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1. REAL ESTATE QUARTERLY PERFORMANCE REPORT

As of March 31, 2025

PORTFOLIO PERFORMANCE SUMMARY

The table below displays trailing time period performance for the Pennsylvania State Employees' Retirement System ("PA SERS") Real Estate Portfolio as of March 31, 2025 along with select benchmarks

- The policy benchmark is the NCREIF ODCE Index, which is comprised of open-end core real estate funds; we also show two additional real estate benchmarks and the S&P 500
 - The NCREIF Property Index, a benchmark of unlevered core real estate returns
 - The C|A Non-Core Real Estate benchmark consists of non-core (value-add and opportunistic) closed-end real
 estate funds
- The total real estate portfolio has generated a total net return of 1.4% year to date
 - The portfolio has generated an annualized return of 1.9% over the trailing ten years

Portfolio Performance	YTD	1 Year	3 Year	5 Year	10 Year	Inception
Pennsylvania SERS: Total Real Estate Portfolio	1.4%	-2.5%	-8.9%	1.1%	1.9%	6.7%
Policy Benchmark: NFI-ODCE Index ¹	0.9%	1.2%	<i>-5.1%</i>	2.0%	4.7%	N/A
NCREIF Property Index ²	1.3%	2.7%	-2.1%	3.3%	5.4%	N/A
C A Non-Core Real Estate Index³	0.6%	-1.6%	-0.9%	6.0%	7.2%	N/A
S&P 500 Index	-4.3%	8.3%	9.0%	18.6%	12.5%	N/A

Data as of March 31, 2025. Sources include NCREIF, C|A, Manager data, and NEPC.

^{4.} The timing and magnitude of fund cash flows are integral to the IRR performance. Benchmark indices that are time weighted measures should not be directly compared to dollar-weighted IRR calculations. Index data is continuously updated and is therefore subject to change.



^{1.} The NFI-ODCE Index represents pooled returns of open-end comingled core funds in the ODCE Index. The ODCE includes the effects of leverage, and returns shown are time-weighted and net of fees.

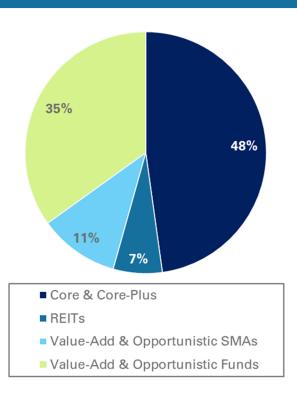
^{2.} The NCREIF Property Index (NPI) represents property-level returns of institutionally-owned core real estate properties in the United States. The NPI is unlevered, and returns are time-weighted and gross of fees.

^{3.} The C|A Benchmark data represents pooled horizon internal rate of return (IRR) calculations, net of fees, across value-add and opportunistic real estate funds.

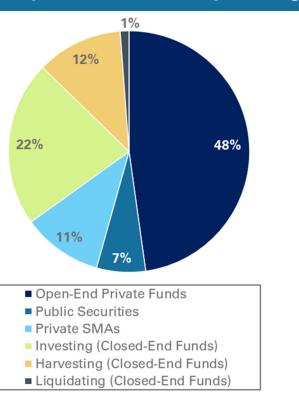
PORTFOLIO ALLOCATION OVERVIEW

- The charts below show PA SERS real estate portfolio broken out by strategy and by investment structure, with closed-end funds further broken out by lifecycle stage
- As shown, approximately 55% of the portfolio is invested in Core, Core-Plus, and REITs
 - We anticipate the Value-Add and Opportunistic strategies to grow over time, in-line with the board-approved sub-strategy targets





Allocation by Structure & Lifecycle Stage





PERFORMANCE BY STRATEGY

The chart and table below shows the performance by strategy for all current (active, non-liquidated) investments in the PA SERS real estate portfolio



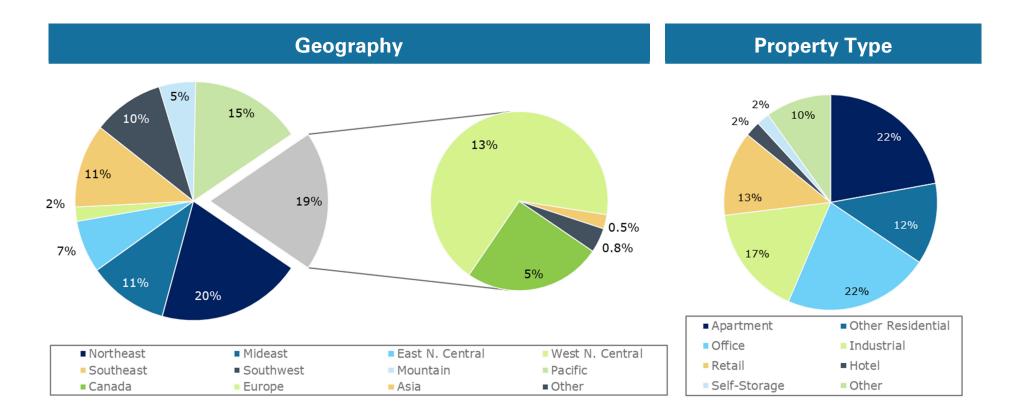
Investment Strategy	Commitment	Paid-In Capital	Unfunded Commitment	Cumulative Distributions	Valuation	Total Value	Net Benefit	Call Ratio	DPI Ratio	TVPI Ratio	IRR
Core & Core-Plus	1,077,849,406	1,061,541,976	16,307,430	432,987,361				98%			5.37%
REITs	183,616,773	183,616,773	0	211,168,336	146,374,541	357,542,877	173,926,104	100%	1.15x	1.95x	9.28%
Value-Add & Opportunistic SMAs	1,754,714,318	1,772,922,706	0	2,281,027,960	238,917,466	2,519,945,425	747,022,719	101%	1.29x	1.42x	5.10%
Value-Add & Opportunistic Funds	1,847,578,325	1,553,276,198	329,130,292	1,172,854,229	776,995,496	1,949,849,724	396,573,526	84%	0.76x	1.26x	5.87%
Total (Active Investments)	4,863,758,821	4,571,357,653	345,437,723	4,098,037,885				94%	0.90x		5.41%



