## Joint Meeting of the Board of Trustees and Investment Advisory Committee





## Call Meeting of the ERS Board of Trustees to Order



## Consideration of Consent Agenda - (Action)



## Discussion Action Item



## 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.



### Call the Investment Advisory Committee to Order



#### \* Consideration of Annual Review of the ERS Incentive Compensation Plan Document for Plan Year 2025

#### May 22, 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** Objectives

**ERS**<sup>°</sup>

- Communicate strategic performance priorities.
- Incentivize the prudent achievement of sustained levels of high investment performance, without undue risk.
- Promote teamwork among employees.
- Support strategic and operational goals.
- Attract and retain key employees in a cost-effective manner.

## **Incentive Compensation Plan** Key Features

- Performance measures are based on 1-year, 3-year, and 5-year performance periods; weighted 20%, 30%, and 50% respectively.
- Participants have asset class and total trust performance benchmarks.
- Participants must exceed their benchmarks to receive an incentive award.
- Participants are evaluated on both quantitative (75%) and qualitative (25%) metrics.
- Incentive awards are generally paid out over a three-year period: 50/25/25.
- Awards can be earned during non-positive years. However, award payments are deferred until the next 1-year performance period is positive.

# Incentive Compensation Plan



#### Awards Summary

	ICP Awards				Trust Fund Returns by Performance Period						
	(Quantitative & Qualitative)			1-Year		3-Year		5-Year			
Plan Year	Average Realization	Minimum Realization	Maximum Realization	Total Trust Return	Excess Return Over Benchmark	Total Trust Return	Excess Return Over Benchmark	Total Trust Return	Excess Return Over Benchmark		
2023	89.3%	55.5%	100.0%	6.73%	0.81%	9.63%	2.99%	7.71%	1.50%		
2022	83.2%	45.0%	100.0%	-1.59%	1.79%	9.66%	2.27%	8.27%	1.65%		
2021	81.4%	45.0%	100.0%	25.46%	6.96%	11.34%	1.62%	11.13%	1.50%		
2020	43.0%	15.0%	72.5%	6.82%	-1.35%	6.42%	0.05%	7.30%	-0.16%		
2019	52.3%	16.3%	86.2%	3.00%	-0.06%	8.15%	0.83%	5.99%	0.41%		
Average	69.8%	35.4%	91.7%	8.08%	1.63%	9.04%	1.55%	8.08%	0.98%		

Revised: 04/10/24

**Incentive Compensation Plan** Plan Year 2025 – Proposed Material Changes

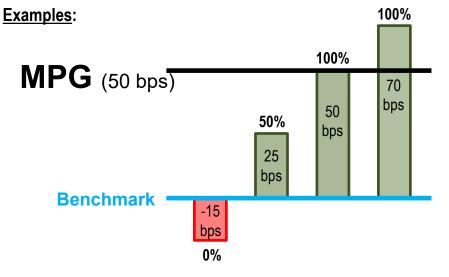


- 1. Methodology change for setting "Maximum Performance Goals"
- 2. Changes to investment attorney plan group on Appendix A



#### 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%.



## **ERS**°

#### 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	



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.



#### What impact will this change have?

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

\* Includes some anticipated changes to the IPS.

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**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



#### APPENDIX A ELIGIBLE EMPLOYEE POSITIONS WITH VALENT POLICOLI D Plan Groups Executive Directo Chief Investment Officer 100% Deputy Chief Investment Officer 100% 100% 50/25/25 Managing Director Program Director 90% Supervising Portfolio Manager 90% Portfolio Manager IV, V & VI 80% Portfolio Manager I, II & III 70% Chief Trader I & II 70% 50/25/25 Investment Analyst V 70% 50/25/25 Trader I, II & III 85% 50/25/25 58% Investment Analyst III & IV 50/25/25 Investment Operations Manager 50% 50/25/25 Investment Analyst I & II 35% 50/25/25 Performance Specialist 35% 50/25/25 50/50/0 Investment Operations Specialist 25% 100/0/0 Investment Administrative Support 5% ments and Securities Atto 85% 50/25/25 90% 80% 50/25/25 70% 35% 50/25/25 nvestments and Securities, Paralegal

Plan Groups	Maximum Incentive Award Percentages	Payment Schedules (Year 1/2/3, see Section 6.2)
Investments and Securities, Attorney	<del>65%</del>	<del>50/25/25</del>
Deputy General Counsel (Investment Attorney)	<u>90%</u>	<u>50/25/25</u>
Senior Investment Attorney	<u>80%</u>	<u>50/25/25</u>
Investment Attorney	<u>70%</u>	<u>50/25/25</u>
Investments and Securities, Paralegal	35%	50/25/25

#### APPENDIX A

Agenda Item 05 – Joint Meeting May 22, 2024

## **Incentive Compensation Plan** *Plan Year 2025 – Other Proposed Changes*



In addition to the proposed material changes, staff is proposing some other changes to the Plan document that will provide clarification and better reflect current processes and practices. These include:

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

These changes are reflected in the draft Plan document.



#### Discussion



#### \*Consideration of Quarterly Review of Investment Performance

#### May 22, 2024

John McCaffrey, Managing Director of Portfolio Management Sam Austin, Partner, NEPC David T. Veal, Chief Investment Officer





## QUARTERLY PERFORMANCE REPORT EMPLOYEES RETIREMENT SYSTEM OF TEXAS

MAY 22, 2024

Sam Austin, Partner





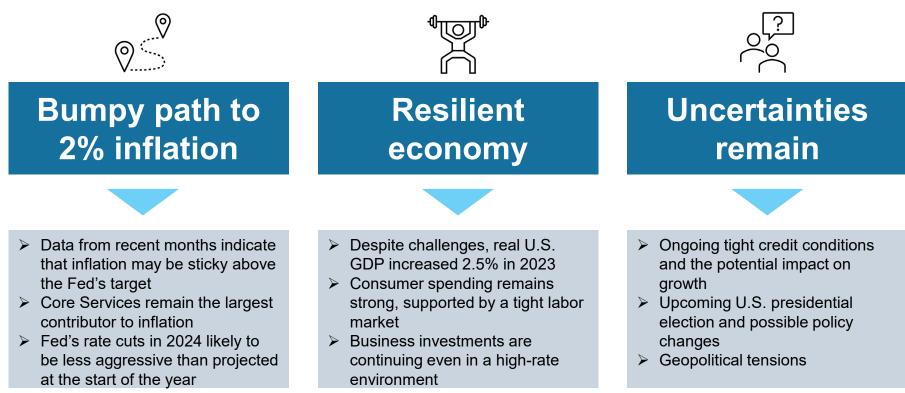
## TABLE OF CONTENTS

- Economic and Market Environment
- Executive Summary



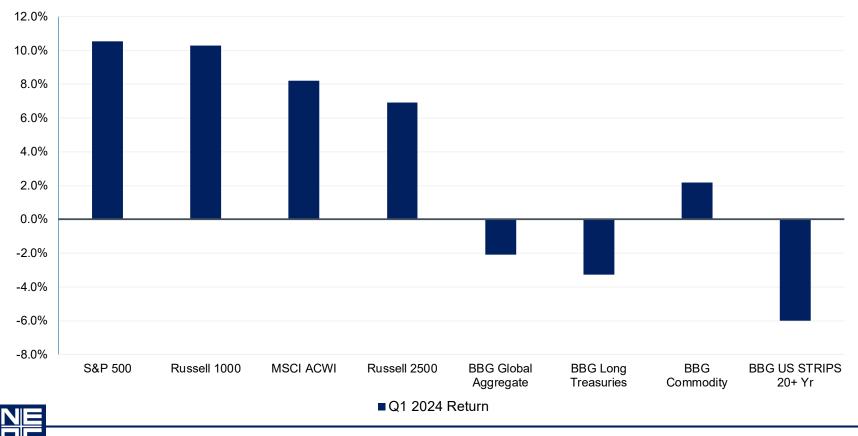
## ECONOMIC AND MARKET ENVIRONMENT

## **ECONOMIC ENVIRONMENT**



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#### **BEST AND WORST INDEX PERFORMANCE**





## EXECUTIVE SUMMARY

### **ERS TRUST DASHBOARD**

Performance	(	СҮТD	FYTD 2024	
Total Trust	4.14% (37)		7.83% (50)	
Policy Benchmark	2.90% (86)		6.93% (78)	
Excess Return		1.24%		
Risk Statistics	5-Y	5-Year		
	Sharpe Ratio	Sortino Ratio	Tracking Error	
Total Trust	0.92 (3)	1.43 (4)	1.76%	
Policy Benchmark	0.67 (9)	1.03 (7)	-	
Attribution Summary				
Largest Contributors (Quarter)				

Public Equity (+0.9%) was the largest contributor, followed by Private Credit (+0.2%) and Private Real Estate (+0.2%).

Largest Detractors (Quarter)

Infrastructure was the sole detractor (-0.1%).

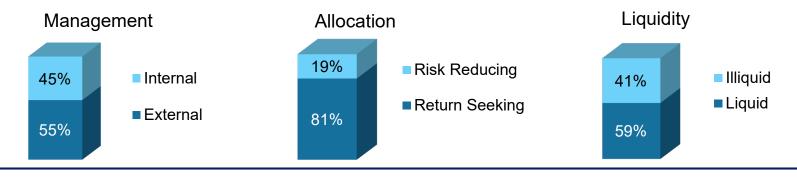


Note: Numbers in parentheses indicate the Trust's rank among the peer universe of Public Defined Benefit plans greater than \$1 Billion.

#### **ERS TRUST DASHBOARD**

NF

Profile	
Market Value at March 31, 2024	\$38.8 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	\$38,798,131,597	4.1% (37)	7.8% (50)	11.8% (36)	7.9% (3)	9.3% (6)	7.9% (10)
Policy Benchmark		2.9% (86)	<b>6.9%</b> (78)	10.1% (75)	5.7% (6)	7.5% (53)	6.8% (39)
Passive Index		6.1% (1)	12.4% (1)	18.4% (1)	<b>5.1%</b> (18)	9.0% (7)	7.4% (22)

- For the one-year period ended March 31, 2024, the Trust outperformed the policy benchmark by 1.7%.
- In the one-year period, the Trust's assets increased from \$33.69 billion to \$38.80 billion. This includes a \$4.10 billion net investment gain within the one-year period and a \$1.55 billion net investment gain within the first calendar quarter of 2024.

