussed and adopted to build a successful private equity program with the proper controls in place.

Details

The accompanying document details the existing strategic asset allocation along with the other mixes evaluated. It includes comprehensive analysis covering the following: probability of achieving expected return, expected location relative to the efficient frontier, historical stress tests and scenario analysis, liquidity analysis and risk budgeting.

Please feel free to give us a call with any questions.

LAF/SS/AL/sf

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MEMORANDUM

TO: Trustees, City of Austin Employees Retirement System
FROM: Leandro A. Festino, Stephanie Sorg, Aaron Lally, Meketa Investment Group
DATE: November 14, 2024
RE: Investment Policy Statement - 2024 Process Memo

Executive Summary

Meketa and Staff have spent the past few months working on a revised Investment Policy Statement for COAERS. This brief memo outlines the steps that have been taken, and our joint Meketa and Staff recommendation.

Recommendation

Meketa recommends that COAERS adopt this revised Investment Policy Statement. We feel it appropriately summarizes the key elements required in an institutional quality Investment Policy Statement. Importantly it addresses Fund level matters (e.g. investment beliefs, roles and responsibilities, goals and objectives) without being overly perspective – which in our experience is the appropriate stance to take with such a policy document.

Process

Starting in summer 2024, Meketa reviewed the existing COAERS Investment Policy Statement. We sought to "start fresh" and create a new document with just the key sections that (in our experience) are required for a high quality (yet succinct) Investment Policy Statement. Our first draft was shared with Staff in late 3Q24. Feedback from the Trustees during the October Workshop was crucial in progressing to the next stage of the process. In October and November, Meketa and Staff worked collaboratively on the IPS – taking turns "red-lining" and discussing enhancements and changes to each others suggestions. Ultimately, we arrived at a joint document that contains both parties best suggestions.

Questions or Additional Details

We are happy to address any questions or comments from the Board of Trustees, during the November Investment Committee meeting or prior.

Please feel free to give us a call with any questions.

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COAERS

Investment Policy Statement Revisions
Staff Memo

EXECUTIVE SUMMARY:

The proposed changes to the Investment Policy Statement (IPS) represent the coordinated work between Meketa and COAERS Staff. This document summarizes what Staff view to be the important changes to the policy but is not exhaustive.

These proposed changes take input from a variety of conversations with and approvals from the Board including the Investment Practices and Performance Evaluation report, overall review of the investment program in 2024, and Asset/Liability and Asset Allocation Studies. Additionally, these changes conform with the Pension Review Board guidelines on investment policy statements which suggest elements related to fund mission, roles and responsibilities, investment objective, liquidity, risk tolerance, investments assets, proxy voting, performance evaluation, investment manager selection and monitoring, and ethics.

RECOMMENDATION:

Staff concur with Meketa's recommendation to approve changes to the Investment Policy Statement, as presented.

SUMMARY OF CHANGES:

See below description of changes which Staff believe to be most material. Please note that due to the significant simplification of the Policy from 56 pages down to 14 pages there are many changes that are not listed here.

Consolidation of Investment Implementation Policy (IIP) into the IPS: The IIP previously contained a number of specific guidelines for implementing policy related to investment manager selection, allowable investments, reporting guidelines, and individual mandate specifications. Broader, relevant guidelines from the IIP are now consolidated into the IPS. For items which were eliminated, the IPS also now contains directives to Consultant and Staff to adopt more specific asset class and mandate guidelines internally.

Investment Objectives: Simplifies the primary objective of the investment program to maximize returns within an acceptable level of risk.

Investment Beliefs: Updates consistent to the beliefs recommended by Meketa at the workshop. Adds statements regarding diversification, strategic decisions, and risk management.

Roles and Responsibilities: Consolidates parties listed out in policy consistent with recommendations by Meketa at the workshop and clarifies roles.

Risk Budget: Eliminates explicit risk targets in policy (both relative and absolute) and instead prescribes a risk budgeting process to determine Fund risk alongside the Asset Allocation study.

Strategic Asset Allocation: Updates the Strategic Asset Allocation in line with prior Board approvals to simplify the overall structure, move to a single set of allowable ranges, eliminate Multi-Asset and include Private Credit. Updates benchmarks consistent with prior Board approvals.

Rebalancing Authority: Limits delegated rebalancing authority for Staff to only be for market drift and eliminates risk-based rebalancing.

Phased Transition Guidelines: Adopts guidelines for transitioning to the new Strategic Asset Allocation by benchmarking the Fund using exposures based on actual market values instead of neutral values.

Performance Goals: Sets performance goals for the fund at three levels (total Fund, asset class, and individual mandates) and includes appropriate timeframes for evaluation.

Private Markets Considerations: Incorporates the Strategic Plan for private markets into the IPS by reference to govern procedures for this portion of the portfolio.

Asset Class Guidelines: Maintains, and slightly modifies, broad guidelines for asset class exposures. Eliminates more granular guidelines from Policy and directs Consultant and Staff to develop appropriate internal guidelines.

Portfolio Reporting: Includes peer performance rankings as a required quarterly reporting item. Requires a new annual report to the Investment Committee on investment risks and their appropriateness. Individual manager reporting requirements are requested by Staff.

Gold: Moves gold exposure into the Real Assets asset class and benchmark in anticipation of the elimination of Multi-Asset, where it is currently housed.

Fixed Income: Sets minimum and maximum exposures for ‘plus’ sector exposures in Fixed Income.

Liquidity: Establishes a new maximum threshold for less liquid exposures.

Manager Selection: Uses broad language to specify the approach to selecting investment managers and strategies, and eliminates prescriptive language related to the Premier List.

Implementation: Broadly simplifies policy language around implementation items and delegates these responsibilities to Staff.

COAERS
CITY OF AUSTIN
EMPLOYEES' RETIREMENT SYSTEM

Board Approved Policy

Subject:	Investment Policy Statement
Review Committee:	Investment Committee
Date Implemented:	December 10, 2019
Date Updated:	December 17, 2024 [effective date January 1, 2025]

Signature of Chairperson: ______________________________

Yuejiao Liu

Adopted
December 17, 2024

Investment Policy Statement (IPS)

for

City of Austin Employees' Retirement System (COAERS)

Table of Contents

Investment Policy Statement (IPS)

for

City of Austin Employees' Retirement System (COAERS)

I. STATEMENT OF POLICY

Purpose and Scope

This document is the official Investment Policy of the City of Austin Employees' Retirement System (the "System"). The policies in this document (the "Policy") have been adopted by the Board of Trustees of the System (the "Board") to establish the objectives and policies of the System's investment program. This document also articulates the policies and guidelines and procedures that are employed in the day-to-day management of System investments by Staff. No responsible party shall deviate from the terms and requirements of this policy without the prior authorization of the Board.

The purpose of the Investment Policy Statement is to assist the Board in effectively supervising, monitoring, and evaluating the investment of the System's assets by:

- Stating the System's Investment Beliefs
- Establishing the investment goals, objectives, and risk tolerance of the System
- Defining asset class allocations, targets, and ranges
- Creating oversight standards for policy implementation
- Setting performance objectives and measurement criteria

Investment Beliefs

Time Horizon - The Fund is a permanent entity with long-lived liabilities and, as such, it should strive to be a thoughtful, analytical, and patient investor that is focused on achieving successful outcomes.

Governance - Clear governance and decision-making structures that promote decisiveness, simplicity, efficiency, and accountability are effective and add value to the Fund. To the extent possible, investment decision-making should be driven by data and analysis, including the findings of relevant research on financial markets and investment management.

Risk Compensation - The Fund should seek to be well compensated for the investment risks it chooses to bear, risks that should be articulated at the time of investment and revisited regularly.

Risk Management - Risk is multi-faceted, and the appropriate level of the COAERS' portfolio risk is determined within an asset-liability context that focuses on maintaining the viability of the System.

Diversification - Diversification across asset classes and risk factors is central to the System's investment strategy, and investments that may improve the Fund's risk/return profile will be considered. Investments should be considered based on their primary role in the total Fund context, including their impact on total Fund diversification.

Strategic vs. Tactical - Given the long-term nature of the liabilities, the Fund should be a thoughtful and patient investor that focuses on long-term strategic decisions as opposed to the short-term trading of strategies.

Costs - Costs can significantly reduce net returns and therefore must be carefully measured and managed when making decisions regarding investment strategy and implementation.

Implementation - Implementation should occur passively and in public markets unless a high likelihood of success on a risk-adjusted, net-of-fees basis can be expected from other approaches.

Investment Goals & Objectives

The sole purpose of the System's investment fund ("the Fund") is to accumulate the financial reserves necessary to provide benefits to eligible members of the System and their beneficiaries. The long-term primary objective for the Fund is to attain a high level of return within an acceptable level of risk.

The Fund will pursue achievement of this goal via fiduciary best practices that:

- Ensure proper diversification of asset classes and factor exposures; and
- Maintain appropriate long-term risk and return expectations; and
- Adapt the Fund to changing market conditions, when appropriate.

The Board, with consultation, advice and assistance from the System's Investment Consultant(s) and Staff, will use the Fund's strategic asset allocation process and its effective implementation as the primary tools to achieve these goals. A primary emphasis of the management of the Fund is consistency of growth by seeking to balance the risk of inadequate long-term returns against the risk of permanent impairment of capital. Taxes shall not be a consideration except that the System's tax-exempt status should be preserved.

II. INVESTMENT POLICY IMPLEMENTATION

Investment Horizon

The Board will periodically review the portfolio's alignment with the fund's pension liabilities. The investment policy and guidelines are based on an investment horizon of 20 years. The Board will consider both intermediate-term and longer-term investment return horizons in formulating expected returns and assessing portfolio risk parameters. The System's strategic asset allocation is based on this longer-term perspective. Fluctuations of investment results in the interim should be viewed with an appropriate perspective.

Performance Goals

The expected and actual investment returns of the total Fund will depend on the asset allocation targets, the mix of investment styles within asset classes, and individual manager performance. Therefore, performance goals have been set at three levels: total Fund, asset class, and individual portfolios. These performance objectives should generally be monitored over both a full market cycle and rolling 5-year periods on a risk-adjusted, net of fees basis.

Total Fund:

- Meet or exceed the actuarial assumed rate of return. Annualized investment returns should exceed the actuarial assumed rate of return.
- Meet or exceed the Passive benchmark. Annualized investment returns should exceed the passive benchmark. The passive benchmark is intended to reflect a naïve balanced portfolio of stocks and bonds implemented via low-cost passive

investable indices. Outperformance relative to the passive benchmark should indicate that the diversification decisions through the Strategic Asset Allocation process have successfully added value.

- Meet or exceed the Policy benchmark. Annualized investment returns should exceed the Policy benchmark. The Policy benchmark is a composite of the benchmarks of the asset classes in the Strategic Asset Allocation. Returns in excess of the Policy benchmark should indicate that the implementation of the investment program as a whole is successfully adding value.

  Composition of the Passive and Policy benchmarks are detailed in Appendix 2.

Asset Class:

- Meet or exceed the asset class benchmark. Each asset class is to be benchmarked by an associated index that describes, in general terms, the opportunity set and return characteristics associated with the asset class. For certain private or more complex asset classes the index should serve as a proxy for expected returns rather than an approximation of the actual investments that will characterize that component of the portfolio.

  Asset class benchmarks are detailed in Appendix 2.

Individual Portfolios:

- Meet or exceed the mandate benchmark. Performance objectives for manager portfolios are stated in the respective investment manager agreements. Manager benchmarks will be determined by Consultant and Staff based upon the investment mandate.
- Meet or exceed median ranking in relevant peer group. Appropriate peer groups will be determined by Consultant and Staff based upon the investment mandate.

Risk Tolerance and Budgeting

The Board takes several steps throughout the investment process to identify, measure, and report on investment risk at a variety of different levels. Investment opportunities in various asset classes have differing risk and return expectations. In general, investments with higher expected returns involve a higher level of risk. The Board recognizes that some level of risk must be assumed to achieve the System's long-term investment objectives. The Board will attempt to achieve its investment return objective with an appropriate level of risk using an efficient combination of investments.

The Strategic Asset Allocation process uses risk budgeting for the Fund which provides a transparent, measurable methodology for allocating risk to various investment types in pursuit of the System's investment objectives. To ensure that the risk assumed by the Fund continues to be appropriate it will be reviewed at least annually, concurrently with an asset allocation study. A more in-depth review will be done at least every five years and coincide with the formal Asset/Liability Study. These processes should incorporate a variety of risk estimates that go beyond simple volatility measures.

Liquidity Needs

Sufficient liquidity must be maintained to pay benefits and expenses. Investment income and contributions are expected to exceed projected benefit payments and expenses on an annual basis for the foreseeable future, making it possible to invest a reasonable portion of the portfolio in illiquid investments. The liquidity horizon shall be reviewed each time asset allocations and expected return projections are revised.

Strategic Asset Allocation

The Board, with advice from Investment Consultant and Investment Staff, is responsible for establishing the Strategic Asset Allocation ("SAA") process and parameters for the Fund. SAA refers to the establishment of neutral weights and suitable ranges for the appropriate asset types that determine the distribution of investments within the Fund. The SAA process will seek to optimize expected return net of fees for the Fund within the established risk budget over a long-term horizon by maintaining a highly efficient portfolio.

The current Strategic Asset Allocation targets and ranges are detailed in Appendix 1. Since the Fund is designed to benefit both current and future generations of beneficiaries, its time horizon is long. More specifically, the Board should calibrate the SAA process toward the aim of meeting the System's investment objectives and risk budget over a time horizon of twenty years or more. However, since the benefit payment obligations of the System must be met on a timely and regular basis, cash flow considerations (including the potential for a sustained period of net outflows) will generally be balanced with the long-term liability stream when setting the SAA parameters and the associated risk budget.

