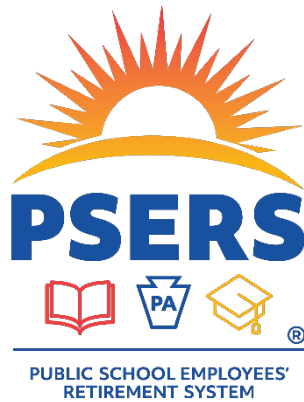




Private Real Estate Asset Class Review

February 28, 2025

Team



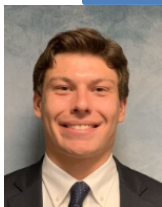
Melissa Quackenbush – Senior Portfolio Manager

- 7+ years at PSERS, 28+ years experience (Honeywell, MetLife, various Commercial Debt/Equity Brokerage Firms, CitiBank, Fleet Bank)



Jarrett Richards – Portfolio Manager

- 5+ years at PSERS, 12+ years experience (Altus Group), CAIA



Tyler Howell – Junior Investment Professional

- 6 months at PSERS, BBA in Finance from James Madison University



James Del Gaudio – Managing Director, Head of Private Markets

- 10+ years at PSERS, 20+ years experience (NYC Retirement System, Wachovia Securities)

Private Real Estate Takeaways

Role

- Stability of Returns – Income with Potential Appreciation
- Diversification
- Inflation Participation

Performance

- Meaningful outperformance relative to benchmark
- Absolute performance muted over 2023 and 2024
- Limited distributions / contributions in 2023 and 2024

Market

- Low Transaction Volume
- Supply Overhang
- Housing Affordability

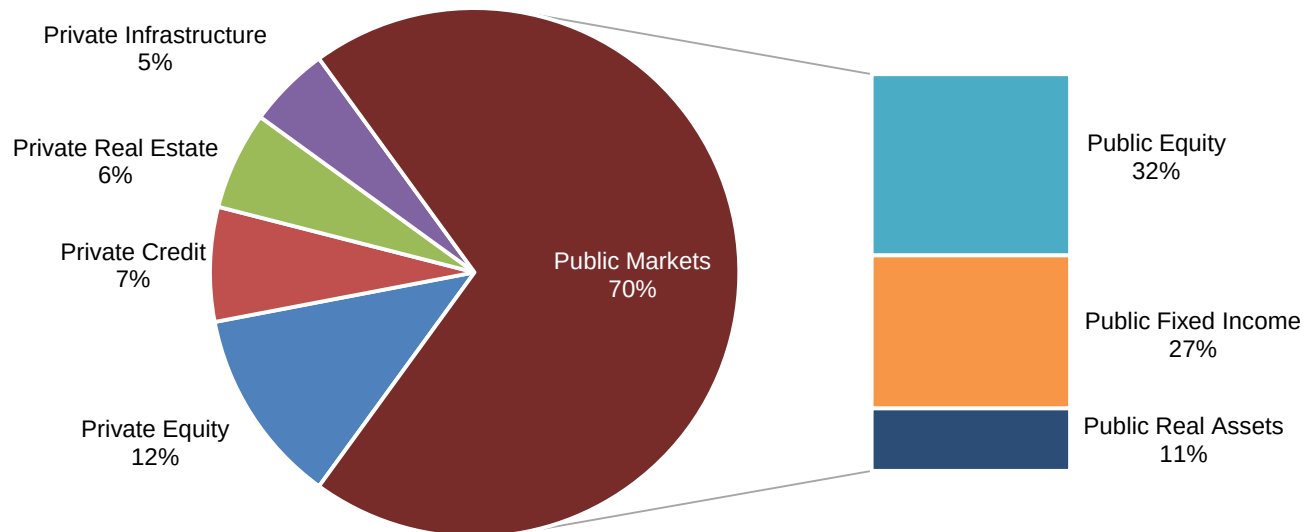
Strategy

- Complementary to the Public RE portfolio
- Tilted toward domestic, value-add, sector specialists
- Planned further diversification of residential and industrial

Overview

What is the role of Private Real Estate within the PSERS portfolio?