Note: The Passive Index is comprised of 80% MSCI ACWI IMI and 20% Bloomberg Intermediate Treasury Index. 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 March 31, 2024								
	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio				
Total Trust	7.9% (3)	6.9% (1)	0.77 (1)	1.18 (4)				
Policy Benchmark	5.7% (6)	7.6% (1)	0.44 (4)	0.64 (4)				
5 Years Ending March 31, 2024								
	5 Years	s Ending March 31, 2024						
	<b>5 Year</b> s Return	<b>s Ending March 31, 2024</b> Standard Deviation	Sharpe Ratio	Sortino Ratio				
Total Trust			Sharpe Ratio 0.92 (3)	Sortino Ratio 1.43 (4)				

- The three-year and five-year Trust returns have 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	Fiscal Year-To-Date	One Year	Three Years	Five Years
Beginning Market Value	\$37,592,117,969	\$35,363,436,955	\$33,690,927,096	\$32,023,039,282	\$28,285,241,189
Contributions	\$2,616,079,456	\$9,592,885,827	\$14,287,661,973	\$56,341,868,018	\$84,717,137,388
Withdrawals	-\$2,963,163,791	-\$9,007,581,362	-\$13,279,234,293	-\$58,030,345,037	-\$89,049,656,021
Net Cash Flow	-\$347,084,335	\$585,304,465	\$1,008,427,679	-\$1,688,477,019	-\$4,332,518,633
Net Investment Change	\$1,553,097,962	\$2,849,390,176	\$4,098,776,822	\$8,463,569,334	\$14,845,409,040
Ending Market Value	\$38,798,131,597	\$38,798,131,597	\$38,798,131,597	\$38,798,131,597	\$38,798,131,597
Net Change	\$1,206,013,627	\$3,434,694,641	\$5,107,204,501	\$6,775,092,315	\$10,512,890,407



## **TRUST ASSET ALLOCATION VS. POLICY TARGETS**

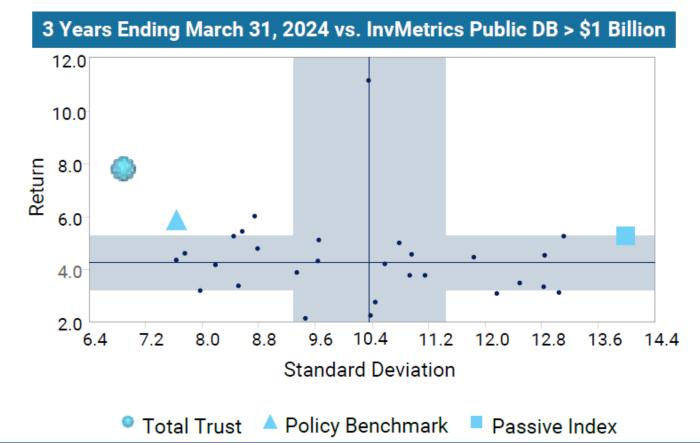
100%	5.3%	6.0%	Asset Allocation as of March 31, 2024						
90% —	4.7% 8.4%	2.0% 12.0%		Current Value	Current	Strategic Target	Tactical Range		
80%	5.9%	5.0%							
70%		0.00/	Public Equity	\$13,824,424,540	35.6%	35.0%	25.0% - 45.0%		
1070	10.0%	9.0%	Private Equity	\$6,642,010,491	17.1%	16.0%	11.0% - 21.0%		
60%	3.9%	3.0%	Public Credit	\$2,644,153,670	6.8%	9.0%	4.0% - 14.0%		
	6.8%	9.0%	Private Credit	\$1,503,088,398	3.9%	3.0%	0.0% - 8.0%		
50%			Real Estate - Public	\$740,725,149	1.9%	3.0%	0.0% - 13.0%		
40%	17.1%	16.0%	Real Estate - Private	\$3,879,513,922	10.0%	9.0%	4.0% - 14.0%		
			Infrastructure	\$2,287,213,964	5.9%	5.0%	0.0% - 10.0%		
30% —			Rates	\$3,251,546,007	8.4%	12.0%	7.0% - 17.0%		
20%			Cash	\$1,824,939,119	4.7%	2.0%	1.0% - 10.0%		
			Hedge Funds	\$2,075,440,493	5.3%	6.0%	0.0% - 11.0%		
10%			Special Situations	\$125,075,845	0.3%	0.0%	0.0% - 5.0%		
0%	35.6%	35.0%	Total	\$38,798,131,597	100%	100%			

Current

Strategic Target

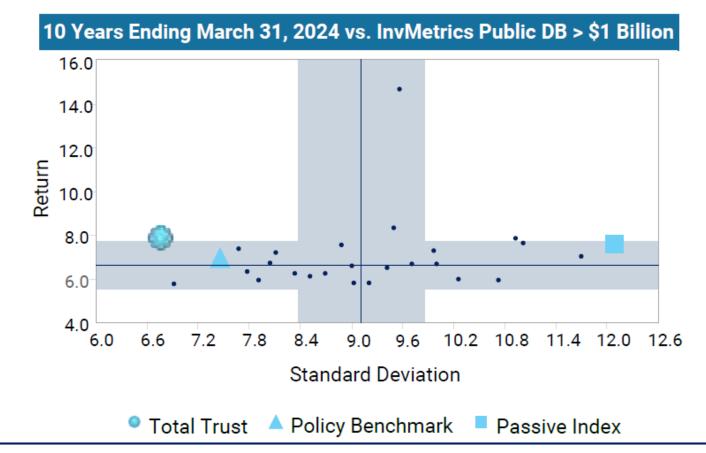
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#### **TOTAL TRUST RISK/RETURN**



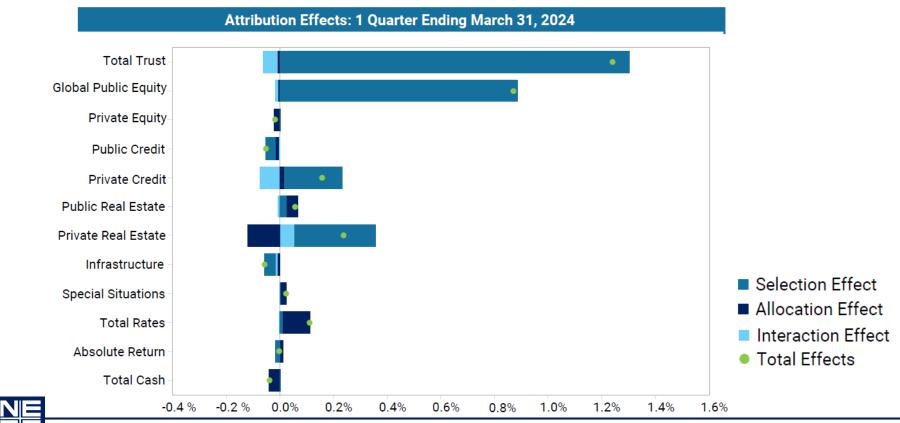


#### **TOTAL TRUST RISK/RETURN**



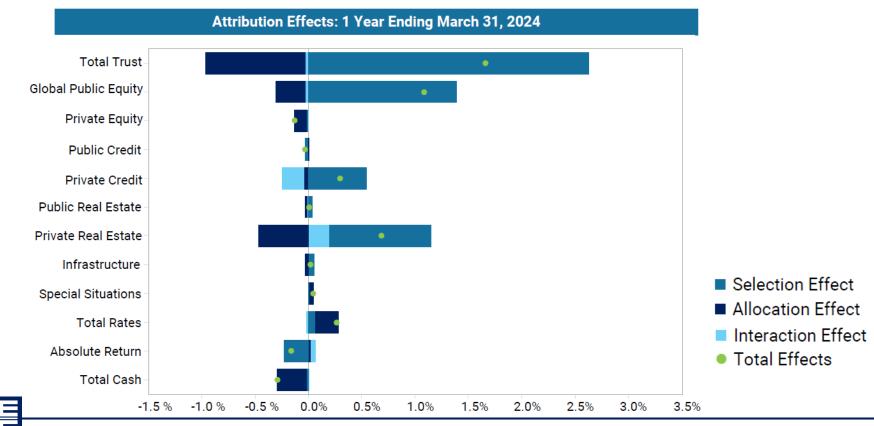


#### **TOTAL TRUST ATTRIBUTION ANALYSIS**

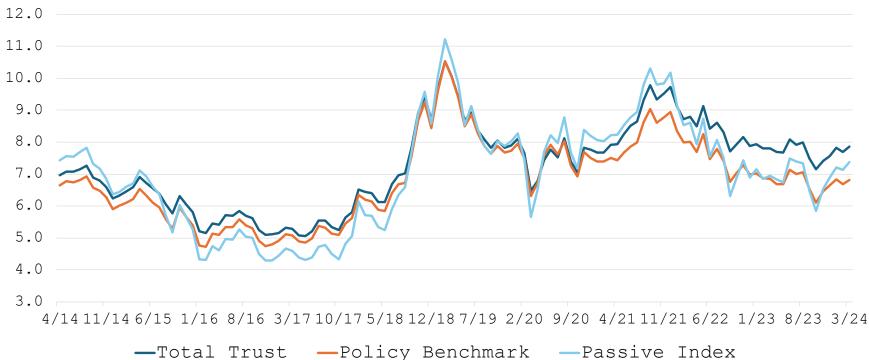




#### **TOTAL TRUST ATTRIBUTION ANALYSIS**



#### LONG TERM INVESTMENT RESULTS

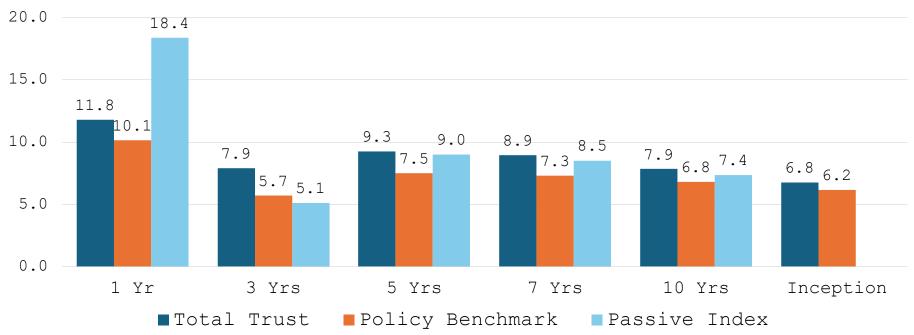


Rolling 10-Year Annualized Return (%)



#### LONG TERM INVESTMENT RESULTS





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

-Total Trust

#### **ROLLING TRACKING ERROR**

#### Rolling 3-Year Tracking Error



-Total Trust



### PERFORMANCE SUMMARY COMMENTARY

- Over the past 10 years, Total Trust outperformed the Policy Benchmark by 1.0% and outperformed the Plan's actuarial rate of return of 7.0% by 0.9%.
- In the one-year period ended March 31, 2024, the Trust outperformed the Policy Benchmark by 1.7%.
  - The largest contributors to performance against the benchmark were Public Equity (+1.1%), and Private Real Estate (+0.7%).
  - The largest detractor was Cash (-0.3%), followed by Absolute Return (-0.2%) and Private Equity (-0.1%).
- In the past one-year, portfolio positioning at the asset class level detracted -0.9% from Total Trust returns versus the policy benchmark.
  - An overweight position in Private Real Estate contributed negatively (-0.5%).
  - An underweight position in Public Equity contributed negatively (-0.3%).
  - An overweight position in Cash contributed negatively (-0.3%).