Asset Liability Study

At least every five years (or more frequently if warranted by a material event in either the liability structure of the Fund, the contribution policy, and/or the capital markets) the Board will conduct a formal Asset/Liability Study to review asset classes, risk-return assumptions, and correlation of returns, and implementation styles in light of the System's expected liability stream. These periodic studies will provide the primary basis for material changes to the Fund's strategic asset allocation parameters and overall risk posturing.

Rebalancing

The Board has chosen to adopt a rebalancing policy that allows rebalancing the Fund between major asset classes due to market drift. Market movements and cash draws for benefit payments may cause current Fund positioning to drift away from neutral positioning and potentially beyond the prescribed ranges in the Strategic Asset Allocation.

When a month end Custodian report shows that an asset class has drifted beyond these prescribed ranges, rebalancing shall be enacted to bring Fund positioning within the prescribed ranges while following the guidelines below. To the extent there is not sufficient liquidity to do so, such as in private market strategies, or it is otherwise not prudent to do so, Staff shall report this and any recommended actions to the Investment Committee at its next regularly scheduled meeting.

Investment Staff is also authorized to rebalance the portfolio within the policy ranges for market drift between asset classes. Such rebalancing is only permissible to the extent that it results in positioning which is nearer to neutral and does not change positioning from an underweight to an overweight, or vice versa.

Investment Staff is responsible for developing and overseeing all portfolio rebalancing activities and is authorized to carry out these activities in accordance with this section. The Executive Director and the General Consultant shall consent in writing to Investment Staff's proposed rebalancing prior to any action taking place. All rebalancing activities permitted by this section must be authorized by the Executive Director in the form of approved instructions to the investment manager(s) and/or custodial bank.

In all cases the potential benefits of rebalancing must be weighed against the costs, including explicit transaction costs such as commissions and market impact as well as opportunity costs such as Staff time and focus. Investment Staff will report the results of rebalancing activity to the Executive Director and Investment Consultant upon completion of the rebalance. The Board shall be notified of any such changes (1) by email within one business day of initiating the rebalancing with the Custodian and/or Manager(s) and (2) in writing at the next regular meeting of the Investment Committee.

Phased Transitions

During times of phased transition to a new set of Strategic Asset Allocation parameters, interim rebalancing weights and procedures may be chosen until the implementation of the new parameters can be prudently completed. During the transition towards the new parameters, certain asset classes may exceed prescribed limits and will serve as either a funding source for new strategies or portfolios, or as a proxy pending implementation of certain allocations.

Currently approved phased transition guidelines adopted by the Board, if any, can be found in Appendix 4.

Investment Manager Selection

The Board, acting through its Investment Committee and with advice from its Investment Consultant(s) and Investment Staff, hires Managers to carry out its duties to implement the System's investment program. Implementation decisions should be made with particular attention to the Board's stated Investment Beliefs regarding the potential benefits of diversification and the impact of costs.

The Board supports disciplined and rigorous processes for selection, monitoring, and retention of Investment Managers. This process shall include, among other items as appropriate, mandate specification, initial diligence, onsite diligence visits, due diligence questionnaires, finalist evaluation, and approval by the Investment Committee and Board. This disciplined process shall consider both quantitative and qualitative measurements to determine whether an Investment Manager is likely to maintain a consistent philosophy and strategy, perform well on a risk-adjusted basis versus peers pursuing a similar strategy, and add value net of all costs. The Board shall maintain a Watch List for the purpose of ensuring that concerns regarding any Investment Manager with a live mandate are appropriately recognized, addressed, and resolved.

The terms, provisions, and requirements set forth in this Policy, applicable laws (which shall include US sanctions programs), relevant fund documents, and the agreement(s) executed by the Investment Manager with the System establish the requirements governing the investment of System assets.

III. INVESTMENT ROLES & RESPONSIBILITIES

The System's investments are held in trust for the exclusive benefit of its members, beneficiaries, and retirees and may not be diverted under any circumstances. This "exclusive benefit" rule shall be strictly followed when making, implementing and monitoring investment decisions. Specific care should also be taken to structure the System's investment relationships to maximize alignment of interests while mitigating conflicts of interest and agency problems.

Specific duties and responsibilities are set forth below for the parties that are established to act as fiduciaries regarding the investment program for the Fund in achieving its objectives.

Board of Trustees

The Board has the fiduciary responsibility of overseeing the management of the Fund and the associated investment process. In fulfilling this responsibility, the Board will establish, maintain, and require compliance with this policy and its stated objectives. Trustees are tasked primarily with setting the overall risk/return preferences, and weighing total portfolio return against a properly constructed policy benchmark.

Within this framework, the Board will select, retain, monitor, and evaluate the Investment Consultant, Investment Managers, Custodian (as defined herein), and other parties to serve the goal that actual results meet the objectives.

At its discretion, the Board may delegate authority for strategic and operational aspects of the Fund to Staff, though it may not delegate overall responsibility for the program.

Investment Committee

The Investment Committee is chartered to assist the Board of Trustees in fulfilling its fiduciary oversight responsibility for the management of the System's investments. Duties of the Investment Committee may include, but are not limited to:

- formulating and recommending to the Board the overall investment policies of the System,
- establishing and recommending to the Board investment guidelines in furtherance of those policies, all of which shall be subject to approval by the Board,
- monitoring investment performance relative to the strategic objectives and compliance with relevant investment risk guidelines set forth in policy, and
- monitoring the management of the Fund for compliance with relevant investment policies and guidelines.

Professional Staff

The Executive Director, the Chief Investment Officer, the Chief Financial Officer, and other Investment Staff will constitute the System's Professional Staff ("Staff"). Staff is responsible for rendering to the Board objective, competent, professional investment advice that is free from conflicts of interest. Staff will make recommendations to the Board regarding the Fund and will be responsible for implementing both Board decisions and applicable portions of this policy.

Investment Staff

Investment Staff is required by the Board to provide professional investment analysis and support, to exercise a standard of care consistent with fiduciary duty, and to maintain the integrity of the investment program. Responsibilities of Investment Staff include investment analysis and research, recommendations on the Fund, proxy voting, risk management, manager and compliance monitoring, rebalancing, trade cost analysis, and any other functions directly related to the investment of Trust assets. Investment Staff support the investment program at the strategic and operational levels through the establishment of appropriate policies and procedures. Investment Staff is also responsible for implementation and maintenance of analytical tools to measure and monitor risk as further described in this policy and internal procedures.

Investment Staff will also advise regarding the development of this policy and its implementation and aid in selection and monitoring of all Managers, Consultants, Custodians and other service providers related to the investment function.

Investment Consultant(s)

The Board may obtain the services of one or more qualified firms or individuals to assist and advise the Board and Staff regarding the structure, strategy, management, and investment of the Fund (a “General Investment Consultant”). The duty of a General Investment Consultant is to render objective, competent, professional advice and assistance that is free from conflicts of interest and to work with the Board and Staff regarding the investment process. This responsibility includes meeting regularly with the Board to provide perspective on the Fund’s goals, strategy, structure, and risk as well as the progress toward fulfilling the Fund’s long-term objectives.

A General Investment Consultant will advise, consult and work with the Board, Investment Committee and Investment Staff to develop and maintain a well-diversified portfolio of investments for the Fund. Fund positioning and performance will be reviewed regularly, and recommendations will be made as appropriate. A General Investment Consultant will assist the Board in manager selection and monitoring as needed, including informing the Board promptly of material changes to portfolio investments. Within this process, a General Investment Consultant assumes fiduciary responsibility for advice given regarding the management of the investment process. A General Investment Consultant will perform its duties and obligations in conformance with generally accepted industry standards and its contract with the System.

The Board may also hire one or more qualified firms or individuals to assist and advise the Board regarding specialized mandates such as selection of managers and/or investments (a “Specialized Investment Consultant”). The Specialized Investment Consultants are hired by, and report to, the Board to assist in the management of the specialized portfolio. The Specialized Investment Consultants provide advice to the Board on specific asset class policies, recommend pacing commitments, Manager selection and terminations, Manager guidelines and restrictions, participate in the due diligence process and ongoing monitoring of Managers including policy compliance, provide analysis of investment performance, and provide advice on other investment-related issues. Specialized Investment Consultants work closely with Staff in all aspects of the specialized investment portfolio including its relationship to the Fund as a whole.

It is imperative that Consultants have the independence and ability to inform the Board in the event of any concerns related to investment activity. If any Consultant learns of a material issue regarding deviation from prudence, objectivity, policy or parameter adherence or any other matter of concern involving the investment program, the Consultant has a duty to express that concern in writing to the Executive Director and CIO while also recommending any action to be taken as deemed necessary. The Consultant shall also contact the Board if it concludes that further immediate action is required and is beyond the authority granted to the Executive Director or Investment Staff. In any event, all such material matters will be reported to the Board at its next regularly scheduled meeting.

Investment Managers

Except for direct investments, investments for the Fund shall be made and managed by one or more investment managers ("Managers") who meet the requirements of Sections 802.203(d) and 802.204, Texas Government Code. Managers will construct and manage a portfolio of investments (the "Portfolio") consistent with the investment philosophy and strategy they are hired to implement in compliance with this policy and/or any agreement(s) they execute with the System. Investment Managers shall provide quarterly reporting in a format as requested by Investment Staff.

Custodian(s)

Custodian bank(s) ("Custodian" or "Custodians") will maintain custody of the cash, securities, commingled funds and other investments of the Fund. The Custodian(s) will be responsible for safekeeping, clearing and settling securities as appropriate for the accounts they are assigned. The Custodian(s) will regularly value, list and summarize these holdings for review by the Board, Staff and Consultant. In addition, a bank or trust depository arrangement with the Custodian(s) may be utilized to invest cash in liquid, interest-bearing instruments.

A Master Custodian will be designated to accurately record all transactions affecting the Fund. The audited entries from the Master Custodian shall constitute the official book of record for the Fund. All Custodians will be directed to provide timely and accurate information to the Master Custodian.

IV. FIDUCIARY CONDUCT

An investment fiduciary includes, but is not limited to, a person who exercises discretionary authority or control in the investment of the assets of the Fund or who renders, for a fee, advice for the Fund. The term investment fiduciary includes but is not limited to the members of the Board, the Fund Administrator, the investment consultants, and investment managers. An investment fiduciary shall discharge his or her duties exclusively in the interest of the participants in the System and their beneficiaries in accordance with the fiduciary standards set forth in Section 802.203 of the Texas Government Code and other applicable law.

In adopting this Policy, the Board requires all Trustees and Staff involved in the investment of Fund assets to make all investment decisions in the best interest of the System and to abide by the System's Ethics Policy.

V. OPERATIONAL GUIDELINES

Asset Class Guidelines

To ensure that the Strategic Asset Allocation is implemented in a way that broadly represents the risk/return profile and exposures desired by the Board, guidelines for each major asset class have been adopted in Appendix 3. These guidelines lay out the broad-based guidelines that Investment Staff and Investment Consultant shall follow in implementing these strategies and in making recommendations to the Investment Committee and/or Board.

In addition to these guidelines, Investment Consultant and Investment Staff shall adopt internal guidelines and/or policies to oversee the implementation of each asset class. These guidelines should, where appropriate, include considerations for absolute and relative risks, desired exposures, liquidity, leverage, diversification, counterparties, and fees, among other items.

Private Markets Specific Guidelines

Given the unique characteristics of private markets strategies, the Board has adopted a Private Markets Strategic Plan to govern the selection, monitoring, performance reporting and guidelines of these strategies. The Private Markets Strategic Plan, which is incorporated into the Investment Policy Statement here by reference, shall be reviewed annually for appropriateness and shall also include a pacing plan to guide allocation decisions.

Use of Derivatives

The only authorized uses of derivative instruments are to efficiently manage portfolios and risk and to implement investment strategies authorized by this Policy more effectively. The following derivative instruments are allowable: futures, forwards, swaps, structured notes, and options. Managers may only engage in derivatives transactions that are consistent with their investment guidelines as well as applicable laws and regulations.

Cash Management

As a mature pension plan, cash disbursements of the System are expected to exceed cash receipts for the medium term. As such, sufficient funds must be made available for transfer from the System's investments to meet the operating needs of the System. On at least a quarterly basis, Staff will project the cash flow needs of the System based on the amount budgeted for administrative expenses and projected benefit payments, including retiree payroll. Cash draws should generally be made from asset classes and individual portfolios that are overweight relative to their strategic neutral weight, with those funds then transferred to the System's cash account at the Custodian Bank. Each quarter Staff will provide to the Board via the Investment Committee a report detailing all cash movements from the prior quarter that are related to investment program operations.

Securities Lending

The Board may select a Securities Lending Agent(s) to generate incremental income by making term loans of eligible securities. Any such program shall not inhibit the trading activities of Managers and should not run counter to the investment strategy of the Fund overall.

Securities Litigation

As a large institutional investor, the Fund frequently holds securities that are the subject of individual and class action securities litigation. The Custodian and other parties (the "Claims Processor") may be appointed by the Board to monitor such lawsuits, report to the Executive Director and Investment Staff, and file notice of claim or other necessary documentation. The Claims Processor shall notify Managers of any potential or pending legal action.

In its role as a fiduciary, the Board may, with the advice and assistance of the System's General Counsel, determine that the Fund should pursue litigation where it has been harmed due to securities fraud or other bad acts. The Board has set a "Threshold Value" to determine when the estimated financial loss to the System may warrant pursuing lead plaintiff status in a class action or separate prosecution of claims. The Threshold Value is defined as an estimated financial loss that exceeds 0.03% of Fund assets as of the most recent quarter end. In most cases, the Funds' interest in securities litigation claims will be adequately addressed solely through participation as a class member, rather than taking a lead plaintiff role in such litigation.

