

Joint Meeting of the Board of Trustees
and
Investment Advisory Committee

August 21, 2024



Public Agenda Item # 15
Reconvene the Board of Trustees

August 21, 2024

Public Agenda Item # 16

Call the Investment Advisory Committee to Order

August 21, 2024

Public Agenda Item #17

**Progress Report from Investments Governance Specialist
Regarding the Investment Advisory Committee*

August 21, 2024

James R. Hille, CFA, CAIA

Porter Wilson, Executive Director

Investments Governance Project

Progress Report



- *Progress is on or ahead of schedule*
 - Review of governance research completed
 - Review of peer governance practices in process
 - Literature review, peer interviews, consultant inquiry
 - More interviews scheduled
 - Interviewed Trustee and IAC members (present & past)
 - Interviewed key staff
 - Developing recommendations
 - Can prepare final report by December 2024

Discussion

Public Agenda Item #18

**Consideration of Annual Review of the
Investment Policy Statement
(Action)*

August 21, 2024

David T. Veal, CFA, CAIA, FRM

Annual IPS Review

Purpose and Scope



- Investment Policy Statement (IPS) guides the investment program
- Provides a robust framework for the management of ERS investments
 - Investment Philosophy, Goals and Objectives
 - Roles & Responsibilities including Delegation of Authority
 - Operating Parameters for Asset Allocation and Risk
 - Performance Evaluation and Benchmarking
 - Code of Ethics including Standards of Conduct

Annual IPS Review

Process for Developing Recommendations



- Policy requires review of IPS by staff at least annually
- Input from Investments, Investment Compliance, Office of General Counsel, Executive Office, and General Investment Consultant
- 2019: move to principles-based policy
- 2022: significant revisions to reflect organizational changes

Annual IPS Review

Staff Recommendations



- Proposed updates:
 - Edits to Asset Class Investment Committee (ACIC) Charter and redrafting of the definition of a “security”
 - Revision to strategic benchmark for Hedge Funds program
 - Alignment of operating parameters across asset classes

Annual IPS Review

Addendum Updates



- Proposed revisions to ACIC Charter:
 - Add language to address continuation vehicles
 - Clarify the language related to fund extensions
 - Add requirement that consultants disclose any conflicts of interest
 - Clarify the requirements for approval via email
- Redrafting the definition of a “security” to reflect statutory changes

Annual IPS Review

Strategic Benchmark for Hedge Funds



- Current situation
 - Strategic benchmark: 3-month Treasury bills + 350 bps annually
 - Implies a net return of 8-9% and a gross return of 10% or more
 - Inconsistent with the purpose of the program as risk-reducing asset class

Annual IPS Review

Strategic Benchmark for Hedge Funds



- Evaluation Process
 - Staff analyzed 20 different possibilities across a number of key criteria
 - Two-step process
 - Quantitative analysis using five factors to gauge goodness of fit
 - Qualitative analysis to evaluate finalists for strategic alignment
 - Engage with asset class consultant to confirm concurrence
 - Memo to memorialize the process and document agreement

Annual IPS Review

Strategic Benchmark for Hedge Funds



- Recommendation: HFRI Fund of Funds Conservative Index starting 9/1/24
 - Widely used peer index with a track record of more than 30 years
 - Measures the performance of 20 conservative hedge fund pools
 - Include more than 100 underlying funds across a variety of strategies

<i>as of June 30 , 2024</i>	Last 3 Months	Trailing 1 Year	Trailing 3 Years	Trailing 5 Years
ERS Hedge Fund Program	2.23%	5.49%	4.11%	7.20%
HFRI FOF: Conservative Index	1.24%	7.43%	3.69%	5.00%
<i>difference</i>	<i>0.99%</i>	<i>-1.94%</i>	<i>0.42%</i>	<i>2.20%</i>
3 Month T-Bills + 3.5% annually	2.25%	9.18%	6.51%	5.72%

Annual IPS Review

Operating Parameters



- IPS sets excess return targets for many asset classes within public markets

Public Equity	
Strategic Benchmark	MSCI ACWI IMI with USA Gross Total Return index (M1WDW\$GI)
Reference Indices*	Domestic Portfolio: MSCI USA Total Return Index (NDDUUS) International Portfolio: MSCI ACWI IMI ex-USA Total Return Index (M1WDUIM)
Portfolio Role	Growth, Alpha
Primary Risk Control	150 bps Tracking Error Target / 300 bps Tracking Error Limit
Benchmark Description	A capitalization-weighted index of large, mid, and small cap stocks representing developed and emerging market countries. The index is the broadest measure of the aggregate global stock market, covering approximately 99% of the global equity investment opportunity set.
Management Style	Active and Passive
Expected Information Ratio	0.25

Tracking Error target (150 bps) × Information Ratio target (0.25) = Excess Return target (37.5 bps)

Annual IPS Review

Proposed Updates



- Make tracking targets consistent across asset types

	OPERATING PARAMETERS	
Fiscal Years:	2024 and prior	2025 and beyond
Based on:	Tracking Error	Tracking Error
EQUITY MARKETS		
Public Equity	150	200
Public Real Estate	200	200
FIXED INCOME		
Public Credit	200	200
Rates	50	50
Cash	25	25

Annual IPS Review

Proposed Updates



- Align information ratio targets across asset types

	OPERATING PARAMETERS	
Fiscal Years:	2024 and prior	2025 and beyond
Based on:	Information Ratio	Information Ratio
EQUITY MARKETS		
Public Equity	0.25	0.25
Public Real Estate	0.30	0.25
FIXED INCOME		
Public Credit	0.35	0.20
Rates	0.20	0.20
Cash	0.20	0.20

Annual IPS Review

Excess Return Targets



- Higher ICP max performance goals for risk-seeking asset classes, Trust overall

	Proposed Maximum Performance Goals (basis points)	
Plan Years:	2024 and prior	2025 and beyond
Based on:	Information Ratio	Excess Return
Public Equity	25	50
Public Real Estate	30	50
Public Credit	35	40
Rates	20	10
Cash	20	5
Based on:	Excess Return	Excess Return
Other Asset Classes	24.1	25.0
Asset Allocation	N/A	1.10
TOTAL TRUST	46.63	50.00

Discussion
Action Item

Public Agenda Item #19

*Consideration of the Incentive Compensation Plan with
Proposed Changes for Plan Year 2025
(Action)*

August 21, 2024

DeeDee Sterns, Director of Human Resources

Jamey Pauley, ICP Program Specialist

Incentive Compensation Plan (ICP)

Annual Review



- The Board of Trustees reviews and approves the ICP on an annual basis.
- For the May Board meeting, staff provides:
 - A review of the plan objectives and key features
 - A summary of the ICP awards over the last five years
 - Information on any proposed plan changes
 - A draft plan document for the upcoming fiscal year
- At the August Board meeting:
 - Staff presents the final proposed plan document for consideration and approval

Incentive Compensation Plan

Plan Year 2025 – Proposed Material Changes



- 1. Methodology change for setting “Maximum Performance Goals”**
- 2. Changes to investment attorney plan group on Appendix A**

Incentive Compensation Plan

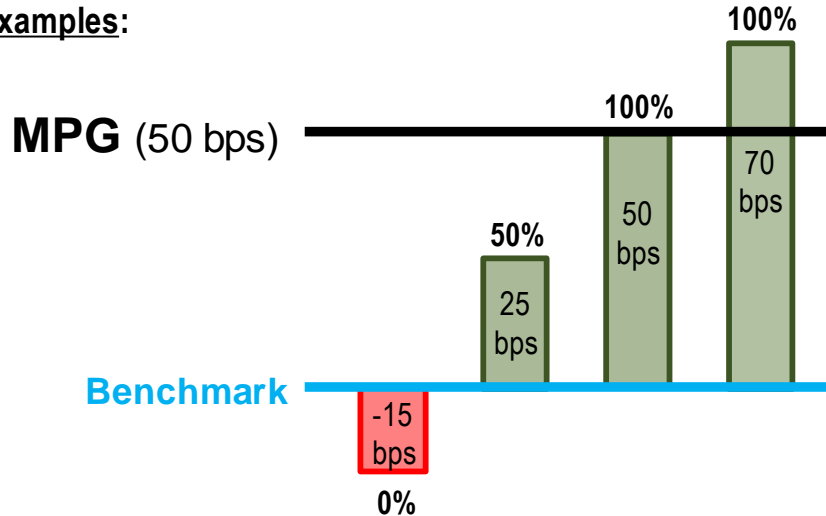


Plan Year 2025 – Proposed Methodology Change

What is a “Maximum Performance Goal (MPG)?”

- It’s the point above the benchmark at which the award realization for a particular performance goal caps out at 100%.

Examples:



Incentive Compensation Plan

Plan Year 2025 – Proposed Methodology Change



What is being proposed?

- Changing how the MPG for each Public Market Asset Class is determined.

	Current	Proposed
Trust	Excess Return Targets	Excess Return Targets
Public Market Asset Classes	Information Ratios	Excess Return Targets

Incentive Compensation Plan

Plan Year 2025 – Proposed Methodology Change



Why is this change being proposed?

- To provide consistency between how ICP awards are calculated for the Public Market Asset Classes and for the Trust overall.
- To align more closely with the objective established in the IPS, which is to obtain returns in excess of the assigned benchmarks with prudent limits on risk.

Incentive Compensation Plan

Plan Year 2025 – Proposed Methodology Change



What impact will this change have?

	Proposed Maximum Performance Goals (basis points)	
Plan Years:	2024 and prior	2025 and beyond
Based on:	Expected Information Ratio	Excess Return Target
Public Equity	25	50
Public Real Estate	30	50
Public Credit	35	40
Rates	20	10
Cash	20	5

Incentive Compensation Plan

Plan Year 2025 – Proposed Material Changes



1. Methodology change for setting “Maximum Performance Goals”
2. **Changes to investment attorney plan group on Appendix A**

Incentive Compensation Plan

Plan Year 2025 – Proposed Change to Appendix A



Current

Plan Group	Maximum Incentive Award Percentage
Investment Attorney	65%

Proposed

Plan Group	Maximum Incentive Award Percentage
Deputy General Counsel (Investment Attorney)	90%
Senior Investment Attorney	80%
Investment Attorney	70%

Incentive Compensation Plan

Plan Year 2025 – Other Proposed Changes



- Removing references to “Individual Research Coverage.”
- Adding a definition for “Tracking Error.”
- Updating and simplifying the language in Appendix C.

Discussion
Action Item

Public Agenda Item #20

**Consideration of Quarterly Review of Investment Performance*

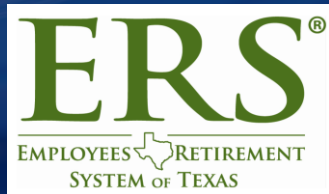
August 21, 2024

John McCaffrey, Managing Director of Portfolio Management

Sam Austin, Partner, NEPC

Christian McCormick, Senior Consultant, NEPC

David T. Veal, Chief Investment Officer



QUARTERLY PERFORMANCE REPORT

EMPLOYEES RETIREMENT SYSTEM OF
TEXAS

AUGUST 21, 2024

Sam Austin, Partner

Christian McCormick, Senior Consultant



TABLE OF CONTENTS

- Economic and Market Environment
- Executive Summary



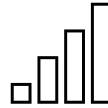
ECONOMIC AND MARKET ENVIRONMENT

ECONOMIC ENVIRONMENT



Slowing inflation and easing labor market

- Signs of slowing inflation (CPI and PCE)
- Wage inflation has decelerated to lowest level in a few years
- Employment is still growing but seeing a slowdown
- Job gains concentrated in fewer industries



Will bull market continue?

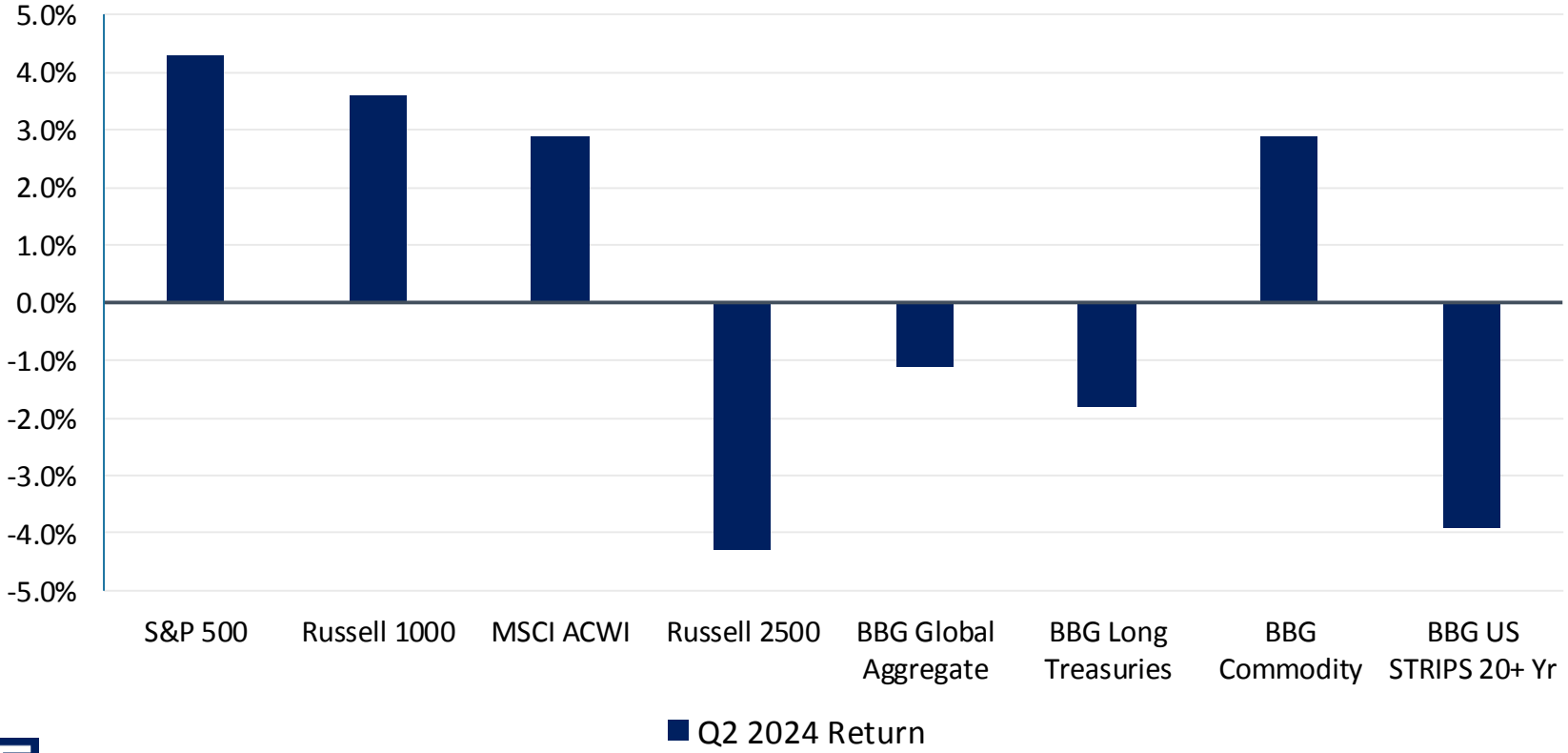
- Markets eyeing at least one rate cut by Fed before year-end
- Investors are hopeful for a soft landing
- Momentum in artificial intelligence has contributed to market performance this year



Uncertainties remain

- Consumer debt increasing
- Ongoing tight credit conditions
- Upcoming U.S. presidential election
- Impact of geopolitical conflicts, tariffs and trade actions on inflation

BEST AND WORST INDEX PERFORMANCE





EXECUTIVE SUMMARY

ERS TRUST DASHBOARD

Performance	CYTD		FYTD 2024
Total Trust	5.98% (10)		9.74% (25)
Policy Benchmark	4.34% (70)		8.43% (67)
Excess Return	1.64%		1.31%
Risk Statistics	5-Year		3-Year
	Sharpe Ratio	Sortino Ratio	Tracking Error
Total Trust	0.89 (1)	1.38 (1)	1.70%
Policy Benchmark	0.64 (7)	0.97 (6)	-
Attribution Summary			
Largest Contributors (Quarter)			

Public Equity (+0.2%) was the largest contributor, followed by Private Credit (+0.1%).

Largest Detractors (Quarter)

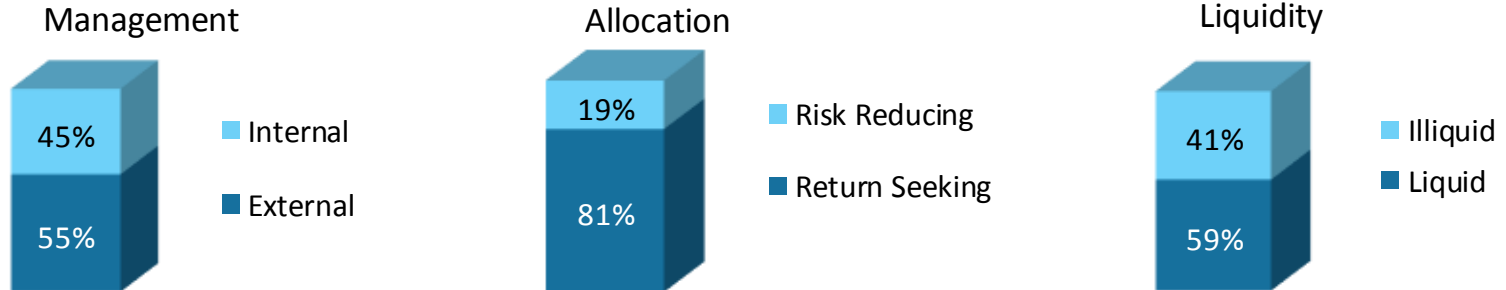
There were no detractors for the quarter.



Note: Numbers in parentheses indicate the Trust's rank among the peer universe of Public Defined Benefit plans greater than \$ 1 Billion.

ERS TRUST DASHBOARD

Profile	
Market Value at June 30, 2024	\$39.1 Billion
Actuarial Accrued Liability August 31, 2023	\$48.0 Billion
Actuarial Value of Assets August 31, 2023	\$34.0 Billion
ERS Trust Funded Ratio August 31, 2023	70.8%
Actuarial Assumed Rate of Return	7.00%
Retirees and Beneficiaries August 31, 2023	124,504
Retirement Payments Year Ended August 31, 2023	\$3.0 Billion





PERFORMANCE SUMMARY

TOTAL TRUST PERFORMANCE DETAIL (NET OF FEES)

	Market Value	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
Total Trust	\$39,102,741,120	1.8% (4)	9.7% (25)	10.8% (22)	6.1% (1)	9.1% (1)	7.6% (4)
<i>Policy Benchmark</i>		<i>1.4% (17)</i>	<i>8.4% (67)</i>	<i>9.3% (47)</i>	<i>4.6% (7)</i>	<i>7.2% (45)</i>	<i>6.6% (32)</i>
<i>Passive Index</i>		<i>2.1% (1)</i>	<i>14.7% (1)</i>	<i>15.6% (1)</i>	<i>3.9% (17)</i>	<i>8.8% (4)</i>	<i>7.2% (15)</i>

- **For the one-year period ended June 30, 2024, the Trust outperformed the policy benchmark by 1.5%.**
- **In the one-year period, the Trust’s assets increased from \$35.27 billion to \$39.10 billion. This includes a \$4.07 billion net investment gain within the one-year period and a \$679 million net investment gain within the second calendar quarter of 2024.**

Note: The Passive Index is comprised of 80% MSCI ACWI IMI and 20% Bloomberg Intermediate Treasury Index. Index definitions can be found in the appendix. Numbers in parentheses indicate the Trust’s rank among the peer universe of Public Defined Benefit plans greater than \$1 Billion.