## Discussion



### Quarterly Review of Investment Performance

#### May 22, 2024

John McCaffrey, Managing Director of Portfolio Management



### Quarterly Review of Investment Performance

#### May 22, 2024

John McCaffrey, Managing Director of Portfolio Management

## **Investment Performance** Mission & Objectives



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



Add value vs. benchmarks over rolling five-year periods

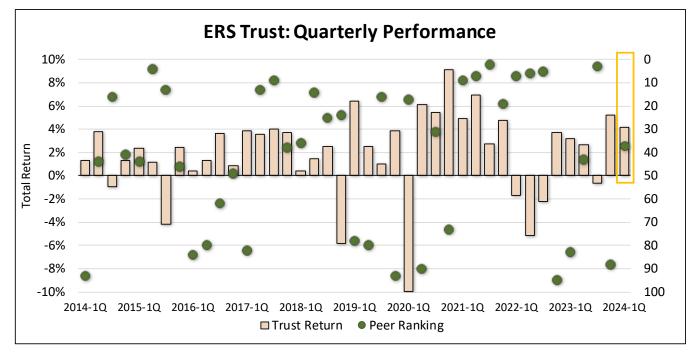


Earn appropriate returns for the risks assumed

## **Investment Performance** *Quarterly Performance*



• Positive return for five out of the last six quarters, with peer ranking in 37<sup>th</sup> percentile

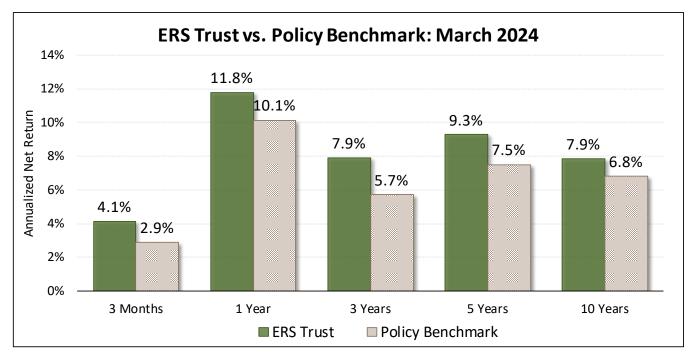


# Investment Performance

#### Absolute & Relative Return



• Strong performance vs. Policy Benchmark, including +177 bps on a 5-year basis



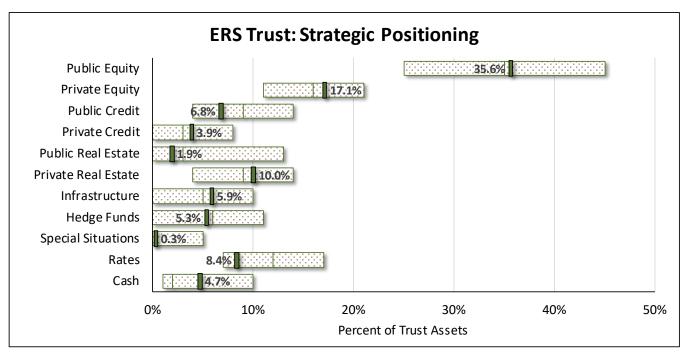
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## Insurance Fund Performance

# **ERS**<sup>°</sup>

### Trust Positioning

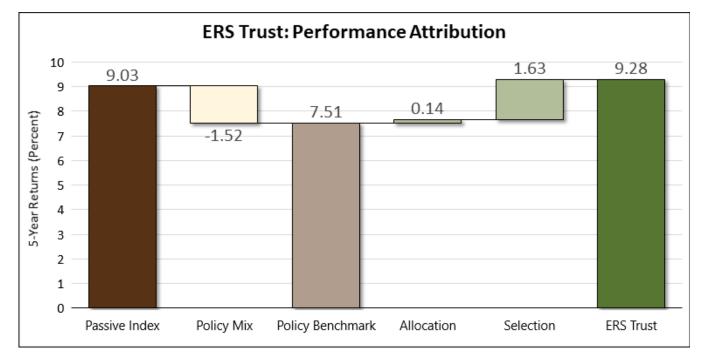
• Tilts toward private markets, public equity, and cash vs. public credit, real estate, and rates



## **Investment Performance** Attribution Analysis – Last Five Years



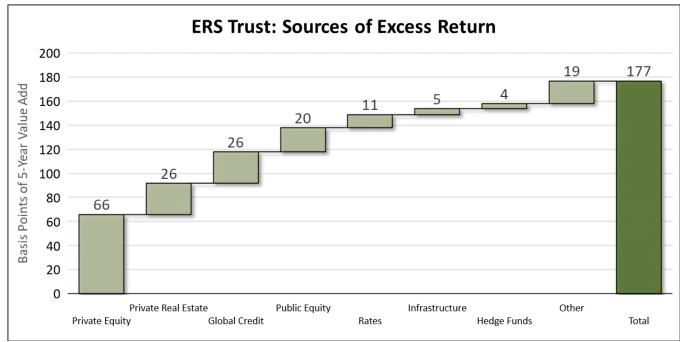
• Favorable Trust positioning adds to very strong results from security selection



## **Investment Performance** Attribution Analysis – Last Five Years



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



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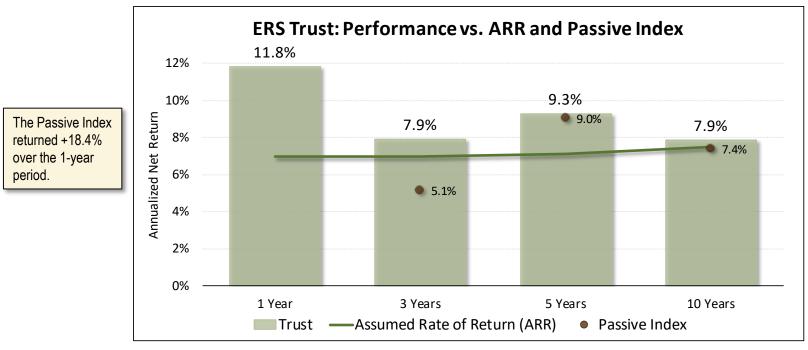
Source: ERS/BNYM as of 3/31/2024

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## Investment Performance

### Absolute & Relative Return

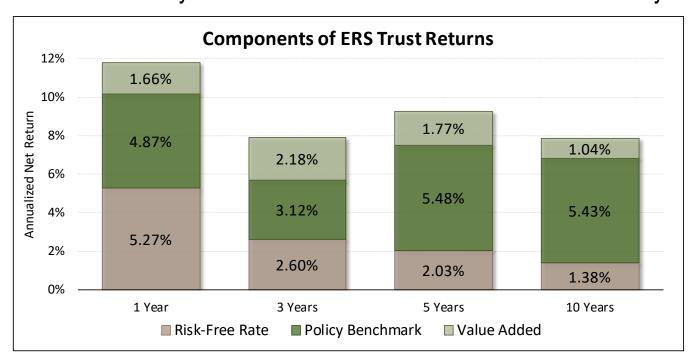
• Strong implementation gains have kept realized long-term returns above the ARR



## Investment Performance

## Building Blocks of Returns

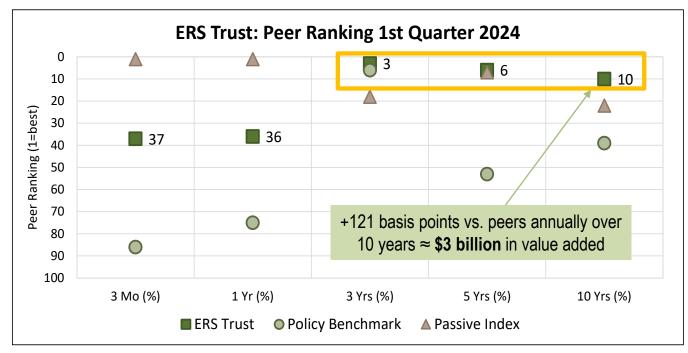
• Risk-free rates remain a key driver of recent returns: above 5.25% on a one-year basis



## **Investment Performance** *Peer Rankings for Current Quarter*



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

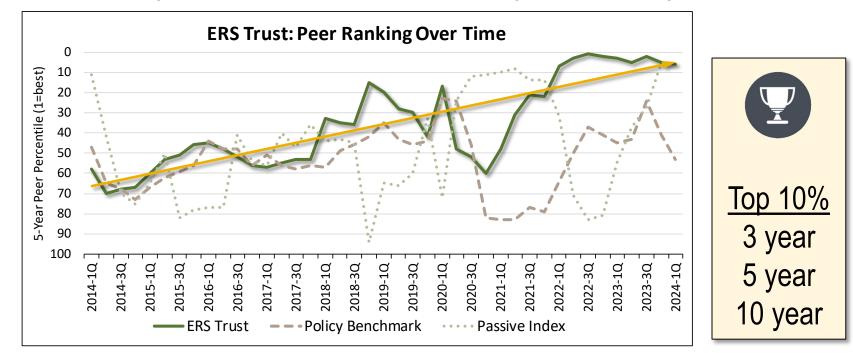


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Source: Investment Metrics data for Public DB Plans >\$1B via NEPC as of 3/31/2024

## **Investment Performance** *Peer Ranking Over Time*

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



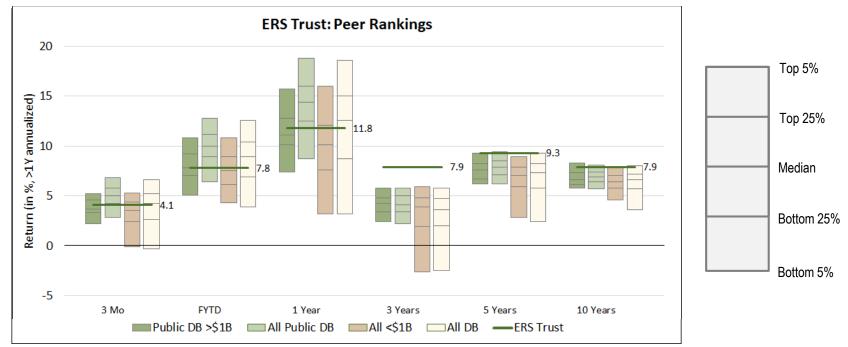
Agenda Item 06 – Joint Meeting May 22, 2024

Source: Investment Metrics data for Public DB Plans >\$1B via NEPC as of 3/31/2024

## **Investment Performance** *Peer Ranking vs. Broad Pension Universe*



Top 10% vs. peer funds across long-term horizons, including high 3-year returns



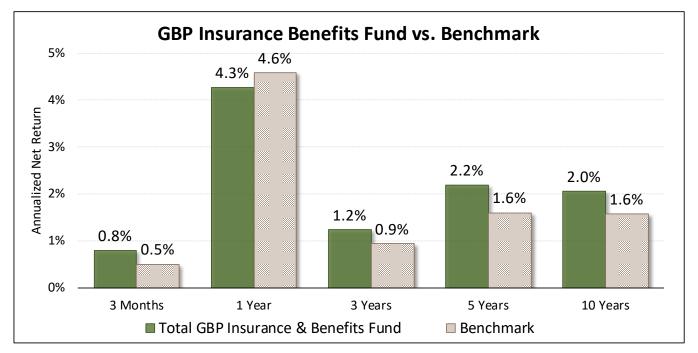
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Source: Investment Metrics data for Defined Benefit Plans via NEPC as of 3/31/2024

## **Investment Performance** GBP Insurance & Benefits Fund



Strong performance over long-term horizons for this highly conservative allocation





## Discussion



## Public Agenda Item #7

## \*Consideration of Quarterly Report from Chief Investment Officer

May 22, 2024

David T. Veal, CFA, CAIA, FRM

## **CIO Report** Retirement Fund Performance Dashboard



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

Net investment returns as of March 31, 2024						
	Last 3 Years		Last 5 Years		Last 10 Years	
ERS Trust	7.9%		9.3%		7.9%	
Assumed Rate	7.0%	+0.90%	7.1%	+2.17%	7.5%	+0.38%
Policy Benchmark	5.7%	+2.19%	7.5%	+1.77%	6.8%	+1.04%
Passive Index	5.1%	+2.77%	9.0%	+0.25%	7.4%	+0.47%
Median Peer	4.3%	+3.65%	7.6%	+1.64%	6.6%	+1.21%