Proxy Voting

Proxy voting is generally delegated to Investment Managers and will be authorized via the Manager's contract to represent COAERS prudently on issues of corporate governance regarding the portfolio. Records of proxy votes will be maintained by the Managers and submitted to Investment Staff on request or at specified intervals. In representing the System, external managers and proxy voting agents are to consider only those pecuniary factors that relate to the economic value of System investments and are not to subordinate the interests of the System's participants and beneficiaries to unrelated objectives. Investment Staff will provide a proxy voting summary report for separately managed accounts to the Executive Director, on an annual basis as soon as practical after fiscal year-end.

VI. <u>REPORTING, EVALUATION AND REVIEW</u>

Performance

Regular performance evaluation of the Fund by the Board is designed to monitor the effectiveness of the investment process in meeting the long-term objectives of the System. The purpose is to test the continued validity of the associated decisions and to prompt a review of underperformance or excessive risk. All performance measurement should be based on total returns, net of fees, adjusted for risk, as measured over a sufficient time period to reflect the benefits of any active decisions (typically a minimum of three years and preferably over five or more years and/or a full market cycle).

The General Investment Consultant shall provide to the Board via the Investment Committee a written summary of the Fund's performance each quarter. This report shall include a comparison to performance goals as well as the investment performance ranking of other appropriate peer group(s). The Consultant will conduct an in-depth performance attribution analysis, which will quantify the extent to which specific allocations, strategies, and/or managers added or detracted from overall Fund performance.

Risk

At least annually, Investment Consultant and Investment Staff shall provide a risk report to the Board via the Investment Committee. This report shall contain a variety of risk reporting items and should describe context for whether the risks taken by the Fund were appropriate in measure and compensation.

Items included in this report shall be both backwards looking (ex-post) and forward looking (ex-ante), where possible. At a minimum, this report should include volatility, tracking error, value at risk, correlations, beta, Sharpe Ratio, Information Ratio, portfolio characteristics and contribution to risk at the Total Fund and asset class levels.

VII. INTERPRETATION, REVIEW AND REVISION OF POLICY

It is intended that this policy and all addenda hereto be construed and administered such that they comply with all applicable federal and state laws and regulations, as such may be amended from time to time to reflect best practices for prudent investors. The Executive Director is authorized to approve variances from the policies set forth herein in furtherance of such compliance. The Executive Director is also authorized to update this policy for strictly administrative items subject to approval by the General Counsel. Any variance approved for compliance with law shall be approved by General Counsel, Investment Counsel, or Tax Counsel as appropriate. The Executive Director shall report any such variances or updates to the Board at its next regular meeting via the Investment Committee.

All previous System investment policies and objectives are superseded by this document. The Board will formally review this Policy at least annually to determine whether it remains appropriate in light of the Board's investment philosophy and objectives. This document will also be reviewed periodically and updated as necessary to reflect changes in the capital markets and to reflect best industry practices for prudent investors. Any revisions to this document will be promptly supplied to the appropriate parties in written form.

APPENDICES

1. Strategic Asset Allocation

Asset Class	Minimum	Neutral	Maximum
Global Equities	46%	53%	60%
Real Assets	12%	15%	19%
Private Credit	7%	10%	13%
Fixed Income	18%	21%	28%
Cash & Equivalents	0%	1%	10%

2. Benchmarks

Policy Benchmark

The Policy benchmark is a blended benchmark consisting of Asset Class benchmarks held at neutral Strategic Asset Allocation weights.

Passive Benchmark

Asset Class	Benchmark	Weight
Global Equities	MSCI ACWI IMI Net Index	60%
Global Fixed Income	Bloomberg Global Aggregate Bond Index	40%

Asset Class Benchmarks

Asset Class	Benchmark
Global Equities	MSCI ACWI IMI Net Index
Real Assets	Blended weighted average of primary composite benchmarks
Private Credit	LSTA Leveraged Loans Index +200 bps
Fixed Income	Bloomberg US Aggregate Bond Index
Cash & Equivalents	Bloomberg US Treasury Bills 1-3 Month Index

Real Assets Composite*	Benchmark
Real Estate	NCREIF ODCE Net EWA
Infrastructure	Burgiss Global Infrastructure Funds Index
Gold	Bloomberg Gold Subindex Total Return

**Real Assets composite benchmarks are given pro-rata weights based on actual allocation weights on a monthly basis.*

3. Asset Class Guidelines

Global Equities:

Region	Benchmark	Min	Neutral	Max
US Equities	MSCI USA IMI Net	-5%	Weight in ACWI IMI	+5%
DM Equities	MSCI World ex USA IMI Net	-5%	Weight in ACWI IMI	+5%
EM Equities	MSCI Emerging Markets IMI Net	-5%	Weight in ACWI IMI	+5%

Minimum and maximum ranges to be used for Market Drift rebalancing.
Percentages expressed relative to Global Equities exposure.

Fixed Income:

Fixed Income Strategy Type	Min	Max
Core Mandates	60%	100%
Plus Mandates	0%	40%

Percentages expressed relative to Fixed Income exposure.

Core mandates are those which are benchmarked to and represent the general characteristics of the Bloomberg US Aggregate Bond Index.
Plus mandates may include public markets strategies in US High Yield, Bank Loans, Emerging Market Debt, and Multi-Asset Credit.

Cash & Equivalents:

Cash Strategy Type	Min	Max
Foreign Currency Mandates	0%	25%

Percentages expressed relative to Cash & Equivalents exposure.
Minimum and maximum ranges only to be used for Market Drift rebalancing.

4. Phased Transition Guidelines

Recently the Board adopted a Strategic Asset Allocation which includes new private markets exposures in Private Credit and Real Assets and eliminates exposure to Multi-Asset strategies:

Asset Class	Prior Neutral	Current Neutral	Change
Global Equities	56%	53%	-3%
Real Assets	15%	15%	
Private Credit		10%	10%
Fixed Income	21%	21%	
Cash & Equivalents	1%	1%	
Multi-Asset	7%		-7%

Given the expected time required over several years to build out these exposures, the Board has adopted the below interim guidelines for benchmarking and the Strategic Asset Allocation:

- The Policy Benchmark shall consist of the Asset Class benchmarks held at actual allocation weights, reweighted monthly, instead of the Neutral Strategic Asset Allocation weights.

- The Real Estate and Infrastructure Composites in Real Assets shall be benchmarked by the below, which consists of underlying strategy type benchmarks at actual allocation weights, reweighted monthly:

Real Estate Composite

Strategy Type	Benchmark
Private Markets	NCREIF ODCE (Net) (EWA)
Public Markets	US REITs Completion Index

Infrastructure Composite

Strategy Type	Benchmark
Private Markets	Burgiss Global Infrastructure Funds Index
Public Markets	Dow Jones Brookfield Global Infrastructure Index (Net)

- The below minimum and maximum Strategic Asset Allocation minimums and maximums shall apply:

Asset Class	Minimum	Maximum
Global Equities	46%	63%
Real Assets	12%	19%
Private Credit	0%	13%
Fixed Income	15%	28%
Cash & Equivalents	0%	10%
Multi-Asset	0%	7%

These Phased Transition guidelines shall stay in effect until such time as the Board approves their removal from this Policy.

5. Other Portfolio Guidelines

Except as explicitly approved by the Board the following guidelines shall apply:

- In active strategies no more than 20% of the System's investments shall be managed on a permanent basis by a single investment firm.
- The System's investments shall not permanently constitute more than 20% of any firm's assets under management within the asset class managed for the System.
- Less liquid assets, defined as those with expected liquidity of less frequent than quarterly, shall not constitute more than 40% of Fund assets
- The Fund shall not have more than 3% of its investments at market value in the securities of any one corporation
- The Fund shall not own more than 5% of any class of voting securities of any one public corporation
- The Fund shall not represent more than 20% of a single commingled investment vehicle, based on market values.
- The Custodian(s) shall maintain a credit rating of at least A+ or equivalent

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City of Austin Employees Retirement System

November 22, 2024

Strategic Asset Allocation Study

Table of Contents

Introduction

Introduction

→ Setting up asset allocation targets is one of the most important decisions a pension board makes.

→ Meketa typically recommends its clients conduct an asset allocation study every three years, or more often if conditions warrant it, such as significant changes in market conditions, consultant coverage, or the probability of achieving the long-term return objectives changes significantly.

→ Given our short tenure with COAERS, we believe it is prudent to conduct a strategic asset allocation to review the current policy utilizing Meketa' capital market expectations.

→ This document presents a review of the current asset allocation policy and the alternative option that incorporates an 8% allocation to private equity (notated "8% PE" throughout the document).

→ We provide various approaches to assessing risk to provide a "mosaic" of the risks faced by the System, and to highlight the tradeoffs inherent to different policy portfolios.

→ As a reminder, a mix with an 8% Private Equity target is considered for the following reasons:

- This option produces an expected return of 8.5%, with a marginally improved Sharpe ratio.
- It reduces the System's exposure to global equity by 8%, dampening realized volatility.
- It improves the likelihood of meeting the assumed rate of return over the long term to 73% from 70.5%.
- It sets in motion a program to invest in private equity in a gradual approach.
- The 8% target is obtainable within 4-5 years.

→ Meketa recommends that the COAERS portfolio maintain its current policy allocation while evaluating the potential inclusion of private equity. The current policy is well-positioned for the System to achieve the long-term objectives.

Asset Allocation Policy Options

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Asset Allocation Policy Options[1]

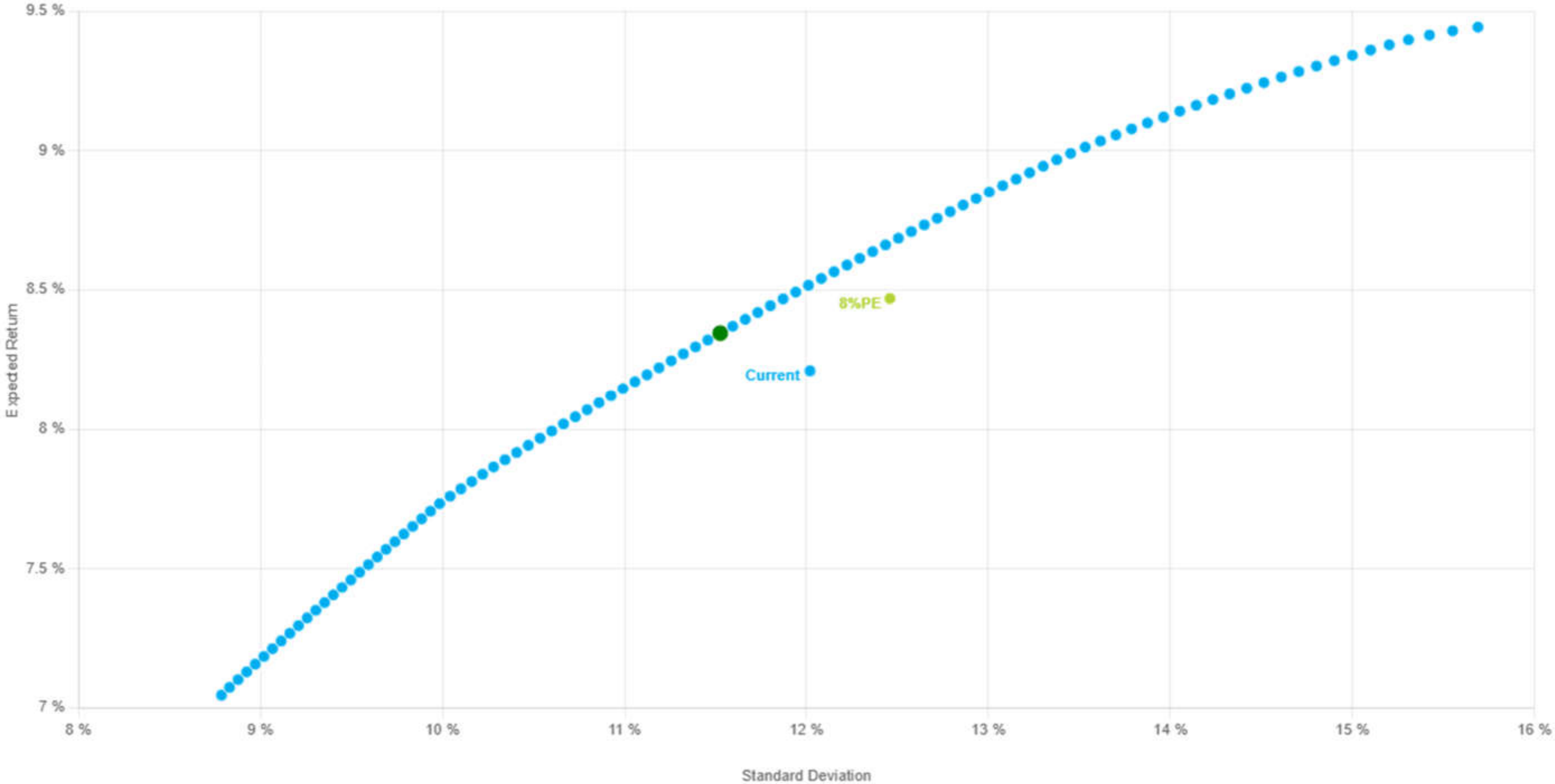
	Current (%)	8% PE (%)	8% PE with RMS (%)	Meketa 7/30 Model Portfolio[1] (%)	Meketa 8/30 Model Portfolio[1] (%)	2024 - Public DB >$1B (%)
Growth/Equity	53	53	45	20	42	58
Public Equity	53	45	37	14	31	43
Private Equity	0	8	8	6	11	15
Credit	10	10	10	14	11	8
Public Credit	0	0	0	6	7	4
Private Credit	10	10	10	8	4	4
Rate Sensitive	22	22	22	40	22	17
Cash Equivalents	1	1	1	0	0	3
Investment Grade Bonds	21	21	21	40	22	14
Real Assets[2]	15	15	15	20	17	12
Real Estate	10	10	10	9	8	9
Infrastructure	5	5	5	6	5	1
Natural Resources / Comm.	0	0	0	5	4	2
Other	0	0	8	6	8	5
Hedge Funds / Risk Parity/ TAA	0	0	0	0	0	5
RMS Aggregate	0	0	8	6	8	0
Expected Return (20 years)	8.2	8.5	8.2	7.0	8.0	8.5
Standard Deviation	12.0	12.5	11.1	7.7	10.8	13.1
Sharpe Ratio	0.47	0.48	0.51	0.59	0.51	0.46

[1] Expected return and standard deviation are based upon Meketa Investment Group's Annual Capital Markets Expectations. Throughout this document, returns for periods longer than one year are annualized. Meketa model portfolios are for clients with 7.0% and 8.0% expected returns, and with a 30% illiquid target

[2] The 8% PE and 8% PE with RMS mixes assume 70% target to closed end value add real estate and 30% to core open ended real estate, and 60% to closed end value add infrastructure and 40% to core open ended infrastructure.