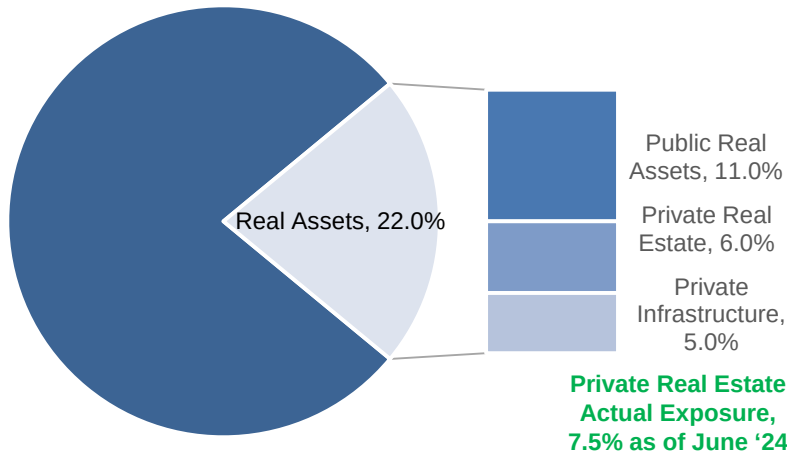
- Stability of Returns – Income and Appreciation Potential
- Diversification
- Inflation Participation



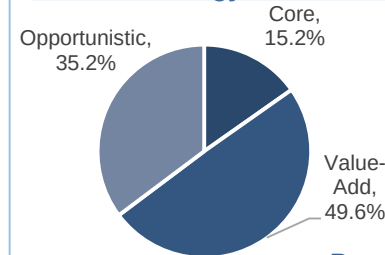
Private Real Estate Dashboard *as of June 30, 2024*

Allocation

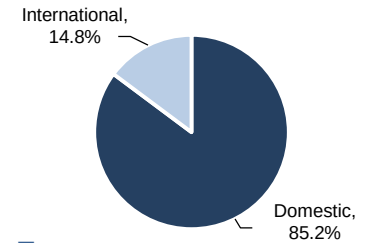
**Target Allocation to Real Assets
in Strategic Asset Allocation (effective Dec 2024)**



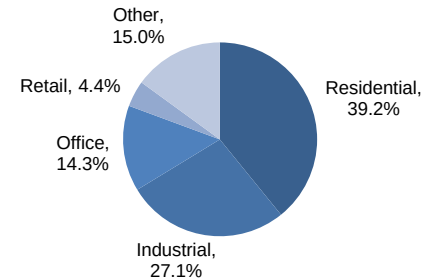
Strategy



Geography



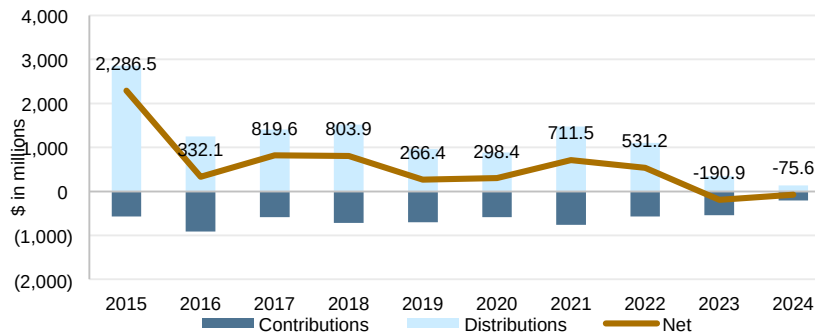
Property Type



Diversification

Performance

Cash Flow History



Portfolio Performance

	Time-Weighted				
	1-YR	3-YR	5-YR	10-YR	ITD
Direct Investments	-0.5%	9.7%	11.9%	11.8%	9.2%
Fund Investments	-6.1%	4.8%	7.4%	9.0%	11.1%
Co-Investments	1.7%	4.1%	2.0%	9.2%	13.0%
Total Portfolio	-4.5%	6.2%	8.5%	9.7%	8.5%
Benchmark ¹	-7.6%	3.0%	4.7%	7.2%	8.2%

Color-coding: **outperformance** or **underperformance** vs. benchmark.

¹ Benchmark: Total Portfolio Benchmark is based on weights using various private indices (Burgiss for Value-Add and Opportunistic; NCREIF-ODCE for Core). Previous period benchmarks consisted of differing weights (Private vs. Public) and benchmarks (NCREIF/NTFI for Private and various public equity benchmarks for Public).