Data as of March 31, 2025. Liquidated investments not shown. Returns shown do not take into account risk/volatility of underlying strategies. Note that, due to rounding, there may be slight differences between the summed figures, totals, and amounts shown elsewhere in this presentation.

PORTFOLIO DIVERSIFICATION

- The PA SERS real estate portfolio is broadly diversified by property type and geography within the U.S.
- 19% of the portfolio is invested outside the U.S., primarily in Europe





HISTORICAL PERFORMANCE BY VINTAGE

- The following chart illustrates capital invested and inception-to-date performance by vintage year as of March 31, 2025
 - Historic inconsistent pacing has negatively impacted portfolio performance
 - The PA SERS Investment Office and NEPC are focused on maintaining a more consistent investment pacing schedule to mitigate the risk of heavy capital investments in poor vintage years

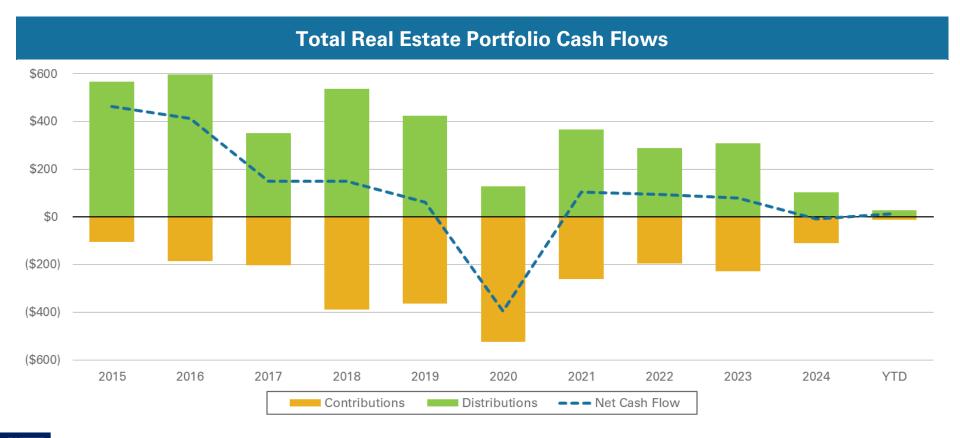




Data as of March 31, 2025. Note that vintage years 2023 and later are excluded; performance may be less meaningful for more recent vintage years due to the "J-curve" effect associated with closed-end fund structures. For separate accounts, the date of initial commitment or investment is used as the vintage year.

10-YEAR CASH FLOWS

- The chart below illustrates the capital invested, distributed, and net cash flows for the real estate portfolio YTD and over the prior 10 full calendar years
 - The portfolio was cash flow positive in eight of the last 10 full calendar years
 - The portfolio is cash flow positive year-to-date in 2025





ACTIVE DIVERSE-LED INVESTMENTS

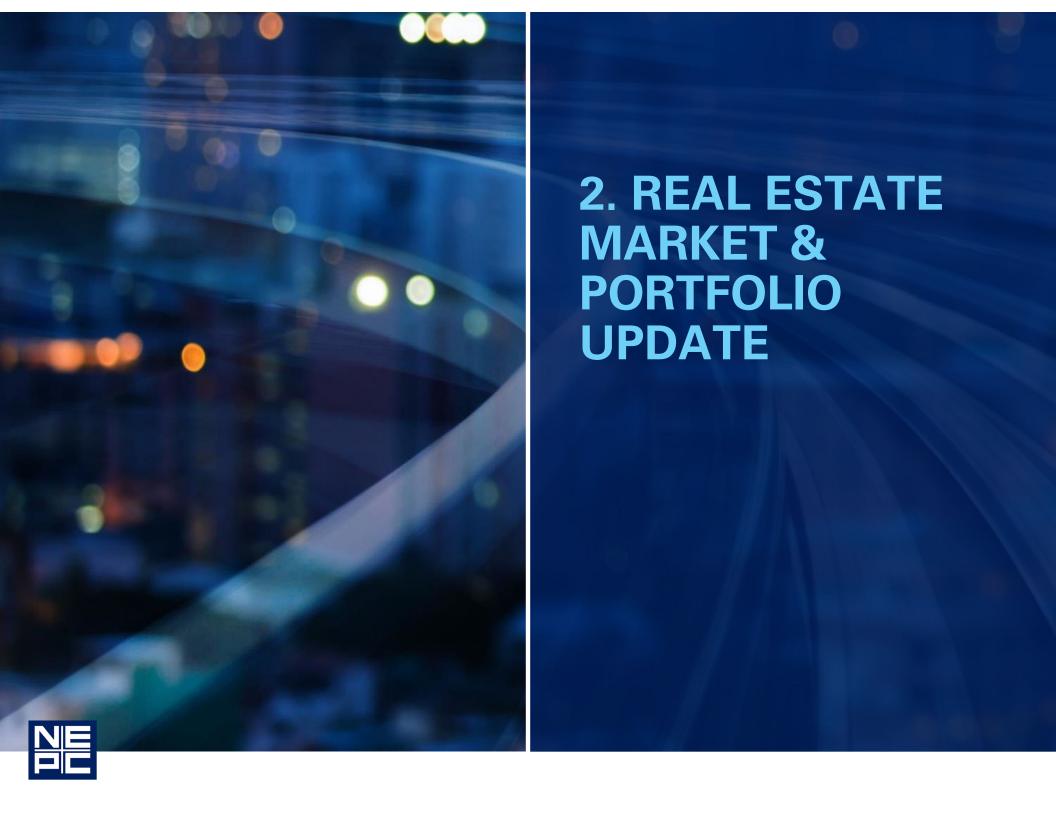
 The table below displays the since-inception performance of active (non-liquidated) investments managed by diverse-owned and diverseled investment management firms in the PA SERS real estate portfolio