TOTAL TRUST PERFORMANCE DETAIL (NET OF FEES)

3 Years Ending June 30, 2024

	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Trust	6.1% (1)	6.7% (1)	0.48 (1)	0.69 (1)
Policy Benchmark	4.6% (7)	7.6% (4)	0.24 (6)	0.34 (6)

5 Years Ending June 30, 2024

	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Trust	9.1% (1)	7.7% (1)	0.89 (1)	1.38 (1)
Policy Benchmark	7.2% (45)	8.0% (2)	0.64 (7)	0.97 (6)

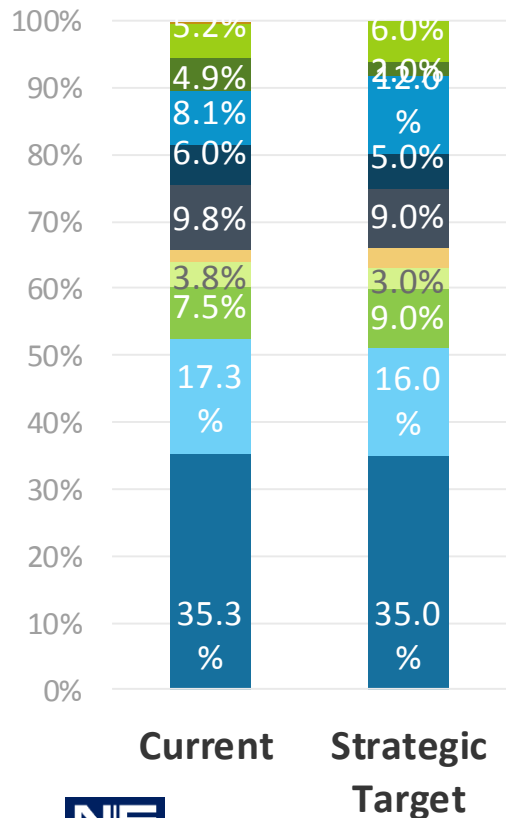
- **The five-year Trust return has outperformed the actuarial rate of return.**
- **On a risk-adjusted basis, the three-year and five-year Sharpe and Sortino Ratios outperformed the benchmark, indicating that active management benefitted the plan.**

TOTAL TRUST ASSET GROWTH SUMMARY

	Last Three Months	Year-To-Date	Fiscal Year-To-Date	One Year	Three Years	Five Years
Beginning Market Value	\$38,798,131,597	\$37,592,117,969	\$35,363,436,955	\$35,265,872,294	\$33,902,876,972	\$28,668,965,891
Contributions	\$384,800,000	\$807,528,631	\$2,713,728,631	\$2,952,828,631	\$7,371,771,430	\$9,986,671,430
Withdrawals	-\$758,800,000	-\$1,726,844,745	-\$2,700,544,745	-\$3,181,744,745	-\$8,610,471,430	-\$13,891,271,430
Net Cash Flow	-\$374,000,000	-\$919,316,114	\$13,183,886	-\$228,916,114	-\$1,238,700,000	-\$3,904,600,000
Net Investment Change	\$678,609,523	\$2,429,939,264	\$3,726,120,279	\$4,065,784,940	\$6,438,564,148	\$14,338,375,229
Ending Market Value	\$39,102,741,120	\$39,102,741,120	\$39,102,741,120	\$39,102,741,120	\$39,102,741,120	\$39,102,741,120
Net Change	\$304,609,523	\$1,510,623,151	\$3,739,304,165	\$3,836,868,826	\$5,199,864,148	\$10,433,775,229



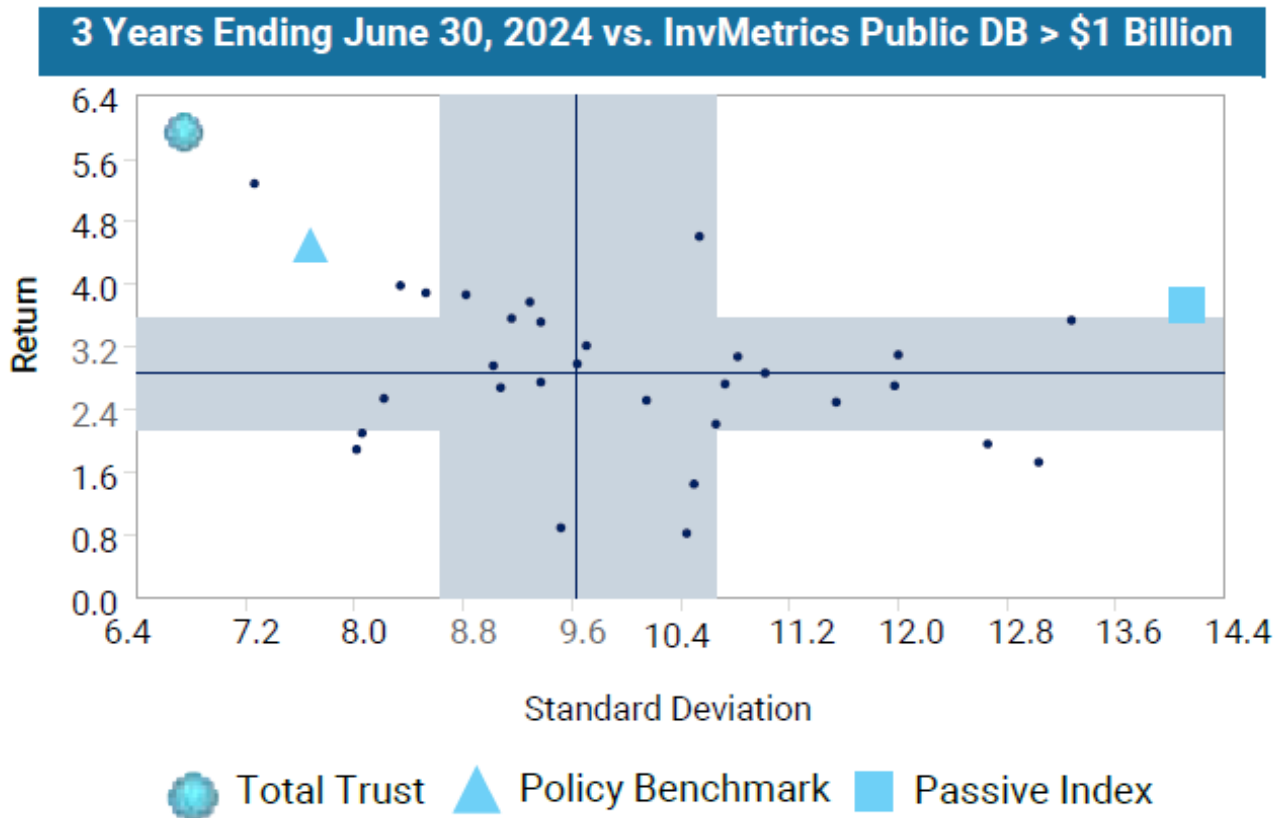
TRUST ASSET ALLOCATION VS. POLICY TARGETS



Asset Allocation as of June 30, 2024				
	Current Value	Current	Strategic Target	Tactical Range
Public Equity	\$13,804,099,648	35.3%	35.0%	25.0% - 45.0%
Private Equity	\$6,783,252,730	17.3%	16.0%	11.0% - 21.0%
Public Credit	\$2,951,496,622	7.5%	9.0%	4.0% - 14.0%
Private Credit	\$1,489,905,978	3.8%	3.0%	0.0% - 8.0%
Real Estate - Public	\$647,980,932	1.7%	3.0%	0.0% - 13.0%
Real Estate - Private	\$3,849,264,734	9.8%	9.0%	4.0% - 14.0%
Infrastructure	\$2,335,832,235	6.0%	5.0%	0.0% - 10.0%
Rates	\$3,173,905,860	8.1%	12.0%	7.0% - 17.0%
Cash	\$1,909,670,630	4.9%	2.0%	1.0% - 10.0%
Hedge Funds	\$2,027,147,367	5.2%	6.0%	0.0% - 11.0%
Special Situations	\$130,184,385	0.3%	0.0%	0.0% - 5.0%
Total	\$39,102,741,120	100%	100%	

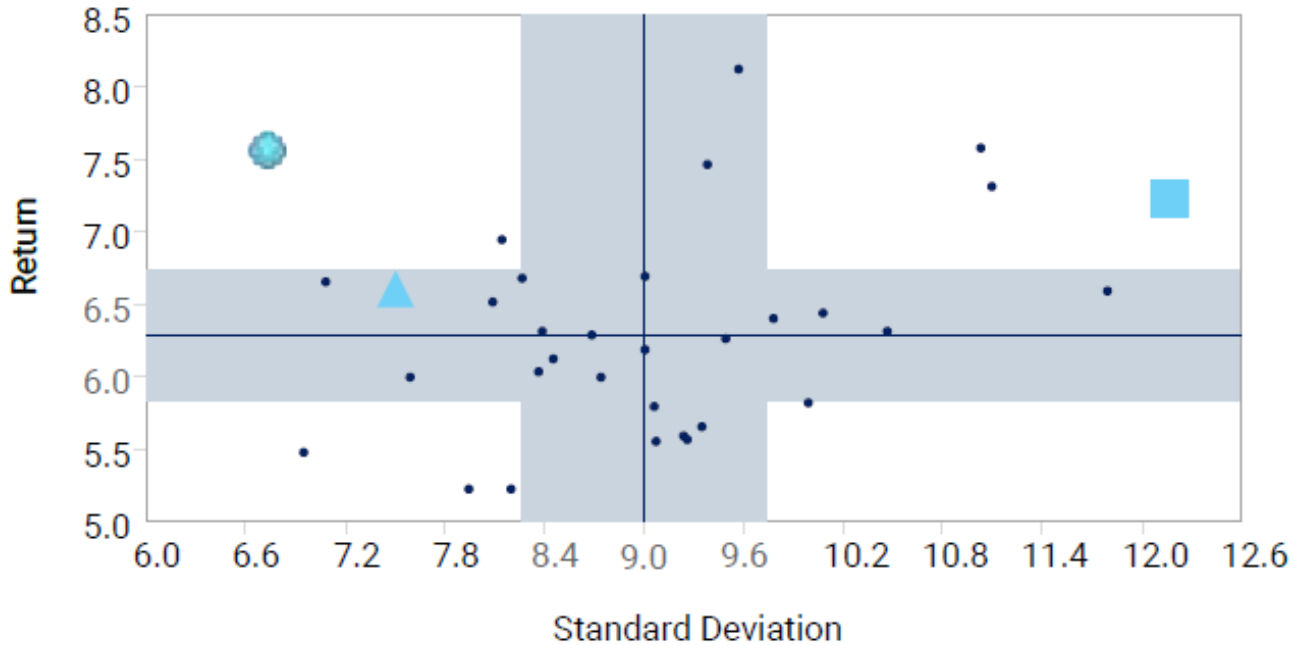





TOTAL TRUST RISK/RETURN



TOTAL TRUST RISK/RETURN

10 Years Ending June 30, 2024 vs. InvMetrics Public DB > \$1 Billion



 Total Trust  Policy Benchmark  Passive Index

PERFORMANCE DETAIL: PUBLIC MARKETS

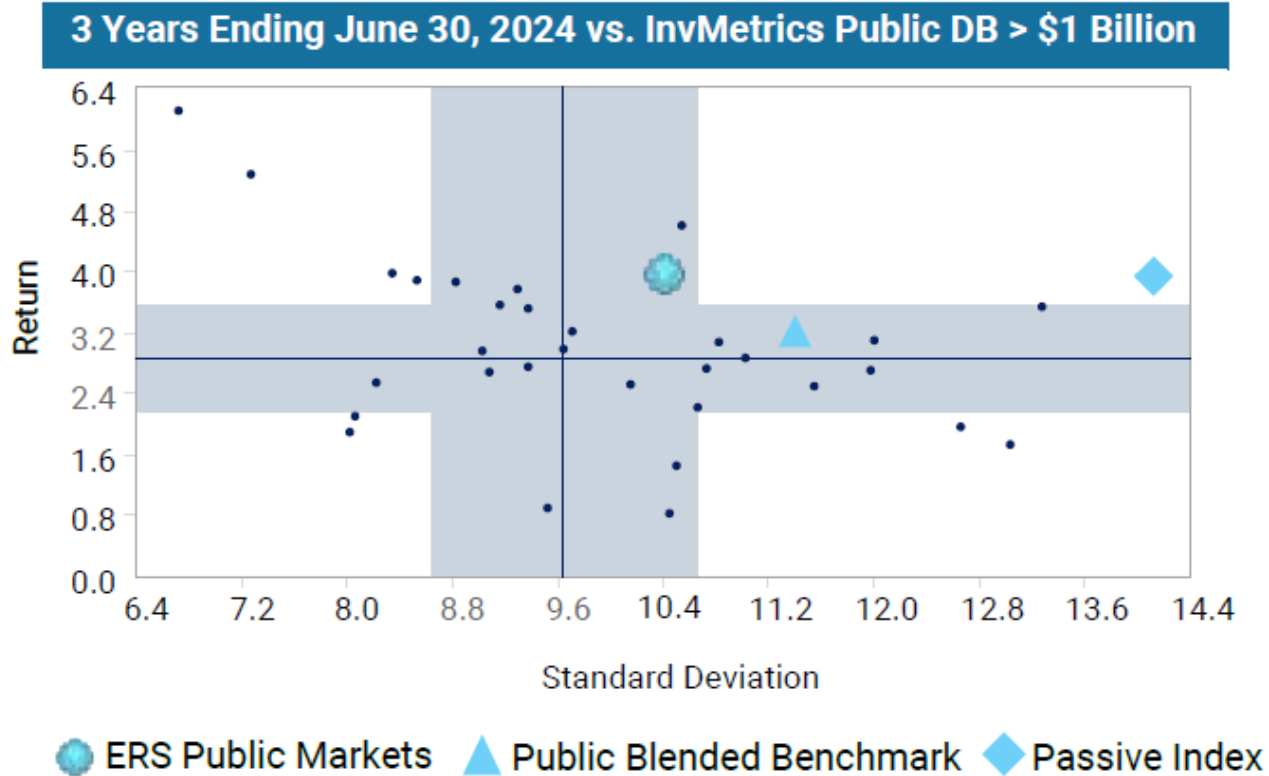
	Market Value	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs
ERS Public Markets	\$24,644,485,443	2.1% (1)	13.9% (1)	14.7% (1)	4.1% (10)	7.9% (12)
<i>Public Blended Benchmark</i>		<i>1.7% (5)</i>	<i>12.1% (2)</i>	<i>13.1% (1)</i>	<i>3.1% (36)</i>	<i>7.0% (49)</i>
<i>Passive Index</i>		<i>2.1% (1)</i>	<i>14.7% (1)</i>	<i>15.6% (1)</i>	<i>3.9% (17)</i>	<i>8.8% (4)</i>

- **For the one-year period ended June 30, 2024, ERS Public Market assets outperformed the Public Blended Benchmark by 1.6%.**

Note: The Passive Index is comprised of 80% MSCI ACWI IMI and 20% Bloomberg Intermediate Treasury Index. Index definitions can be found in the appendix. Numbers in parentheses indicate the Trust's rank among the peer universe of Public Defined Benefit plans greater than \$1 Billion.



RISK/RETURN: PUBLIC MARKETS



PERFORMANCE DETAIL: PRIVATE MARKETS

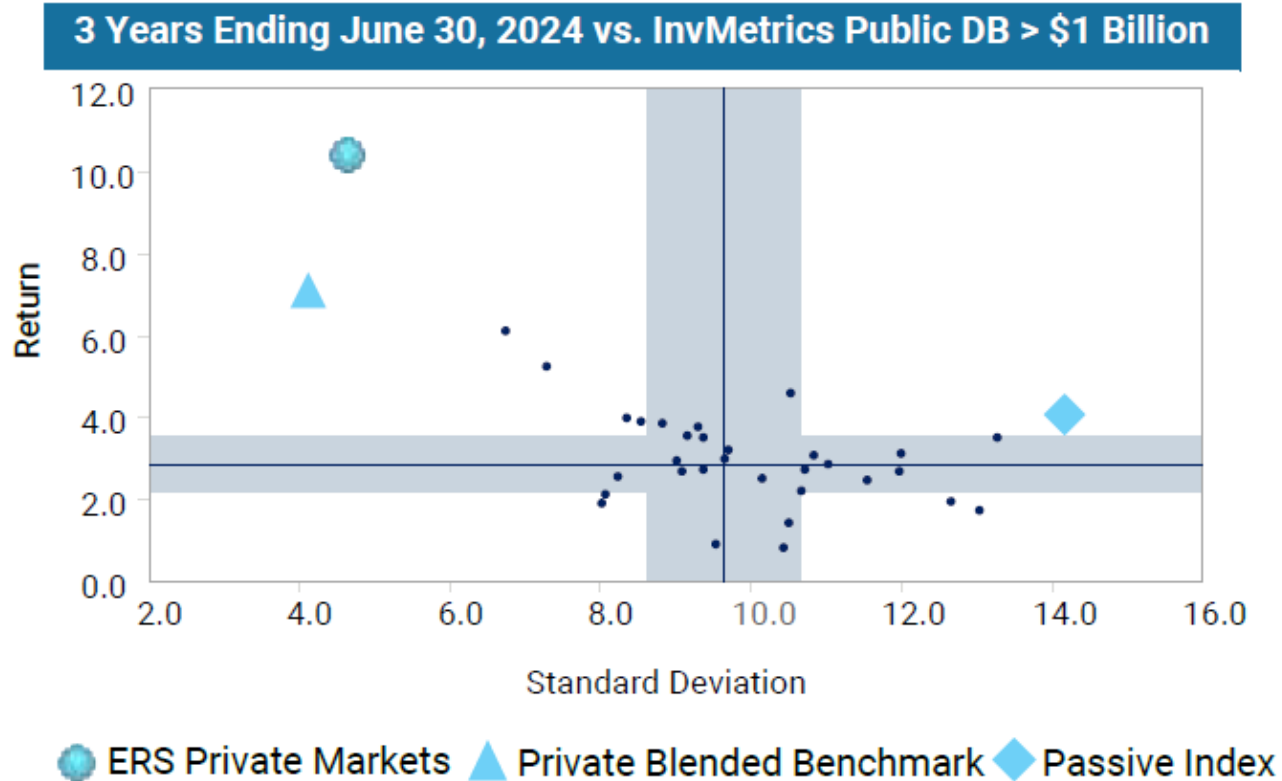
	Market Value	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs
ERS Private Markets	\$14,458,255,677	1.2% (29)	3.2% (100)	4.5% (100)	10.6% (1)	11.8% (1)
<i>Private Blended Benchmark</i>		<i>0.8% (65)</i>	<i>1.2% (100)</i>	<i>1.7% (100)</i>	<i>7.3% (1)</i>	<i>7.1% (47)</i>
<i>Passive Index</i>		<i>2.1% (1)</i>	<i>14.7% (1)</i>	<i>15.6% (1)</i>	<i>3.9% (17)</i>	<i>8.8% (4)</i>

- **For the one-year period ended June 30, 2024, ERS Private Markets outperformed the Private Blended Benchmark by 2.8%.**

Note: The Passive Index is comprised of 80% MSCI ACWI IMI and 20% Bloomberg Intermediate Treasury Index. Index definitions can be found in the appendix. Numbers in parentheses indicate the Trust's rank among the peer universe of Public Defined Benefit plans greater than \$1 Billion.



RISK/RETURN: PRIVATE MARKETS



PERFORMANCE DETAIL: TRUST + PUBLIC/PRIVATE

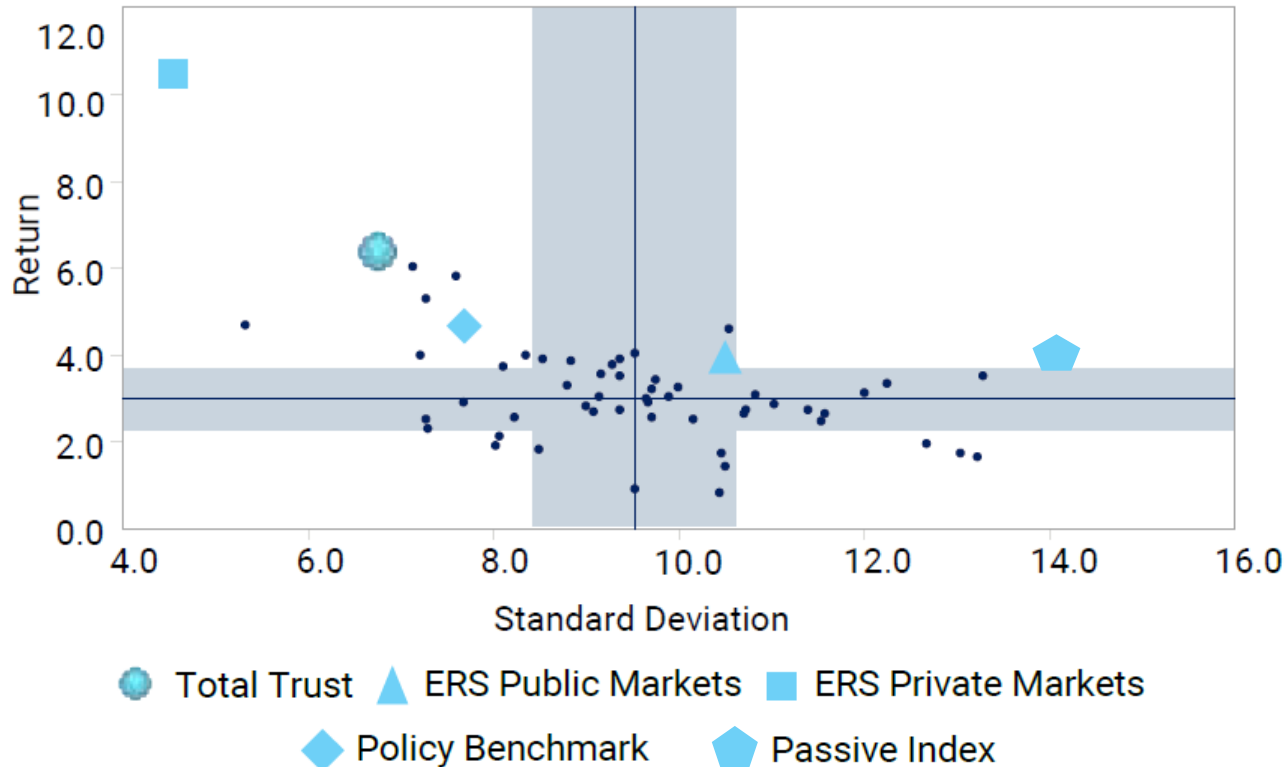
	Market Value	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs
Total Trust	\$39,102,741,120	1.8% (4)	9.7% (25)	10.8% (22)	6.1% (1)	9.1% (1)
<i>Policy Benchmark</i>		<i>1.4% (17)</i>	<i>8.4% (67)</i>	<i>9.3% (47)</i>	<i>4.6% (7)</i>	<i>7.2% (45)</i>
<i>Passive Index</i>		<i>2.1% (1)</i>	<i>14.7% (1)</i>	<i>15.6% (1)</i>	<i>3.9% (17)</i>	<i>8.8% (4)</i>
ERS Public Markets	\$24,644,485,443	2.1% (1)	13.9% (1)	14.7% (1)	4.1% (10)	7.9% (12)
<i>Public Blended Benchmark</i>		<i>1.7% (5)</i>	<i>12.1% (2)</i>	<i>13.1% (1)</i>	<i>3.1% (36)</i>	<i>7.0% (49)</i>
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Note: The Passive Index is comprised of 80% MSCI ACWI IMI and 20% Bloomberg Intermediate Treasury Index. Index definitions can be found in the appendix. Numbers in parentheses indicate the Trust's rank among the peer universe of Public Defined Benefit plans greater than \$1 Billion.