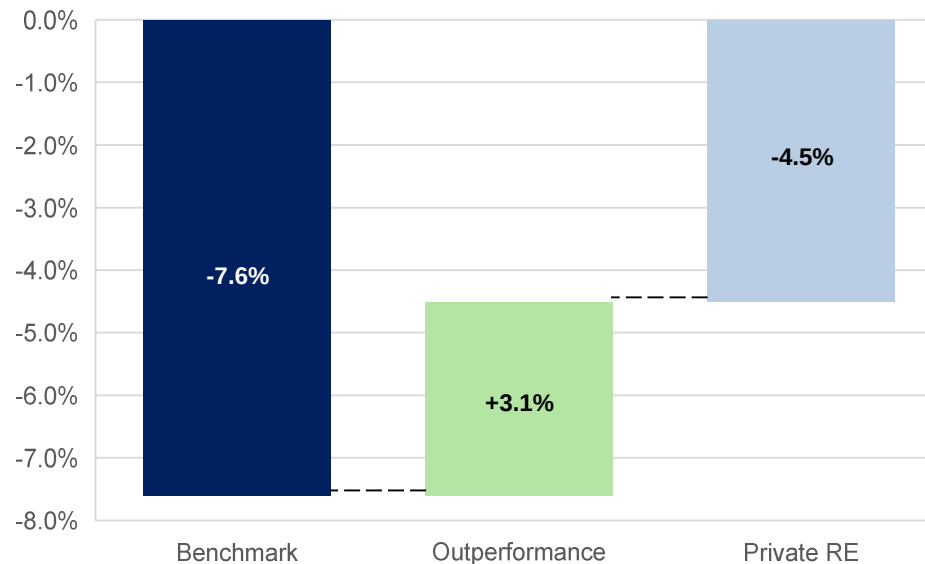
Performance

Private Real Estate Returns – One Year *as of June 30, 2024*

PSERS' Private Real Estate benchmark returned -7.6%.

PSERS' Private Real Estate portfolio returned -4.5%.

PSERS' Private Real Estate portfolio **outperformed** its benchmark by **310 basis points**.



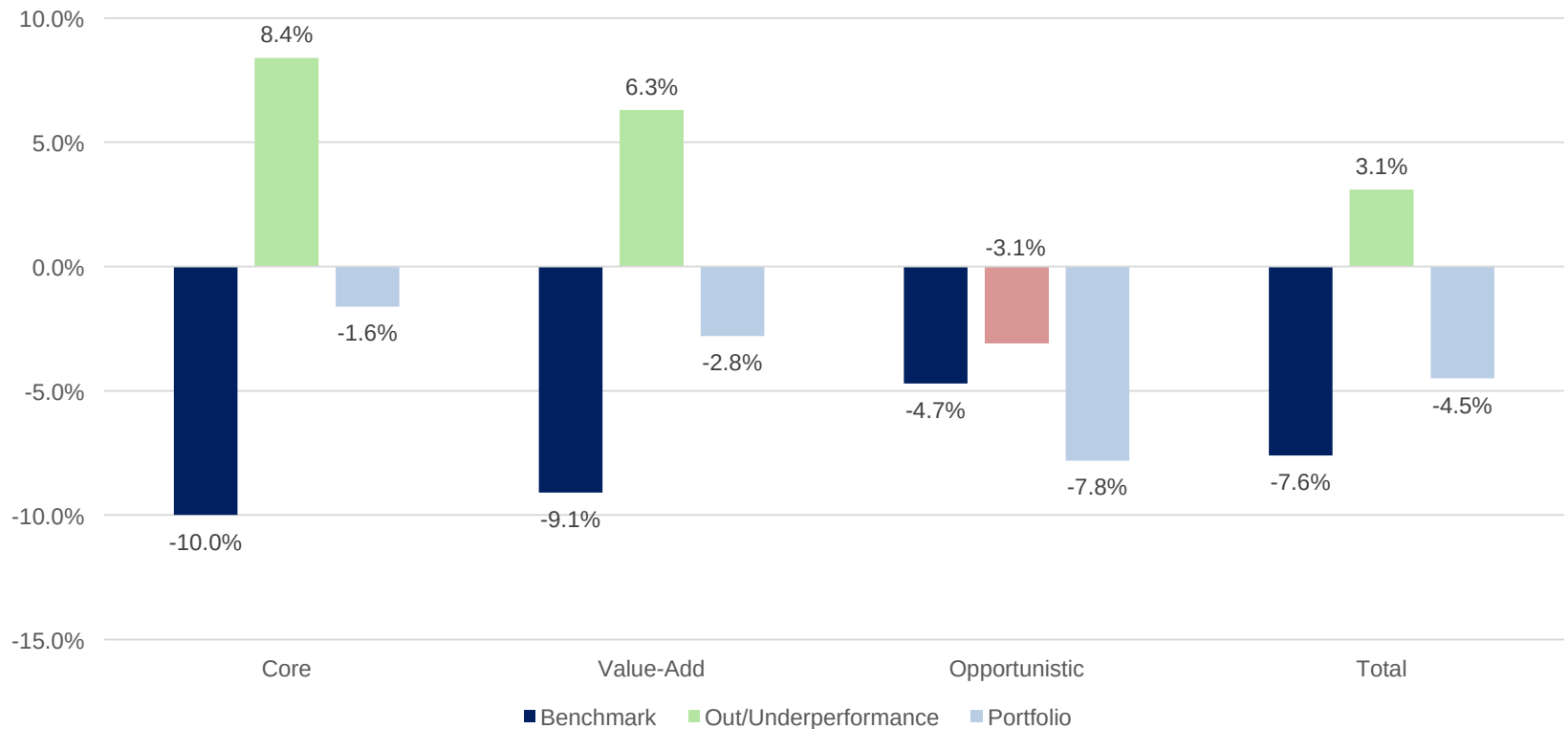
Attribution by Strategy – One Year as of June 30, 2024

Compared to their Strategy Benchmarks...