Investment Name	Vintage Year	Commitment	Paid-In Capital	Unfunded Commitment	Cumulative Distributions	Valuation	Total Value	Net Benefit	DPI Ratio	TVPI Ratio	IRR
Blue Moon Senior Housing II Sidecar L.P.	2019	50,000,000	47,968,832	2,062,589	2,700,000	58,511,452	61,211,452	13,242,620	0.06x	1.28x	7.06%
Blue Moon Senior Housing II, L.P.	2019	50,000,000	48,051,089	1,948,911	815,851	51,903,557	52,719,408	4,668,319	0.02x	1.10x	2.76%
HotelAVE Separate Account	2018	95,994,432	95,994,432	0	68,091,396	1,361,208	69,452,604	(26,541,828)	0.71x	0.72x	(13.15%)
Rubicon First Ascent Sidecar	2021	20,000,000	16,094,555	3,905,445	0	NM	NM	NM	NM	NM	NM
Rubicon First Ascent, L.P.	2021	30,000,000	21,574,740	8,425,260	0	20,397,718	20,397,718	(1,177,022)	0.00x	0.95x	(3.35%)
Scout Fund II-A, L.P.	2016	30,000,000	30,000,000	0	3,398,461	11,666,602	15,065,063	(14,934,937)	0.11x	0.50x	(9.16%)
Total		275,994,432	259,683,648	16,342,205	75,005,708						(3.00%)

NM - Not Meaningful



Data as of March 31, 2025. NEPC defines "diverse-owned" as a firm that's at least 50% owned by an under-represented group and "diverse-led" as a firm that's 33% to 50% owned by an under-represented group. The funds listed on this page are those which NEPC has identified as diverse-owned or diverse-led as of March 31, 2025. Therefore, it is possible that a firm may have been diverse-owned or diverse-led at the time of PA SERS commitment but is no longer, and therefore is excluded from this list. While NEPC has exercised reasonable professional care in preparing this information, we cannot guarantee the accuracy of all source information. Note that, due to rounding, there may be slight differences between the summed figures and the totals.



REAL ESTATE MARKET UPDATE

- U.S. real estate (both core and value-add/opportunistic) has generated positive performance YTD, but uncertainty remains in the market
 - The NCREIF ODCE Index remains in positive territory for the trailing one-year period through the second quarter of 2025
 - While quarterly core returns have been positive, asset appreciation remains muted, with current income serving as the primary driver of returns
 - Redemption queues continue to hamper core real estate markets, but are improving
 - Broader market volatility and economic concerns fuel investor uncertainty
- NEPC continues to believe that opportunistic strategies and select sectorfocused funds are attractive in this market
 - Managers with diversified opportunistic mandates should be poised to capitalize on any distress or inefficiencies in the market
 - Housing, data centers, and industrial-related real estate markets exhibit sustained growth tailwinds
 - It remains an attractive time to be a provider of liquidity, including through real estate debt strategies and secondaries strategies



2025 TARGET REAL ESTATE STRATEGIES

Defensive with high income component and an **INCOME Real Estate Debt** attractive risk-adjusted return relative to equity. NNN may be an equity alternative. **Diversified** Capitalize on market dislocations, distress and **GROWTH** lower pricing. **Opportunistic Real Estate** Discounted entry with advanced business **BALANCED Secondaries** plan execution and shorter duration. Overweight property sectors with strong tailwinds such as data center, attainable **TACTICAL Sector Specific** housing and industrial. Grocery-anchored retail may be a core-plus diversifier. **Europe and Asia** Enhanced economic and market diversification **GLOBAL Pacific** with growing institutionalization.