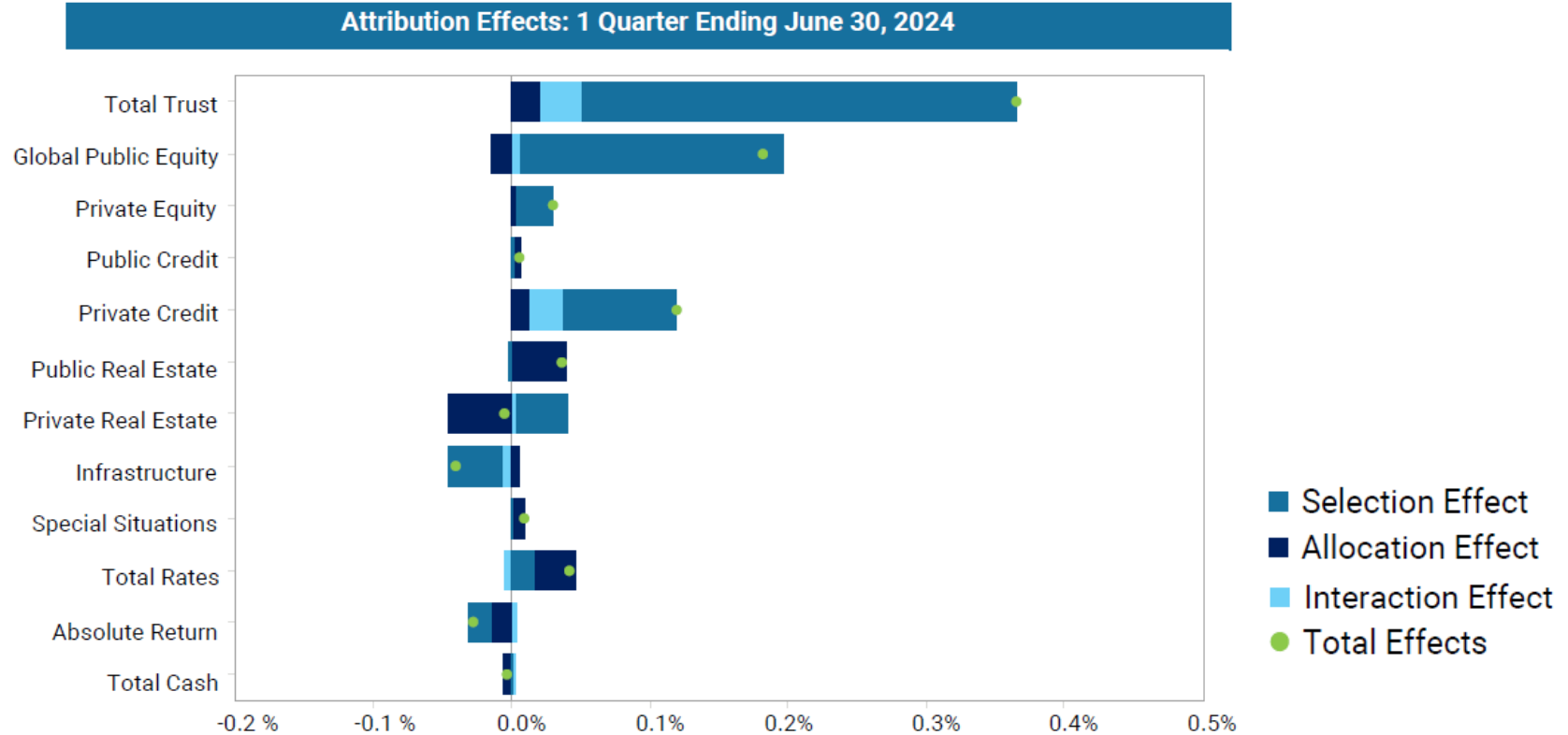


TOTAL TRUST RISK/RETURN + PUBLIC/PRIVATE

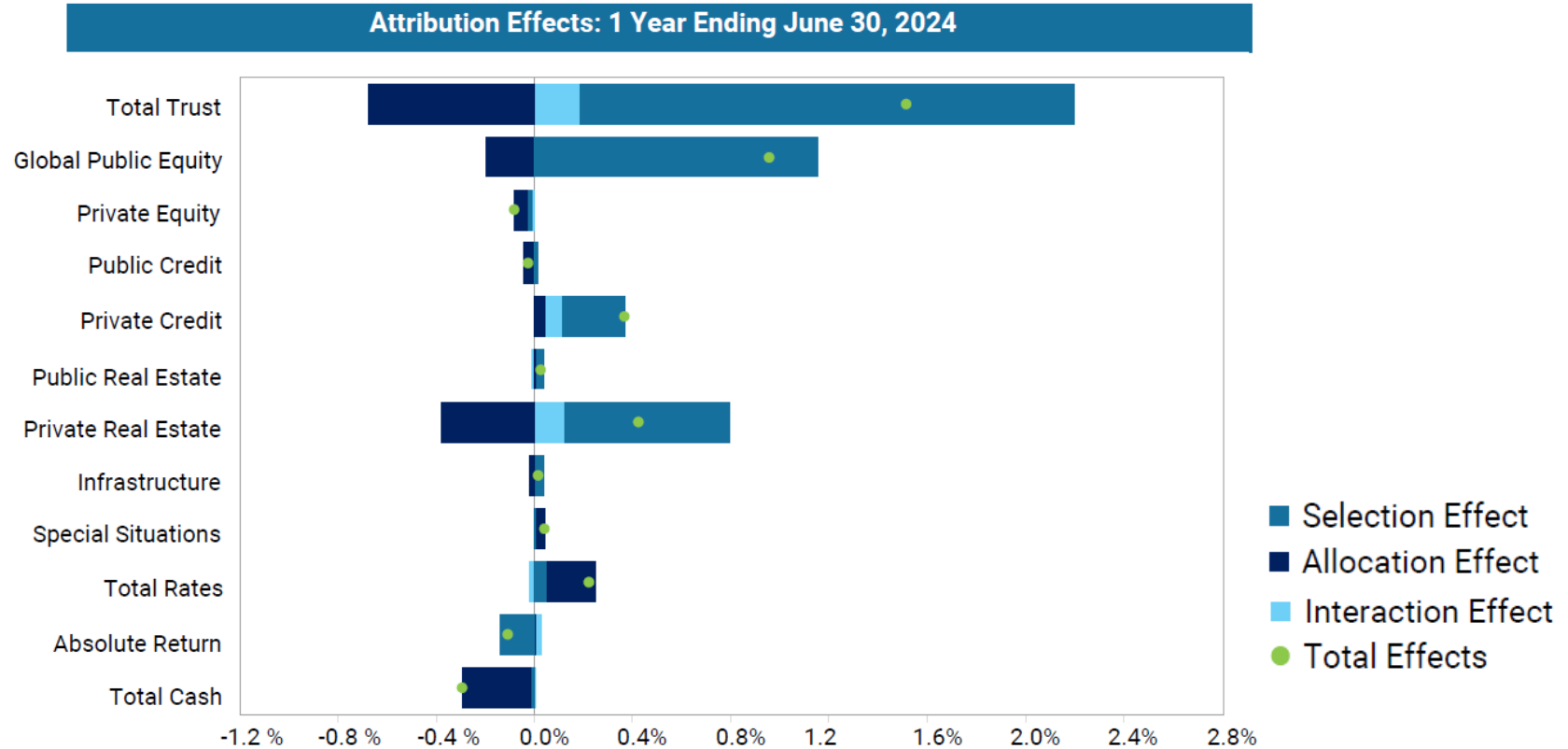
3 Years Ending June 30, 2024 vs. InvMetrics Public DB > \$1 Billion



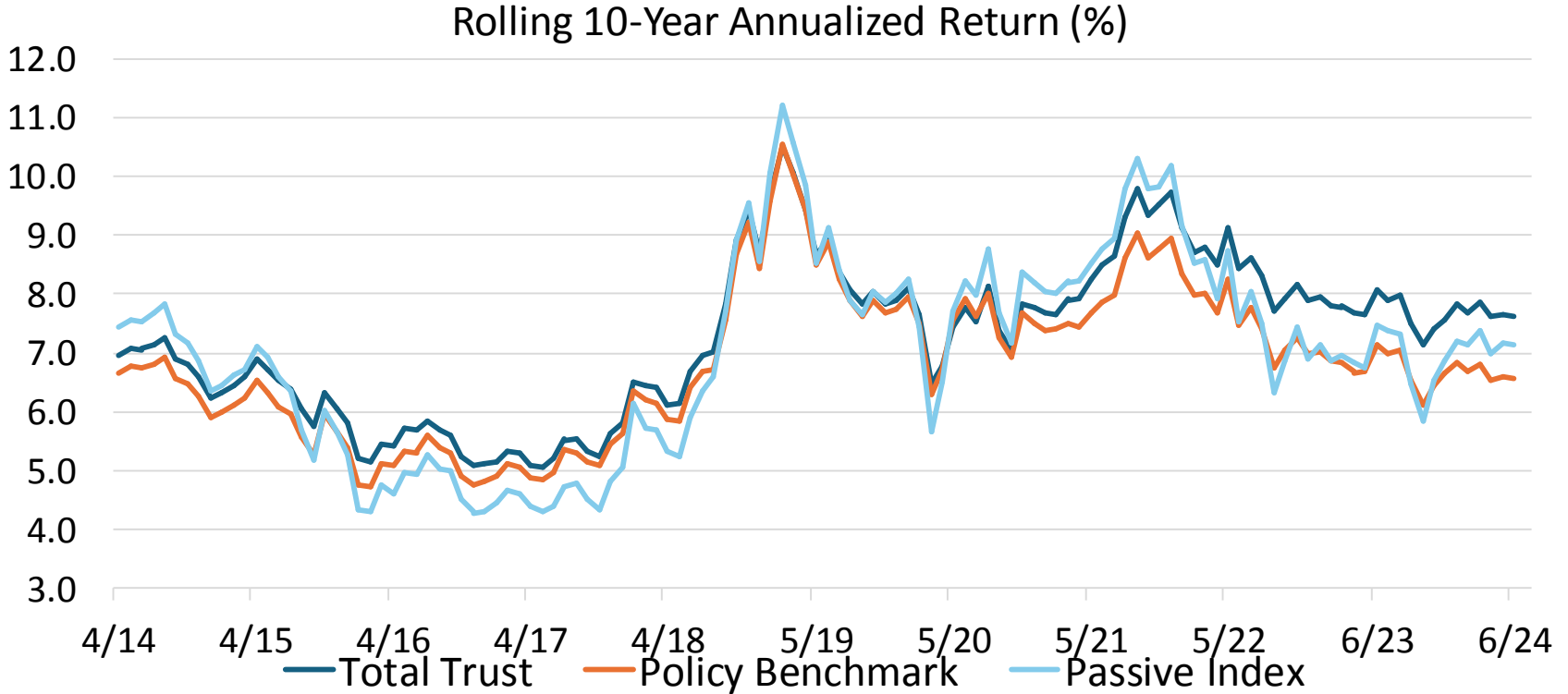
TOTAL TRUST ATTRIBUTION ANALYSIS



TOTAL TRUST ATTRIBUTION ANALYSIS

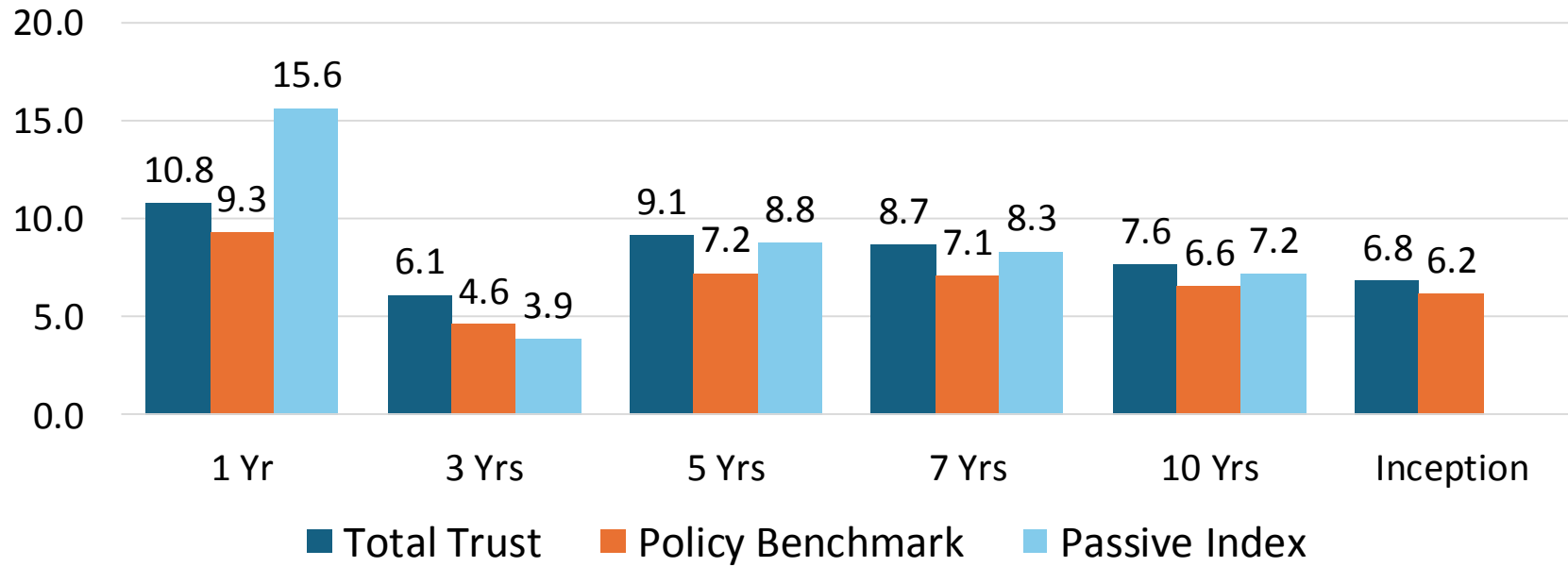


LONG TERM INVESTMENT RESULTS



LONG TERM INVESTMENT RESULTS

Return Summary (net of fees)

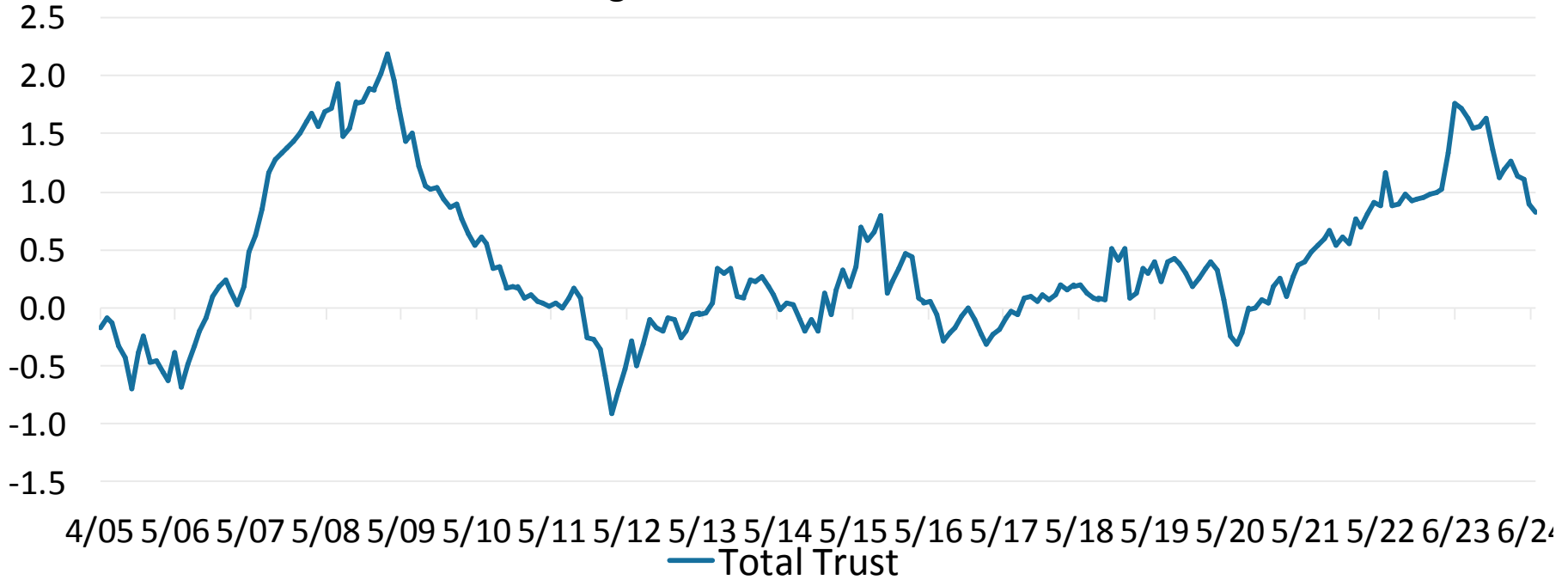


Note: The Passive Index is comprised of 80% MSCI ACWI IMI and 20% Bloomberg Intermediate Treasury Index.
Index definitions can be found in the appendix.



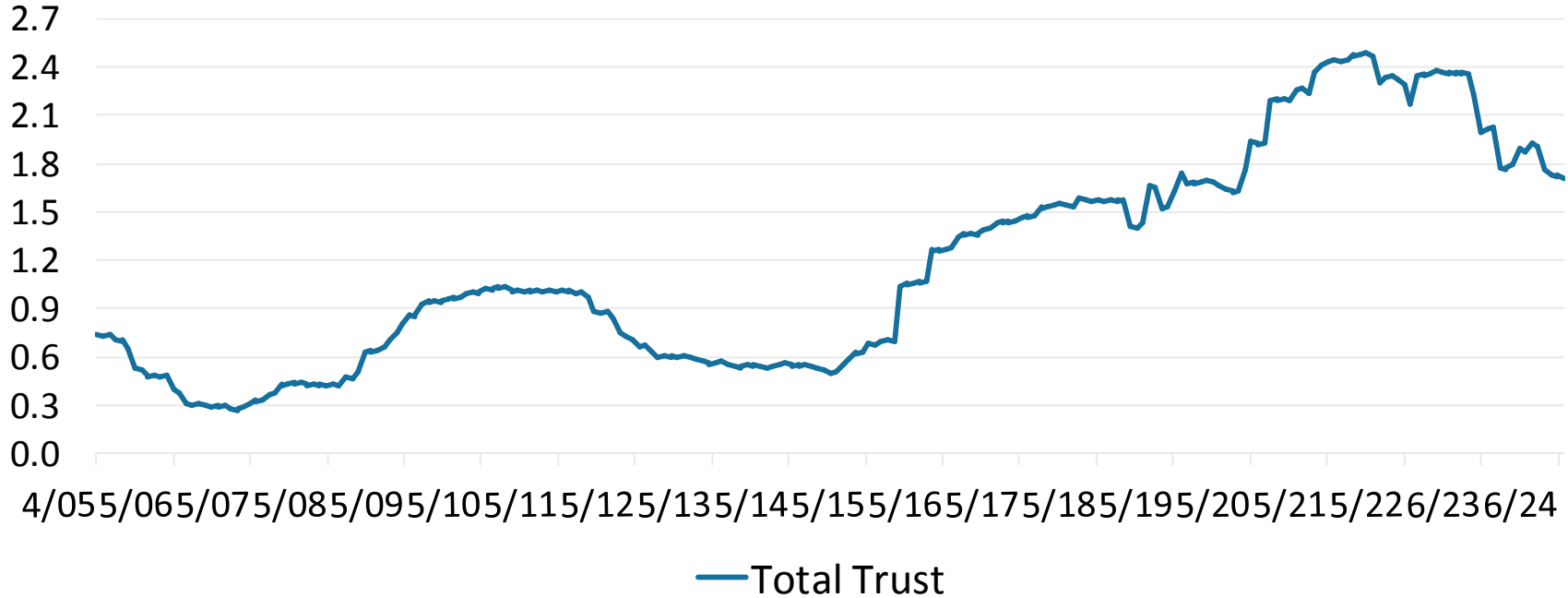
ROLLING INFORMATION RATIO

Rolling 3-Year Information Ratio



ROLLING TRACKING ERROR

Rolling 3-Year Tracking Error



PERFORMANCE SUMMARY COMMENTARY

- **Over the past 10 years, Total Trust outperformed the Policy Benchmark by 1.1% and outperformed the Plan's actuarial rate of return of 7.0% by 0.6%.**
- **In the one-year period ended June 30, 2024, the Trust outperformed the Policy Benchmark by 1.5%.**
 - The largest contributors to performance against the benchmark were Public Equity (+1.0%), and Private Real Estate (+0.4%), and Private Credit (+0.4%).
 - The largest detractor was Cash (-0.3%), followed by Absolute Return (-0.1%) and Private Equity (-0.1%).
- **In the past one-year, portfolio positioning at the asset class level detracted -0.7% from Total Trust returns versus the policy benchmark.**
 - An overweight position in Private Real Estate contributed negatively (-0.4%).
 - An underweight position in Public Equity contributed negatively (-0.2%).
 - An overweight position in Cash contributed negatively (-0.3%).