#### ERS Trust Policy Benchmark Passive Index As of date 1 Year 3 Years 5 Years 10 Years 1 Year 3 Years 5 Years 10 Years 1 Year 3 Years 5 Years 10 Years 2022-2Q 2022-30 2022-40 2023-10 2023-2Q 2023-3Q 2023-4Q 2024-1Q

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

• Top 10% of peers over most long-term time horizons, including over trailing 5 years

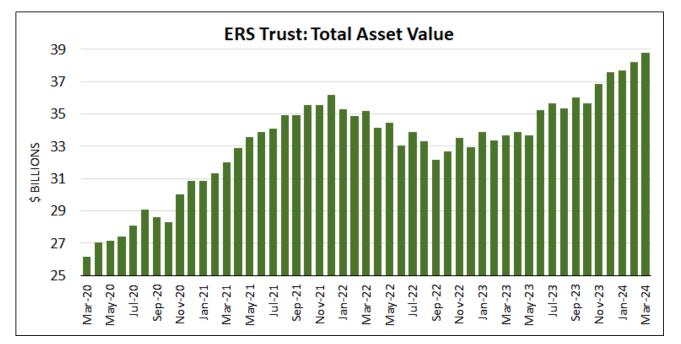
## **CIO Report** Peer Ranks



## **CIO Report** Total Trust Asset Value

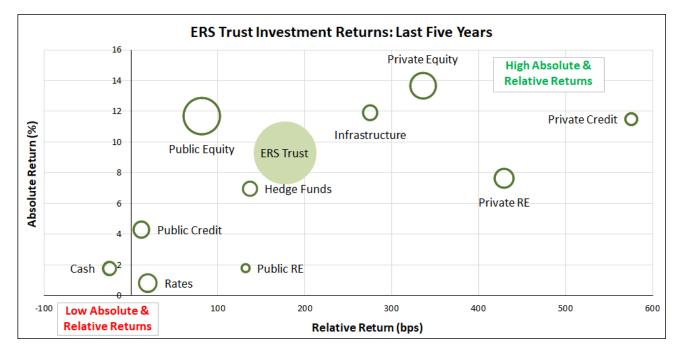


Assets now total ~\$38B vs. \$36B in December 2021 and \$26B at May 2020 lows



## CIO Report Absolute & Relative Trust Returns

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

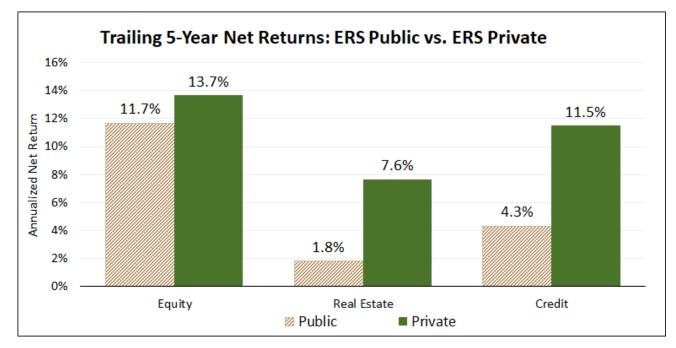


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Source: ERS/BNYM as of 3/31/2024

## CIO Report Private vs. Public Market Returns

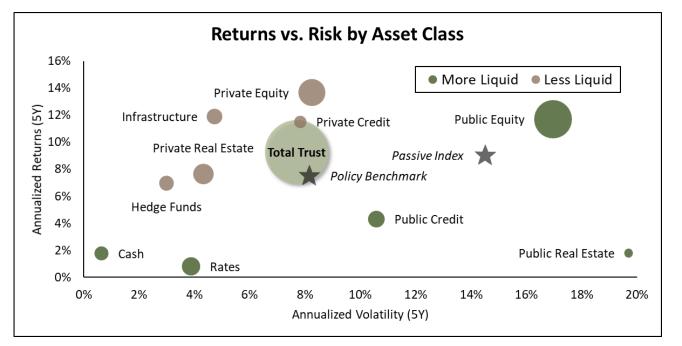
• Private market allocations have outperformed their public market counterparts



## **CIO Report** Risk vs. Return By Asset Class



Private market allocations have exhibited lower volatility than public market counterparts



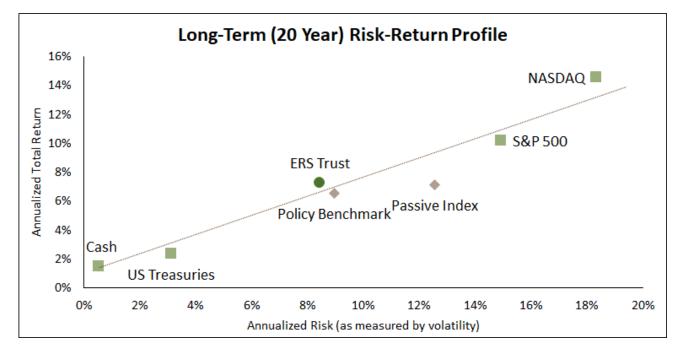
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Source: ERS/BNYM as of 3/31/2024

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## **CIO Report** Risk vs. Return for Trust Overall

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



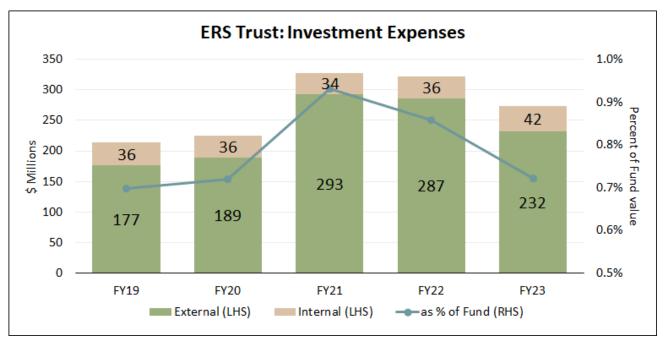
Agenda Item 07 – Joint Meeting May 22, 2024

Source: ERS/Bloomberg/BNYM as of 3/31/2024

## **CIO Report** Investment Expenses



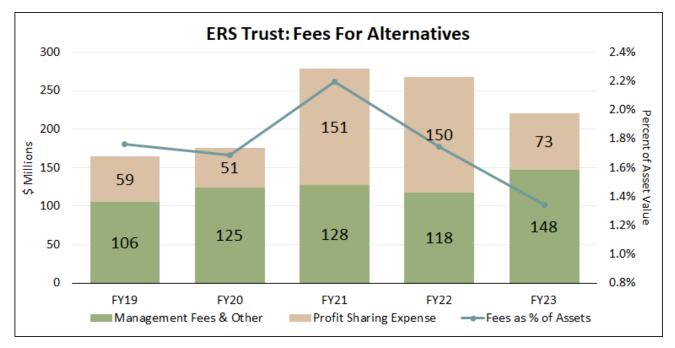
• FY23 expenses trended lower both on an absolute basis and relative to total assets



## **CIO Report** Investment Expenses



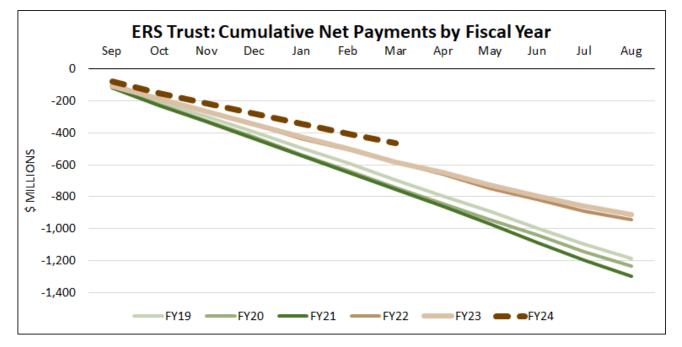
Expenses related to alternative investments reflect the broader trend lower



## CIO Report Liquidity Profile



• Outflows continue to moderate due to ongoing legacy payments and higher contributions



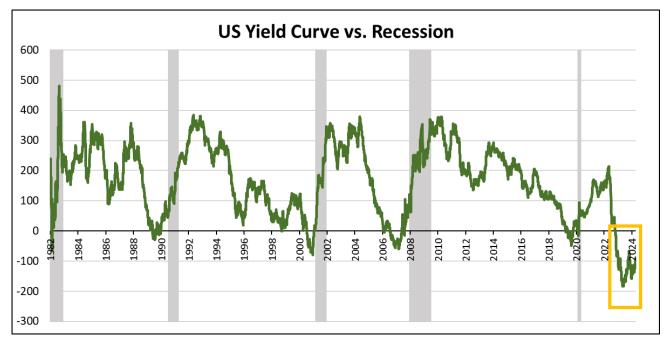
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Source: ERS, Includes amortization of annual \$510 million Legacy Payment 72

## **CIO Report** Market Environment

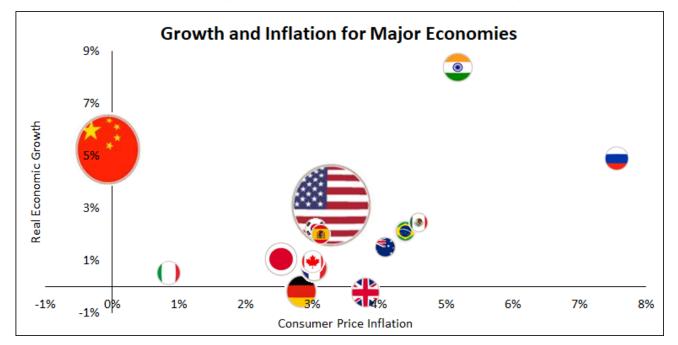


• Historically reliable economic indicators still signaling recession risk



## CIO Report 2023 Market Environment

• Growth and inflation holding up well across most major economies

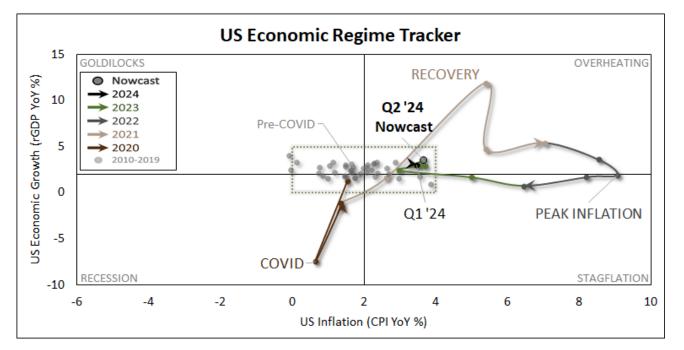




## **CIO Report** 2024 Market Environment



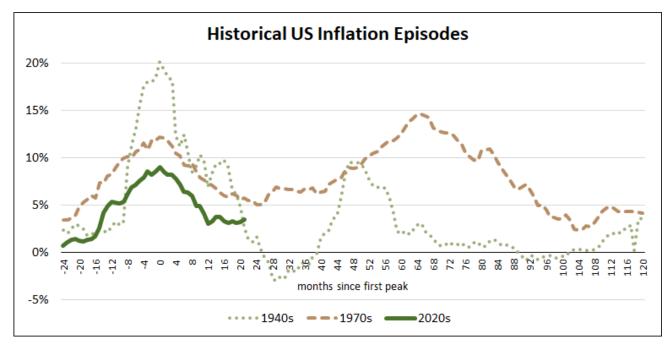
• US economic conditions have remained more or less normal recently



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## **CIO Report** Market Environment

• Risk of resurgent US inflation lingers given historical precedents



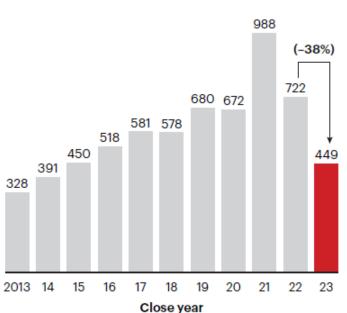
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CIO Report Private Equity Environment

Private equity in 2023 vs. 2021

- Total deal value -60% (-37% y-y)
- Total exit value -66% (-44% y-y)
- Funds formed -55% (-38% y-y)

Lack of distributions becoming an issue for investors with high liquidity needs.