LOOKING FORWARD

- NEPC will continue to work with the PA SERS Investment Office to implement the strategic investment plan for the real estate portfolio, including:
 - Shifting the underlying strategy mix to the new targets approved in 2022
 - Identifying potential investment opportunities for future value-add and opportunistic commitments in 2025
 - We will seek strategies that will both complement the PA SERS portfolio and capitalize on the current market environment
- Best practices for private market investments include maintaining annual commitment pacing, even through periods of uncertainty
 - It is the manager's job to navigate the market and identify attractive investment opportunities

Sub-Strategy	Current Allocation	Target Allocation
Core / Core-Plus	48%	25%
Value-Add & Opportunistic	46%	70%
REITs	7%	5%





APPENDIX 1:

Investment Level Performance as of March 31, 2025

ACTIVE INVESTMENTS

Investments	Trailing Period Returns (IRR) %									
Investment Name	Vintage Year	Commitment	(QTD)	(YTD)	(1 Yr)	(3 Yrs)	(5 Yrs)	(7 Yrs)	(10 Yrs)	SIIRR
Activum SG Fund VI L.P.	2019	50,000,000								
Activum SG Fund VI Pennsylvania Side-Car L.P.	2019	50,000,000								
AG Asia Realty Fund, L.P.	2007	25,000,000	-2.26%	-2.26%	-5.86%	-9.15%	18.64%	6.32%	-3.76%	3.22%
Ares PA Opportunities Fund, L.P Opportunistic Real Estate	2023	100,000,000	NM	NM	NM	NM	NM	NM	NM	NM
Blackstone Property Partners, L.P.	2017	300,000,000	0.09%	0.09%	-6.73%	-6.79%	1.82%	2.62%		2.65%
Blackstone Real Estate Partners V, L.P.	2006	50,000,000	-0.98%	-0.98%	0.42%	113.99%	71.02%	5.83%	5.82%	10.73%
Blackstone Real Estate Partners VI, L.P.	2007	75,000,000	-3.98%	-3.98%	-5.89%	-10.36%	4.42%	7.97%	2.74%	12.69%
Blackstone Real Estate Partners VII, L.P.	2011	75,000,000	0.57%	0.57%	-12.34%	-15.94%	3.51%	1.78%	7.51%	14.15%
Blackstone Real Estate Partners X, L.P.	2022	75,000,000	NM	NM	NM	NM	NM	NM	NM	NM
Blue Moon Senior Housing II Sidecar L.P.	2019	50,000,000	10.81%	10.81%	24.72%	9.59%				7.06%
Blue Moon Senior Housing II, L.P.	2019	50,000,000	7.63%	7.63%	17.08%	5.13%	3.38%			2.76%
Blue Owl Real Estate Capital Fund IV, L.P.	2017	100,000,000	-0.68%	-0.68%	-17.66%	-3.56%	20.74%	17.07%		16.60%
Blue Owl Real Estate Capital Fund V, L.P.	2020	50,000,000	0.80%	0.80%	-3.47%	7.15%				11.35%
Blue Owl Real Estate Capital Fund VI, L.P.	2022	75,000,000	NM	NM	NM	NM	NM	NM	NM	NM
Blue Owl Real Estate Capital Net Lease Property Fund, L.P.	2018	309,743,743	-0.75%	-0.75%	-0.62%	4.80%	10.19%			9.53%
BPG Investment Partnership IX, L.P.	2012	25,000,000	0.00%	0.00%	7.86%	-2.33%	-2.50%	17.31%	16.58%	15.00%
BPG Investment Partnership VI, L.P.	2002	25,000,000	0.63%	0.63%	-15.22%	N/M*	29.84%	14.81%	12.85%	13.51%
BPG Investment Partnership VII, L.P.	2005	25,000,000	0.00%	0.00%	0.88%	-8.86%	1.38%	1.17%	6.66%	-0.64%
C-III Recovery Fund III, L.P.	2017	100,000,000								
CenterSquare Real Estate Securities	2002	183,616,773	0.49%	0.49%	12.26%	-6.63%	10.85%	6.34%	5.70%	9.28%
Heitman America Real Estate Trust, L.P.	2007	100,000,000	1.09%	1.09%	2.17%	-3.56%	4.54%	3.94%	6.32%	6.79%
Heitman Separate Account	1988	813,992,364	0.70%	0.70%	7.88%	-0.83%	18.97%	8.59%	13.18%	4.58%
Henderson Park Enhanced Income Fund, SCSp	2019	300,000,000								
HotelAVE Separate Account	2018	95,994,432	22.36%	22.36%	5.84%	-27.28%	-21.20%			-13.15%



^{*} BPG Investment Partnership VI, L.P. produced a positive return for the trailing three-year period; the timing and magnitude of distributions resulted in an outsized IRR which has been excluded as not meaningful.

Data as of March 31, 2025. Performance metrics calculated by NEPC based on data provided by the investment managers.

ACTIVE INVESTMENTS (CONTINUED)