Efficient Frontier

→ The chart below shows the efficient frontier (which is subject to constraints[1]) and the 8% PE modeled in this document.



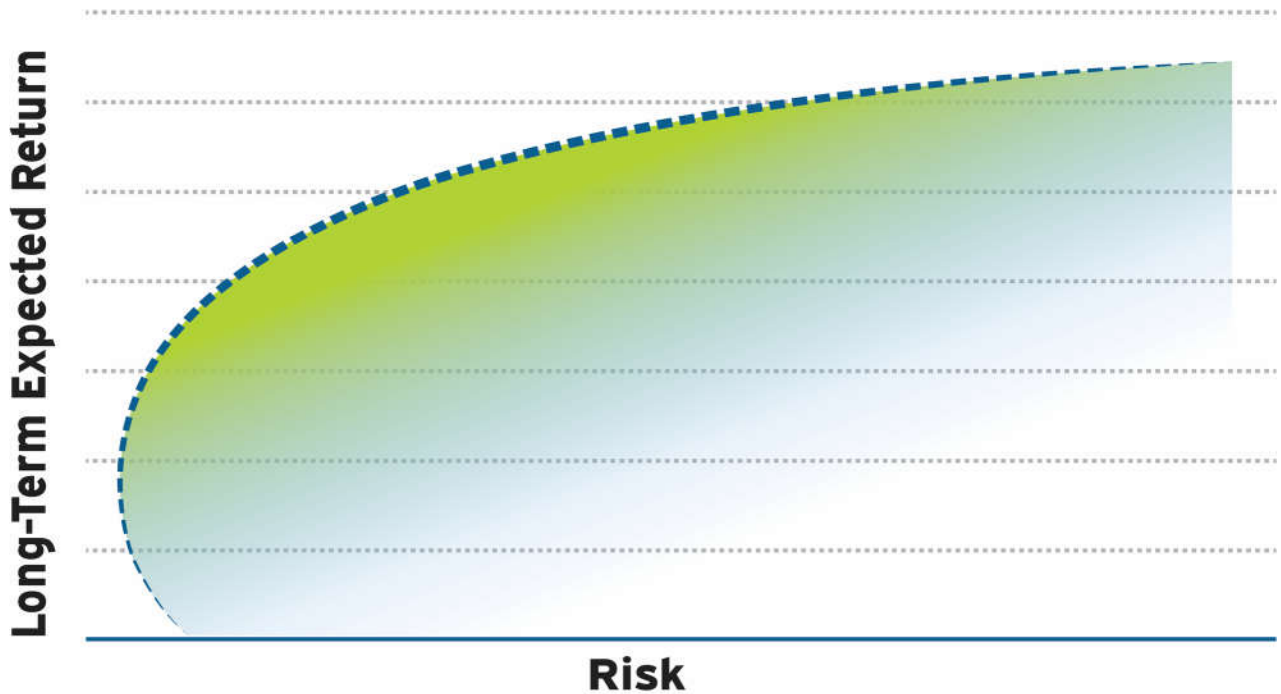
[1] Global equity between 40%-70%, private debt between 5%- 20%, investment grade bonds between 10%-30%, private equity maximum of 20%.

The Efficient Frontier is not Perfect

→ May give a false sense of precision / illusion that there is only one correct portfolio at any given risk/return level

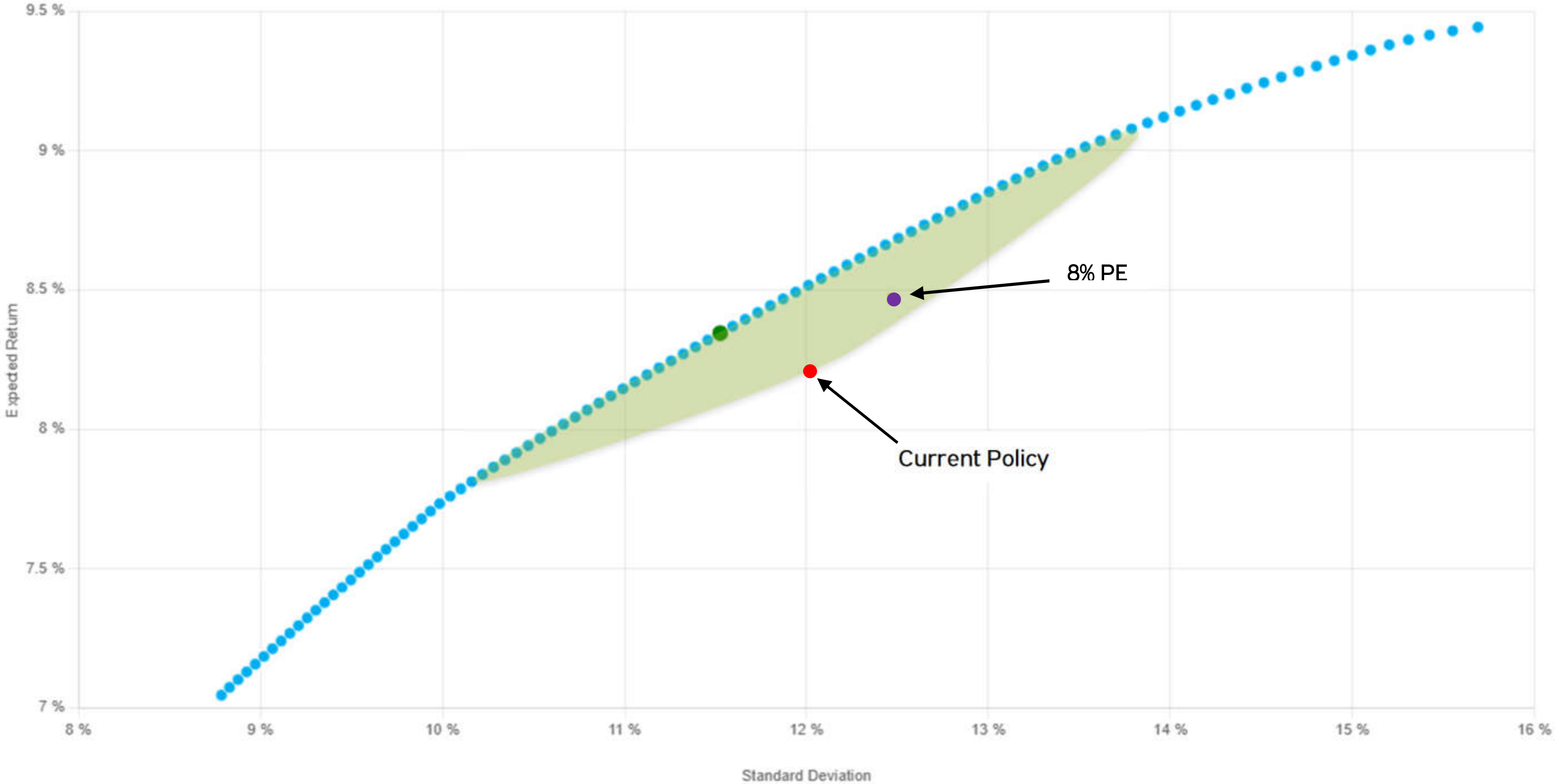
→ Better interpreted with a gradient underneath

- This gradient represents "near-optimal" portfolios
- It also allows for other objectives and constraints

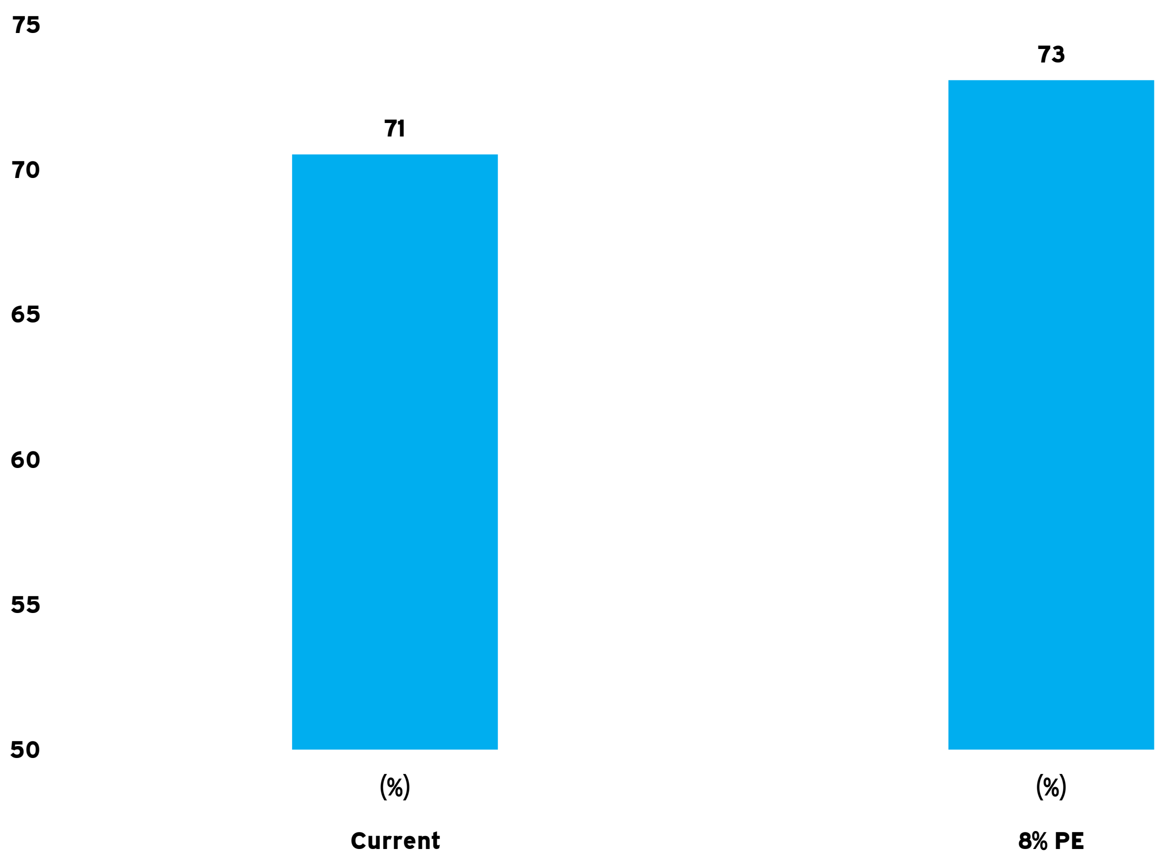


Efficient Frontier w/ Near Optimal Results

→ When incorporating the "near optimal" area, both the current policy and the "8% PE" mix that includes an 8% allocation to private equity are structured to fall within the realm of "optimal" outcomes.



Probability of Achieving 6.75% over 20 years



→ Both the current and 8% PE asset allocation mixes provide a healthy probability over 70% of achieving the System's return target of 6.75% over the next 20 years.

Diversification & Risk Analysis

Diversification

→ The primary motive for diversifying a portfolio is to reduce risk.

→ Diversification is the sole "free lunch" available to investors. That is, it represents the only way to reduce risk without reducing expected returns.

→ Therefore, investments should be allocated across multiple classes of assets, based in part on the expected correlation of their returns.

→ Within each asset type, investments should be distributed across strategies and risk factors to further reduce volatility.

Types of Risk Analysis Addressed

→ Risk budgeting[1]

- Attributes overall portfolio risks to specific asset classes
- Highlights the source and scale of portfolio-level risk

→ Modern Portfolio Theory based risk analytics

- Relies on assumptions underlying Modern Portfolio Theory (MPT)

→ Scenario analysis

- Stress tests policy portfolios using actual historical examples
- Stress tests policy portfolios under specific hypothetical scenarios

[1] Risk budgeting seeks to decompose the aggregate risk of a portfolio into different sources (in this case, by asset class), with risk defined as standard deviation.