Core Portfolio (-1.6% TWR) **outperformed** its benchmark by **840 basis points**

Value-Add Portfolio (-2.8% TWR) **outperformed** its benchmark by **630 basis points**

Opportunistic Portfolio (-7.8% TWR) **underperformed** its benchmark by **310 basis points**



Private Real Estate PME Analysis

PSERS Private Real Estate Portfolio Compared to Public Benchmark

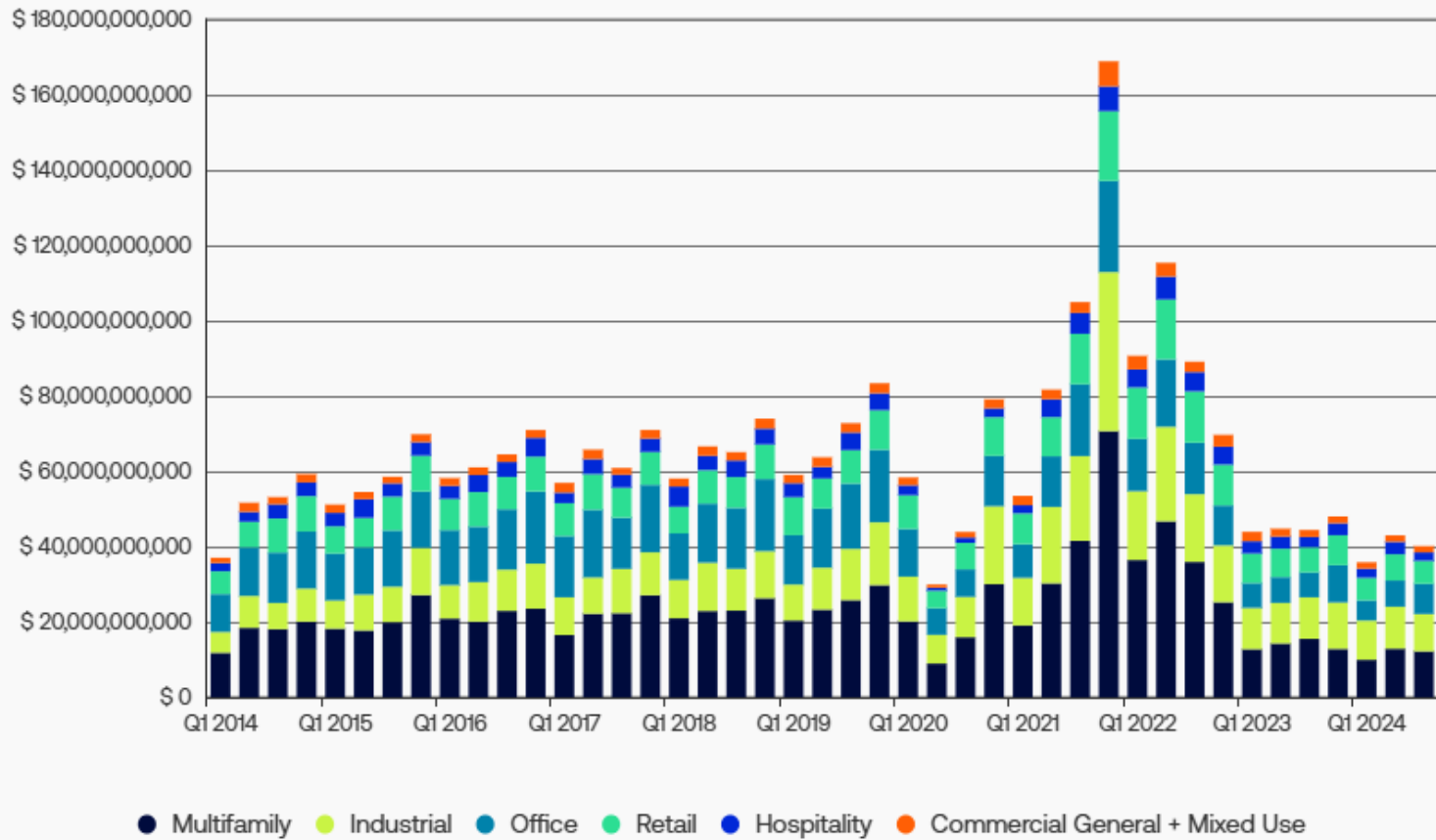
Time Horizon	Portfolio Net IRR	Benchmark PME IRR ¹	Portfolio Spread Over Benchmark	KS PME	Direct Alpha	EVM ²
1 Year	-4.4%	7.1%	-11.5%	0.9x	-10.8%	-\$1.0
3 Year	6.9%	-1.6%	8.5%	1.2x	8.7%	\$1.3
5 Year	9.1%	1.7%	7.4%	1.2x	7.4%	\$2.1
10 Year	10.1%	5.2%	4.9%	1.2x	5.0%	\$2.9