Source: Bain & Co. Private Equity Report 2024



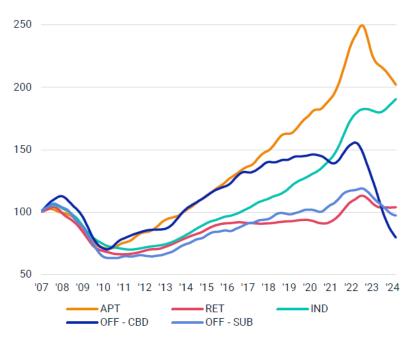
Count of buyout funds closed globally

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### Real estate value trends

- Industrial: +9.2% annualized gains
- Retail: -1.2% y-y, above 2020
- Apartment: -8.4% y-y, above 2020
- Office: -16.6% y-y, including:
  - CBD: -33% y-y, 50% below 2020 levels
  - Suburban: -11% y-y, back to 2020 levels and still falling

#### National Property Types



Source: Bain & Co. Private Equity Report 2024



### CIO Report Real Estate Environment

### **CIO Report** Key Current Initiatives

- Attracting and retaining top investment talent
- Completion of Investment Practices Review
- Investment Consulting RFQ (with Board selection in December)
- Separation of Retirement Trust from Insurance & Benefits Fund
- Annual Review of Investment Policy Statement
- Annual Private Markets Capital Planning Process





### Discussion



### Public Agenda Item #8

### \* Consideration of Annual Review of Real Assets Program

#### May 22, 2024

Robert Sessa, Managing Director of Real Assets Annie Xiao, Director of Public Real Estate Amy Cureton, Director of Private Real Estate Pablo de la Sierra Perez, Director of Infrastructure

### **Real Assets** Asset Class Overview



- **Public Real Estate:** Return seeking allocation to provide long-term growth and liquidity
- **Private Real Estate:** Return seeking allocation to provide long-term growth and inflation hedge
- **Private Infrastructure:** Return seeking allocation to provide long-term growth and inflation hedge

#### **Investment Objective**

- Outperform their respective benchmarks over rolling 5-year (public real estate) or 10-year periods (private real estate and infrastructure)
- Remain in compliance with risk budgets assigned by policy

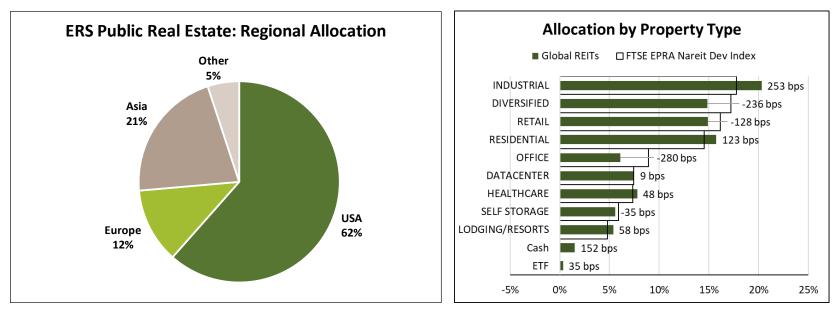


Attribute	Public Real Estate Portfolio
Type of Allocation	Return Seeking
Policy Allocation	Target weight of 3%, range from 0% to 13%
Management Style	Actively managed internally
Performance Objective	Outperform FTSE EPRA Nareit Developed Total Return Index
Risk Budget	Tracking error target of 200 basis points
Information Ratio	Target $\geq$ 0.30 or better; Currently 1.14
Investment Expenses	~31 bps internally (~18 bps at target allocation)

## Public Real Estate

### Portfolio Structure

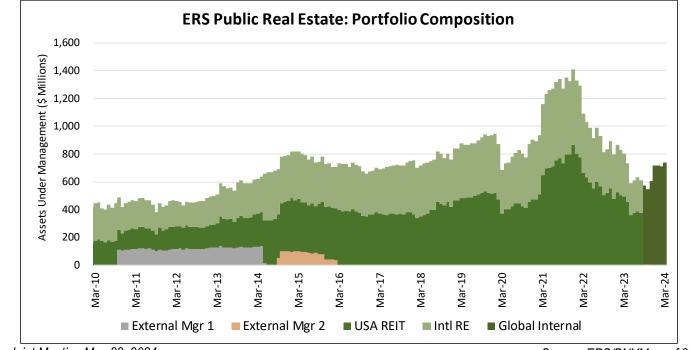
• \$741 million represents 1.9% of the Trust, diversified across major regions and property sectors



## **Public Real Estate** Historical Composition



• Tactical asset allocation (in \$M): +200 in 2021, -325 in 2022, -175 in 2023, +25 in Jan 24

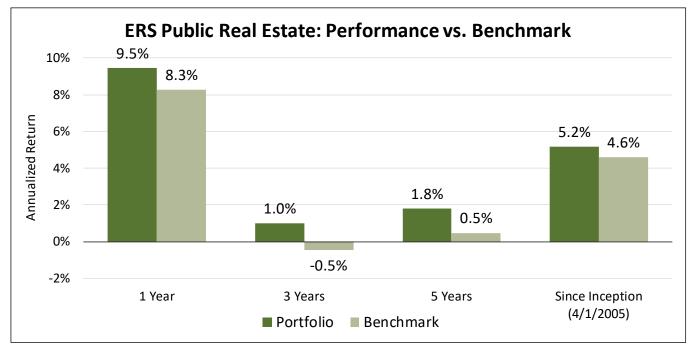


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## **Public Real Estate** *Periodic Performance*



• Outperformance across all time horizons: +118 bps for 1Y, +144 bps for 3Y, +132 bps for 5Y

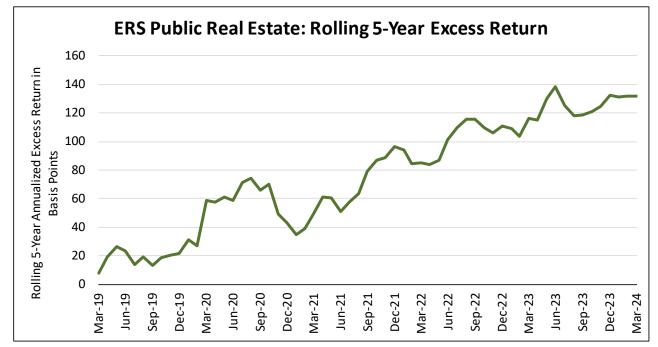


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### **Public Real Estate** *Relative Returns*



• +132 bps of excess return over rolling five years with low levels of risk

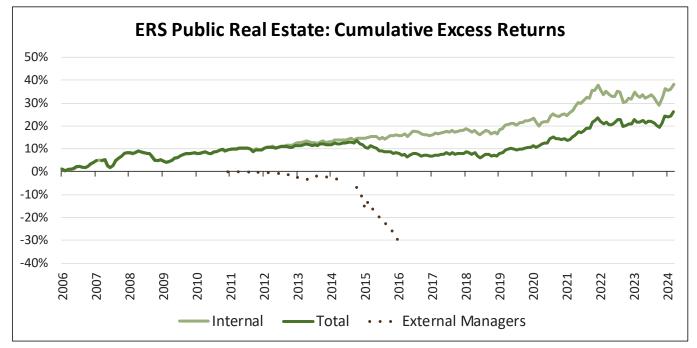


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## **Public Real Estate** Cumulative Excess Return



Added significant value over time despite some periods of underperformance



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#### Trailin£ Mar-19 Jun-19

**Public Real Estate** 

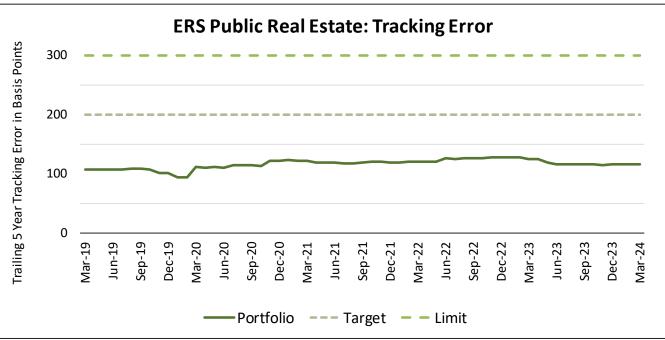
**Risk Parameters** 

•

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Source: ERS/BNYM as of 3/31/2024

#### Realized tracking error 116 bps remains within the assigned risk budget





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### **Public Real Estate** Goals and Objectives for Fiscal Years 2024 & 2025



### FY24

- Outperform respective benchmarks Ongoing
- ☑ Execute on Tactical Plan Ongoing
- ☑ Continue to Improve Investment Process
- ☑ Policy Compliant

### FY25

- Outperform respective benchmarks
- Execute on Tactical Plan
- Continue to Improve Investment Process
- Maintain Policy Compliance



### Discussion

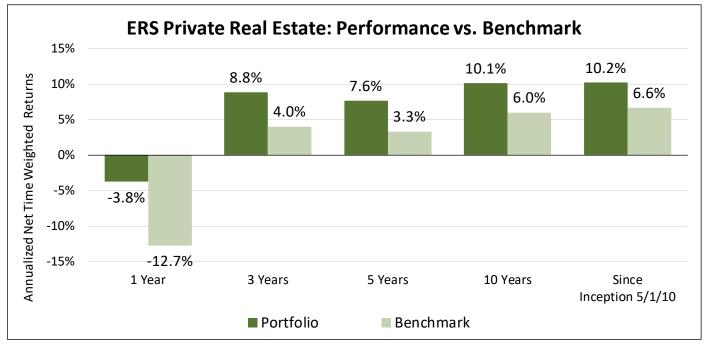


Attribute	Private Real Estate Portfolio
Type of Allocation	Return Seeking
Policy Allocation	Target weight of 9%, range from 4% to 14%
Management Style	Externally managed via commingled funds
	Also fund of funds, separate accounts, and co-investments
Performance Objective	Outperform the NCREIF-ODCE Net Total Return Index
Risk Mitigation	Diversify across vintages, geographies, strategies, sectors and managers
Investment Expenses	~194 basis points external, ~11 bps internal

### **Private Real Estate** *Performance Snapshot*



• Strong performance across all time horizons, including +430 bps of value add last 5 years

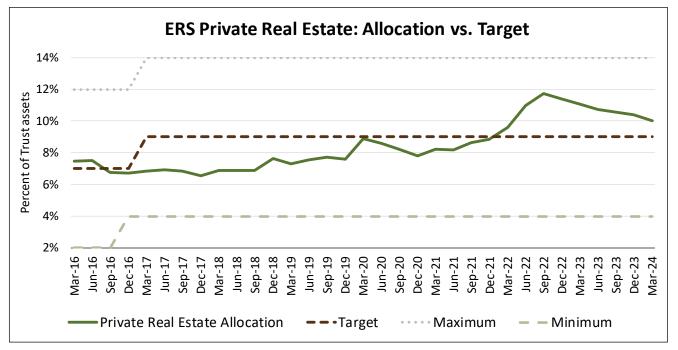


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### **Private Real Estate** *Historical Allocation*