Discussion

Quarterly Review of Investment Performance

August 21, 2024

John McCaffrey, Managing Director of Portfolio Management

Investment Performance

Mission & Objectives



Prudently maintain a high-performing, well-diversified, and cost-effective portfolio to support the provision of earned benefits.



Add value vs. benchmarks
over rolling five-year periods



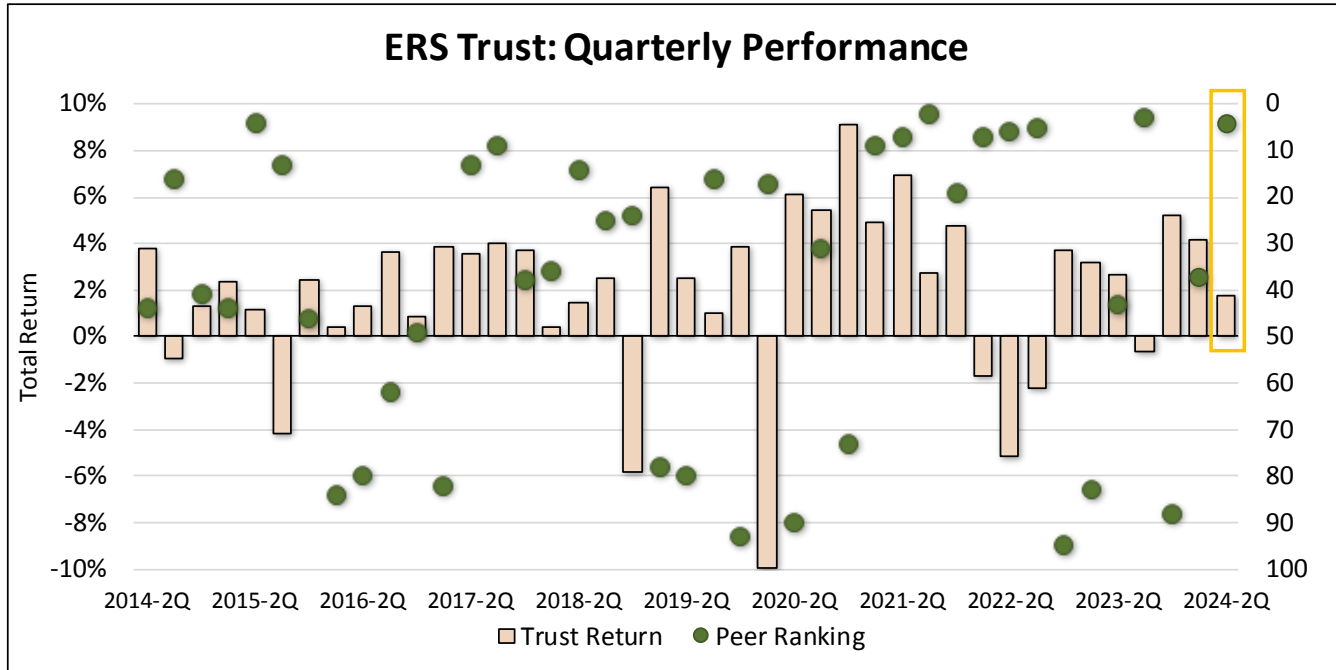
Earn appropriate returns
for the risks assumed

Investment Performance

Quarterly Performance



- Peer rank in the 4th percentile with positive absolute returns in six of last seven quarters

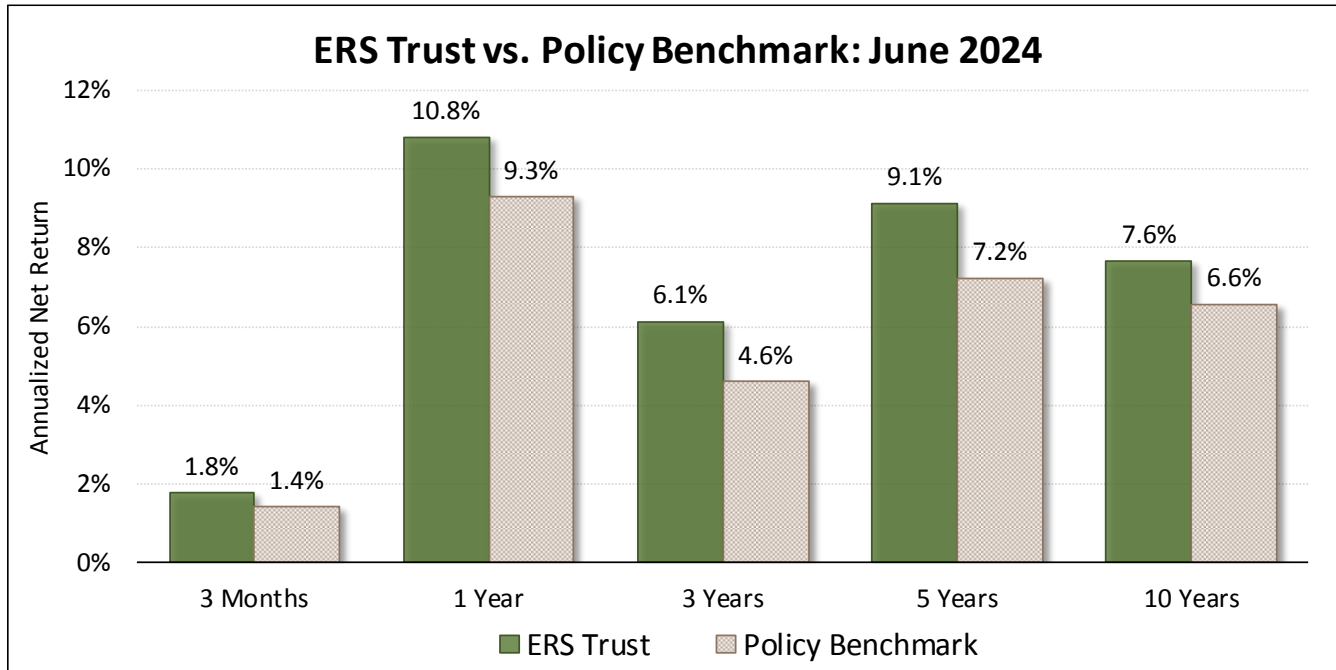


Investment Performance

Absolute & Relative Return



- Strong performance vs. Policy Benchmark, including +191 bps on a 5-year basis

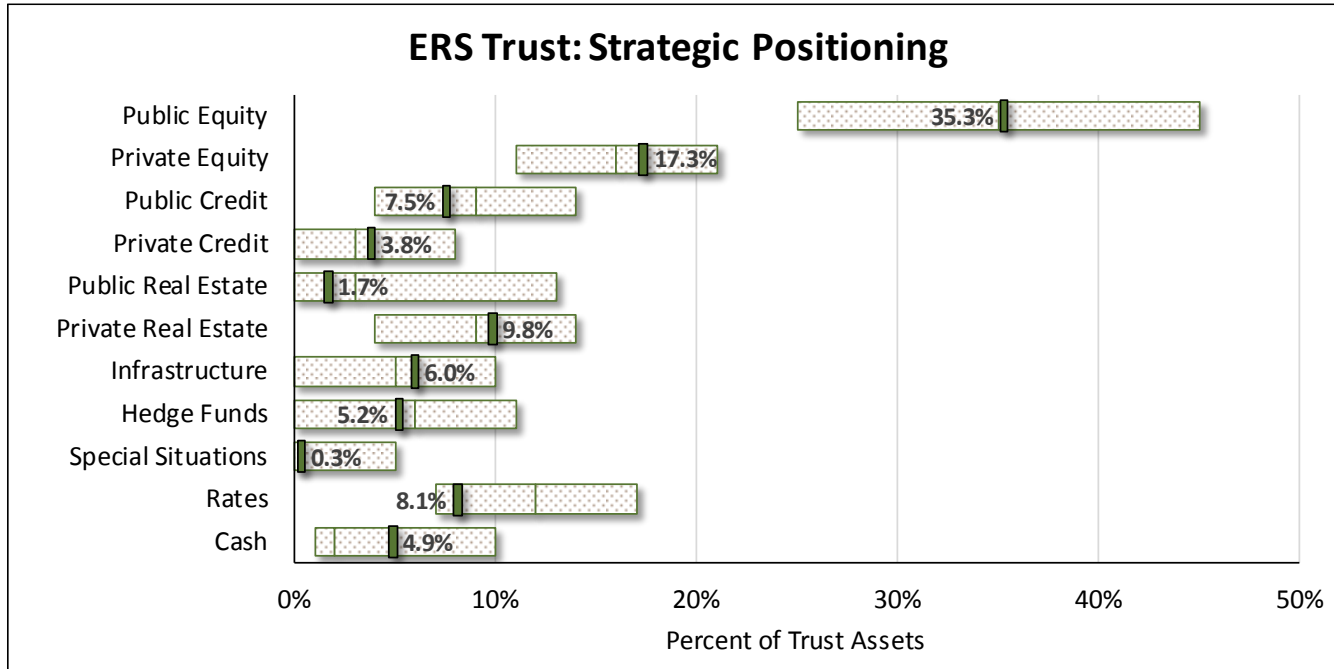


Investment Performance

Trust Positioning



- Tilts toward private markets and cash, away from public markets and rates

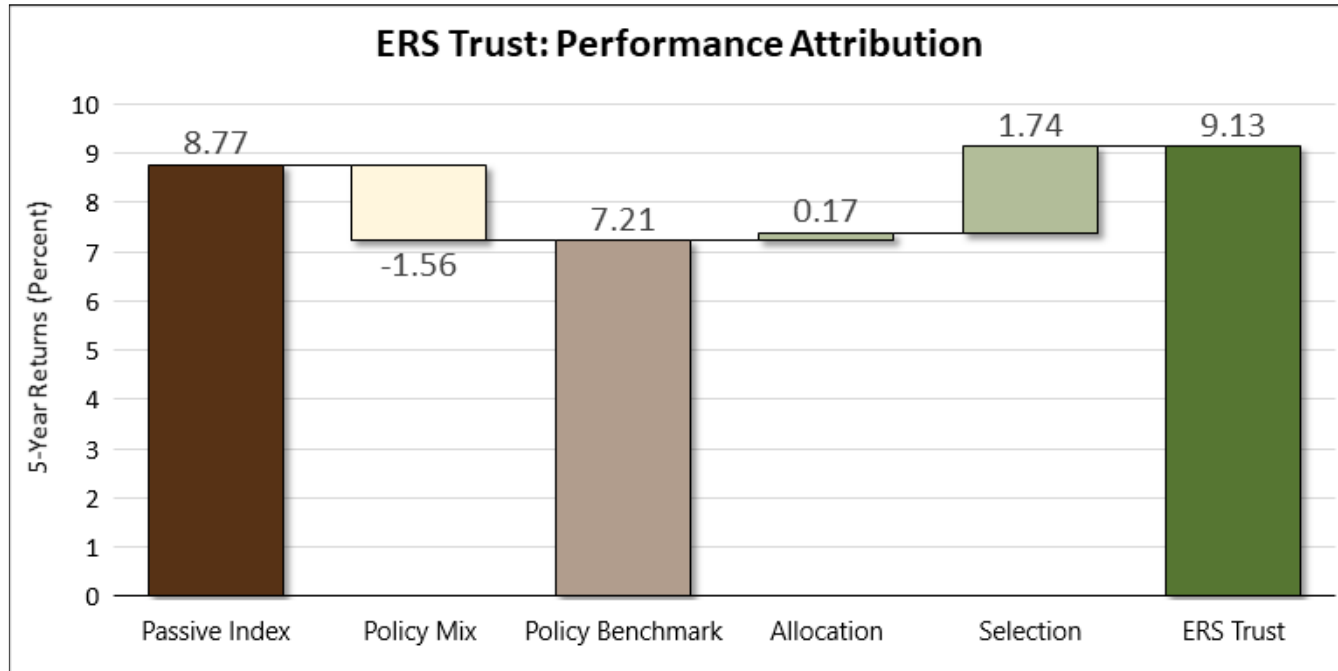


Investment Performance



Sources of (Out)performance – Last Five Years

- Favorable Trust positioning adds to very strong results from security selection

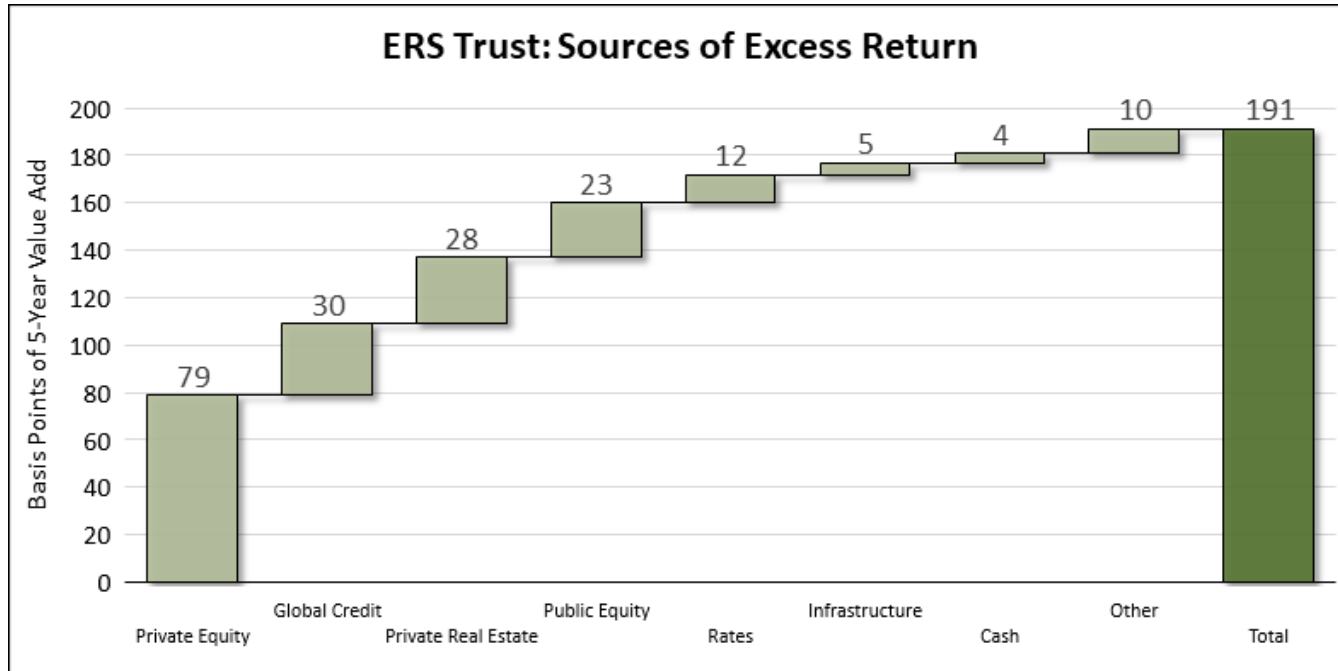


Investment Performance

Sources of (Out)performance – Last Five Years



- Strong security selection seen across all asset classes including public equity

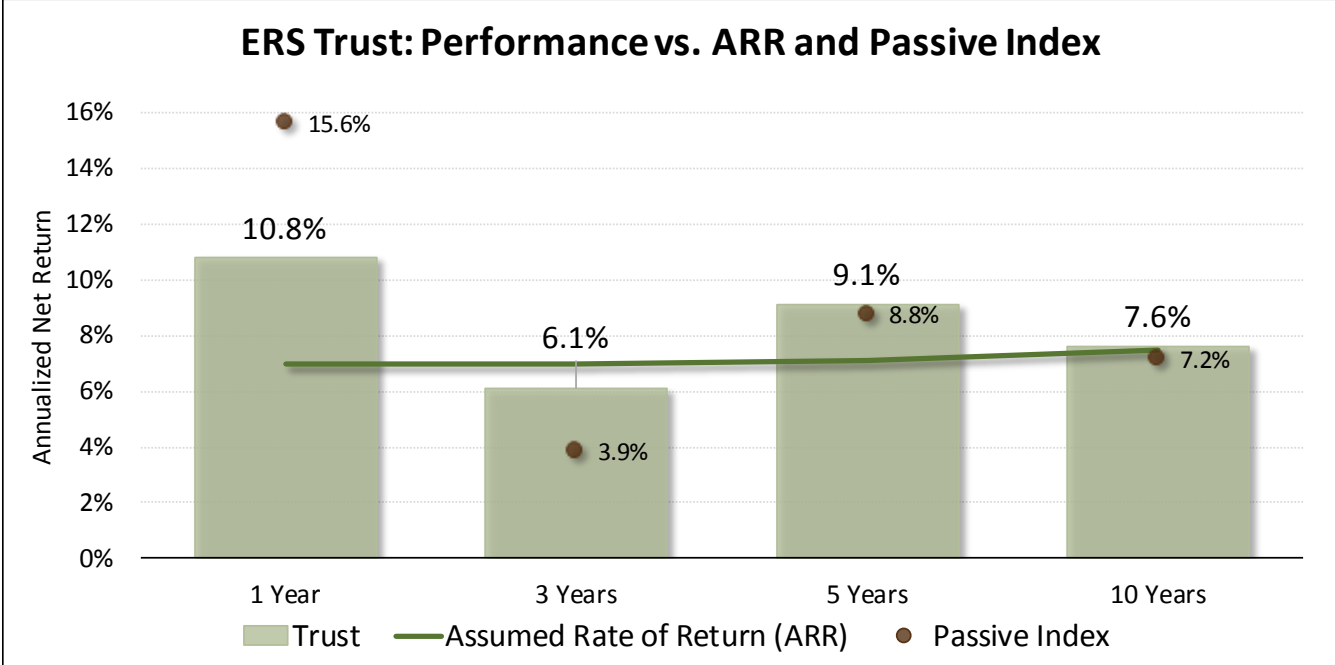


Investment Performance

Assumed Rate of Return



- Strong implementation gains have kept realized long-term returns above the ARR

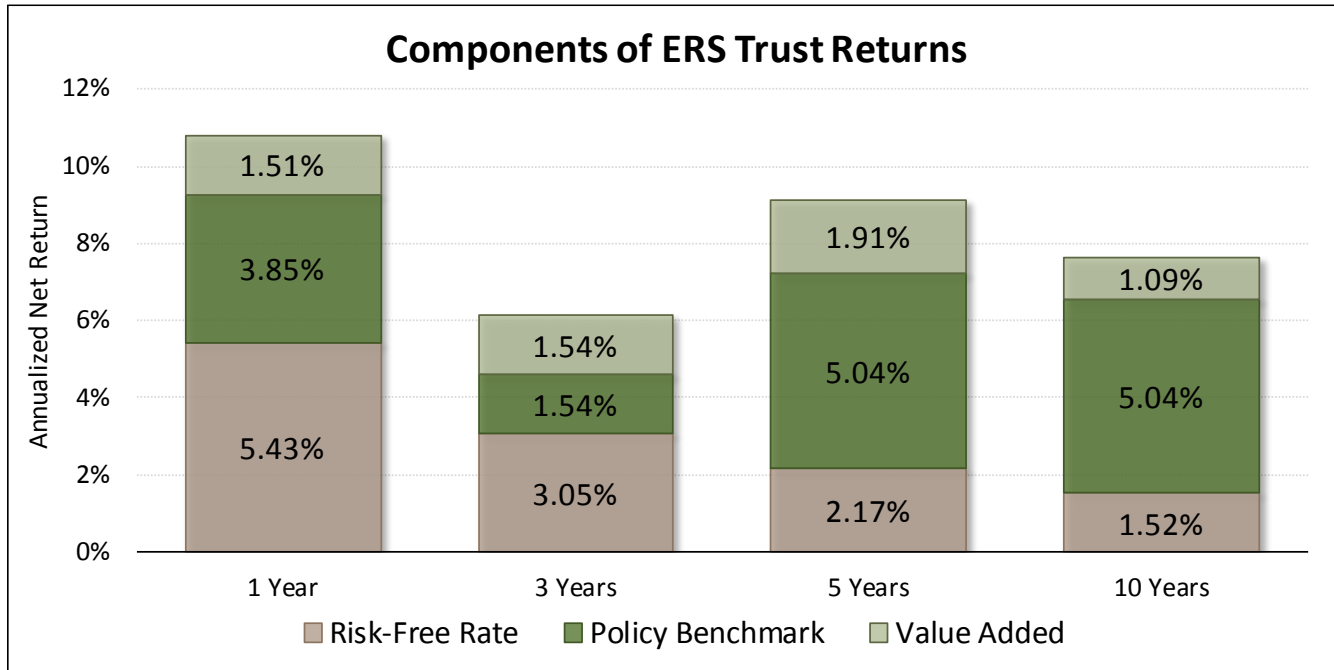


Investment Performance

Building Blocks of Returns



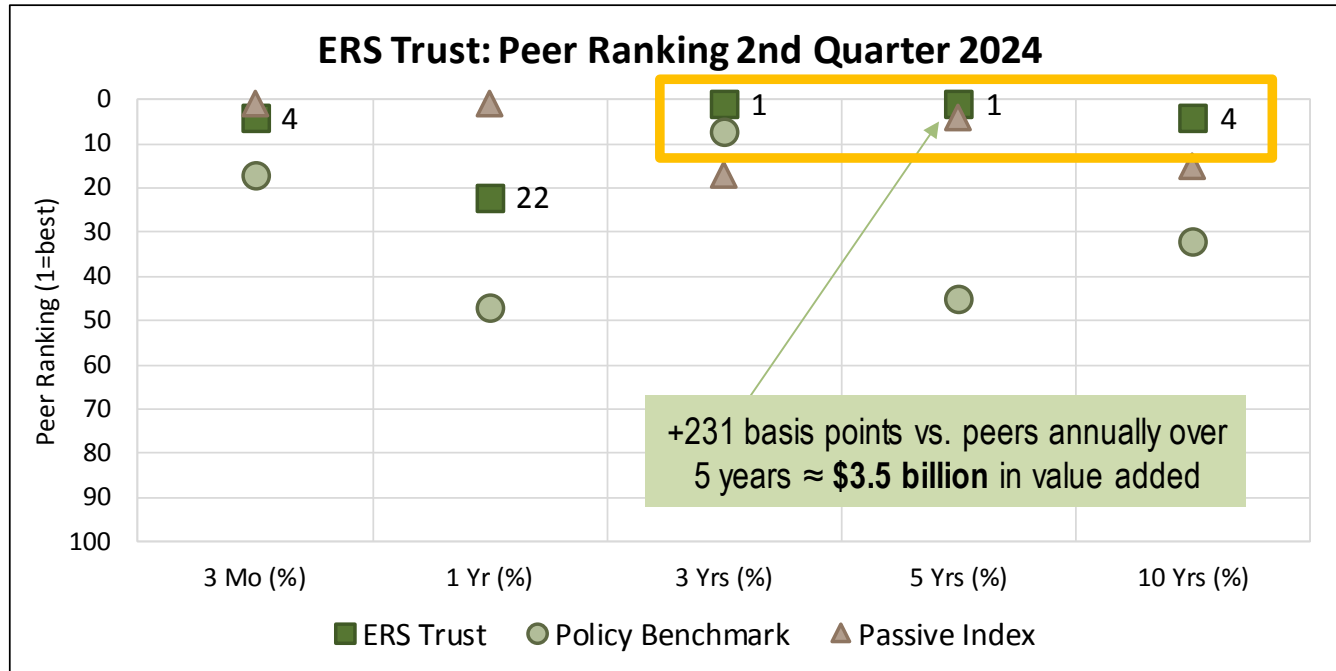
- Risk-free rates remain the largest driver of recent returns: 5.43% on a one-year basis