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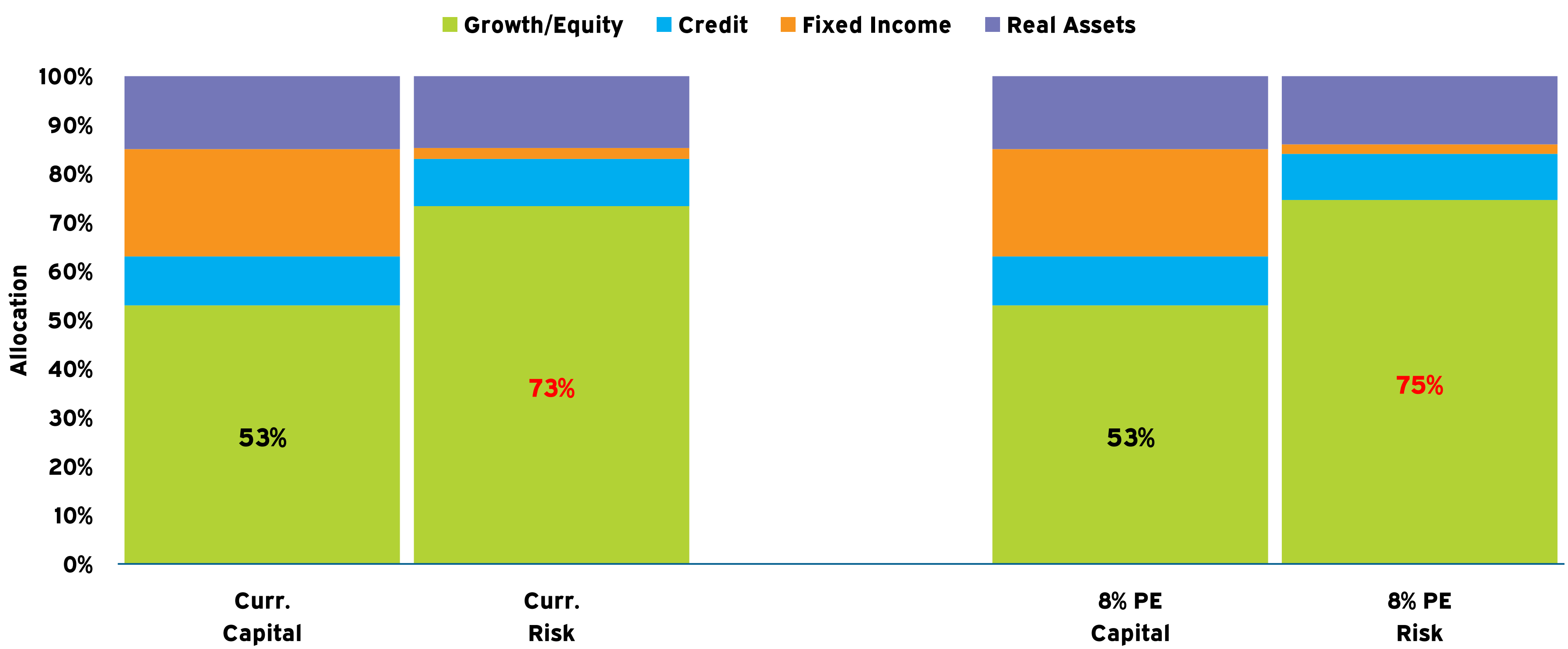
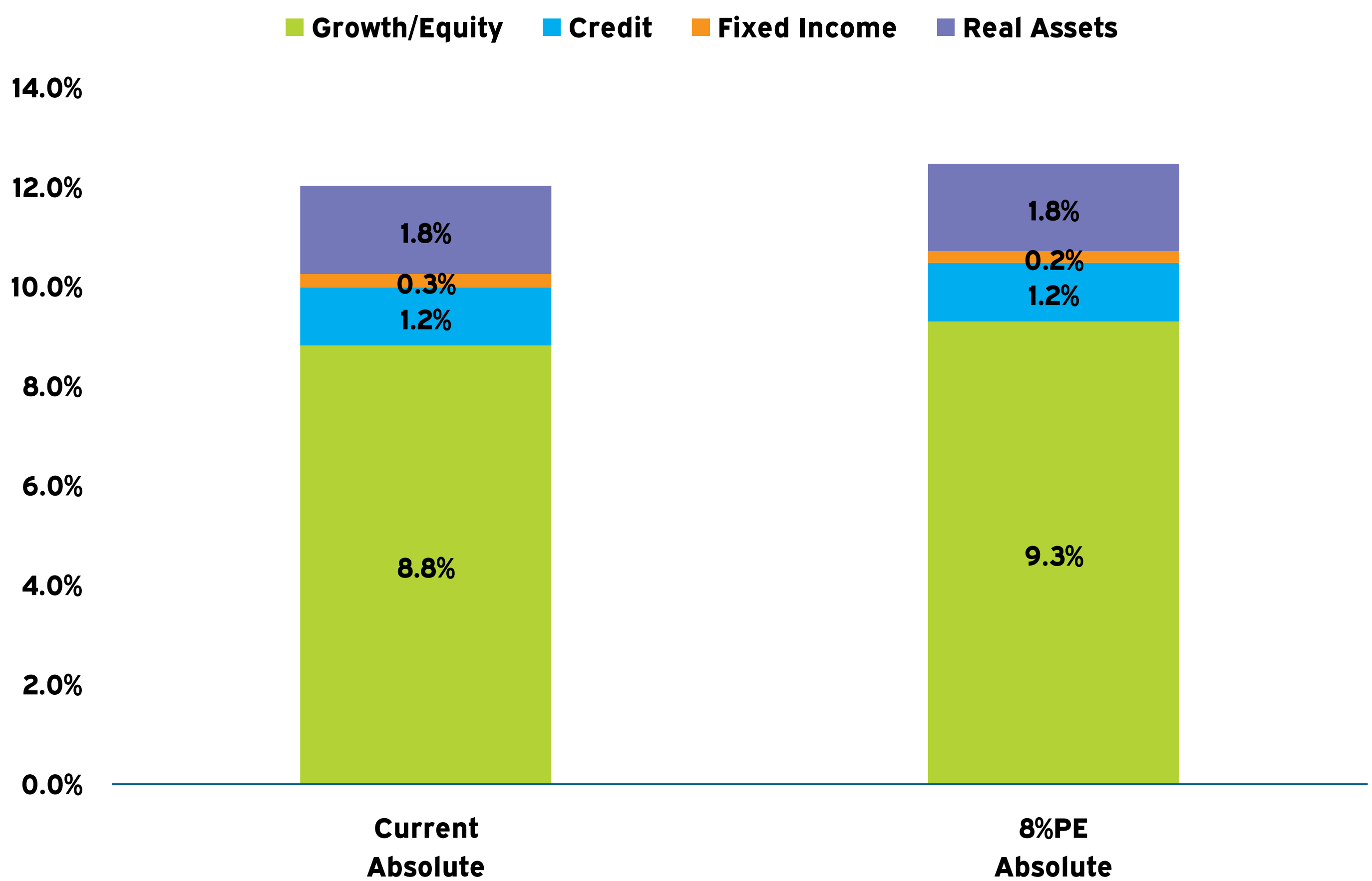
Risk Budgeting Analysis
(Capital Allocation vs. Risk Allocation)



→ Assets with low relative volatility, such as fixed income, contribute less to risk than their asset weighting implies.

Risk Budgeting Analysis[1]
(Absolute Contribution to Risk)



→ In both policy options, equity risk dominates the risk profile of the portfolio.

[1] Contribution to risk is calculated by multiplying the weight of the asset class by its standard deviation and its correlation with the total portfolio.

Modern Portfolio Theory Based Risk Analysis

Scenario	Current (%)	8%PE (%)
Worst Case Returns[1]		
One Year (annualized)	-20.1	-20.7
Five Years (annualized)	-5.5	-5.7
Ten Years (annualized)	-1.7	-1.8
Twenty Years (annualized)	1.1	1.1
Best Case Returns[1]		
One Year (annualized)	46.4	48.2
Five Years (annualized)	23.9	24.7
Ten Years (annualized)	19.0	19.7
Twenty Years (annualized)	15.7	16.3
Probability of Experiencing Negative Returns		
One Year	23.8	23.8
Five Years	5.5	5.6
Ten Years	1.2	1.2
Twenty Years	0.1	0.1
Probability of Achieving at least a 6.75% Return		
One Year	54.8	55.5
Five Years	60.6	62.1
Ten Years	64.9	66.8
Twenty Years	70.5	73.1

→ The probability of experiencing negative returns is identical for both mixes over the one- and twenty-year periods. Notably a 0.1% chance of negative returns over the twenty-year period.

[1] Best and worst case scenarios refer to three-standard deviation events (e.g., 0.3% and 99.7% percentiles).

Historical Negative Scenario Analysis[1]
(*Cumulative* Return)

Scenario	Current (%)	8% PE (%)
Post-COVID Rate Hikes(Jan 2022-Oct 2023)	-8.1	-7.0
COVID-19 Market Shock (Feb 2020-Mar 2020)	-19.4	-17.3
Taper Tantrum (May - Aug 2013)	-0.2	0.4
Global Financial Crisis (Oct 2007 - Mar 2009)	-29.2	-27.5
Popping of the TMT Bubble (Apr 2000 - Sep 2002)	-15.1	-13.5
LTCM (Jul - Aug 1998)	-7.2	-6.3
Asian Financial Crisis (Aug 97 - Jan 98)	1.7	3.2
Rate spike (1994 Calendar Year)	2.8	3.5
Early 1990s Recession (Jun - Oct 1990)	-5.0	-4.0
Crash of 1987 (Sep - Nov 1987)	-10.2	-8.6
Strong dollar (Jan 1981 - Sep 1982)	4.7	5.3
Volcker Recession (Jan - Mar 1980)	-3.9	-3.7
Stagflation (Jan 1973 - Sep 1974)	-21.0	-19.4

→ The 8% PE portfolio would have performed better than the Current Policy in a repeat of most negative events because it has less public equity.

[1] See the Appendix for our scenario inputs. In periods where the ideal benchmark was not yet available we used the next closest benchmark(s) as a proxy.

Historical Positive Scenario Analysis[1]
(*Cumulative* Return)

Scenario	Current (%)	8% PE (%)
Covid Recovery (Apr 2020-Dec 2021)	49.4	51.5
Global Financial Crisis Recovery (Mar 2009 - Nov 2009)	34.9	31.5
Best of Great Moderation (Apr 2003 - Feb 2004)	28.9	27.1
Peak of the TMT Bubble (Oct 1998 - Mar 2000)	35.4	38.2
Plummeting Dollar (Jan 1986 - Aug 1987)	58.1	52.0
Volcker Recovery (Aug 1982 - Apr 1983)	32.0	29.5
Bretton Wood Recovery (Oct 1974 - Jun 1975)	26.7	24.8

→ The Current Policy would have performed better during the Plummeting Dollar period as the portfolio has more public equity exposure and more non-USD exposure.

[1] See the Appendix for our scenario inputs. In periods where the ideal benchmark was not yet available we used the next closest benchmark(s) as a proxy.

Stress Testing: Impact of Negative Market Movements (Expected Return under Negative Conditions)[1]

Scenario	Current (%)	8% PE (%)
10-year Treasury Bond rates rise 100 bps	3.6	3.5
10-year Treasury Bond rates rise 200 bps	-2.0	-1.9
10-year Treasury Bond rates rise 300 bps	-2.3	-2.7
Baa Spreads widen by 50 bps, High Yield by 200 bps	0.9	0.9
Baa Spreads widen by 300 bps, High Yield by 1000 bps	-20.7	-19.8
Trade Weighted Dollar gains 10%	-3.9	-3.4
Trade Weighted Dollar gains 20%	-2.1	-2.2
U.S. Equities decline 10%	-5.0	-5.0
U.S. Equities decline 25%	-15.4	-15.4
U.S. Equities decline 40%	-25.2	-24.1

→ Both mixes would encounter headwinds in a rising rate environment, the impact is quite similar with both the current policy and the 8% Private Equity portfolio.

[1] Assumes that assets not directly exposed to the factor are affected nonetheless. See the Appendix for further details.