Investments	Investments					Trailing Period Returns (IRR) %							
Investment Name	Vintage Year	Commitment	(QTD)	(YTD)	(1 Yr)	(3 Yrs)	(5 Yrs)	(7 Yrs)	(10 Yrs)	SI IRR			
LaSalle Separate Account	1994	512,306,781	-5.22%	-5.22%	-37.00%	-42.50%	-31.82%	-19.35%	-4.20%	8.13%			
LaSalle Takeover Account	2018	332,420,741	2.40%	2.40%	-14.00%	-24.14%	-7.32%			1.31%			
LEM Multifamily Fund VI, L.P.	2022	75,000,000	NM	NM	NM	NM	NM	NM	NM	NM			
Lubert-Adler Real Estate Fund VII, L.P.	2014	25,000,000	-4.55%	-4.55%	-6.13%	-14.51%	-8.80%	-4.71%	-0.66%	-0.97%			
Mesirow Financial Real Estate Value Fund III, L.P.	2018	25,000,000	1.10%	1.10%	2.05%	1.13%	10.97%			10.14%			
Rockpoint Real Estate Fund III, L.P.	2007	50,000,000	1.84%	1.84%	3.01%	-7.79%	-2.36%	-1.50%	-0.62%	13.39%			
Rockpoint Real Estate Fund V, L.P.	2015	50,000,000	1.89%	1.89%	-8.84%	-25.00%	-8.15%	-5.12%		-3.06%			
Rubicon First Ascent Sidecar	2021	20,000,000	NM	NM	NM	NM	NM	NM	NM	NM			
Rubicon First Ascent, L.P.	2021	30,000,000	10.57%	10.57%	19.23%	0.83%				-3.35%			
Scout Fund II-A, L.P.	2016	30,000,000	-1.97%	-1.97%	-7.20%	-27.01%	-14.42%	-10.32%		-9.16%			
Senior Housing Partners V, L.P.	2015	45,727,881	0.64%	0.64%	-10.04%	-10.21%	-5.50%	-1.72%		0.32%			
Senior Housing Partners VI, L.P.	2019	100,000,000	-0.47%	-0.47%	-4.52%	-6.96%	-5.64%			-5.74%			
SRE Opportunity Fund III Select, L.P.	2018	50,000,000											
SRE Opportunity Fund III, L.P.	2018	50,000,000											
Starwood Global Opportunity Fund VII-A, L.P.	2006	35,000,000											
Starwood Global Opportunity Fund VIII, L.P.	2009	50,000,000											
Starwood Opportunity Fund VI, L.P.	2001	50,000,000											
Trumbull Property Fund, L.P.	1988	25,558,525	1.23%	1.23%	0.43%	-6.73%	-0.12%	0.79%	4.35%	6.77%			
ValStone Opportunity Fund V, LLC	2014	14,663,402	-2.00%	-2.00%	-0.94%	-1.97%	2.11%	4.38%	5.79%	5.95%			
Westbrook Real Estate Fund VI, L.P.	2006	35,000,000	-0.01%	-0.01%	0.64%	0.19%	-0.40%	-0.85%	-0.40%	0.23%			
Westbrook Real Estate Fund VII, L.P.	2007	50,000,000	0.42%	0.42%	1.06%	-14.71%	-9.16%	-8.02%	-1.72%	1.44%			
Westbrook Real Estate Fund VIII, L.P.	2009	50,000,000	-0.17%	-0.17%	-25.02%	-17.74%	-13.51%	-12.07%	-6.52%	8.39%			
Total			1.44%	1.44%	-2.50%	-8.89%	1.07%	2.06%	3.34%	5.41%			