(1) PME Benchmark is FTSE EPRA NAREIT Developed Net Total Return Index (Hedged to USD), ticker GPPPSH1

(2) Excess Value Method, in billions USD

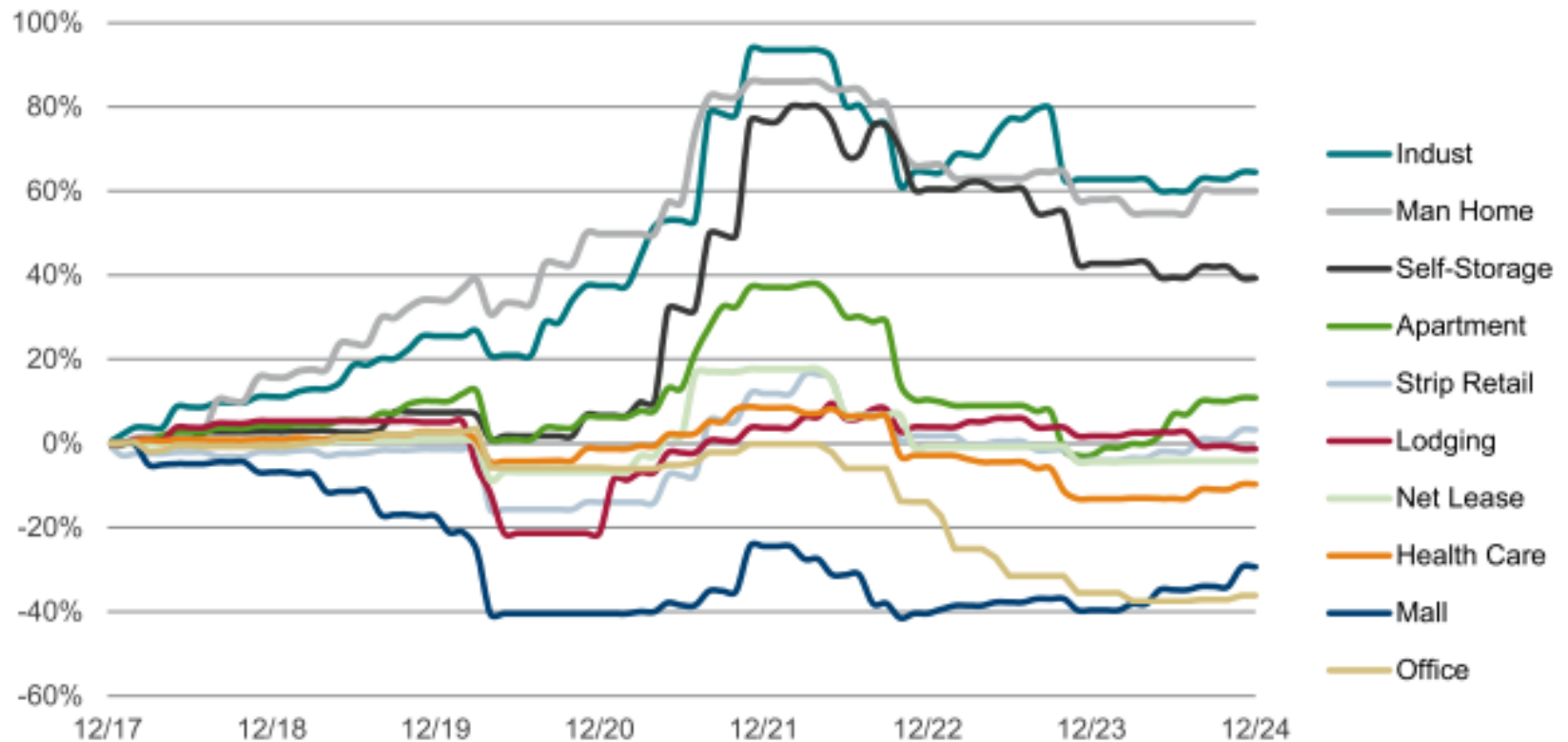
Source: Burgiss Private I, as of 6/30/2024