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Stress Testing: Impact of Positive Market Movements (Expected Return under Positive Conditions)[1]

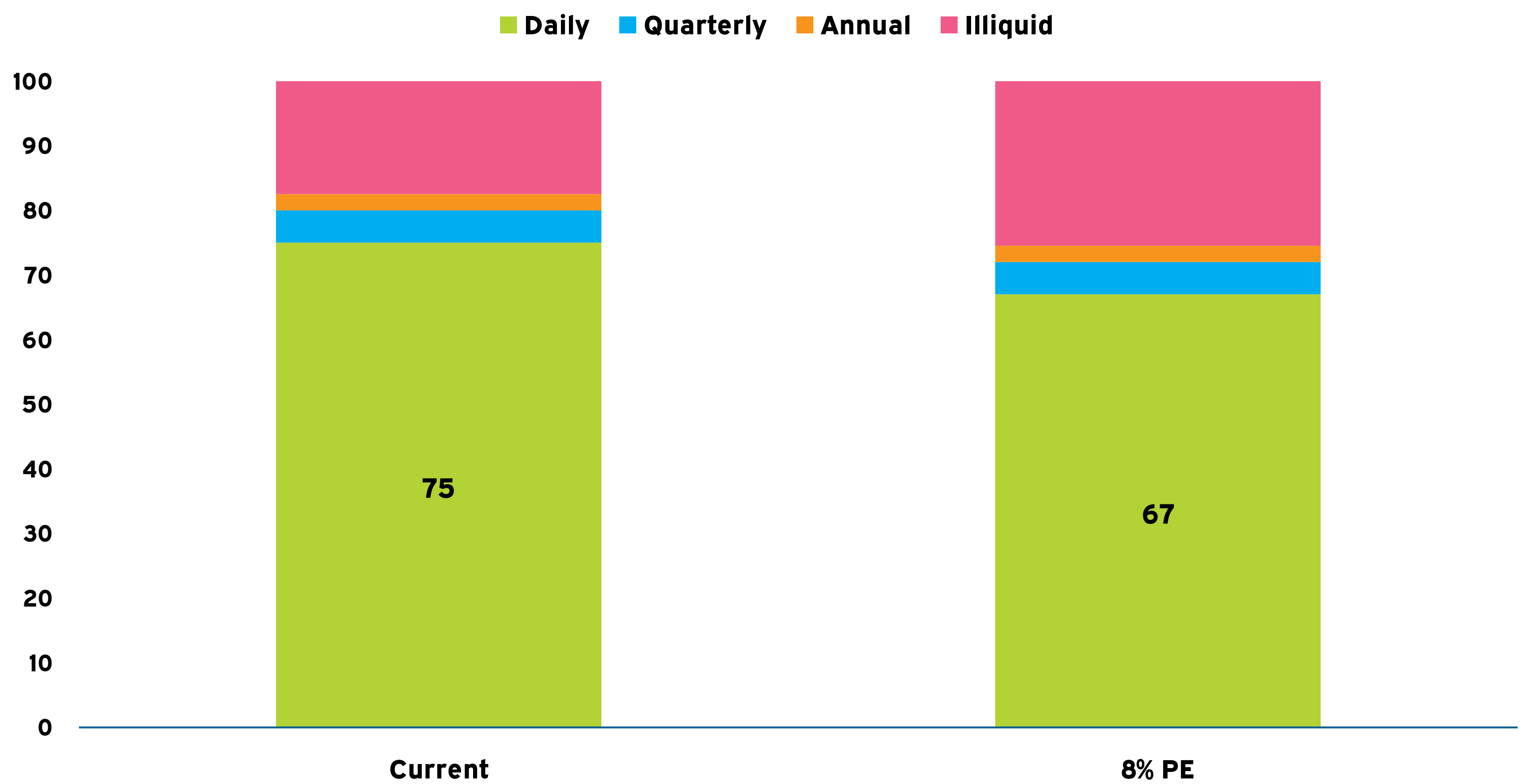
Scenario	Current (%)	8%PE (%)
10-year Treasury Bond rates drop 100 bps	1.5	1.7
10-year Treasury Bond rates drop 200 bps	10.4	9.6
10-year Treasury Bond rates drop 300 bps	13.3	12.2
Baa Spreads narrow by 30bps, High Yield by 100 bps	6.7	6.7
Baa Spreads narrow by 100bps, High Yield by 300 bps	11.9	11.0
Trade Weighted Dollar drops 10%	7.2	6.9
Trade Weighted Dollar drops 20%	22.7	21.2
U.S. Equities rise 10%	5.8	6.0
U.S. Equities rise 30%	15.1	14.3

→ Both mixes would benefit from a weaker US dollar. The Current mix would benefit the most given it has the most currency exposure.

[1] Assumes that assets not directly exposed to the factor are affected nonetheless. See the Appendix for further details.

Liquidity Analysis

Liquidity Profile[1]



→ Both mixes are majority comprised of daily liquid exposures. Even at full 8% private equity weight (which we expect would not occur for at least 4-5 years) we expect COAERS would still have sufficient liquidity to meet its cash flow requirements (i.e. benefit payments, expenses, capital calls, etc).

[1] Scale: **Daily** – public equity, public credit, cash equivalents, investment grade bonds, liquid commodities. **Quarterly** – core real estate. **Annual** – core infrastructure. **Illiquid** – private equity, private infrastructure, private credit, private non-core real estate, private natural resources.

Summary

Summary

→ Both of the mixes evaluated (Current Policy and 8% PE) are expected to generate an expected return above the actuarial target of 6.75%.

→ Acknowledging that an approval of an 8% private equity allocation will take a number of years to fully transition towards, we believe the Current Policy is well positioned to achieve COAERS' objectives in the near-term.

→ **Meketa recommends that the COAERS portfolio maintain its current policy allocation while evaluating the potential inclusion of private equity. The current policy is well-positioned for the System to achieve the long-term objectives.**

Appendix

2024 Capital Markets Expectations

Setting Capital Market Expectations

→ Capital markets expectations (CMEs) are the inputs needed to determine the long-term risk and returns expectations for a portfolio.

- They serve as the starting point for determining asset allocation.

→ Consultants (including Meketa) generally set them once a year.

- Our results are published in January and based on data as of December 31 for public markets and September 30 for private markets.
- Changes are driven by many factors, including interest rates, credit spreads, cap rates, and equity prices.

→ Setting CMEs involves crafting long-term forecasts for:

- Returns
- Standard Deviation
- Correlations (i.e., covariance)

→ Our process relies on both quantitative and qualitative methodologies.

→ We created inputs for 109 "asset classes" for our 2024 Capital Markets Expectations, with a summary output included in the Appendix[1].

[1] The full document can be accessed at: https://meketa.com/wp-content/uploads/2024/02/Meketa-Capital-Markets-Expectations-2024_Full.pdf

Building 10-year Forecasts

→ Our first step is to develop 10-year forecasts based on fundamental models.

- Each model is based on the most important factors that drive returns for that asset class.

Asset Class Category	Major Factors
Equities	Dividend Yield, GDP Growth, Valuation
Bonds	Yield to Worst, Default Rate, Recovery Rate
Commodities	Collateral Yield, Roll Yield, Inflation
Infrastructure	Public IS Valuation, Income, Growth, Leverage
Natural Resources	Price per Acre, Income, Public Market Valuation
Real Estate	Cap Rate, Yield, Growth, Leverage
Private Equity	EBITDA Multiple, Leverage, Public VC Valuation
Private Credit	Yield, Default Rate, Recovery Rate, Leverage, Equity Kicker
RMS	Leverage, Traditional Betas, Alternative Betas

→ The common components are income, growth, and valuation.

- Leverage and currency impact are also key factors for many strategies.

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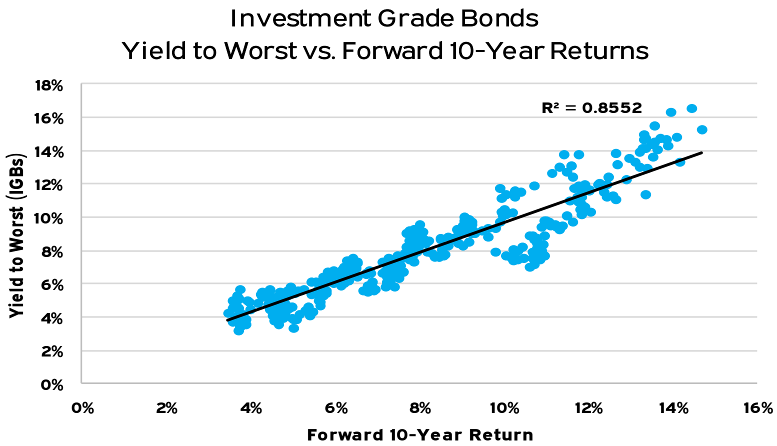
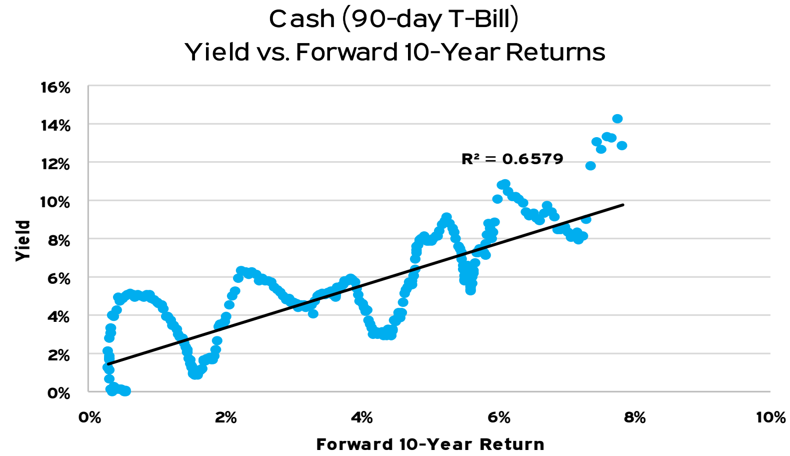
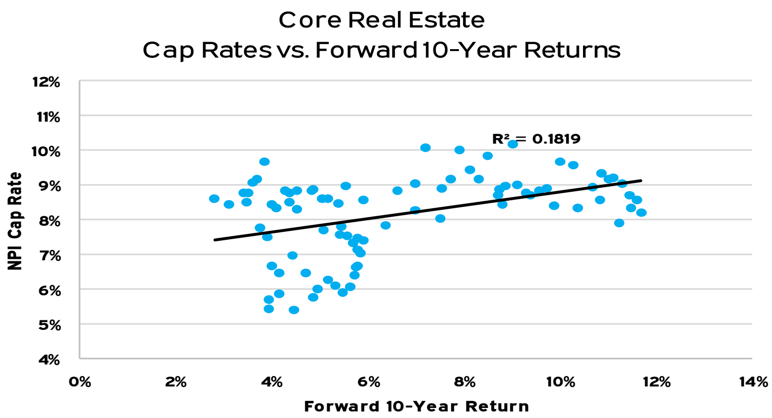
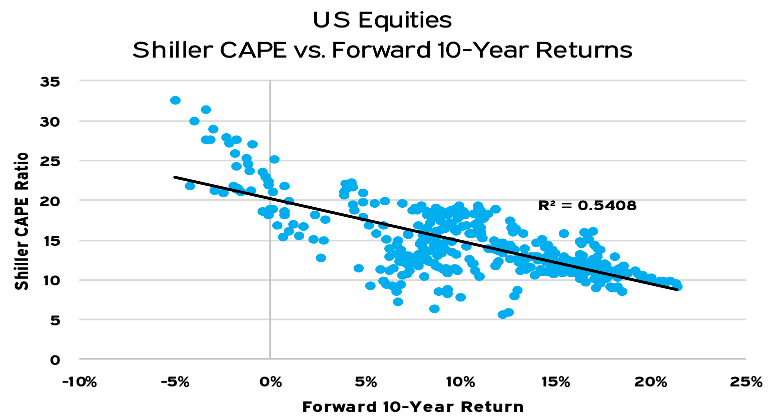
Some factors are naturally more predictive than others[1]









[1] Sources: Bloomberg, FRED, NCREIF, S&P, Robert Shiller (Yale University), and Meketa Investment Group. As of December 31, 2019.

10-year Model Example

→ Bonds

- The short version for investment grade bond models is:

$$E(R) = \text{Current YTW (yield to worst)}$$

- Our models assume that there is a reversion to the mean for spreads (though not yields).
- For TIPS, we add the real yield of the TIPS index to the breakeven inflation rate.
- As with equities, we make currency adjustments when necessary for foreign bonds.
- For bonds with credit risk, Meketa Investment Group estimates default rates and loss rates in order to project an expected return:

$$E(R) = YTW - (\text{Annual Default Rate} \times \text{Loss Rate})$$

→ Equities

- We use a fundamental model for equities that combines income and capital appreciation.

$$E(R) = \text{Dividend Yield} + \text{Expected Earnings Growth} + \text{Multiple Effect} + \text{Currency Effect}$$

- Meketa evaluates historical data to develop expectations for dividend yield, earnings growth, the multiple effect, and currency effect.
  - Earnings growth is a function of Real GDP growth, inflation, and exposure to foreign revenue sources.
  - We assume that long-term earnings growth is linked to regional economic growth.
  - However, many factors can cause differences between economic growth and EPS growth.
- Our models assume that there is a reversion toward mean pricing over this time frame.

Moving from 10-Year to 20-Year Forecasts

→ Our next step is to combine our 10-year forecasts with projections for years 11-20 for each asset class.

→ We use a risk premia approach to forecast 10-year returns in ten years (i.e., years 11-20).

- We start with an assumption (market informed, such as the 10-year forward rate) for what the risk-free rate will be in ten years.
- We then add a risk premia for each asset class.
- We use historical risk premia as a guide, but many asset classes will differ from this, especially if they have a shorter history.
- We seek consistency with finance theory (i.e., riskier assets will have a higher risk premia assumption).

→ Essentially, we assume mean-reversion over the first ten years (where appropriate), and consistency with CAPM thereafter.

→ The final step is to make any qualitative adjustments.

- The Investment Policy Committee reviews the output and may make adjustments.

The Other Inputs: Standard Deviation and Correlation

→ Standard deviation[1]:

- We review the trailing twenty-year standard deviation, as well as skewness.
- Historical standard deviation serves as the base for our assumptions.
- If there is a negative skew, we increased the volatility assumption based on the size of the historical skewness.

Asset Class	Historical Standard Deviation (%)	Skewness	Assumption[2] (%)
Bank Loans	6.5	-2.9	10.0
FI / L-S Credit	5.8	-2.7	9.0

- We also adjust for private market asset classes with “smoothed” return streams.

→ Correlation[3]:

- We use trailing twenty-year correlations as our guide.
- Again, we adjust for “smoothed” return streams.