**ERS**°

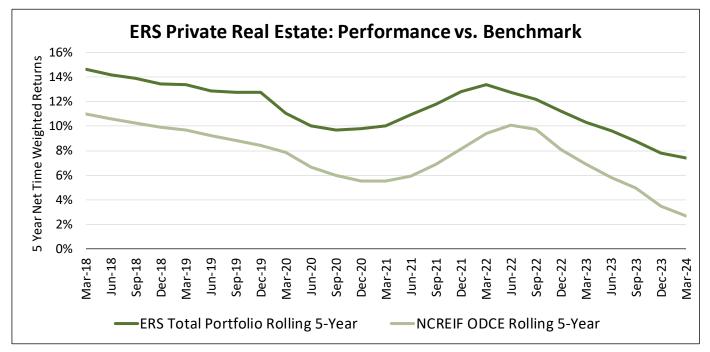
• Strong performance has led to increased allocation to Private Real Estate



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Historical Performance

• Strong and improving performance vs. benchmark across recent horizons



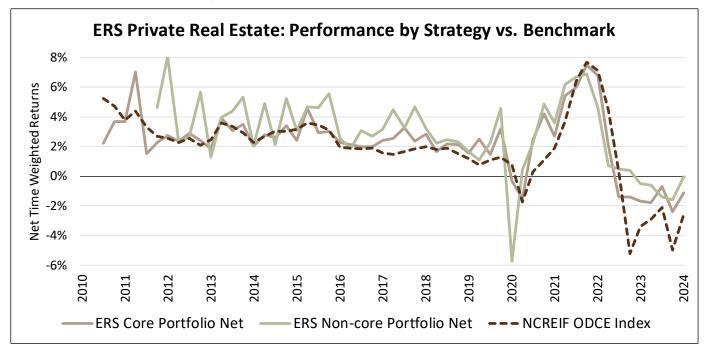
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Source: ERS/Burgiss as of 3/31/2024



### **Private Real Estate** Historical Performance

• Good relative performance by both core and non-core amid market weakness



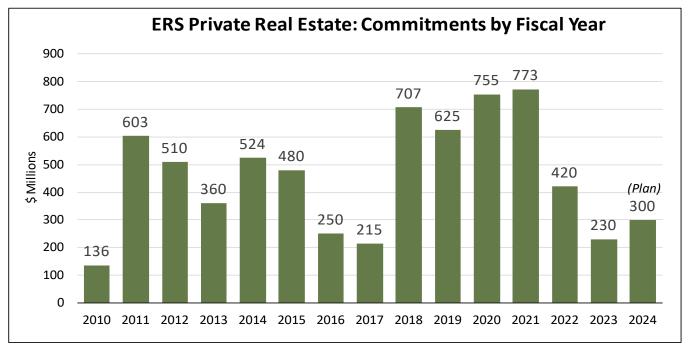
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Source: ERS/Burgiss as of 3/31/2024



Historical Performance: Commitments by Fiscal Year

Commitments driven by allocation target, portfolio construction, and diversification

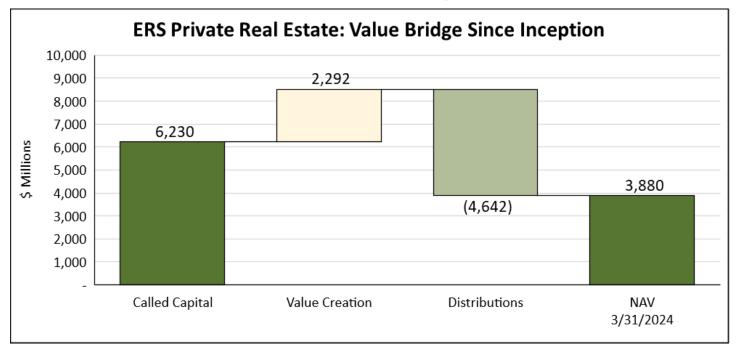


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# ERS<sup>®</sup>

### Historical Performance: Value Bridge

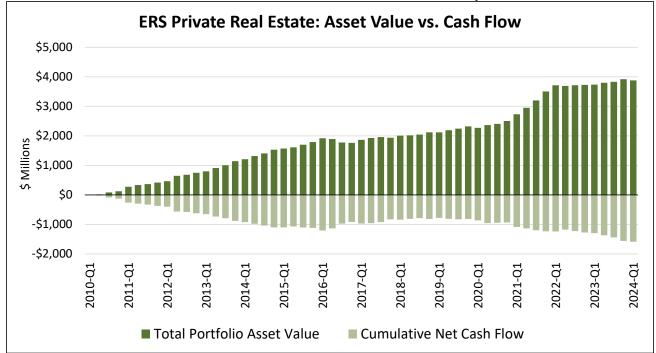
• Significant value creation for the Trust with meaningful distributions over time



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Historical Performance

• Portfolio asset value and cash flow continue to rise as the portfolio matures



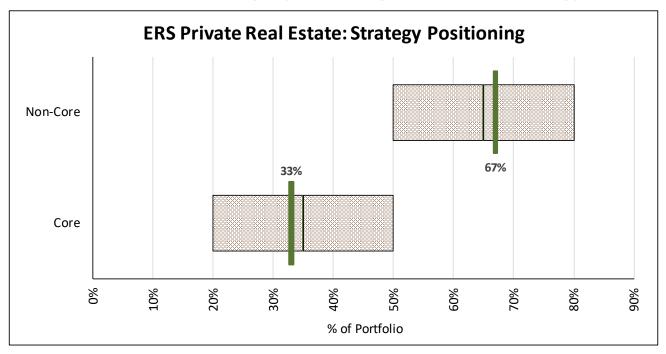
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Source: ERS/Burgiss as of 3/31/2024



## **Private Real Estate** *Risk Diversification*

• Portfolio remains diversified and slightly overweight non-core strategy



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Source: ERS/Meketa as of 12/31/2023

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- Private Real Estate NAV by Geography Private Real Estate NAV by Property Type Other Hotel Retail Europe 2% 4% Other 6% 8% 11% Asia Industrial 15% 23% Traditional Office 14% Office 22% Medical Office 2% Life Science 6% North America Residential 75% 34%
- Portfolio remains properly diversified across regions and property types

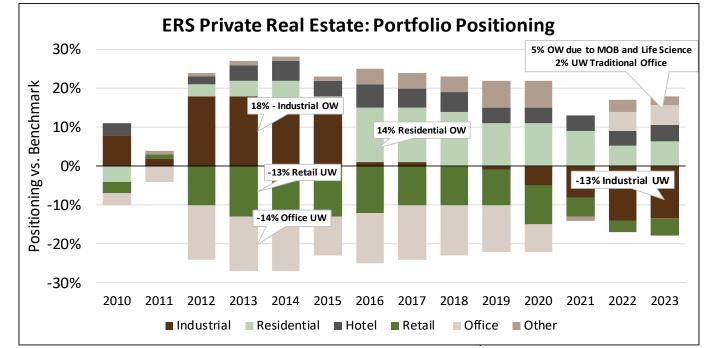
### **Private Real Estate** Risk Diversification



### **Private Real Estate** Historical Composition

ERS

• Highly diversified with current tilts toward residential and away from industrial

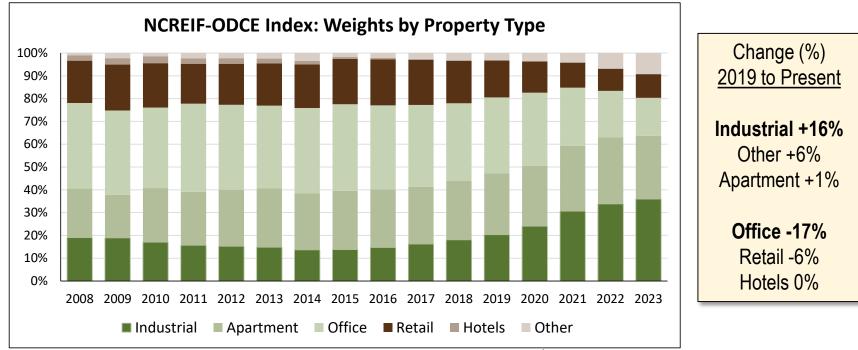


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Source: ERS/Meketa as of 12/31/2023

### Historical Composition of Benchmark

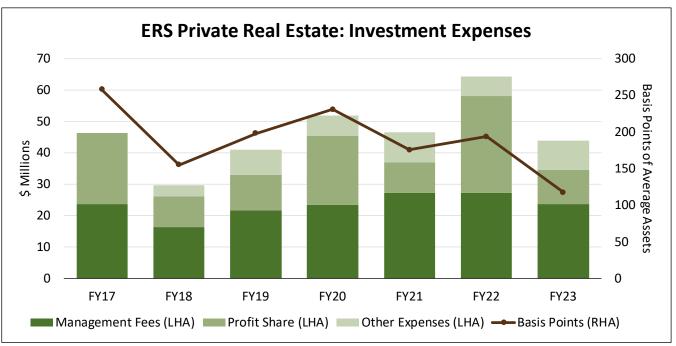
• Benchmark weightings have tilted towards industrial and away from retail and office



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### **Private Real Estate** Investment Expenses

• Profit share normalized due to reduced transaction volume in FY23



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### **Private Real Estate** Goals and Objectives for Fiscal Years 2024 & 2025



### FY24

- ☑ Outperform benchmarks Ongoing
- ☑ Execute on Tactical Plan Ongoing
- Target Allocation Strategy Adjustments Ongoing
- ☑ Continue to Improve Investment Process
- ☑ Policy Compliant
- ☑ On-boarded new hire Jay Hu
- Co-Hosted Real Estate Emerging Managers Conference (REEM) January 2024

### FY25

- Outperform respective benchmarks
- Execute on Tactical Plan
- Target Allocation Strategy Adjustments
- Continue to Improve Investment Process
- Maintain Policy Compliance



### Discussion

## **Private Infrastructure** *Key Characteristics*

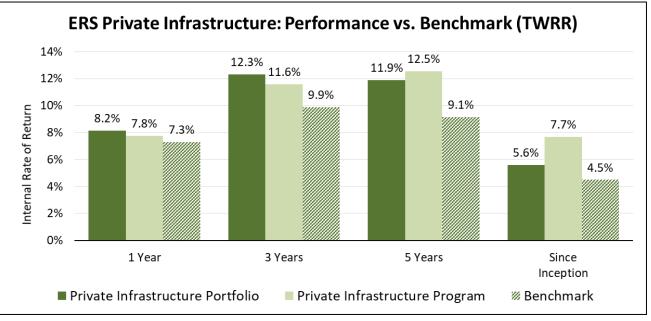


Attribute	Private Infrastructure Portfolio
Type of Allocation	Return Seeking
Policy Allocation	Target weight of 5%, range from 0% to 10%
Management Style	Externally managed open- and closed-end funds
	Also include co-investments and direct investments
Performance Objective	Exceed US Consumer Price Index +400 basis points annually
Risk Mitigation	Diversification across vintages, geographies, strategies, sectors and managers
Investment Expenses	~167 bps external, ~16 bps internal