Market Update – U.S. Transaction Volume

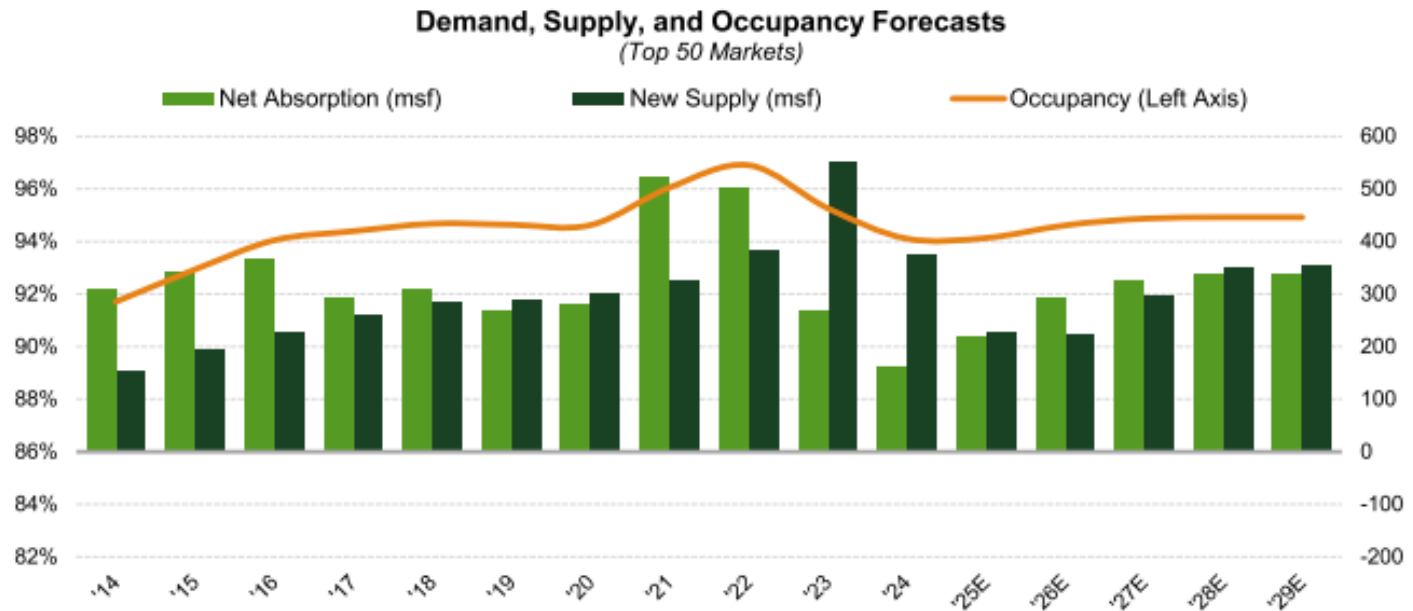


Market Update – Commercial Property Price Index

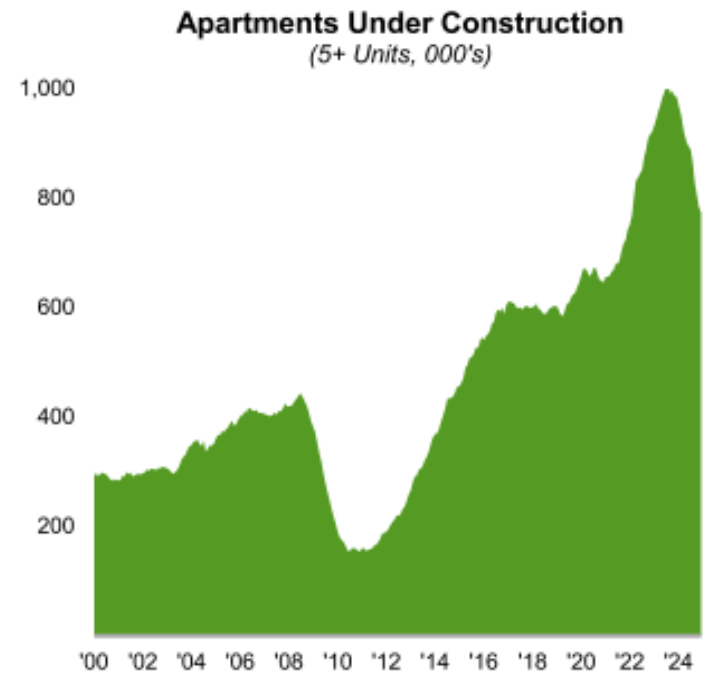
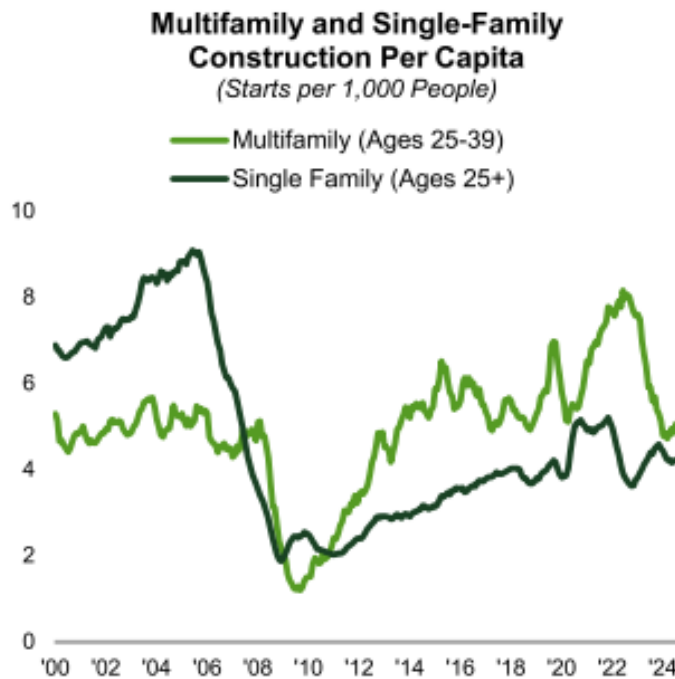
Cumulative Change in CPPI®: Past Seven Years