PERFORMANCE BY STRATEGY

Investments		Commitm	ents	Contributions 8	k Distributions		Valuations		Pe	rforma	nce
Investment Name	Vintage Year	Commitment	Unfunded Commitment	Paid In Capital	Cumulative Distributions	Valuation	Total Value	Net Benefit	DPI	TVPI	IRR
Core/Core-Plus											
Blackstone Property Partners, L.P.	2017	\$300,000,000	\$0	\$300,000,000	\$25,367,360	\$332,759,153	\$358,126,513	\$58,126,513	0.08	1.19	2.65%
Blue Owl Real Estate Capital Net Lease Property Fund, L.P.	2018	\$309,743,743	\$0	\$309,743,743	\$97,354,486	\$345,325,282	\$442,679,768	\$132,936,026	0.31	1.43	9.53%
Heitman America Real Estate Trust, L.P.	2007	\$100,000,000	\$0	\$100,000,000	\$105,497,913	\$145,737,197	\$251,235,110	\$151,235,110	1.05	2.51	6.79%
Henderson Park Enhanced Income Fund, SCSp	2019	\$342,547,138	\$16,307,430	\$326,239,708	\$75,467,864						
Trumbull Property Fund, L.P.	1988	\$25,558,525	\$0	\$25,558,525	\$129,299,737	\$15,331,751	\$144,631,488	\$119,072,963	5.06	5.66	6.77%
Total Core/Core-Plus		\$1,077,849,406	\$16,307,430	\$1,061,541,976	\$432,987,361						5.37%
Value-Add/Opportunistic SMAs											
Heitman Separate Account	1988	\$813,992,364	\$0	\$825,635,117	\$1,230,476,873	\$26,084,946	\$1,256,561,819	\$430,926,702	1.49	1.52	4.58%
HotelAVE Separate Account	2018	\$95,994,432	\$0	\$95,994,432	\$68,091,396	\$1,361,208	\$69,452,604	-\$26,541,828	0.71	0.72	-13.15%
LaSalle Separate Account	1994	\$512,306,781	\$0	\$515,367,360	\$792,997,999	\$48,458,374	\$841,456,373	\$326,089,013	1.54	1.63	8.13%
LaSalle Takeover Account	2018	\$332,420,741	\$0	\$335,925,797	\$189,461,692	\$163,012,938	\$352,474,630	\$16,548,833	0.56	1.05	1.31%
Total Value-Add/Opportunistic SMAs		\$1,754,714,318	\$0	\$1,772,922,706	\$2,281,027,960	\$238,917,466	\$2,519,945,425	\$747,022,719	1.29	1.42	5.10%
REIT											
CenterSquare Real Estate Securities	2002	\$183,616,773	\$0	\$183,616,773	\$211,168,336	\$146,374,541	\$357,542,877	\$173,926,104	1.15	1.95	9.28%
Total REIT		\$183,616,773	\$0	\$183,616,773	\$211,168,336	\$146,374,541	\$357,542,877	\$173,926,104	1.15	1.95	9.28%
Value Add/Opportunistic											
Activum SG Fund VI L.P.	2019	\$57,177,461	\$2,888,829	\$54,280,199	\$10,654,850						
Activum SG Fund VI Pennsylvania Side-Car L.P.	2019	\$55,685,423	\$21,584,698	\$34,100,725	\$438,595						
AG Asia Realty Fund, L.P.	2007	\$23,500,000	\$1,340,156	\$23,500,000	\$27,487,500	\$41,886	\$27,529,386	\$4,029,386	1.17	1.17	3.22%
Ares PA Opportunities Fund, L.P Opportunistic Real Estate	2023	\$100,000,000	\$88,362,503	\$11,637,497	\$0	NM	NM	NM	NM	NM	NM
Blackstone Real Estate Partners V, L.P.	2006	\$50,000,000	\$208,703	\$49,791,297	\$102,189,651	\$60,716	\$102,250,367	\$52,459,070	2.05	2.05	10.73%
Blackstone Real Estate Partners VI, L.P.	2007	\$75,000,000	\$552,134	\$74,791,104	\$157,969,695	\$37,595	\$158,007,290	\$83,216,186	2.11	2.11	12.69%
Blackstone Real Estate Partners VII, L.P.	2011	\$75,000,000	\$5,065,220	\$72,693,133	\$124,361,288	\$9,070,330	\$133,431,618	\$60,738,485	1.71	1.84	14.15%
Blackstone Real Estate Partners X, L.P.	2022	\$75,000,000	\$49,928,652	\$27,474,445	\$117,853	NM	NM	NM	NM	NM	NM
Blue Moon Senior Housing II Sidecar L.P.	2019	\$50,000,000	\$2,062,589	\$47,968,832	\$2,700,000	\$58,511,452	\$61,211,452	\$13,242,620	0.06	1.28	7.06%
Blue Moon Senior Housing II, L.P.	2019	\$50,000,000	\$1,948,911	\$48,051,089	\$815,851	\$51,903,557	\$52,719,408	\$4,668,319	0.02	1.1	2.76%
Blue Owl Real Estate Capital Fund IV, L.P.	2017	\$100,000,000	\$0	\$100,000,000	\$119,413,393	\$30,767,373	\$150,180,766	\$50,180,766	1.19	1.50	16.60%
Blue Owl Real Estate Capital Fund V, L.P.	2020	\$50,000,000	\$0	\$49,996,863	\$20,302,146	\$43,326,805	\$63,628,951	\$13,632,088	0.41	1.27	11.35%
Blue Owl Real Estate Capital Fund VI, L.P.	2022	\$75,000,000	\$44,285,052	\$30,589,338	\$1,315,849	NM	NM	NM	NM	NM	NM

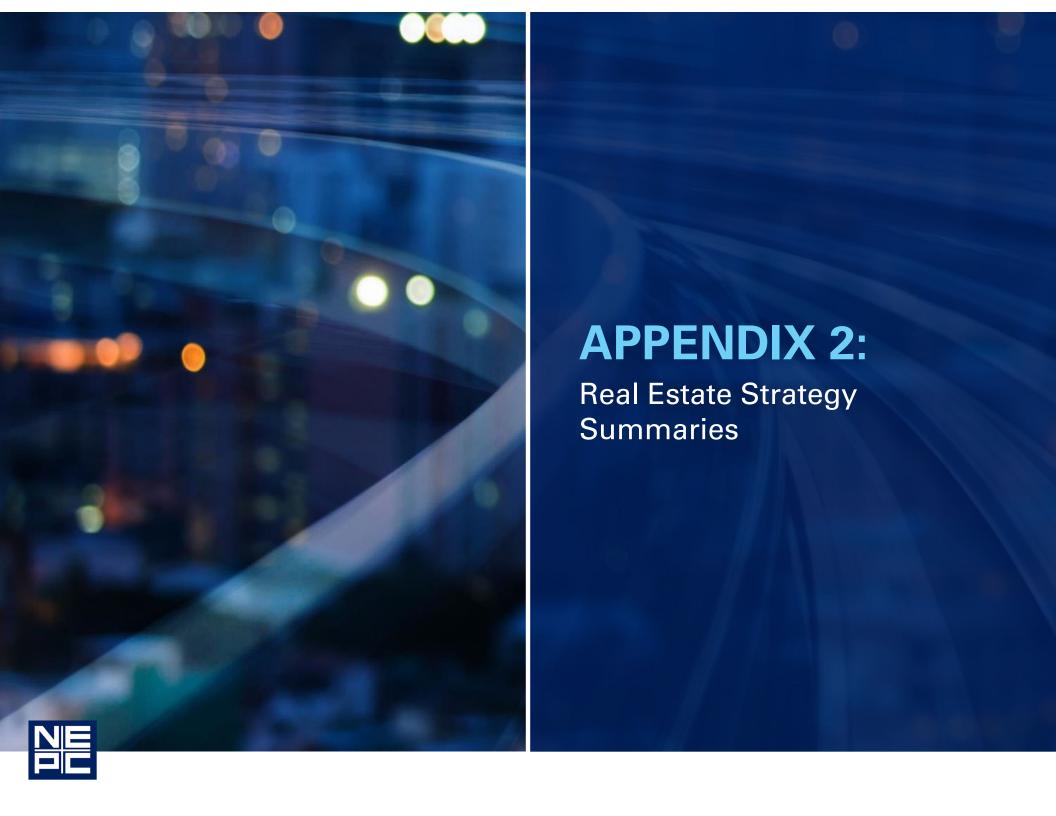


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PERFORMANCE BY STRATEGY (CONTINUED)