### **Private Infrastructure** *Performance Snapshot*



• Strong performance across time horizons, including +275 bps of value add last 5 years



Private Infrastructure Portfolio Inception: 7/1/2012; Private Infrastructure Program Inception: 10/1/2013

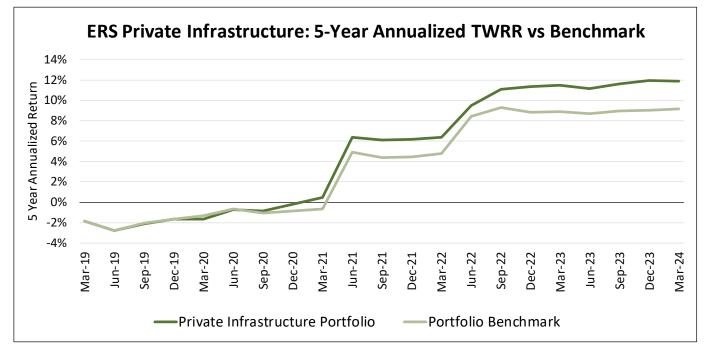
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## Private Infrastructure

Historical Performance



• Strong and improving performance vs. benchmark index



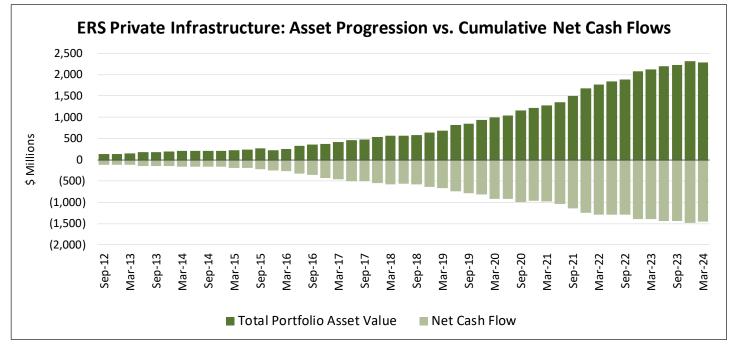
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# Private Infrastructure

Historical Performance



Portfolio asset value and cash flow continue to rise as the portfolio matures



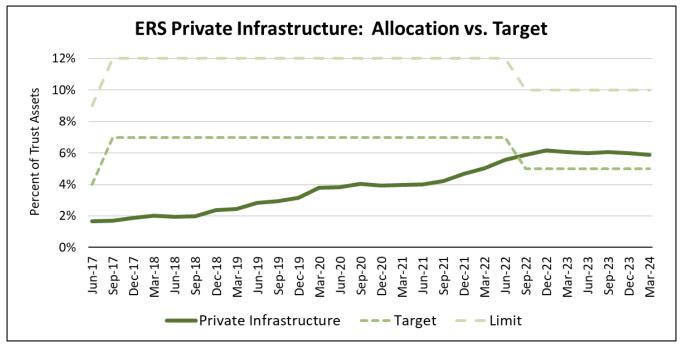
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# Private Infrastructure

**ERS**<sup>°</sup>

Historical Allocation

Gliding towards 5% target allocation under current capital plan



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Source: ERS/BNYM as of 3/31/2024 111

#### Risk Diversification Portfolio remains properly diversified across sectors and manager exposure **ERS Private Infrastructure: Sector Exposure ERS Private Infrastructure: Manager Concentration** Other 4% Others (7) Utilities 5% 14% Stonepeak 20% Midstream KKR 6% 12% Telecom 36% **QIC 6%** Transportation ISQ 11% 15%

Private Infrastructure

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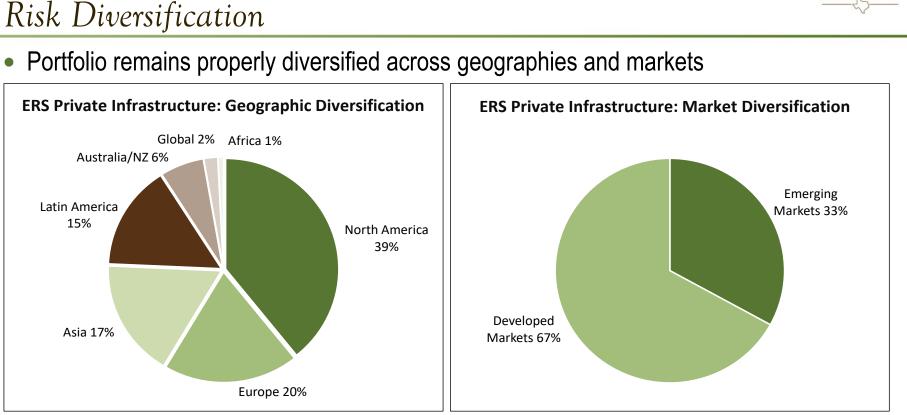
Power 28%

DigitalBridge

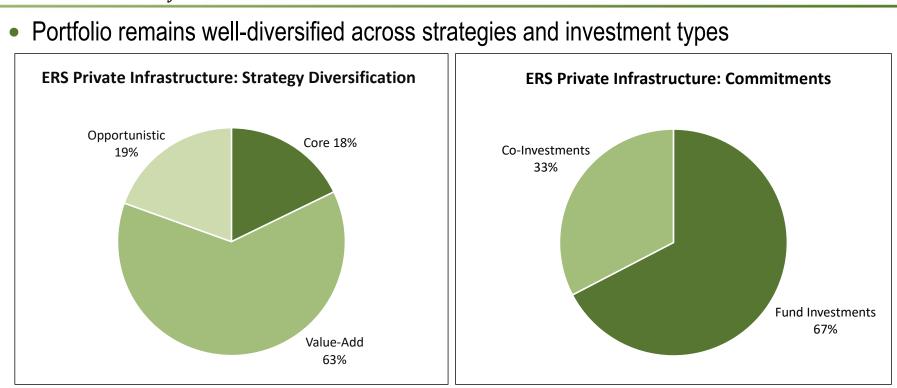
15%

Actis 12%

Ardian 16%



**Private Infrastructure** 



Risk Diversification

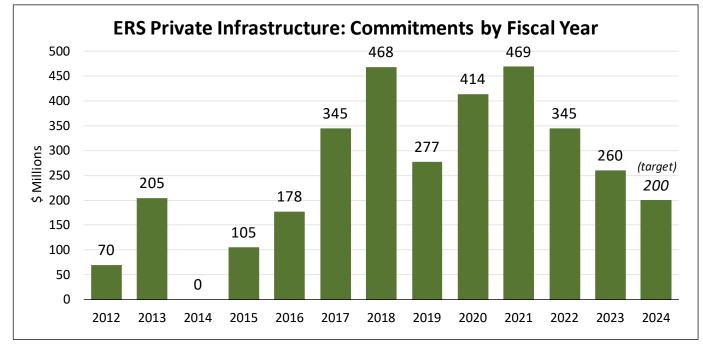
**Private Infrastructure** 

## Private Infrastructure



Historical Performance: Commitments by Fiscal Year

• Declining commitments: maturing Program and glide path towards target allocation

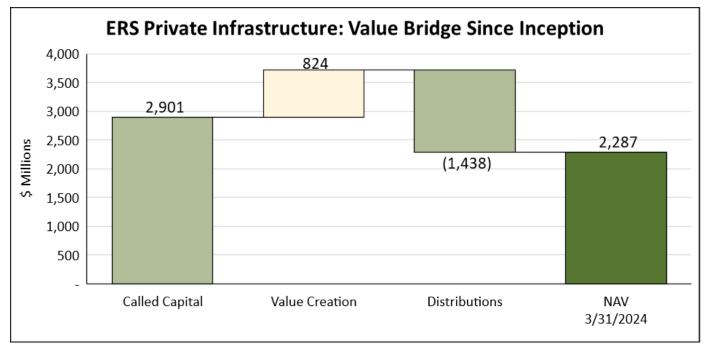


## Private Infrastructure

Historical Performance: Value Bridge



Significant value creation for the Trust with contributions from income and appreciation



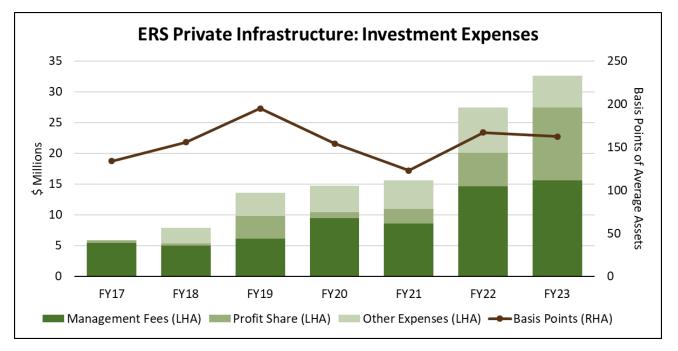
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Source: ERS/BNYM as of 3/31/2024

## **Private Infrastructure** Investment Expenses



• Profit share continues to increase as portfolio has matured in recent years



## **Private Infrastructure** Achievements and Objectives



#### Achievements

- ☑ Deployed within target range in FY23
- ☑ Exceeding benchmark performance
- On-track for execution of FY24 Tactical Plan – ongoing

#### **Forward Looking / Objectives**

- Continued focus on co-investments/directs
- Seek paths to deploy in emerging markets
- Selectively explore new relationships
- Steer deployment to meet diversification guidelines and liquidity needs of the Trust
- □ Hire an Analyst
- Execute on FY25 Tactical Plan to be presented in August



#### Discussion



#### Public Agenda Item #9

### \* Consideration of Annual Review of Private Equity Program

#### May 22, 2024

Ricardo Lyra, Managing Director of Private Equity Thomas Rashman, Private Equity Portfolio Manager **Private Equity** *Program Overview* 

#### **Private Equity Program**

- Program inception in 2008
- Cumulative commitments totaling \$12.9 billion

#### **Investment Objective**

- Outperform its benchmark over rolling 10-year period
- Maintain risk compliance through portfolio diversification



## **Private Equity** *Key Characteristics*

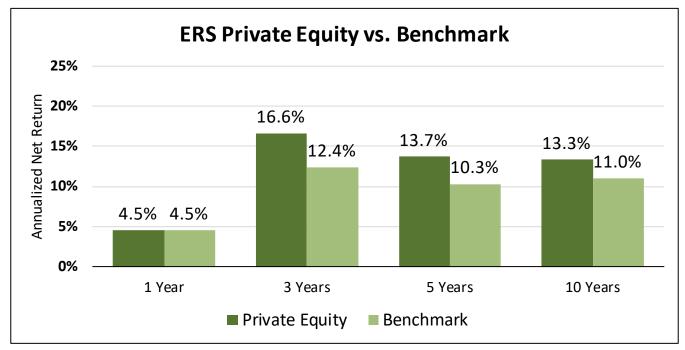


Attribute	Private Equity Portfolio
Type of Allocation	Return Seeking
Policy Allocation	Target weight of 16%, range from 11% to 21%
Performance Objective	Exceed median return of peers in Wilshire TUCS
Management Style	Externally managed closed-end funds
	Participate in co-investments to mitigate investment expenses
Risk Mitigation	Diversification across vintages, geographies, strategies, sectors and managers
Investment Expenses	122 bps external, 9 bps internal for FY23