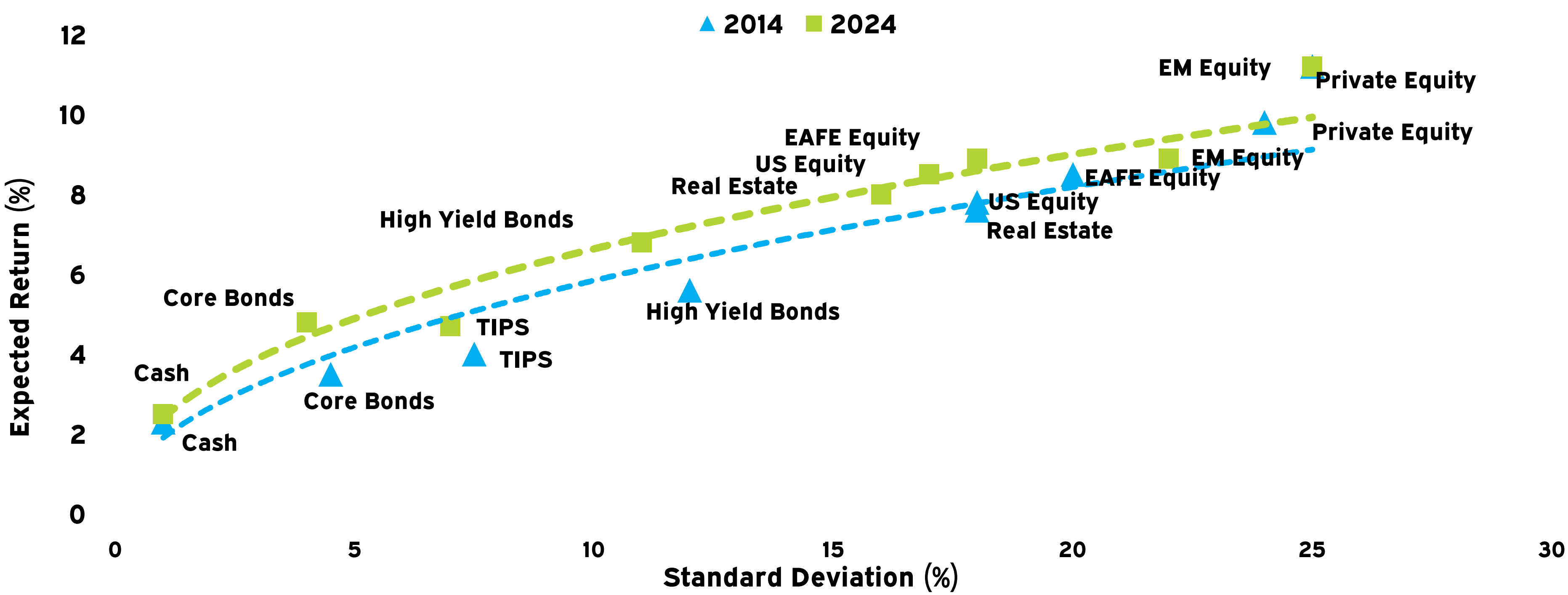
→ Most of our adjustments are conservative in nature (i.e., they increase the standard deviation and correlation).

[1] A measure of the amount of variation of the values of a variable about its mean. A low standard deviation indicates that the values tend to be close to the mean (also called the expected value) of the set, while a high standard deviation indicates that the values are spread out over a wider range.
[2] Note that we round our standard deviation assumptions to whole numbers.
[3] Correlation is a statistic that measures the degree to which two variables move in relation to each other.

The Big Picture: Higher Return for the ~Same Risk[1]

→ The relationship between long-term return expectations and the level of risk accepted is not static.

→ The higher interest rates of the last two years mean that many investors should be able to take on less risk than they have over the past decade if they want to achieve their target returns.



[1] Expected return and standard deviation are based upon Meketa Investment Group's 2014 and 2024 20-year capital market expectations.

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Annualized Risk and Return Expectations for Major Asset Classes[1]

Asset Class	10-year Expected Return (%)	20-year Expected Return (%)	Standard Deviation (%)	11-20 year Risk Premia[1] (%)
Cash Equivalents	2.4	2.5	1.0	-2.0
Investment Grade Bonds	4.6	4.8	4.0	0.4
Long-term Government Bonds	4.3	5.0	12.0	1.0
TIPS	4.3	4.7	7.0	0.4
High Yield Bonds	6.5	6.8	11.0	2.5
Bank Loans	6.5	6.6	10.0	2.0
Emerging Market Debt (local)	6.3	6.2	12.0	1.5
Private Debt	9.2	9.2	15.0	4.6
US Equity	6.9	8.5	17.0	5.5
Developed Non-US Equity	7.7	8.9	18.0	5.4
Emerging Non-US Equity	7.6	8.9	22.0	5.5
Global Equity	7.2	8.7	17.0	5.5
Private Equity	9.9	11.2	25.0	7.8
Real Estate	6.3	8.0	16.0	5.3
Infrastructure	7.4	9.0	18.0	6.1
Commodities	4.9	5.3	17.0	1.0
Hedge Funds	4.5	5.8	7.0	2.5
RMS	3.6	4.4	7.0	1.7
Inflation	2.4	2.8		-1.5

[1] Risk Premia are calculated relative to the market's projection for the yield on the 10-year Treasury in ten years. Return assumptions are geometric, net of fees and assume no alpha from active management.

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CMEs for Selected Asset Classes

Asset Class	Geometric 20-Year Expected Return (%)	Standard Deviation (%)
Cash Equivalents	2.5	1.0
Investment Grade Bonds	4.8	4.0
Long-term Government Bonds	5.0	12.0
TIPS	4.7	7.0
Short-term TIPS	3.7	5.0
High Yield Bonds	6.8	11.0
Bank Loans	6.6	10.0
Private Debt	9.2	15.0
Foreign Bonds	3.9	8.0
Emerging Market Bonds (major)	6.8	12.0
Emerging Market Bonds (local)	6.2	12.0
US Equity	8.5	17.0
Developed Market Equity (non-US)	8.9	18.0
Emerging Market Equity	8.9	22.0
Global Equity	8.7	17.0
Private Equity	11.2	25.0
Real Estate	8.0	16.0
REITs	7.8	24.0

CMEs for Selected Asset Classes (continued)

Asset Class	Geometric 20-Year Expected Return (%)	Standard Deviation (%)
Core Private Real Estate	6.9	12.0
Value-Added Real Estate	9.0	20.0
Opportunistic Real Estate	10.3	26.0
Natural Resources (Private)	9.3	22.0
Commodities (Naive)	5.3	17.0
Infrastructure	9.0	18.0
Infrastructure (Public)	9.1	17.0
Infrastructure (Core Private)	8.0	14.0
Infrastructure (Non-Core Private)	10.0	22.0
Hedge Funds	5.8	7.0
RMS Aggregate	4.4	7.0
Risk Parity (10% vol)	7.2	10.0
Tactical Asset Allocation	6.1	11.0

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Correlation Matrix for Select Asset Classes

Asset Class	Cash Equivalents	Investment Grade Bonds	Long-term Government Bonds	Private Debt	Global Equity	Private Equity	Core Private Real Estate	Value-Added Real Estate	Natural Resources (Private)	Infrastructure	Hedge Funds	RMS Aggregate
Cash Equivalents	1.00											
Investment Grade Bonds	0.13	1.00										
Long-term Government Bonds	0.10	0.86	1.00									
Private Debt	0.04	0.07	-0.35	1.00								
Global Equity	-0.06	0.25	-0.09	0.72	1.00							
Private Equity	0.11	0.00	-0.10	0.71	0.90	1.00						
Core Private Real Estate	0.20	0.25	0.10	0.44	0.39	0.41	1.00					
Value-Added Real Estate	0.15	0.20	0.00	0.46	0.49	0.44	0.90	1.00				
Natural Resources (Private)	-0.02	0.09	-0.19	0.54	0.76	0.63	0.52	0.51	1.00			
Infrastructure	0.18	0.31	0.14	0.52	0.68	0.51	0.59	0.58	0.72	1.00		
Hedge Funds	-0.11	0.12	-0.20	0.74	0.85	0.53	0.40	0.40	0.59	0.61	1.00	
RMS Aggregate	0.03	-0.01	0.10	-0.13	-0.01	-0.15	-0.06	-0.04	-0.02	-0.03	0.22	1.00

Asset Allocation Overview

Asset Allocation

What is Asset Allocation?

→ Asset allocation refers to the distribution of assets across a number of asset classes that exhibit different correlations with each other. Each asset class exhibits a unique combination of risk and reward. The expected and realized long-term returns vary by asset class, as does the interim volatility of those returns. Some asset classes, like equities, exhibit high degrees of volatility, but also offer high returns over time. Other asset classes, like cash, experience very little volatility, but offer limited return potential.

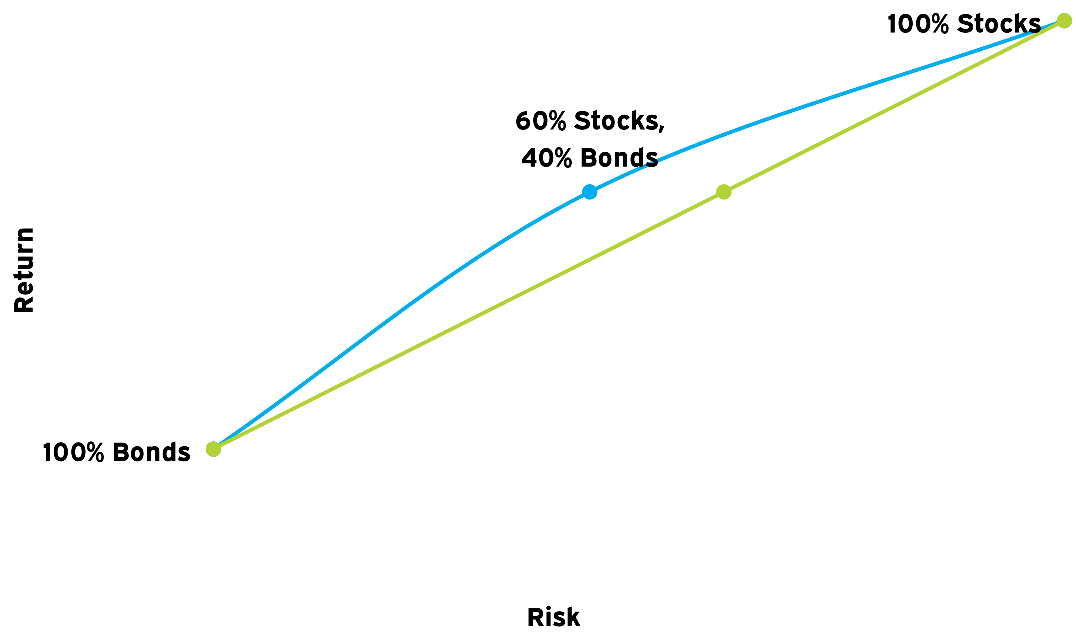
Why is Asset Allocation important?

→ The distribution of assets across various asset classes exerts a major influence on the return behavior of the aggregate pool over short and long time periods.

How does Asset Allocation affect aggregate performance?

→ In addition to exhibiting unique characteristics, each asset class interacts differently with other asset classes. Because of low correlations, the likelihood that any two asset classes will move together in the same direction is limited, with the movement of one asset class often offsetting another's. Combining asset classes allows investors to control more fully the aggregate risk and return of their portfolios, and to benefit from the reduction in volatility that stems from diversification.

The Efficient Frontier



→ Combining uncorrelated assets produces an "efficient frontier." Different combinations of assets (e.g., 60% stocks and 40% bonds) will lie along this efficient frontier.

→ By combining assets that are not highly correlated with each other, the System can produce a higher return for a given level of risk than it could by investing in perfectly correlated assets.

- Alternatively, it can experience lower risk for a given level of return.

Notes and Disclaimers

[1] The returns shown in the Policy Options and Risk Analysis sections rely on estimates of expected return, standard deviation, and correlation developed by Meketa Investment Group. To the extent that actual return patterns to the asset classes differ from our expectations, the results in the table will be incorrect. However, our inputs represent our best unbiased estimates of these simple parameters.

[2] The returns shown in the Policy Options and Risk Analysis sections use a lognormal distribution, which may or may not be an accurate representation of each asset classes' future return distribution. To the extent that it is not accurate in whole or in part, the probabilities listed in the table will be incorrect. As an example, if some asset classes' actual distributions are even more right-skewed than the lognormal distribution (i.e., more frequent low returns and less frequent high returns), then the probability of the portfolio hitting a given annual return will be lower than that stated in the table.

[3] The standard deviation bars in the chart in the Risk Analysis section do not indicate the likelihood of a 1, 2, or 3 standard deviation event—they simply indicate the return we expect if such an event occurs. Since the likelihood of such an event is the same across allocations regardless of the underlying distribution, a relative comparison across policy choices remains valid.

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9. Discuss and consider 2025 investment resource budget

COAERS

COMMITTEE MEETING
Agenda Item Information Sheet

AGENDA ITEM 9:
Discuss and consider proposed 2025 Investment Budget

AGENDA ITEM OBJECTIVE
This item supports the Board's fiduciary oversight of the Fund, including defraying reasonable expenses of administering the system.

RECOMMENDATION FOR COMMITTEE ACTION
Staff recommends that the Committee refer the 2025 investment budget to the Board for approval.

RELEVANCE TO STRATEGIC PLAN
This item allows the Committee to review investment costs and is related to **COAERS Strategic Plan Goal 4: Identify and implement leading practices in board governance, pension administration, and investment management.**

ITEM SUMMARY
Staff has developed a proposed investment resource budget for 2025 that is aligned with the organization's mission, vision, and goals. Notably, this proposed budget maintains resources related to the build-out of additional private markets capabilities. Staff will review these figures and items for consideration in 2025.

ATTACHMENTS
1. Staff Memo "Proposed Budget"
2. Proposed 2025 Investment Budget

EXECUTIVE SUMMARY:

The proposed 2025 Investment Budget continues a history of strong stewardship and maintains items necessary for the effective oversight and management of the Fund. The total budget that Staff is requesting for the Investment program totals approximately $2.2M.