Investment Performance

Peer Rankings for Current Quarter

- Superior performance over long horizons; top decile over last three-, five-, and ten years

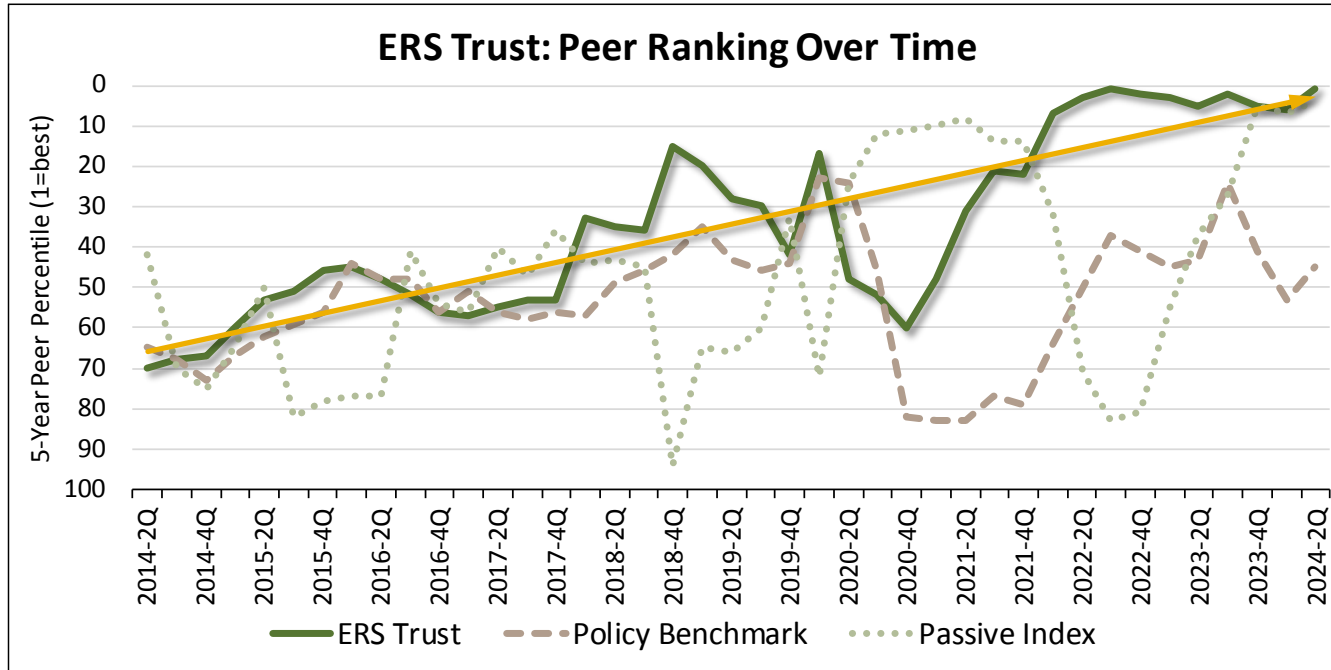


Investment Performance

Peer Ranking Over Time



- A decade of progress culminates in a top performing fund over long time horizons



Top 1%
 3 year
 5 year
Top 4%
 10 year

Discussion

Public Agenda Item #21

**Consideration of Quarterly Report from
Chief Investment Officer*

August 21, 2024

David T. Veal, CFA, CAIA, FRM

CIO Report

Performance Dashboard



- Meaningful amounts of value added vs. key benchmarks over long-term time horizons

Net investment returns as of June 30, 2024

	Last 3 Years		Last 5 Years		Last 10 Years	
ERS Trust	6.1%		9.1%		7.6%	
Assumed Rate	7.0%	-0.87%	7.1%	+2.04%	7.4%	+0.19%
Policy Benchmark	4.6%	+1.54%	7.2%	+1.91%	6.6%	+1.09%
Passive Index	3.4%	+2.27%	8.8%	+0.36%	7.2%	+0.47%
Median Peer	2.9%	+3.26%	6.8%	+2.31%	6.3%	+1.35%

CIO Report

Peer Ranks



- Top 5% of peers over long-term time horizons, including top 1% over trailing 5 years

Investment Performance Peer Ranking (1 = best, 100 = worst)

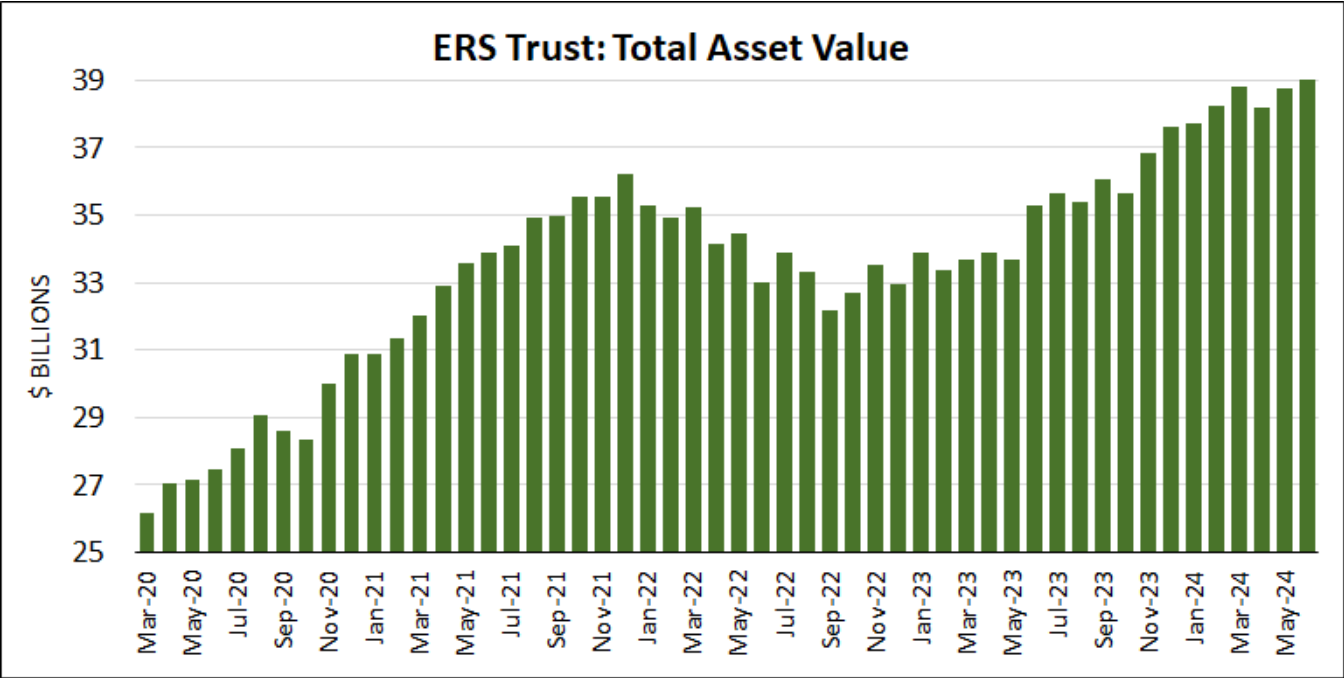
As of date	ERS Trust			Policy Benchmark			Passive Index		
	3 Years	5 Years	10 Years	3 Years	5 Years	10 Years	3 Years	5 Years	10 Years
2022-3Q	1	1	10	36	37	45	86	83	79
2022-4Q	1	2	7	28	41	48	98	81	52
2023-1Q	12	3	6	86	45	56	21	56	48
2023-2Q	5	5	11	60	43	49	43	38	39
2023-3Q	1	2	6	28	24	35	68	28	37
2023-4Q	1	5	6	15	42	31	55	4	25
2024-1Q	3	6	10	6	53	39	18	7	22
2024-2Q	1	1	4	7	45	32	17	4	15

CIO Report

Total Trust Asset Value



- Assets now total ~\$39B vs. \$36B in December 2021 and \$26B at March 2020 lows

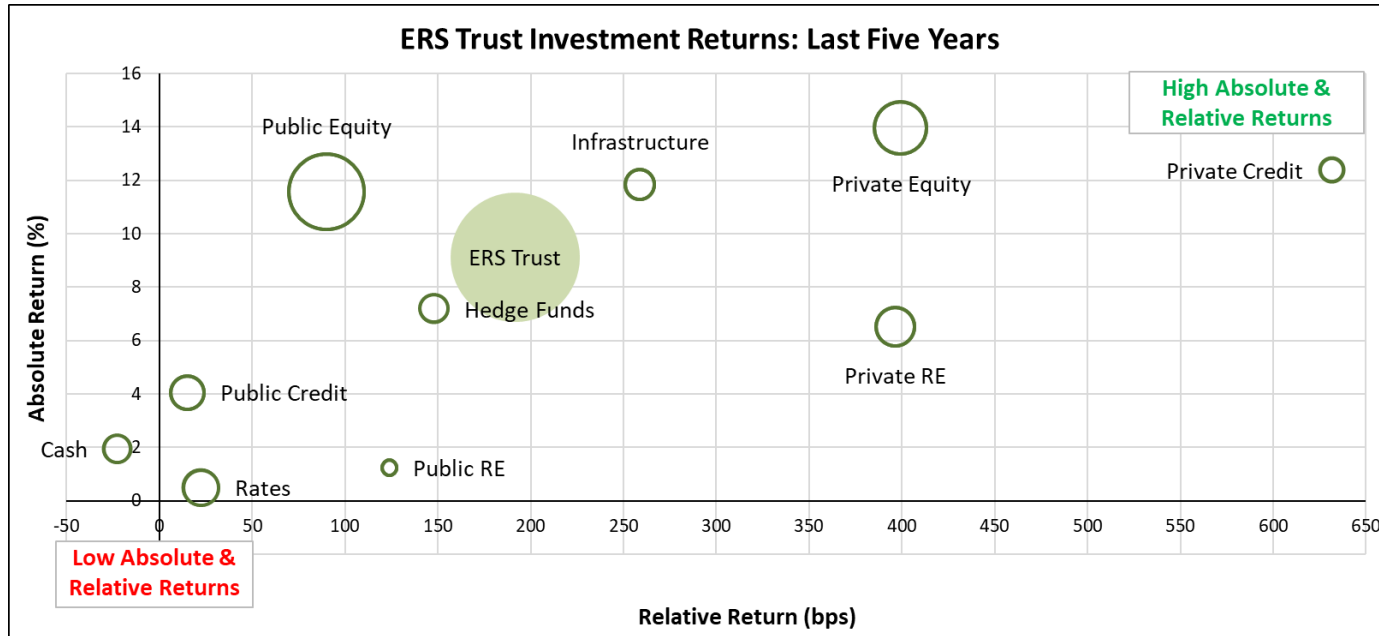


CIO Report

Absolute & Relative Trust Returns



- All asset classes except cash contributing to absolute and relative returns

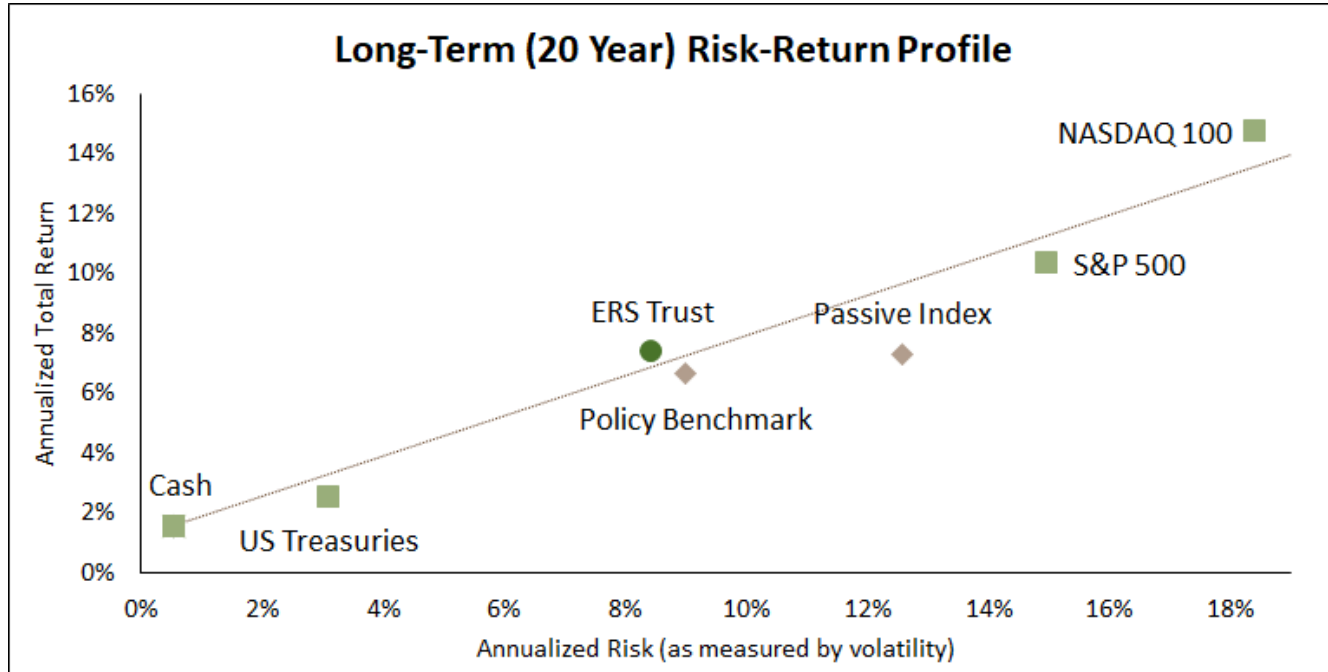


CIO Report

Risk vs. Return for Trust Overall



- Trust providing strong long-term returns at levels of risk appropriate for pension fund

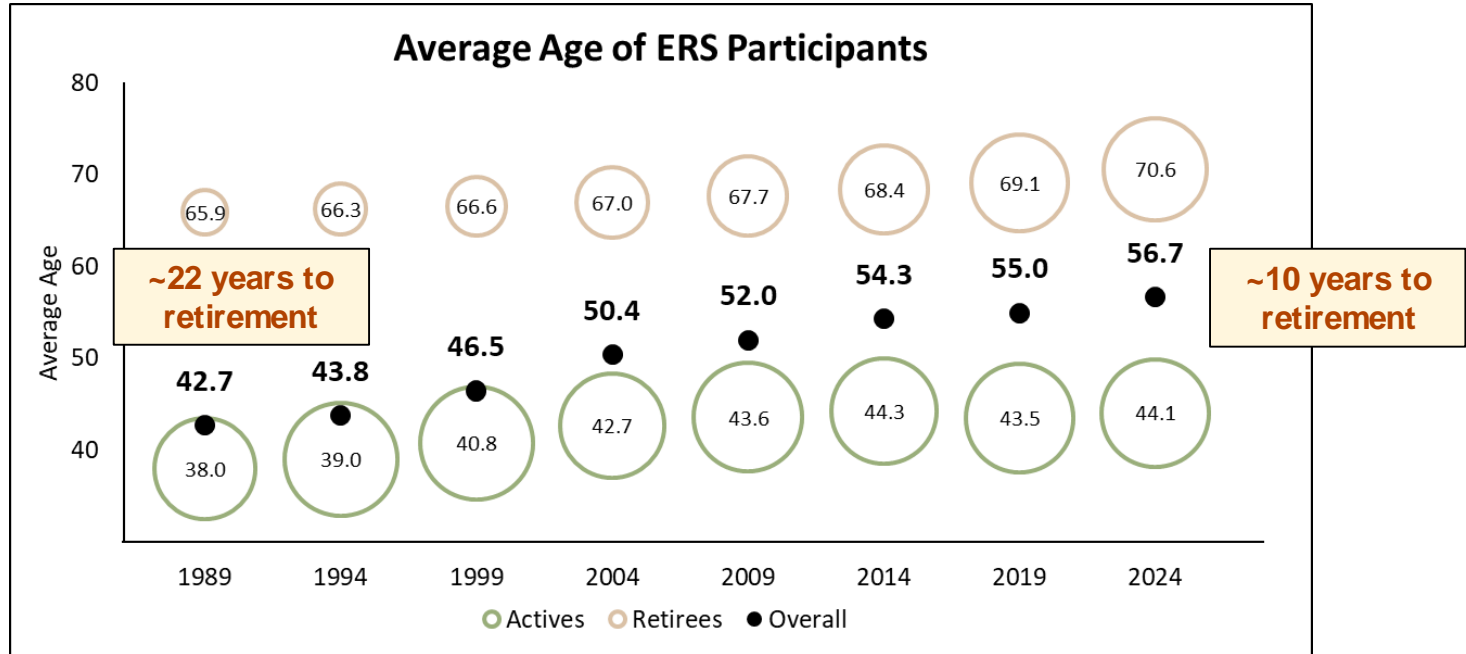


CIO Report

Target Date Fund Analysis



- Average age of ERS participant has risen significantly in recent decades



CIO Report

Target Date Fund Analysis



- ERS participant profile and Trust allocation currently align well with 2035 TDF

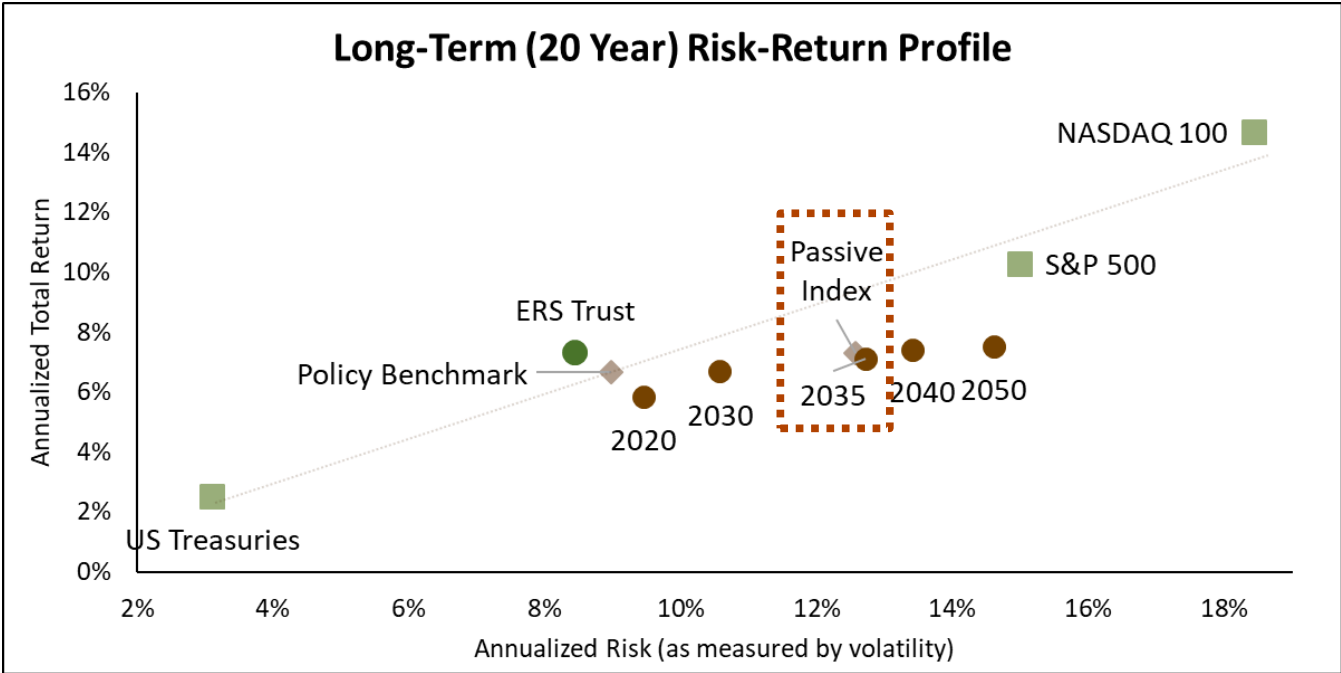
	1989		Today		
Years to retirement	26	16	11	6	-4
TDF Vintage	2050	2040	2035	2030	2020
Asset Class					
Domestic Equities	60%	49%	42%	35%	26%
International Equities	31%	25%	22%	17%	12%
Real Estate	4%	4%	3%	3%	2%
Public Equity	96%	78%	67%	55%	40%
Corporate Bonds	3%	7%	9%	12%	11%
Government Bonds	0%	11%	18%	26%	41%
Inflation-Linked Bonds	1%	5%	6%	7%	8%
Fixed Income	4%	22%	33%	45%	60%