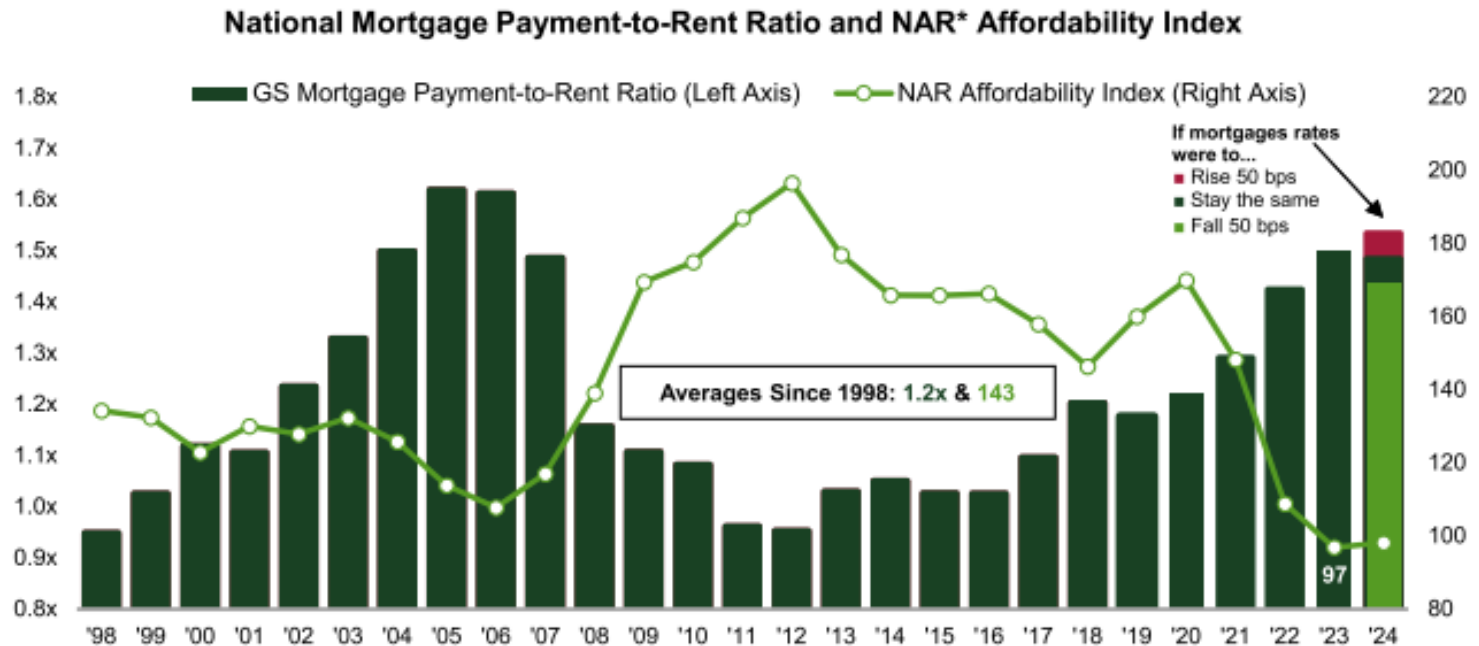
Market Update – Industrial Supply vs. Demand



Market Update – Multifamily Supply



Market Update – Housing Affordability



*NAR Methodology: Affordability index of 100 indicates a family with a median income has exactly enough income to qualify for a mortgage on a median priced home in a particular market, assuming a 20% down payment and a 25% qualifying income (i.e. monthly P&I payment cannot exceed 25% of median family monthly income). A score of 120 means a family earning the median family income has 120% of the income necessary to qualify for a conventional loan covering 80% of a median-priced existing single-family home. An increase in the score then shows that this family is more able to afford the median priced home.