### **Private Equity** Performance Snapshot



• Strong performance across all time horizons, including +230 bps over 10 years

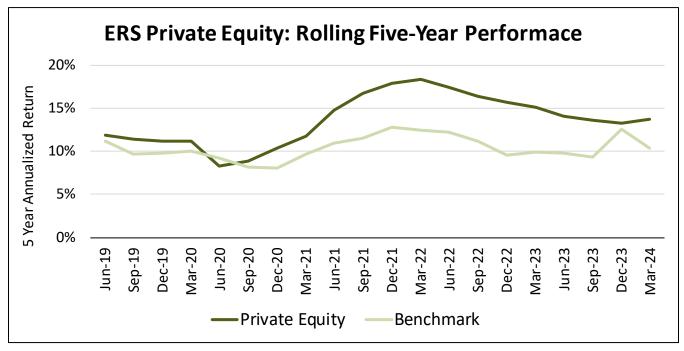


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Source: ERS/BNYM as of 3/31/2024 123

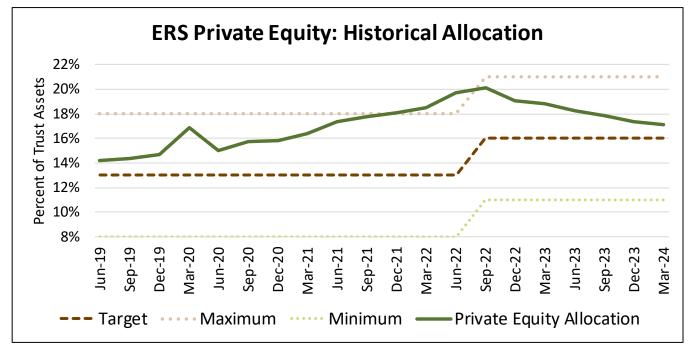
## **Private Equity** Historical Performance

• Strong performance against peer universe across recent horizons



## **Private Equity** Historical Allocation

Strong positive cash flow has led to decreased allocation to Private Equity

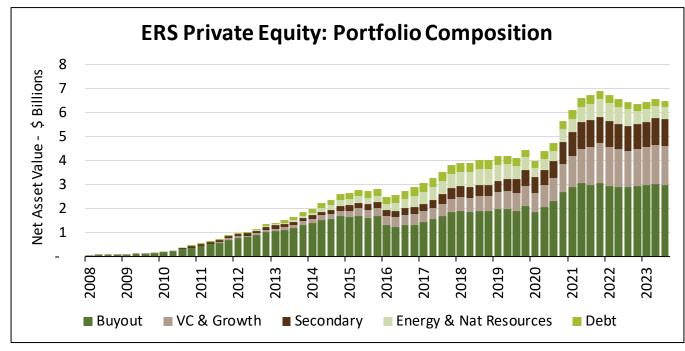


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## **Private Equity** Historical Composition

• Portfolio has remained properly-diversified as assets have grown over time



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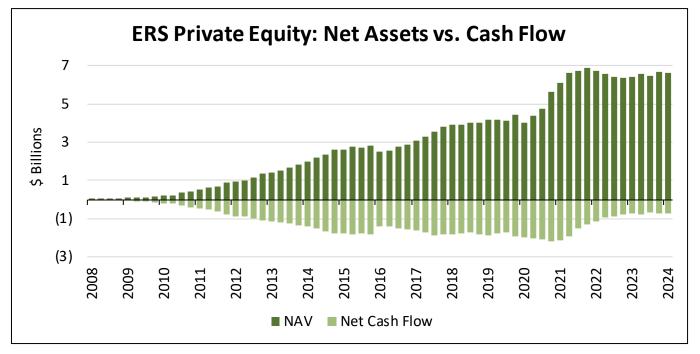
Source: Burgiss as of 9/30/2023126



## **Private Equity** Historical Performance

ERS

• Strong positive cash flow has continued despite slower M&A market



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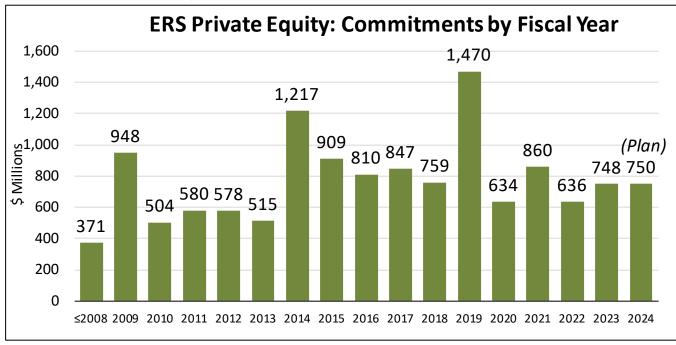
Source: Burgiss and ERS/BNYM as of 3/31/2024

### Private Equity

#### Commitments by Fiscal Year



Strategic allocation driven by consistent execution on capital plan

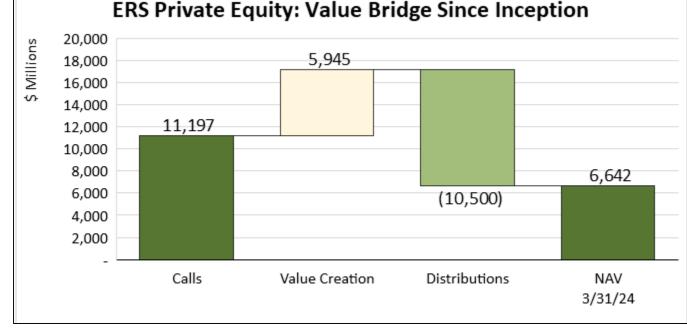


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Source: ERS/BNYM as of 3/31/2024

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Source: ERS/BNYM as of 3/31/2024



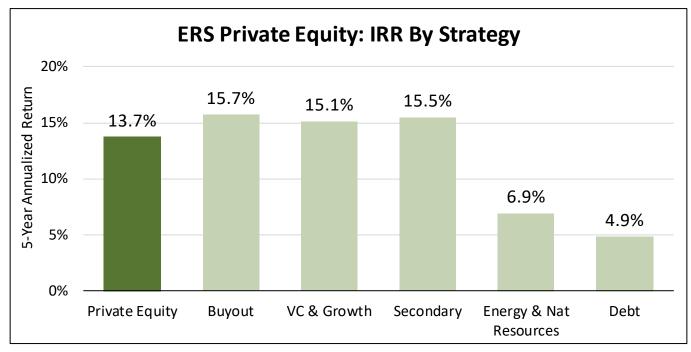
• The portfolio has distributed 93% of called capital since inception in 2008

**Private Equity** Value Bridge



## **Private Equity** Performance Drivers

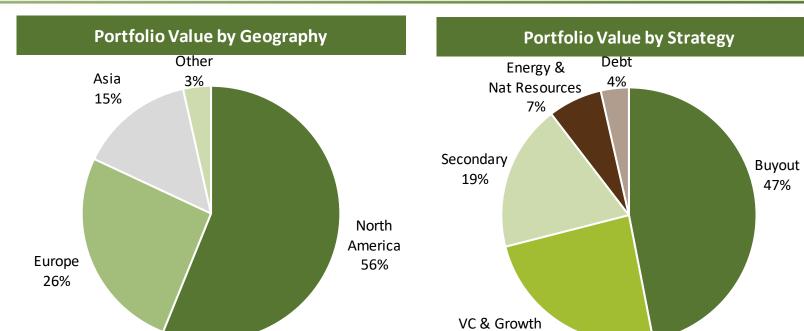
• Buyout and Secondaries lead as Venture and Growth see lower multiples



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Source: Burgiss as of 9/30/2023130

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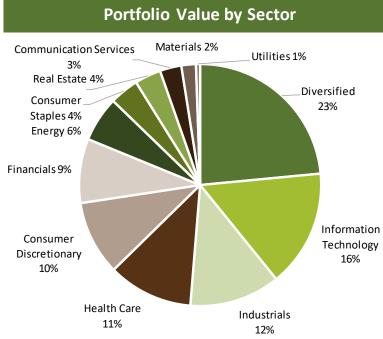
24%

## **Private Equity** *Risk Diversification*

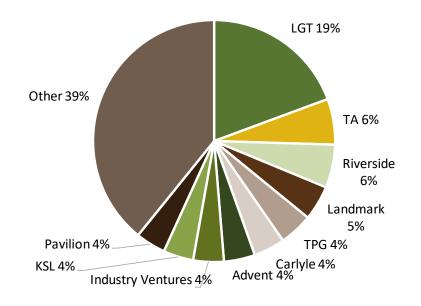


# **Private Equity** Risk Diversification





#### Economic Exposure by Manager



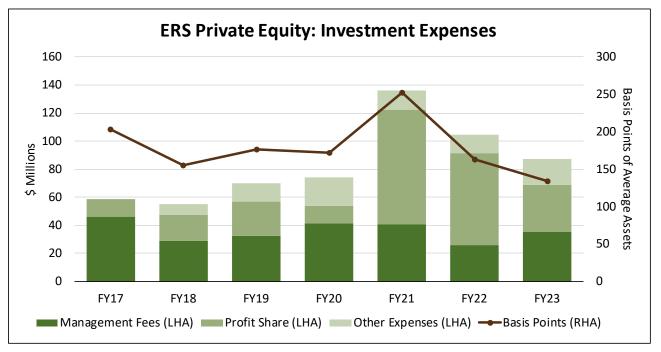
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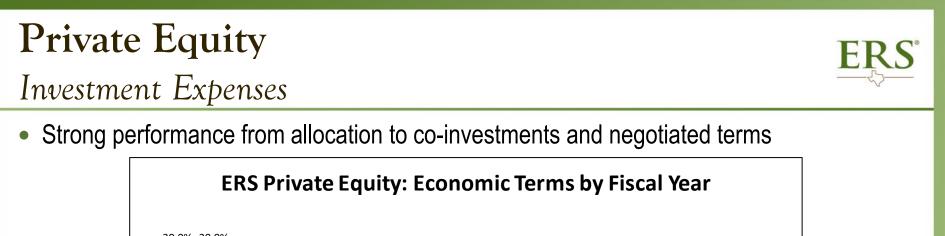
Source: Burgiss as of 9/30/2023132

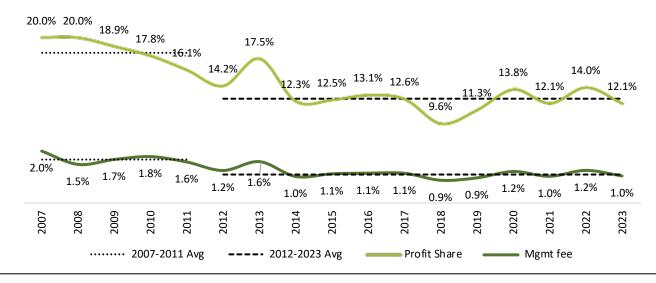
### **Private Equity** Investment Expenses



Reduced expenses as returns moderate and net cash flow remains positive







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#### Goals and Objectives for Fiscal Years 2024 & 2025

#### **FY24**

- ☑ Execute on Tactical Plan Ongoing
- Continued Monitoring/Reporting Improvements
- ☑ Co-Investment Sourcing

**Private Equity** 

#### **FY25**

- Execute on Tactical Plan to be Approved in August
- Hire an Analyst
- Continued Monitoring/Reporting Improvements
- Co-Investment Sourcing





#### Discussion



#### Public Agenda Item #10

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

May 22, 2024



### Public Agenda Item #11

Recess of the Board of Trustees – Following a temporary recess, the Board of Trustees will reconvene to take up the remaining items listed on the agenda.

May 22, 2024