CIO Report

Target Date Fund Analysis



- ERS Trust performs well against all vintages of TDF, which represent good proxies

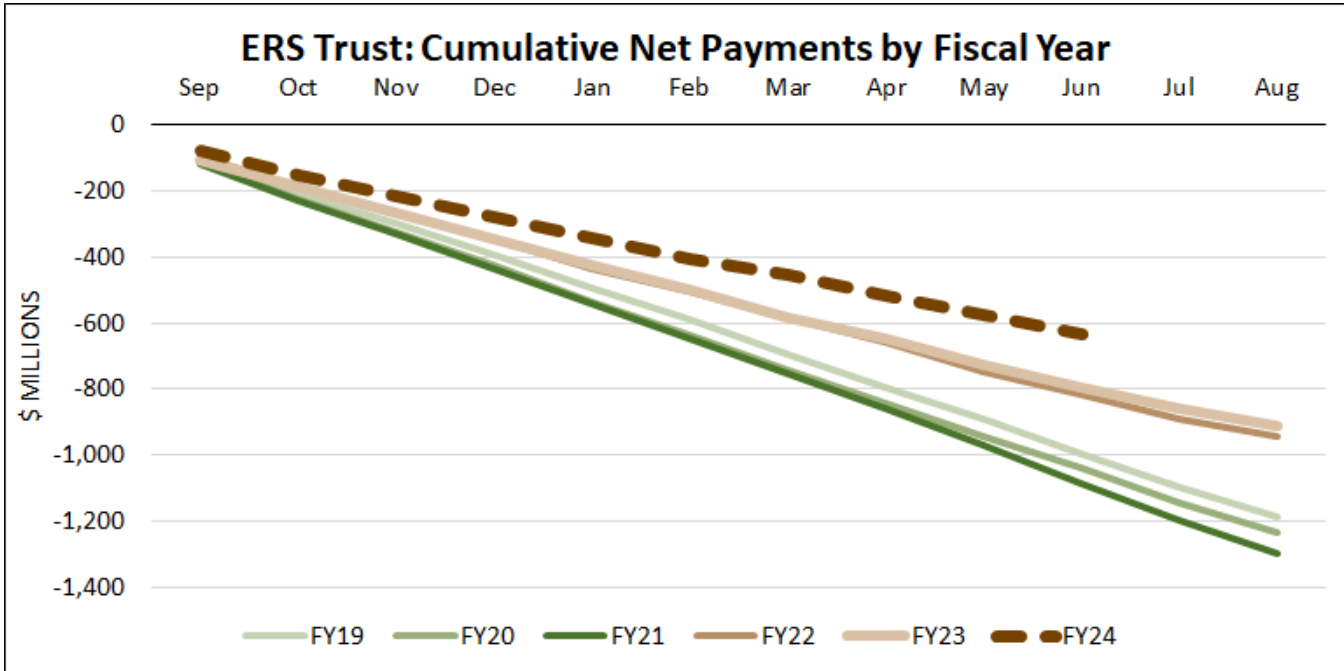


CIO Report

Liquidity Profile



- Net outflows continue to moderate due to legacy payments and higher contributions

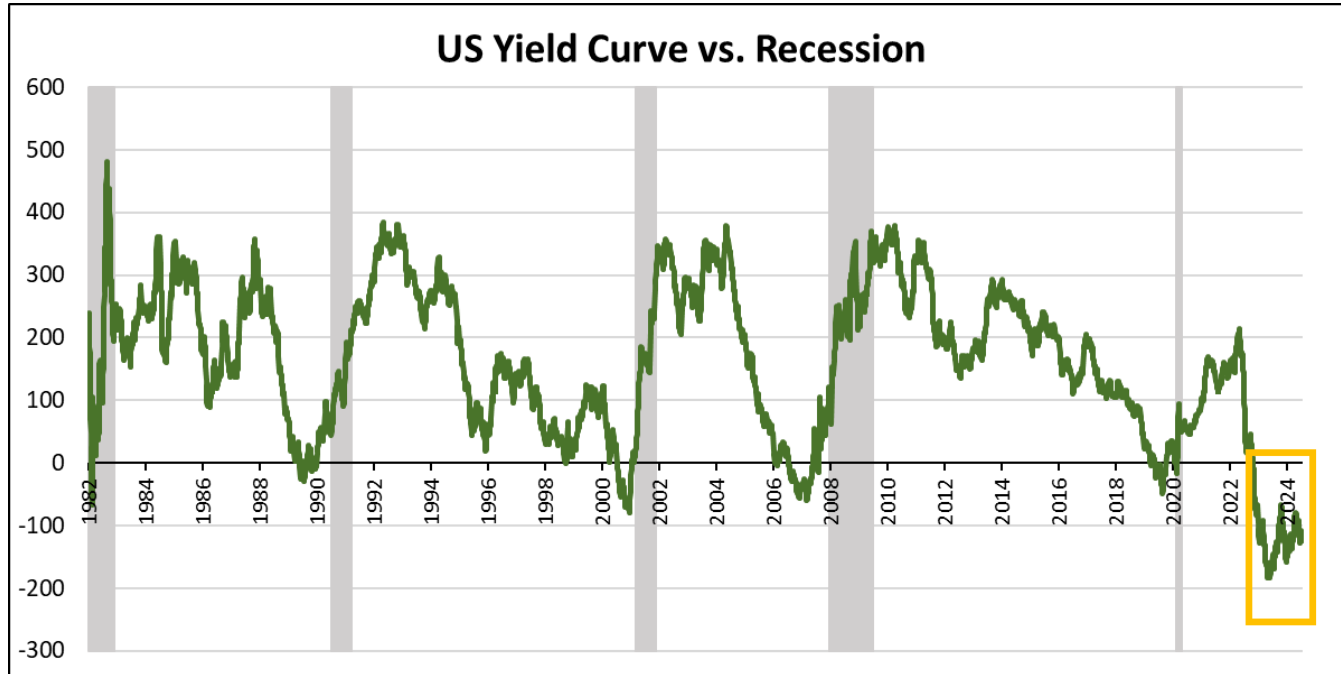


CIO Report

Market Environment



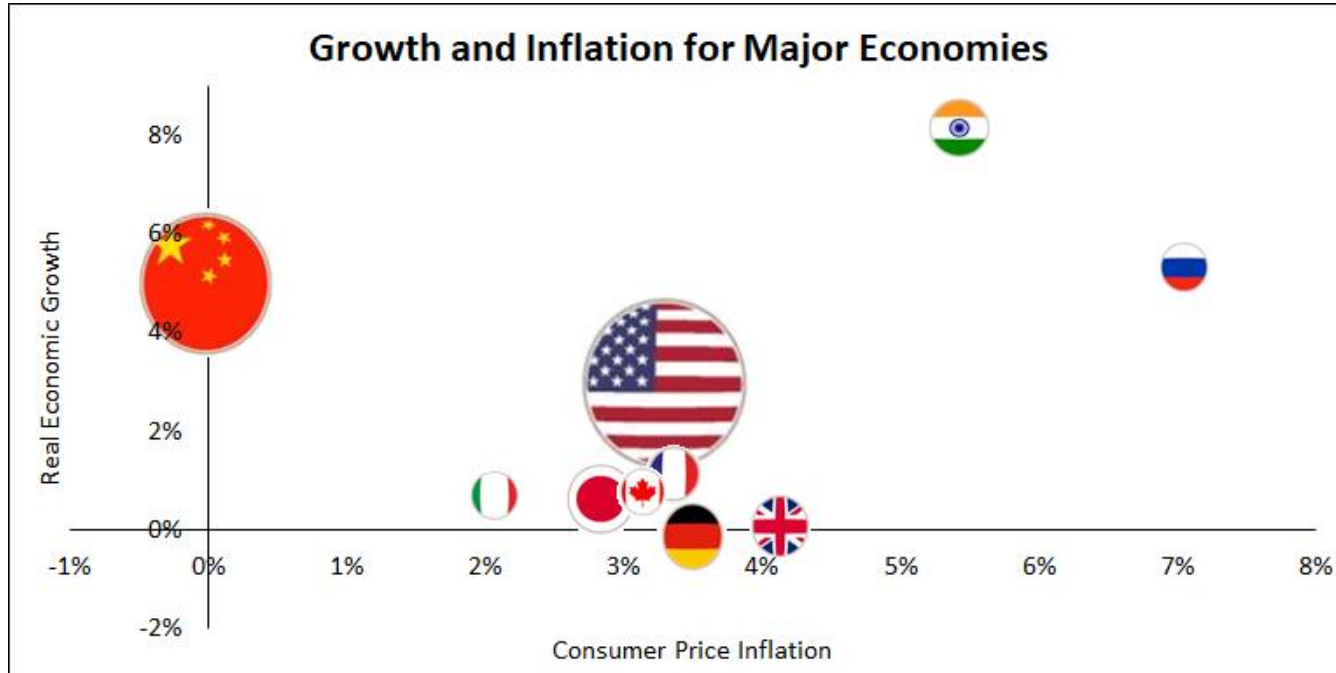
- Historically reliable economic indicators still signaling recession risk



CIO Report

Market Environment

- Growth and inflation holding up well across most major countries

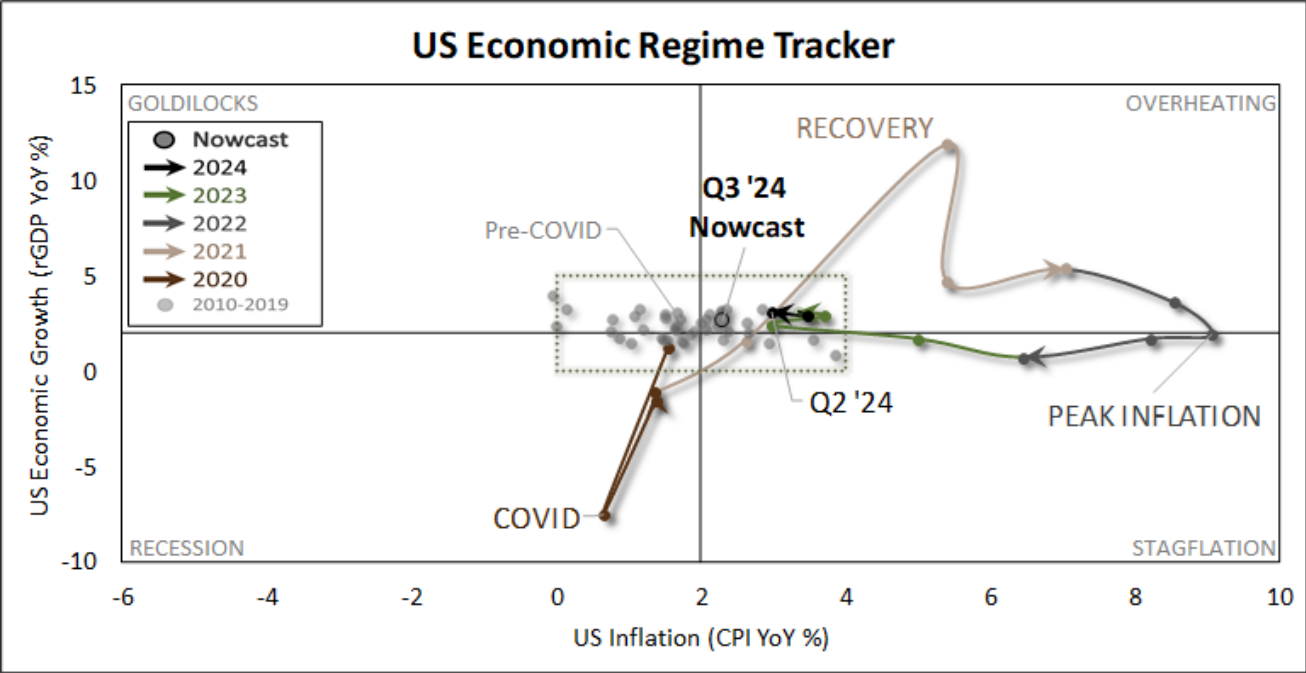


CIO Report

2024 Market Environment



- US economic conditions have remained more or less normal

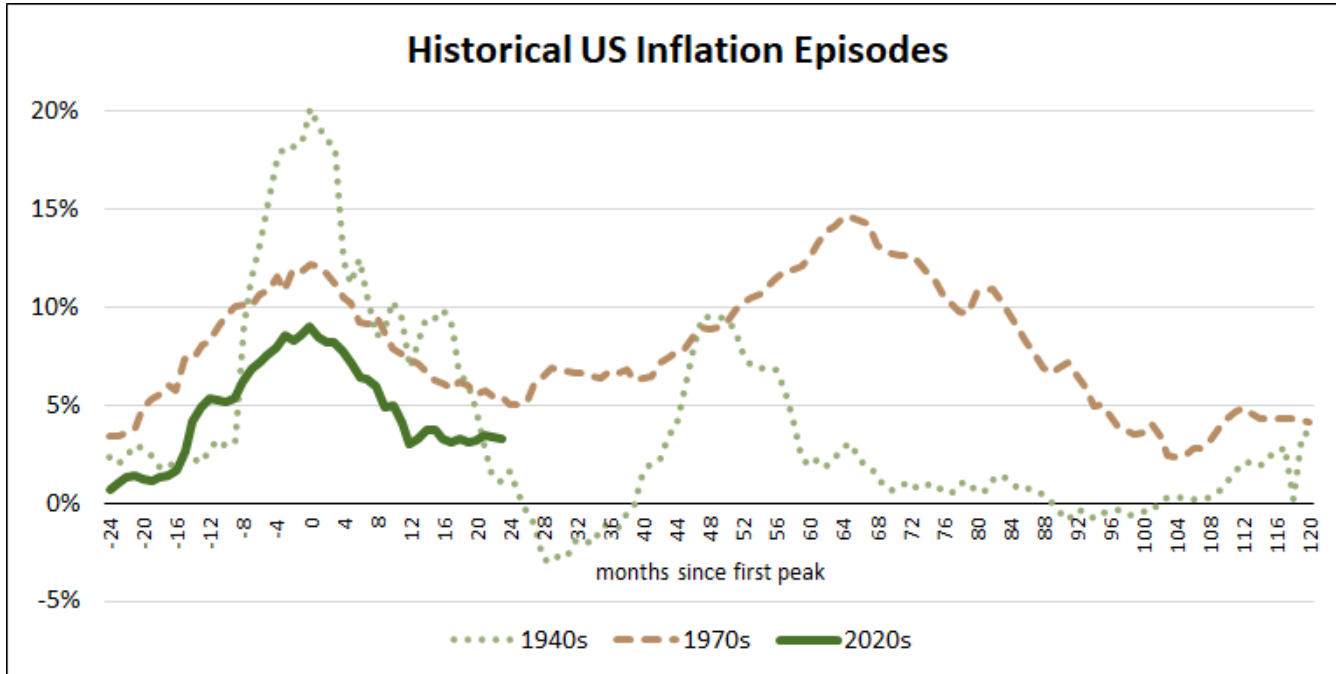


CIO Report

Market Environment



- Risk of resurgent US inflation lingers given historical patterns

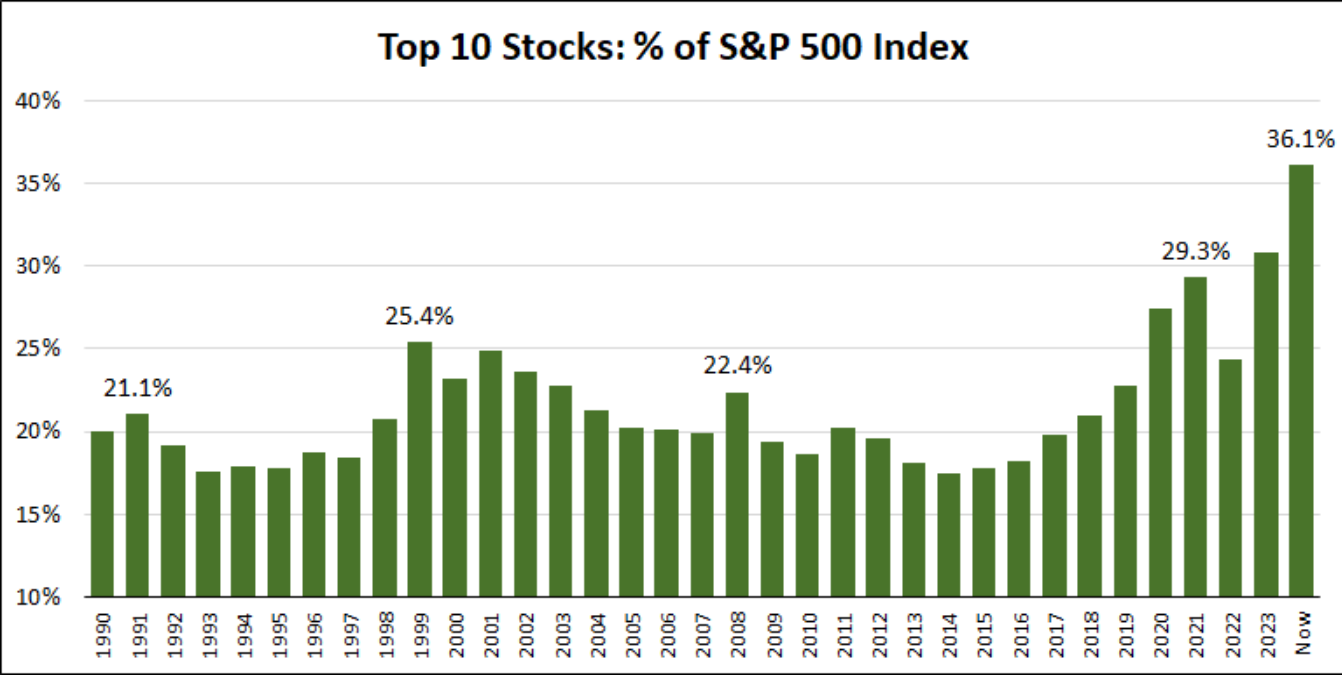


CIO Report

Market Environment



- US large cap index concentration now at levels unseen in decades



CIO Report

Market Environment



- Index concentration can meaningfully affect future market returns

Ten Largest S&P 500 Stocks at Year End 1999

Company Name	Index Weight on 12/31/99	Annualized Returns Next 5 Years
MICROSOFT	4.9%	-12.4%
GENERAL ELECTRIC	4.1%	-4.7%
CISCO SYSTEMS	2.9%	-18.5%
WALMART	2.5%	-4.6%
EXXON MOBIL	2.3%	7.5%
INTEL	2.2%	-10.4%
NOKIA OF AMERICA	1.9%	-42.0%
INTL BUSINESS MACHINES	1.6%	-1.2%
CITIGROUP	1.5%	6.6%
TIME WARNER	1.4%	-23.8%
TOTAL	25.4%	-10.1%