Investments		Commitm	ents	Contributions 8	k Distributions		Valuations		Pe	erforma	nce
Investment Name	Vintage Year	Commitment	Unfunded Commitment	Paid In Capital	Cumulative Distributions	Valuation	Total Value	Net Benefit	DPI	TVPI	IRR
Value Add/Opportunistic (Continued)											
BPG Investment Partnership IX, L.P.	2012	\$25,000,000	\$696,591	\$24,417,362	\$40,376,122	\$2,702	\$40,378,824	\$15,961,462	1.65	1.65	15.00%
BPG Investment Partnership VI, L.P.	2002	\$24,543,712	\$0	\$24,543,712	\$44,921,380	\$8,361	\$44,929,741	\$20,386,029	1.83	1.83	13.51%
BPG Investment Partnership VII, L.P.	2005	\$25,000,000	\$0	\$24,985,519	\$18,270,069	\$4,680,434	\$22,950,503	-\$2,035,016	0.73	0.92	-0.64%
C-III Recovery Fund III, L.P.	2017	\$100,000,000	\$2,860,947	\$96,799,611	\$11,576,844						
LEM Multifamily Fund VI, L.P.	2022	\$75,000,000	\$33,937,500	\$41,062,500	\$1,398,098	NM	NM	NM	NM	NM	NM
Lubert-Adler Real Estate Fund VII, L.P.	2014	\$25,000,000	\$625,000	\$24,375,000	\$15,311,744	\$7,715,362	\$23,027,105	-\$1,347,895	0.63	0.94	-0.97%
Mesirow Financial Real Estate Value Fund III, L.P.	2018	\$25,647,559	\$0	\$25,859,215	\$10,748,397	\$30,917,213	\$41,665,610	\$15,806,395	0.42	1.61	10.14%
Rockpoint Real Estate Fund III, L.P.	2007	\$50,632,887	\$4,241,165	\$50,675,144	\$68,151,141	\$1,133,076	\$69,284,217	\$18,609,073	1.34	1.37	13.39%
Rockpoint Real Estate Fund V, L.P.	2015	\$50,000,000	\$7,108,485	\$48,392,349	\$25,396,310	\$17,062,497	\$42,458,807	-\$5,933,542	0.52	0.88	-3.06%
Rubicon First Ascent Sidecar	2021	\$20,000,000	\$3,905,445	\$16,094,555	\$0	NM	NM	NM	NM	NM	NM
Rubicon First Ascent, L.P.	2021	\$30,000,000	\$8,425,260	\$21,574,740	\$0	\$20,397,718	\$20,397,718	-\$1,177,022	0.00	0.95	-3.35%
Scout Fund II-A, L.P.	2016	\$30,000,000	\$0	\$30,000,000	\$3,398,461	\$11,666,602	\$15,065,063	-\$14,934,937	0.11	0.50	-9.16%
Senior Housing Partners V, L.P.	2015	\$45,727,881	\$4,590,192	\$41,137,690	\$6,645,689	\$35,409,611	\$42,055,300	\$917,611	0.16	1.02	0.32%
Senior Housing Partners VI, L.P.	2019	\$100,000,000	\$12,939,604	\$86,966,354	\$0	\$72,769,667	\$72,769,667	-\$14,196,688	0.00	0.84	-5.74%
SRE Opportunity Fund III Select, L.P.	2018	\$50,000,000	\$20,242,500	\$29,897,486	\$19,579,003						
SRE Opportunity Fund III, L.P.	2018	\$50,000,000	\$6,686,439	\$47,153,386	\$16,863,561						
Starwood Global Opportunity Fund VII-A, L.P.	2006	\$35,000,000	\$0	\$35,000,000	\$27,413,405						
Starwood Global Opportunity Fund VIII, L.P.	2009	\$50,000,000	\$4,643,719	\$45,356,484	\$74,032,760						
Starwood Opportunity Fund VI, L.P.	2001	\$50,000,000	\$0	\$50,153,525	\$52,008,516						
ValStone Opportunity Fund V, LLC	2014	\$14,663,402	\$0	\$14,663,777	\$10,164,834	\$12,286,111	\$22,450,945	\$7,787,168	0.69	1.53	5.95%
Westbrook Real Estate Fund VI, L.P.	2006	\$35,000,000	\$0	\$38,550,099	\$38,837,150	\$145,771	\$38,982,921	\$432,822	1.01	1.01	0.23%
Westbrook Real Estate Fund VII, L.P.	2007	\$50,000,000	\$0	\$56,376,719	\$56,575,755	\$5,025,087	\$61,600,842	\$5,224,123	1.00	1.09	1.44%
Westbrook Real Estate Fund VIII, L.P.	2009	\$50,000,000	\$0	\$54,366,448	\$63,418,319	\$4,130,767	\$67,549,086	\$13,182,638	1.17	1.24	8.39%
Total Value Add/Opportunistic		\$1,847,578,325	\$329,130,292	\$1,553,276,198	\$1,172,854,229	\$776,995,496	\$1,949,849,724	\$396,573,526	0.76	1.26	5.87%
Total		\$4,863,758,821	\$345,437,723	\$4,571,357,653	\$4,098,037,885				0.90		5.41%