RECOMMENDATION:

Staff recommends that the Investment Committee forward to the Board for approval the 2025 Investment Budget, as presented.

COMMENTARY:

For 2025, Staff is requesting a budget which is formatted in a way that more directly shows the expenses related to the investment program which require a Board approved budget. Prior budget requests, such as in 2024, included a variety of items which were either out of the direct control of Staff (such as external investment management fees) or included in the administrative budget (such as Staff salaries). We believe that reporting total investment expenses in this manner continues to be prudent and will continue to do so.

The proposed 2025 Investment Budget totals approximately $1.93M, compared to approximately $1.84M in 2024 for the same categories. The below sections provide descriptions for each of these categories as well as commentary for their necessity in effectively managing the investment program:

- **Investment Consulting ($390K):** As presented, this item contains the retainer expenses for the general investment consultant. Additional items which will need to be updated if and as appropriate include costs associated with the hiring of a private markets consultant and any investment-related consulting projects that the Board chooses to undertake.

- **Travel and Training ($150K):** This item contains expected costs associated with conducting due diligence site visits for the private markets consultant RFP as well as new and ongoing diligence of investment managers. Staff Continuing Education contains budget for professional designations and annual general meeting (AGM) attendance for private markets funds. AGMs represent both an opportunity to develop Staff skills and an opportunity to represent the interests of COAERS in private market funds.

- **Investment Resources ($967.5K):** As the largest item in the budget, this item breaks down into four primary categories necessary to effectively implement the investment program:
    - **Investment Systems ($775K):** Various investment systems employed by Staff are necessary to effectively oversee current and prospective Fund investments. These costs are broadly broken down into the following:
        - Market data (15%): To effectively evaluate various benchmarks, fund exposures and have accurate information related to securities pricing, Staff subscribes to services providing market data across all asset classes.
        - Manager research (15%): Staff uses a variety of investment manager databases for public and private markets to effectively source new investment ideas and compare current investment mandates. Additionally, platforms are used to track existing

mandates, their reporting, and diligence items.

- Exposure look-through (30%): Given increasing exposure to private markets strategies over time, additional systems are required to be able to view underlying investments accurately.
- Risk measurement (15%): In addition to ex-post risk reporting, this item contains systems which can measure and estimate ex-ante risks to the fund based on individual holdings across all asset classes.
- Private markets resources (25%): Additional due diligence database access specifically geared towards private markets managers.

  - **Investment Research ($125K):** Research reports related to broad economic trends, market technicals, private markets trends, and other asset class dynamics allow Staff to be better informed in making recommendations to the Board.
  - **Memberships and Licenses ($50K):** Memberships to trade groups and various organizations that further interests of funds such as COAERS. Major index providers (i.e., Bloomberg, S&P, MSCI) also charge fees to access their data and is needed to make informed decisions about the underlying investment exposures for COAERS.
  - **Subscriptions ($17.5K):** Various subscriptions helpful to the investment program.

- **Other Fixed Investment Costs ($325K):** In order to safekeep the System's investments, price and account for them, the custodian charges a flat annual fee. Additionally, reporting and monitoring services ensure that transaction costs for managers are not too high and that proxies are voted in line with the System's statutory responsibilities, among other items.

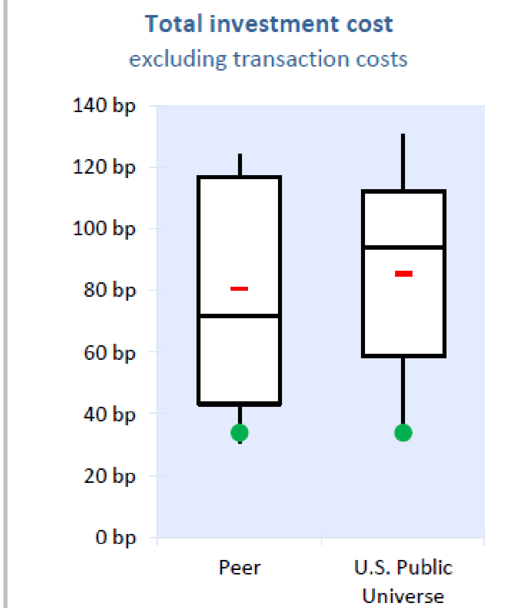
- **Variable Investment Costs – Estimates ($100K):** These items are broadly transaction or activity based, meaning they will directly increase or decrease based on portfolio activity. For example, legal counsel costs are dependent on the number of new investments during the year.

CEM COST BENCHMARKING:

The System has a strong history of defraying reasonable costs through its budgeting process for the investment program and has historically focused on optimizing costs for value received. As part of the COAERS Strategic Plan, CEM Benchmarking performed a full cost analysis of the investment program in 2023 and showed that the Fund remains low-cost relative to peers. This analysis, as of year-end 2022, shows that the COAERS investment program ranked in the bottom quartile (i.e., lowest cost) among peers and the total US public pension universe (Exhibit 1) for absolute costs.

This analysis also evaluates a benchmark cost to account for differences in asset mix among different pensions. The benchmark cost is an estimate of what the cost would be given COAERS' actual asset mix and the median costs that peers pay for similar services. It represents the cost COAERS' peers would incur if they had COAERS' actual asset mix. This analysis showed that the COAERS investment program was 10.5 basis points less expensive than would be expected should a peer plan run the Fund. This efficiency in implementing the program represents a cost savings of approximately $3.4 million per year, meaningful by any measure.

Exhibit 1: CEM Total Cost Quartiles



	Peer	U.S. Public Universe
90th %ile	124.2	130.6
75th %ile	116.6	112.1
Median	71.8	93.8
25th %ile	43.3	58.6
10th %ile	30.7	33.9
— Average	80.4	85.4
Count	15	41
Med. assets	3,038	39,901
City of Austin Employees' Retirement System		
• You	33.9	33.9
%ile	14%	10%

Exhibit 2: CEM Benchmark Cost Estimates

Your cost versus benchmark

	$000s	basis points
Your total investment cost	11,093	33.9 bp
Your benchmark cost	14,514	44.4 bp
Your excess cost	(3,421)	(10.5) bp

Proposed 2025 Investment Budget

Category	Proposed 2025 Budget	2024 Budget Figure	Change	Notes
Investment Consulting	**390,000**	**355,713**	**34,287**	
Investment Consultant - Base Fees	390,000	325,713	64,287	General investment consultant retainer
Specialized Investment Consultant	-	-	-	To be updated upon selection of specialized investment consultant
Consulting - Project Fees	-	30,000	(30,000)	To be updated if/as needed
Travel and Training	**150,000**	**125,000**	**25,000**	
Due Diligence & Site Visits	100,000	75,000	25,000	Specialist investment consultant RFP, manager onsite due diligence
Staff Continuing Education	50,000	50,000	-	Professional designations, conferences, annual general meetings
Investment Resources	**967,500**	**940,000**	**27,500**	
Investment Systems	775,000	775,000	-	Market data, manager research, exposure look through, risk measurement and private markets diligence resources
Investment Research	125,000	125,000	-	Economic, technical, private markets, and asset class research
Memberships & Licenses	50,000	25,000	25,000	Increased in anticipation of higher index licensing fees
Subscriptions	17,500	15,000	2,500	
Other Fixed Investment Costs	**325,000**	**325,000**	**-**	
Custodial Fees	275,000	275,000	-	Custody services
Reporting & Monitoring	50,000	50,000	-	Trade cost analysis, proxy voting, daily custodian pricing
Variable Investment Costs - Estimates	**100,000**	**100,000**	**-**	
Investment Legal Counsel	100,000	100,000	-	Dependent on number of new fund commitments
Total Investment Budget	**1,932,500**	**1,845,713**		

10. Discuss 2024 Investment Committee Work Plan and development of 2025 Committee work plan

Presented by Ed Van Eenoo

COAERS

COMMITTEE MEETING
Agenda Item Information Sheet

AGENDA ITEM 10:
Review 2024 Committee Work Plan and
discuss development of 2025 Committee Work Plan

AGENDA ITEM OBJECTIVE

This agenda item is for the Committee to review the work done by the Committee in 2024 and discuss the development of the 2025 Committee Work Plan.

RELEVANCE TO STRATEGIC PLAN

This agenda item meets **COAERS Strategic Plan Goal 4: Identify and Implement Best Practices**. It is an industry best practice to establish and review Committee work plans.

RECOMMENDATION FOR COMMITTEE ACTION

At the Committee's discretion.

ATTACHMENTS

1. 2024 Committee Work Plan
2. Draft 2025 Committee Work Plan

Updated 2024 Investment Committee Priorities and Workplan

Priority 1: Review and update Investment Policy Statement and Investment Implementation Plan

- January:
  - ✓ Investment program objectives
  - ✓ Measuring success including benchmarking philosophy
- February:
  - ✓ Discuss and consider review of policy and processes of investment program
  - ✓ Global Equities strategic review, Premier List, and implementation
- April:
  - ✓ Fixed Income and Cash & Equivalents strategic review and benchmarking discussion
- May:
  - ✓ Real Assets strategic review and benchmarking discussion

- August:
  - ✓ ~~Consider proposed changes to the Investment Policy Statement and Investment Implementation Policy~~ (moved to November)
  - ✓ ~~Review and discussion of the investment manager selection process~~ (moved to October)
  - ✓ Educational presentation regarding fund governance, best practices, and investment beliefs survey
  - ✓ Review updates to Committee Workplan and COAERS investment program initiatives

- October
  - ✓ Receive presentation regarding fund governance and investment beliefs survey results
  - ✓ Strategic Asset Allocation study
  - ✓ Review of investment manager selection process

- November:
  - ✓ Updated Strategic Asset Allocation
  - ✓ Consider proposed changes to the Investment Policy Statement (IPS) and Investment Implementation Policy (IIP)

Priority 2: Investment Consultant RFP review and recommendation

- February:
  - ✓ Discuss and consider bids from general investment consultant requests for proposal
  - ✓ Discuss timeline for RFP process and establish review committee
- April:
  - ✓ Consultant RFP initial evaluation
  - ✓ Consultant RFP Site Visits (week of either April 22 or April 29)
- May:
  - ✓ Consultant RFP recommendation to Board

Priority 3: Development of private markets program

- January:
  - ✓ Private markets program discussion

- February:
  - ✓ Discuss and consider private markets program including draft strategic plan

- August:
  - ✓ ~~Discuss private markets program resources~~ (moved to October)

- October
  - ✓ Private markets program discussion

- November:
  - ✓ ~~Review of private markets program, pacing analysis and 2025 funding plan~~ (moved to 2025)
  - ✓ ~~Private credit investment recommendations~~ (moved to 2025)
  - ✓ Private Markets consultant discussion

Priority 4: Monitor the performance of the investment portfolio, investment staff, investment managers, and investment consultant

- February:
  - ✓ Review total portfolio and asset class performance through fourth quarter 2023 – RVK
- May:
  - ✓ Quarterly review of investment performance, positioning, strategy, implementation, delegated authority, manager fees, cash movements, manager monitoring and compliance, Premier List
- August:
  - ✓ ~~Review passive approach to Global Equity portfolio~~ (moved to November)
  - ✓ Quarterly review of investment performance, positioning, strategy, implementation, delegated authority, manager fees, cash movements, manager monitoring and compliance, Premier List
- November:
  - ✓ Quarterly review of investment performance, positioning, strategy, implementation, delegated authority, manager fees, cash movements, manager monitoring and compliance, Premier List
  - ✓ Annual review of investment budget
  - ✓ Review of Private Equity education ~~passive approach to Global Equity portfolio~~

- December (TBD):
  - Core Fixed Income Manager recommendation

2025 Investment Committee Work Plan

Scheduled Quarterly Meetings

First Quarter Meeting:

- Public Equity asset class review including benchmarking
- Private Markets Consultant RFP
- Review SAA with new CMAs
- Quarterly review of investment performance, strategy, manager monitoring and compliance, implementation and related items

Second Quarter Meeting:

- Investment manager fee benchmarking review
- Private Markets Consultant RFP
- Fixed Income and Cash asset class review including benchmarking
- Quarterly review of investment performance, strategy, manager monitoring and compliance, implementation and related items

Third Quarter Meeting:

- Annual review of General Investment Consultant
- Review of private markets program, strategic plan, pacing analysis and 2025 funding plan
- Private markets manager recommendations, as possible
- Real Assets asset class review including benchmarking
- Quarterly review of investment performance, strategy, manager monitoring and compliance, implementation and related items

Fourth Quarter Meeting

- Private markets manager recommendations, as possible
- Private Credit asset class review including benchmarking
- Quarterly review of investment performance, strategy, manager monitoring and compliance, implementation and related items
- Annual risk report and review
- Investment budget
- Committee workplan for 2026

Board Workshop

- TBD

11. Call for future agenda items

Presented by Ed Van Eenoo

COMMITTEE MEETING
Agenda Item Information Sheet

AGENDA ITEM 11:
Call for future agenda items

AGENDA ITEM OBJECTIVE
This standing agenda item provides Trustees the opportunity to review the key takeaways from the meeting.

RECOMMENDATION FOR COMMITTEE ACTION
Trustees will review key meeting takeaways and delineate next steps.

RELEVANCE TO STRATEGIC PLAN
This agenda item meets **COAERS Strategic Plan Goal 4: Identify and implement leading practices in board governance, pension administration, and investment management.** It is an industry best practice to review key meeting takeaways to summarize what was accomplished at the meeting as well as ensure Staff has clear direction on further work and future agenda items.