Market Performance

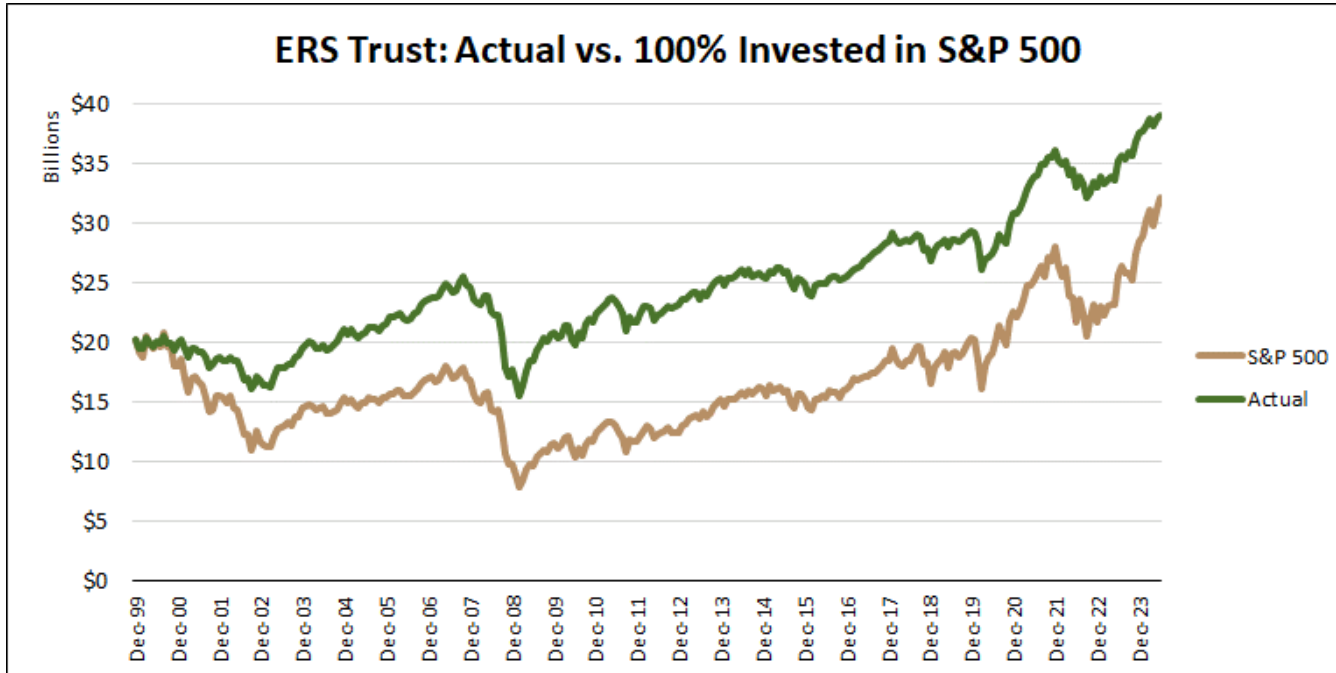
Index Name	Annualized Returns 2000-2004
S&P 500 EQUAL WEIGHT	8.1%
US TREASURIES	7.5%
MSCI EMERGING MARKETS	4.3%
DOW INDUSTRIALS	0.7%
MSCI ACWI EX-US	-0.3%
S&P 500	-2.3%
NASDAQ 100	-15.1%

CIO Report

Market Environment



- Poor returns plus meaningful outflows can impair capital for decades



CIO Report

Key Current Initiatives



- Attracting and retaining top investment talent
 - Setting ambitious goals for excellence and engagement
- Investment Consulting RFQ (with Board selection in December)
- Implementation of Investment Practices Review

Discussion

Public Agenda Item #22

** Consideration of Annual Review of Proposed Private
Markets Capital Plans for Fiscal Year 2025
(Action)*

August 21, 2024

Anthony Curtiss, Deputy Chief Investment Officer

David T. Veal, Chief Investment Officer

Private Markets Capital Plans

Overview



Capital Planning Process

- Established in IPS
- Guide asset allocation
- Manage commitment activity
- Manage 30+ ACICs per year
- Liquidity management

ERS Private Markets Portfolio	Target Allocation	Target Range	Portfolio Role
Private Equity	16%	11% to 21%	Growth, Enhanced Returns, Illiquidity Premium
Private Real Estate	9%	4% to 14%	Diversification, Yield, Potential to Hedge Inflation, Enhanced Returns, Illiquidity Premium
Private Infrastructure	5%	0% to 10%	Diversification, Income-Orientation, Inflation Hedging, Illiquidity Premium
Private Credit	3%	0% to 8%	Yield, Diversification, Illiquidity Premium

Private Markets Capital Plans

Review of FY24



- Total Trust including all asset classes forecasted to remain within approved ranges

Asset Class	Min	Target	Max	Forecast
Private Equity	450	600	750	732
Real Estate	150	300	450	350
Infrastructure	150	200	250	185
Private Credit	100	100	150	150
TOTAL TRUST	900	1,200	1,500	1,417

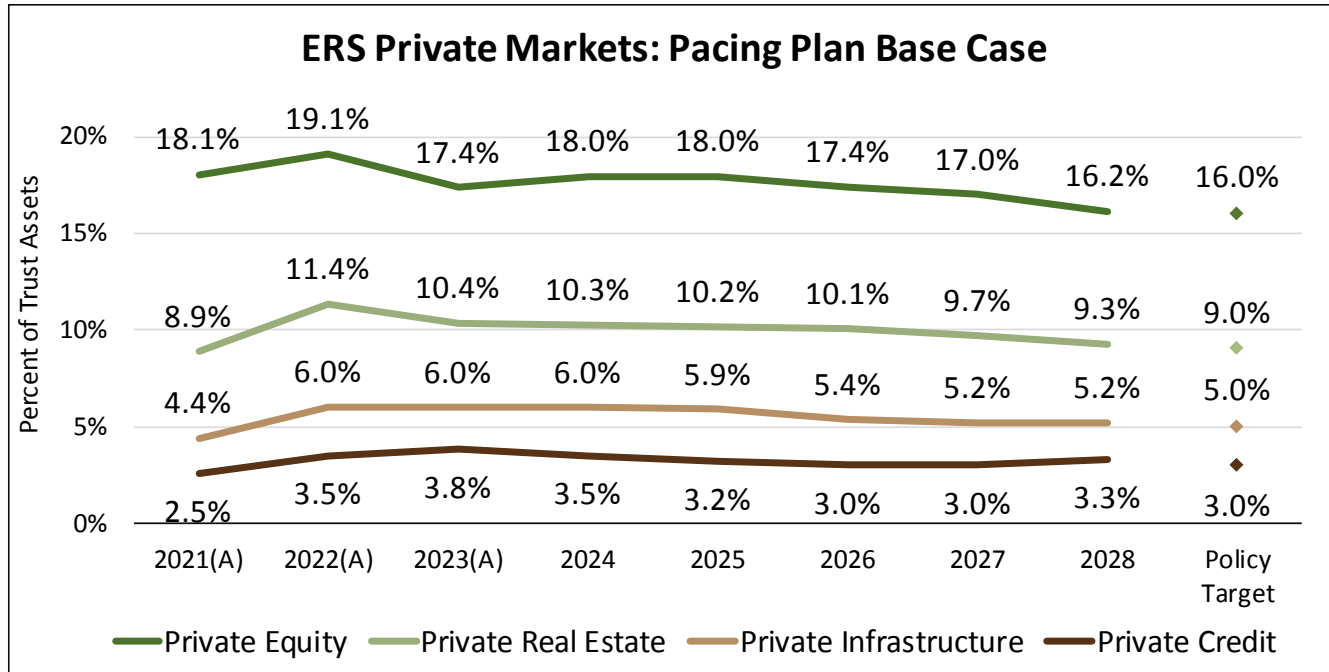
Long-Term View of Trust-level Capital Planning

Private Markets Capital Plans

Plan for Calendar Years 2024-2028



- Private market allocations continue to trend toward their strategic targets

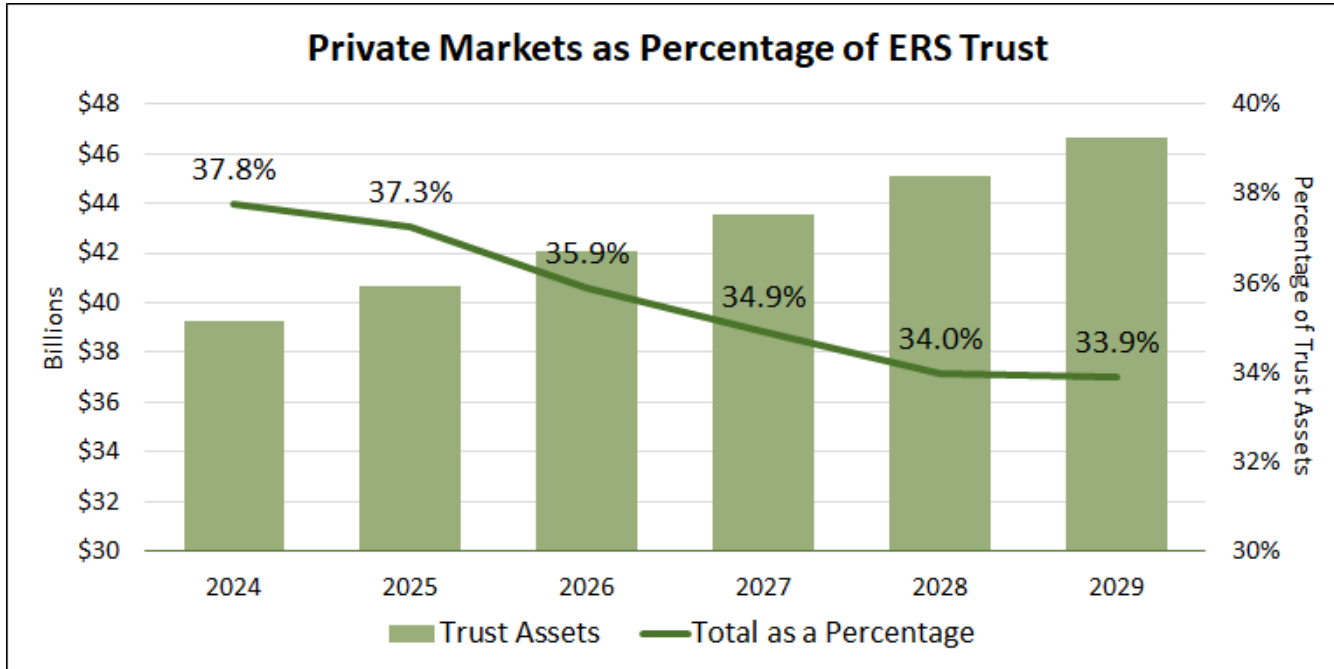


Private Markets Capital Plans

Plan for Calendar Years 2024-2028



- Current trajectory maintains a prudent risk profile with <40% in private markets

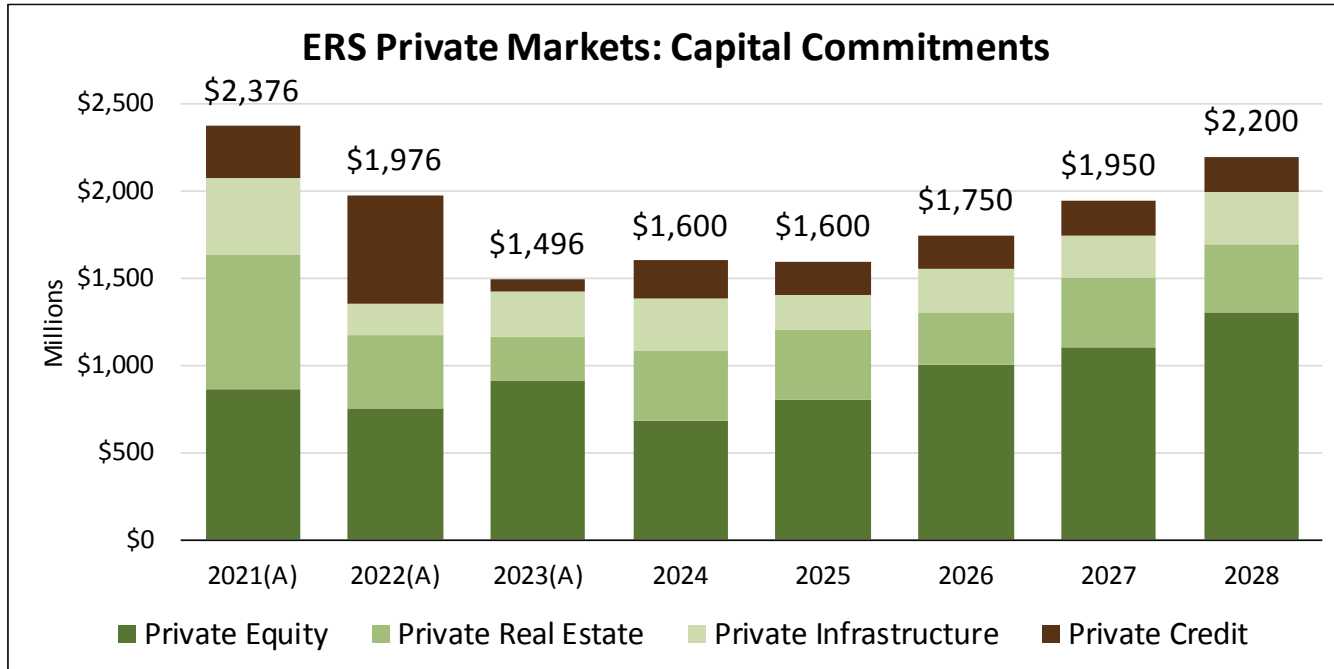


Private Markets Capital Plans

Plan for Calendar Years 2024-2028



- Higher commitments account for Trust growth and improved market environment

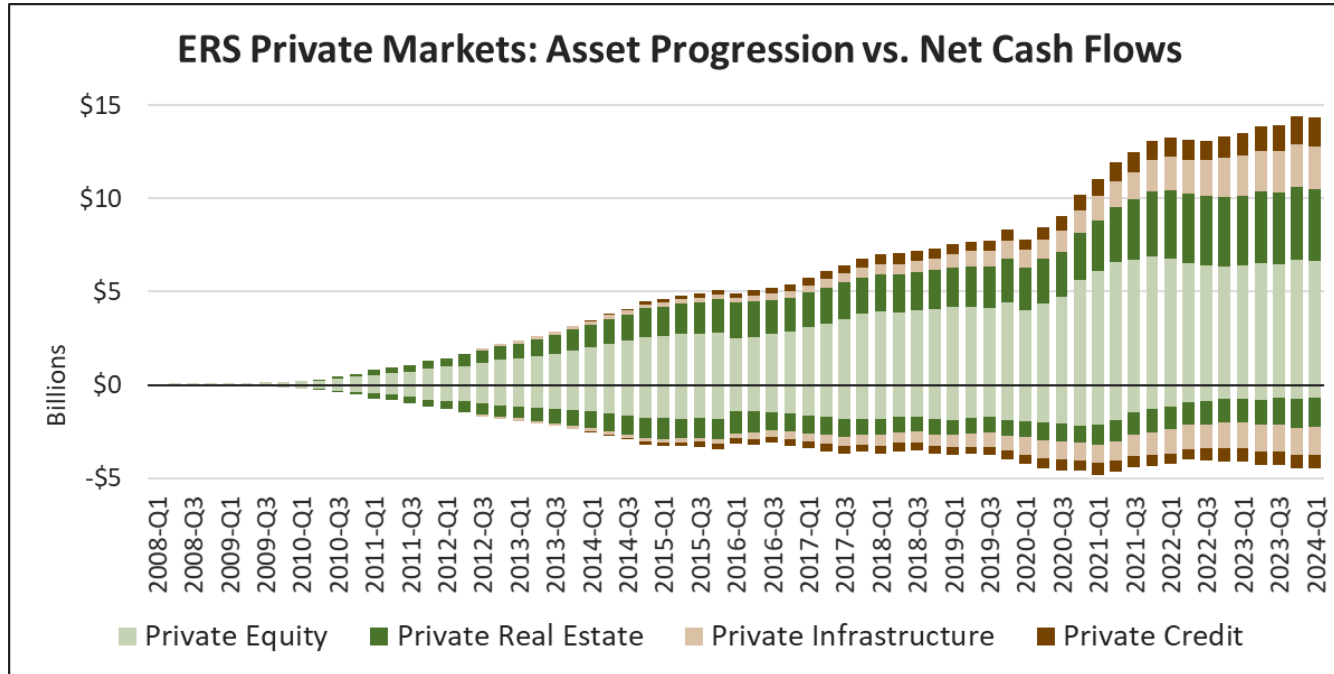


Private Markets Capital Plans

Plan for Fiscal Years 2024-2028 (Action)



- Mature program producing net cash flow, which is expected to continue through FY28

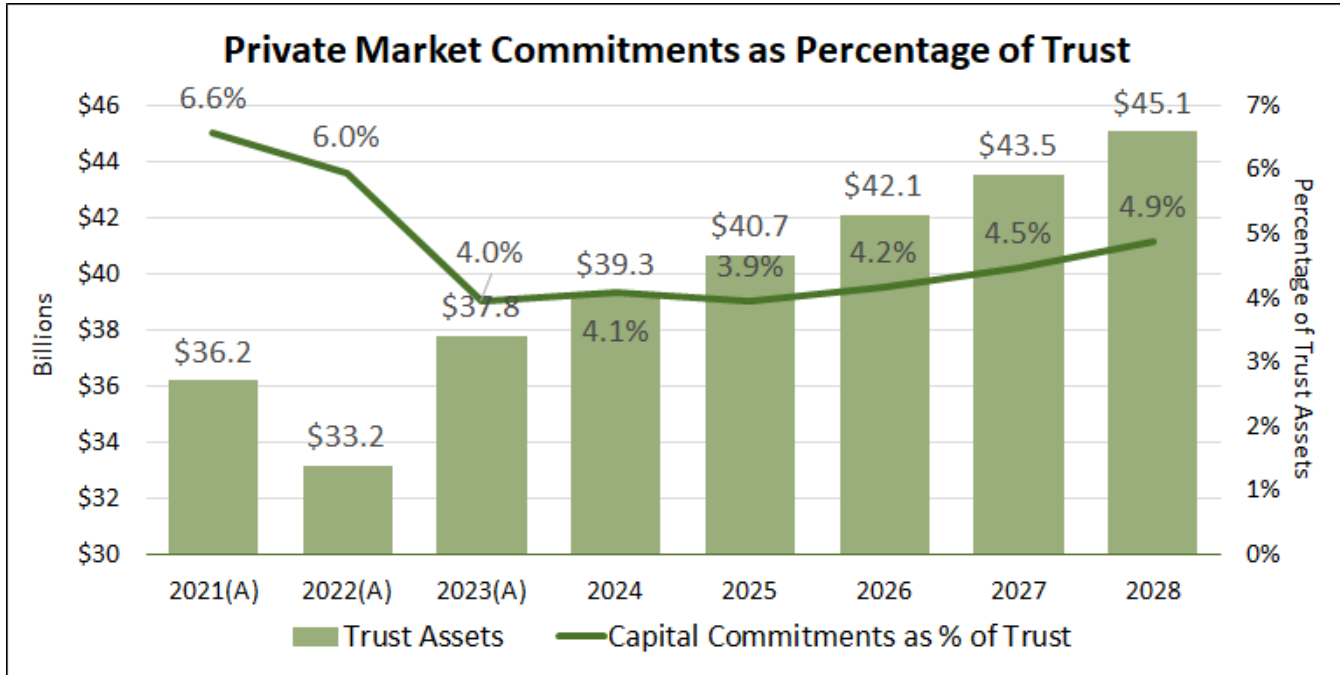


Private Markets Capital Plans

Plan for Calendar Years 2024-2028



- Moderate forecasted Trust growth allows for steady growth in future commitments