Strategic Plan

Decision Points in Portfolio Construction:

- 1) Complementary to Public Real Estate exposure
- 2) Core vs. Value-Add vs. Opportunistic
- 3) Fund + Co-investment vs. Direct
- 4) Demographic vs. GDP-linked property types
- 5) Domestic vs. International
- 6) Sector-Specialist vs. Diversified Funds

2025 Initiatives

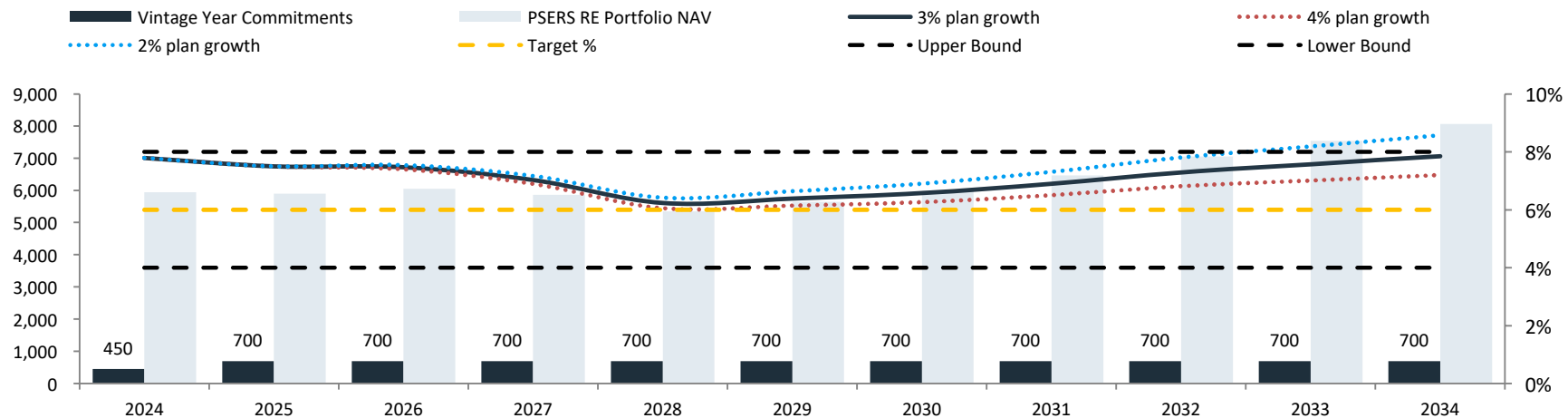
Excerpt from Private Markets Asset Class Policy: “The long-term objective for each Portfolio is to outperform its policy benchmark as set forth in the IPS, on a net-of-fee basis, over long-term time horizons”

- Diversification of residential and industrial exposures
- Continue to refine portfolio to complement public exposures
- Dispositions in the Direct RE portfolio
- Identify liquidity options for aged NAV
- Widen sourcing funnel
- Expanded analysis of property-level data

2025 Aksia Pacing Model

- Pacing Model suggests \$600-\$800M of annual commitments
- Staff recommends \$300-\$600M of commitments in 2025 given RE overweight and magnitude of unfunded commitments; flexibility to modestly increase to match market opportunity

Plan Growth Scenarios - NAV as Percent of Total Plan Assets¹

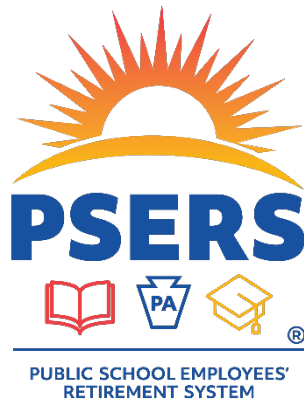


Cash Flows (\$ in millions)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Contributions	-456	-1,148	-915	-787	-734	-715	-701	-699	-700	-701	-700
Distributions	341	1,947	1,487	1,705	1,917	1,050	1,029	924	885	1,031	1,061
Net Cash Flow	-115	798	572	919	1,184	336	327	225	185	330	362
Uncalled Capital	2,404	1,902	1,579	1,428	1,364	1,309	1,282	1,253	1,254	1,181	1,180

Summary

- Portfolio continues to outperform its benchmark and create long-term value relative to public REITs
- Negative absolute performance is almost entirely rate-driven; property fundamentals and resulting cash flows remain strong
- Low transaction volume in 2023 and 2024 equated to historically slow contribution and distribution activity
- Strategic Plan suggests continued focus on domestic, value-add, sector specialist managers; active disposition of direct real estate; liquidity of aged NAV; expansion of sourcing funnel

Sector tilts have resulted in outperformance while rate-driven valuation decreases and low transaction volume suppress absolute returns



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