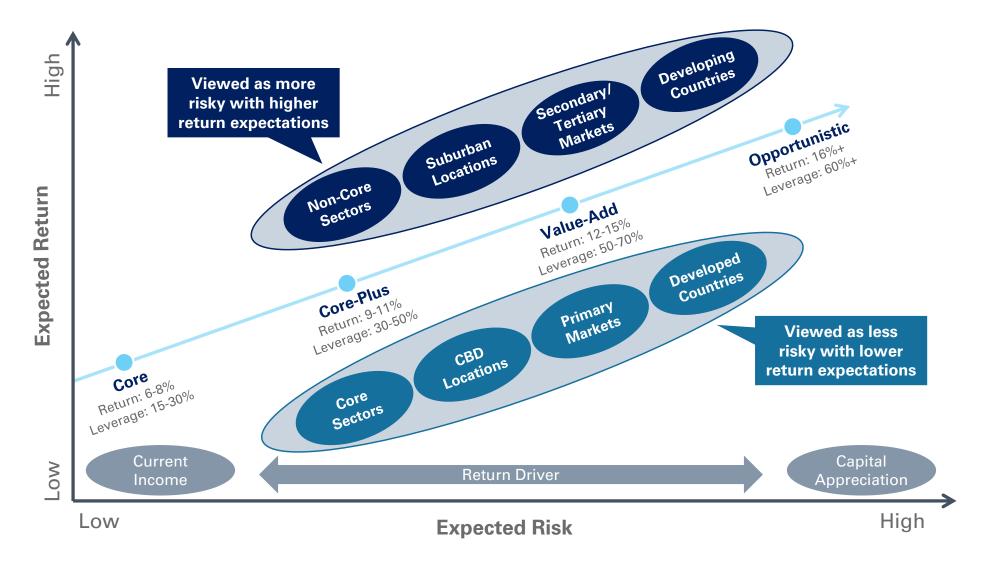
SPECTRUM OF REAL ESTATE INVESTMENT STRATEGIES

	Real Estate Investment Style / Overview	Investment Strategy	Portfolio Role	Considerations
rategies	Core / Core-Plus Return driver: income Primary vehicle: open-end funds Historical avg. returns: 7-8% / 8%-10% Leverage: 15-40% / 40%-50% Hold period: long-term	Stabilized income producing assets	 Current income Broad exposure to commercial real estate (asset class beta) Inflation protection 	 Vehicles are semi-liquid (entrance/exit queues) Limited alpha producing opportunities
Core Strategies	RE Securities Return driver: income Primary vehicle: REIT funds Historical avg. returns: 7-9% Leverage: 30-50% Hold period: long-term	Stabilized income producing assets	 Current income (dividends) Long-term exposure to commercial real estate (beta) Long-term inflation protection 	VolatilityEquity correlation
Non-Core Strategies	Value-Add Return driver: income/appreciation Primary vehicle: varies Historical avg. returns: 8-10% Leverage: 40-70% Hold period: 3-5 years	Properties requiring lease- up, repositioning, renovation or rehabilitation	 Provides part current income and capital appreciation Some inflation protection 	 Vehicles are semi-liquid or illiquid Vintage year is important Higher leverage vs. core Poor benchmarks
Non-Core	Opportunistic Return driver: appreciation Primary vehicle: closed-end funds Historical avg. returns: 10-12% Leverage: 60%+ Hold period: varies	Distressed investments, recapitalizations, development, etc.	 Real estate alpha through capital appreciation with minimal current income 	 Vehicles are illiquid Vintage year is important High leverage Poor benchmarks



RELATIVE EXPECTED RISK RETURN PROFILE

ILLUSTRATIVE RISK / RETURN PROFILE







DISCLAIMER

Past performance is no guarantee of future results.

The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.

Information used to prepare this report was obtained directly from the investment managers or custodians, and market index data was provided by other external sources. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.



ALTERNATIVE INVESTMENT DISCLOSURES

In addition, it is important that investors understand the following characteristics of non-traditional investment strategies including hedge funds, real estate and private equity:

- 1. Performance can be volatile and investors could lose all or a substantial portion of their investment
- 2. Leverage and other speculative practices may increase the risk of loss
- 3. Past performance may be revised due to the revaluation of investments
- 4. These investments can be illiquid, and investors may be subject to lock-ups or lengthy redemption terms
- 5. A secondary market may not be available for all funds, and any sales that occur may take place at a discount to value
- 6. These funds are not subject to the same regulatory requirements as registered investment vehicles
- 7. Managers may not be required to provide periodic pricing or valuation information to investors
- 8. These funds may have complex tax structures and delays in distributing important tax information
- 9. These funds often charge high fees
- 10. Investment agreements often give the manager authority to trade in securities, markets or currencies that are not within the manager's realm of expertise or contemplated investment strategy