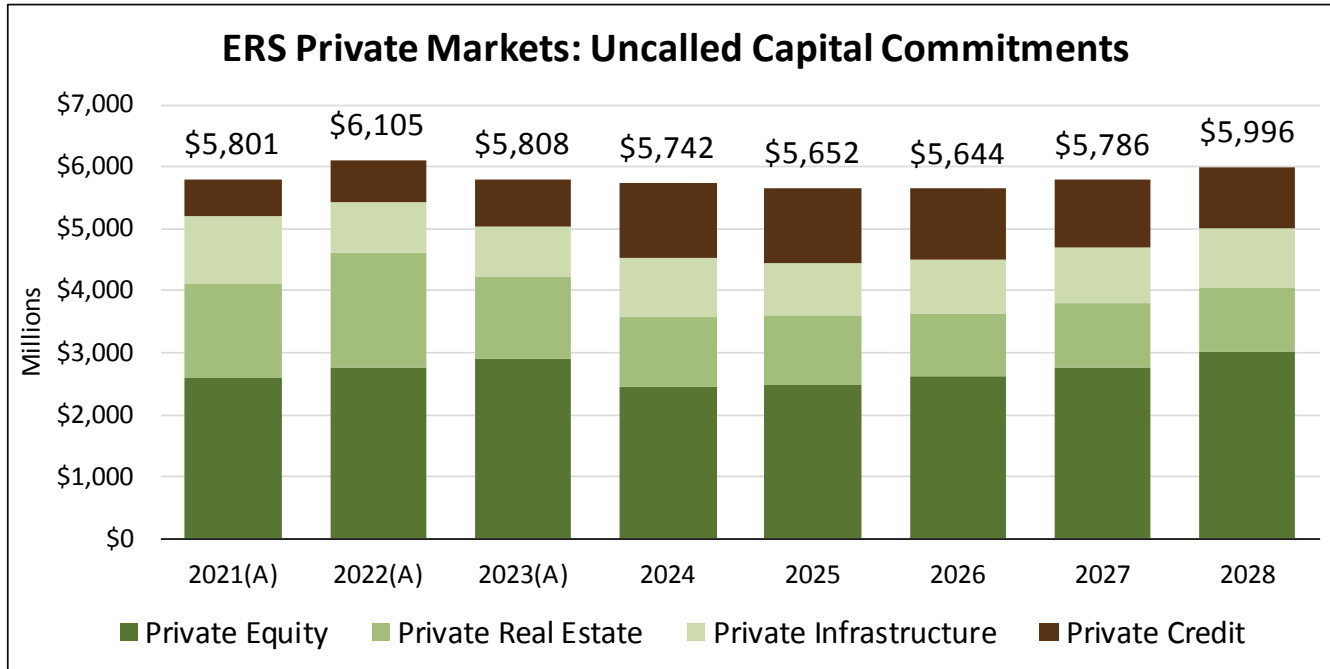


Private Markets Capital Plans

Plan for Calendar Years 2024-2028



- Uncalled commitments have peaked and are expected to remain stable

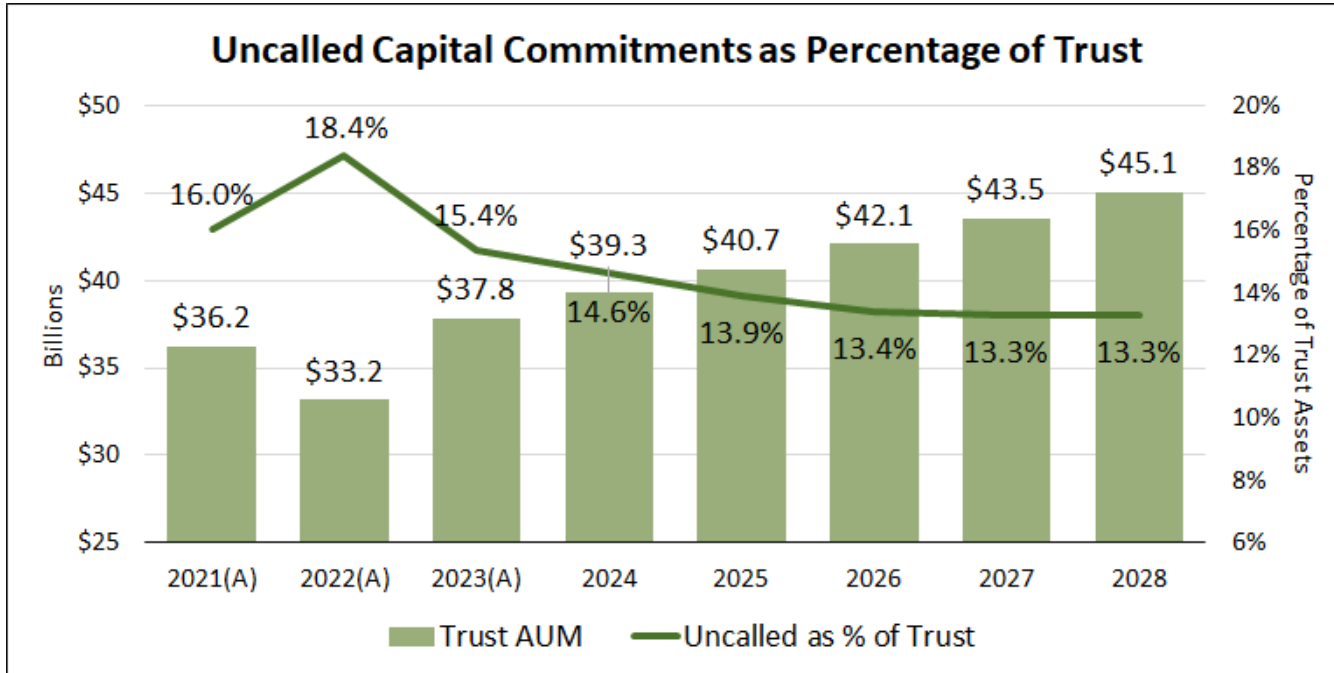


Private Markets Capital Plans

Plan for Calendar Years 2024-2028



- Uncalled capital commitments is forecasted to remain stable over the coming years



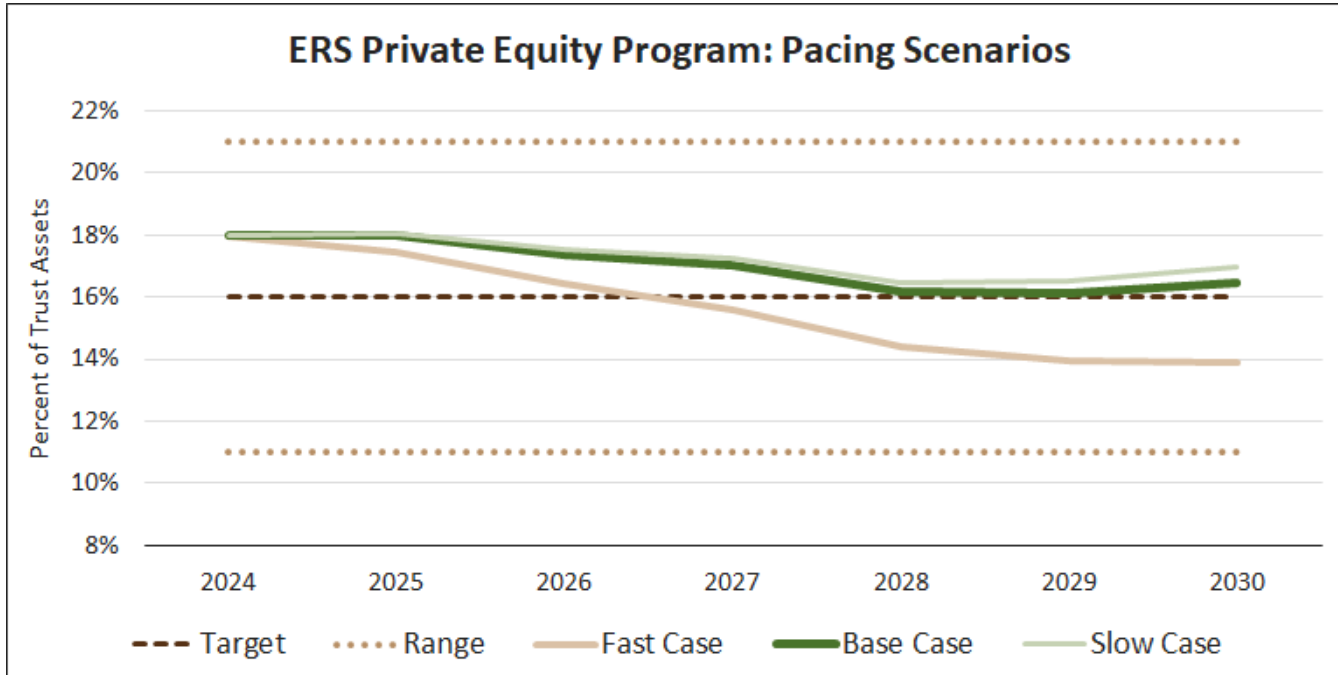
Capital Plans for Private Market Asset Classes

Private Equity Capital Plan

Proposed Tactical Plan for FY25 (Action)



- Target commitments of \$650 million, range of \$500-800 million



Private Equity Capital Plan

Proposed Tactical Plan for FY25 (Action)



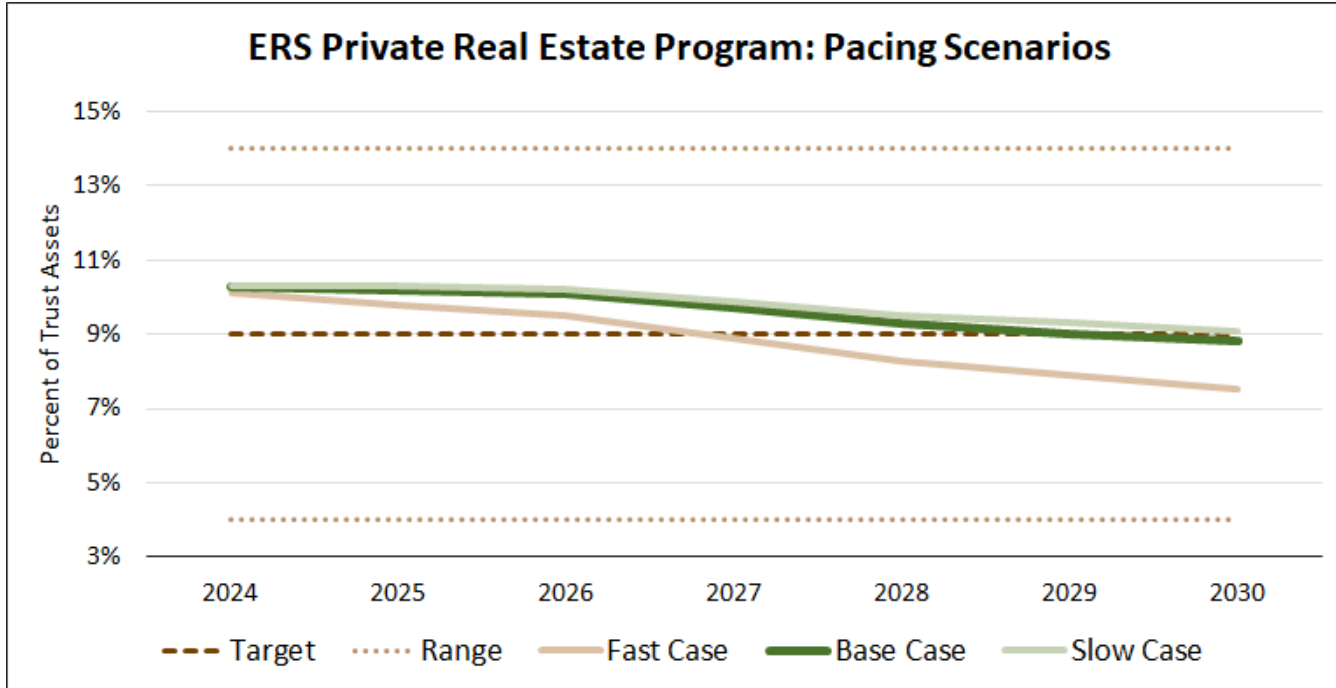
- 12 new primary fund commitments and five to nine co-investments
- Focus on both buyout and growth equity, with an emphasis on selective industries
- Additional consideration for energy investments
- Staff expects to maintain a similar pacing for FY26-FY29
- Transaction multiples continue to decline, driven by slower mergers and acquisitions activity and a difficult fundraising environment

Real Estate Capital Plan

Proposed Tactical Plan for FY25



- Target commitments of \$300 million, range of \$150-450 million



Private Real Estate Capital Plan

Proposed Tactical Plan for FY25 (Action)



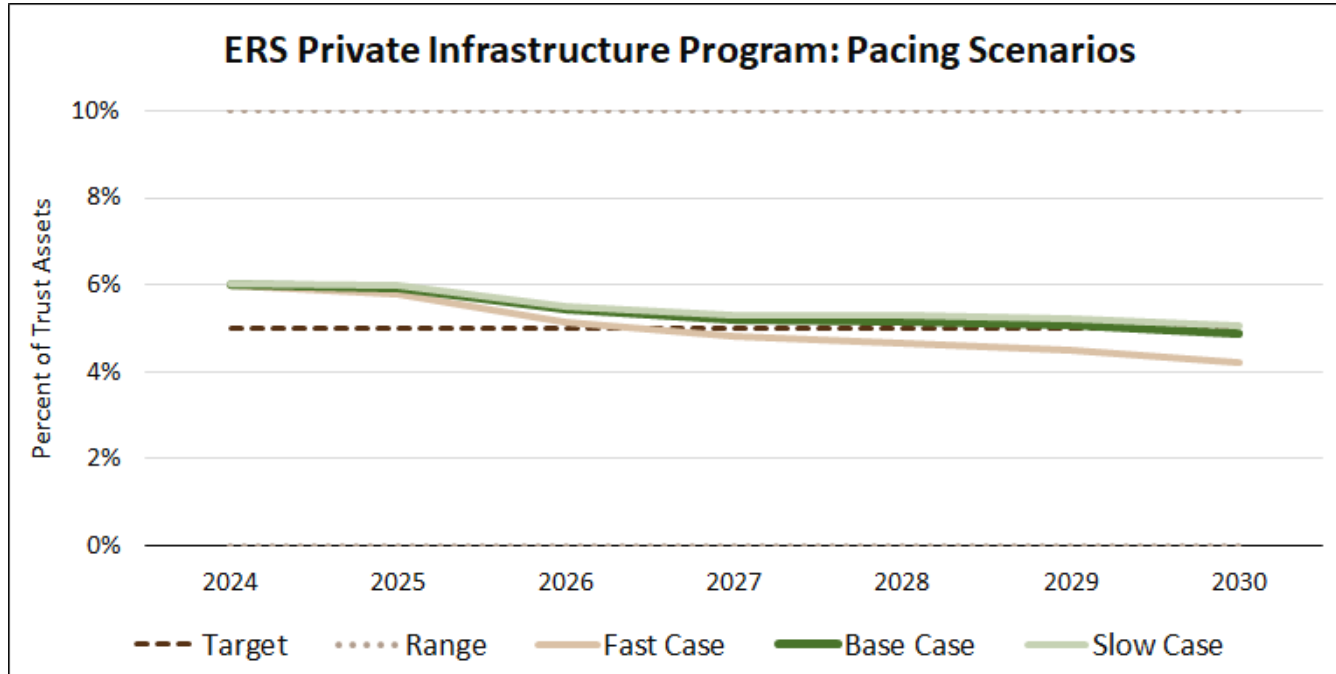
- Five to nine commitments (inclusive of co-investments)
- Staff expects to maintain a similar pacing for FY26-FY29
- Strong desire to add industrial exposure
- Potential to allocate toward upper range of the commitment target based on market conditions and favorable vintage
- Potential for near-term trough in valuations, but dependent on various factors (i.e. geography, region, property type, etc.)

Private Infrastructure Capital Plan

Proposed Tactical Plan for FY25



- Target commitments of \$200 million, range of \$150-250 million



Private Infrastructure Capital Plan

Proposed Tactical Plan for FY25 (Action)



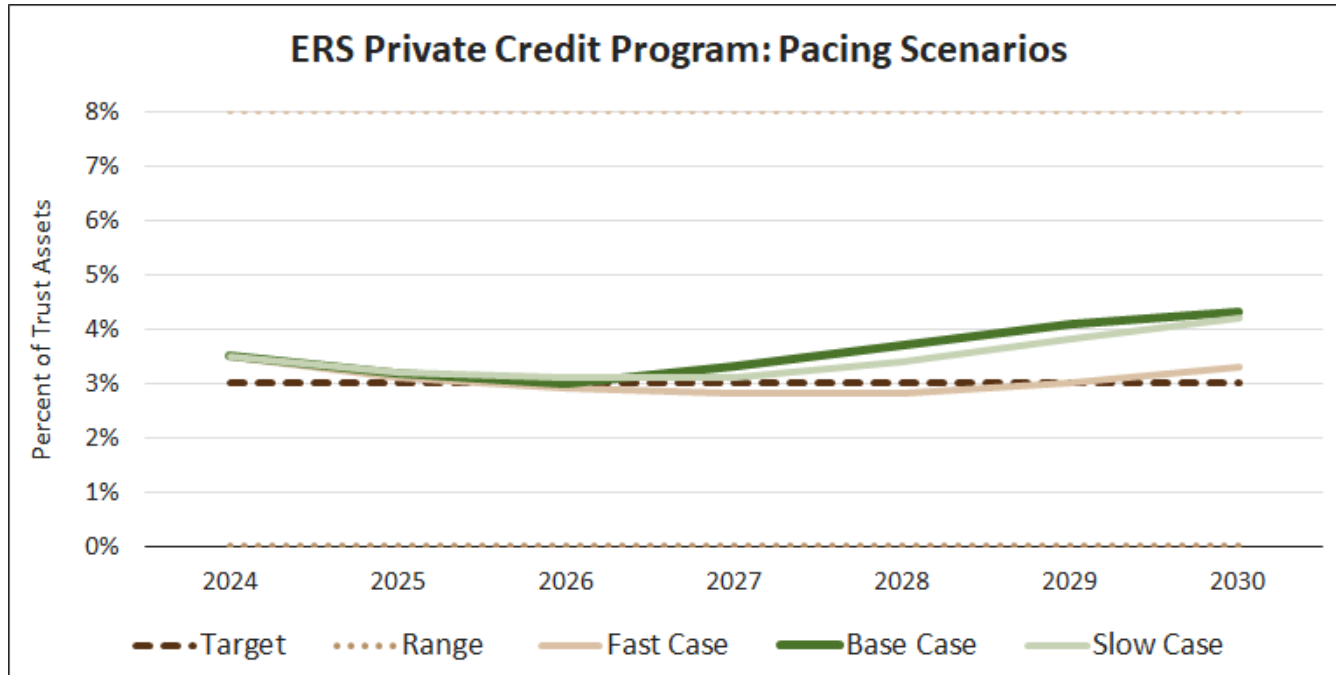
- Four to nine commitments (inclusive of co-investments)
- Maintain current mix in FY25 and consider adding:
 - Opportunistically review new core exposure and increase sector diversification
 - Non-U.S. exposure consideration (Europe, Australia, and Emerging Markets)
- Staff is modeling a gradual increase to its pacing over time
- Changes in long-term inflation and interest rate expectations led to slight slow-down in performance over FY24

Private Credit Capital Plan

Proposed Tactical Plan for FY25



- Target commitments of \$200 million, range of \$150-400 million



Private Credit Capital Plan

Proposed Tactical Plan for FY25 (Action)



- Continue to pursue an opportunistic approach
- One to two new primary fund commitments for the year
- Some areas within structured credit appear attractive
- Staff expects to maintain a similar pacing for FY26-FY29

Private Markets Capital Plan

Proposed Capital Plans for FY25 (Action)



- Total commitments of \$1.35 billion, range of \$1.0 billion to \$1.8 billion

Program	Proposed FY25	Target Range FY25
Private Equity	\$650 million	\$500 to \$800 million
Private Real Estate	\$300 million	\$150 to \$450 million
Private Infrastructure	\$200 million	\$150 to \$250 million
Private Credit	\$200 million	\$150 to \$400 million
Total Trust	\$1,350 million	\$1,000 million to \$1,800 million

Discussion
Action Item

Public Agenda Item #23

*Consideration of the Reappointment of a Current Member
of the Investment Advisory Committee
(Action)*

August 21, 2024

David T. Veal, Chief Investment Officer

Investment Advisory Committee

Operating Framework



- Established at the discretion of the Board in Texas Administrative Code § 63.17(b)
- Chartered in Addendum VI of the Investment Policy Statement (IPS)
- Consists of at least five members and not more than seven
- Members are selected based on experience:
 - in managing a business in which investment decisions are made, or
 - as a prominent educator in the fields of economics or finance
- Members serve at the pleasure of the Board for staggered three-year terms
- Members must comply with ERS Investment Policy Statement and Texas law

IAC Skills Assessment

	Term Expiration	Investment Experience	Public Equity	Private Equity	Credit	Hedge Funds	Rates & Cash	Real Estate	Infra-structure	Special Situations
<u>IAC Chair, Laurie Dotter</u> Retired from Transwestern Corporate Properties as President	5/31/25	39 years						✓	✓	✓
<u>IAC Vice-Chair, Ruby Muñoz Dang</u> Partner and Director of Marketing & Client Services, Garcia Hamilton & Associates, L.P.	3/31/25	27 years	✓		✓		✓			✓
<u>Bob Alley, CFA</u> Retired from AIM Advisors, Inc. as Chief Fixed Income Officer	8/31/24	47 years	✓	✓	✓		✓			✓
<u>Ryan Bailey, CFA, FRM, CAIA, CMT</u> CIO and Managing Partner, Paradigm Institutional Investments, LLC	3/31/25	24 years	✓	✓	✓	✓	✓	✓	✓	✓
<u>Milton Hixson, CPA, CFP</u> Founder & President, FMP Wealth Advisers	3/31/26	50 years	✓	✓	✓	✓		✓	✓	
<u>Ken Mindell</u> Retired SVP, Treasurer & Dir. Investments for Rosewood Management Corporation	5/31/25	42 years	✓	✓	✓	✓		✓		✓
<u>Gene L. Needles, Jr.</u> Former Chairman, President and CEO, Resolute Investment Managers	5/31/26	43 years	✓	✓	✓	✓		✓		✓

Robert G. Alley

Professional Credentials



- IAC Member since 1999
- Current term as IAC Member:
 - 100% attendance at Board/IAC meetings
 - Participant in 49 ACIC meetings
- More than 45 years of investment experience
- Retired from AIM Advisors as Chief Fixed Income Officer and Managing Director
- Captain, U.S. Navy Reserve, Retired (1970-1995)

Discussion
Action Item

Public Agenda Item #24

Election of Board Chair and Vice-Chair for Fiscal Year 2025
(Action)

August 21, 2024

Public Agenda Item # 25

Executive Session

In accordance with Section 551.071, Texas Government Code, the Board of Trustees will meet in executive session to consult with its attorney to seek advice on legal matters, including pending or contemplated litigation and other legal matters in which the duty of the attorney to the Board of Trustees under the Texas Disciplinary Rules of Professional Conduct clearly conflicts with the Open Meetings Act.

August 21, 2024

Public Agenda Item #26

*Dates for Fiscal Year 2025 Meetings of the Board of Trustees,
Investment Advisory Committee, and Audit Committee*

August 21, 2024

Fiscal Year 2025 Meeting Dates

2-day Workshop:

Tuesday, December 10, 2024

Wednesday, December 11, 2024

Wednesday, March 5, 2025

Wednesday, May 21, 2025

Wednesday, August 20, 2025

Public Agenda Item #27

*Adjournment of the Joint Meeting of the Board of Trustees and
Investment Advisory Committee*

August 21, 2024