



PENNSYLVANIA STATE EMPLOYEES' RETIREMENT SYSTEM

REAL ESTATE QUARTERLY
PERFORMANCE REVIEW

FOURTH QUARTER 2024



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1. REAL ESTATE QUARTERLY PERFORMANCE REPORT

As of December 31, 2024



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 December 31, 2024 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 CJA 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 **–7.4% year to date**
 - The portfolio has generated an annualized return of 2.2% over the trailing ten years

Portfolio Performance	YTD	1 Year	3 Year	5 Year	10 Year	Inception
Pennsylvania SERS: Total Real Estate Portfolio	-7.4%	-7.4%	-7.8%	-0.3%	2.2%	6.7%
<i>Policy Benchmark: NFI-ODCE Index¹</i>	<i>-2.3%</i>	<i>-2.3%</i>	<i>-3.1%</i>	<i>2.0%</i>	<i>4.9%</i>	<i>N/A</i>
<i>NCREIF Property Index²</i>	<i>0.4%</i>	<i>0.4%</i>	<i>-0.8%</i>	<i>3.1%</i>	<i>5.7%</i>	<i>N/A</i>
<i>CJA Non-Core Real Estate Index³</i>	<i>-2.5%</i>	<i>-2.5%</i>	<i>-0.9%</i>	<i>5.4%</i>	<i>7.9%</i>	<i>N/A</i>
<i>S&P 500 Index</i>	<i>25.0%</i>	<i>25.0%</i>	<i>8.9%</i>	<i>14.5%</i>	<i>13.1%</i>	<i>N/A</i>

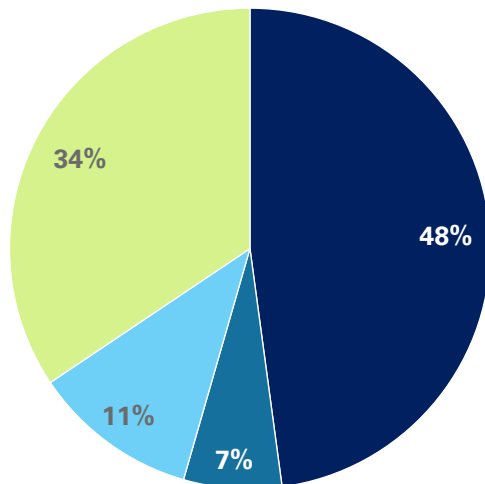
Data as of December 31, 2024. Sources include NCREIF, CJA, Manager data, and NEPC.

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 CJA Benchmark data represents pooled horizon internal rate of return (IRR) calculations, net of fees, across value-add and opportunistic real estate funds.
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.

PORTFOLIO ALLOCATION OVERVIEW

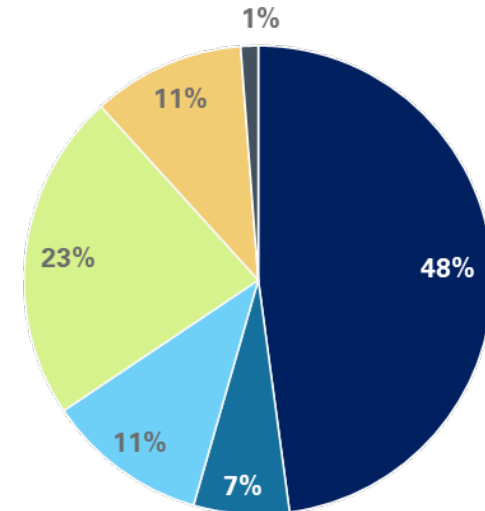
- The charts below show PA SERS real estate portfolio broken out by strategy and by investment structure, with closed-end funds further broken out by lifecycle stage
- As shown, approximately 55% of the portfolio is invested in Core, Core-Plus, and REITs
 - We anticipate the Value-Add and Opportunistic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

Allocation by Strategy



■ Core & Core-Plus
■ REITs
■ Value-Add & Opportunistic SMAs
■ Value-Add & Opportunistic Funds

Allocation by Structure & Lifecycle Stage

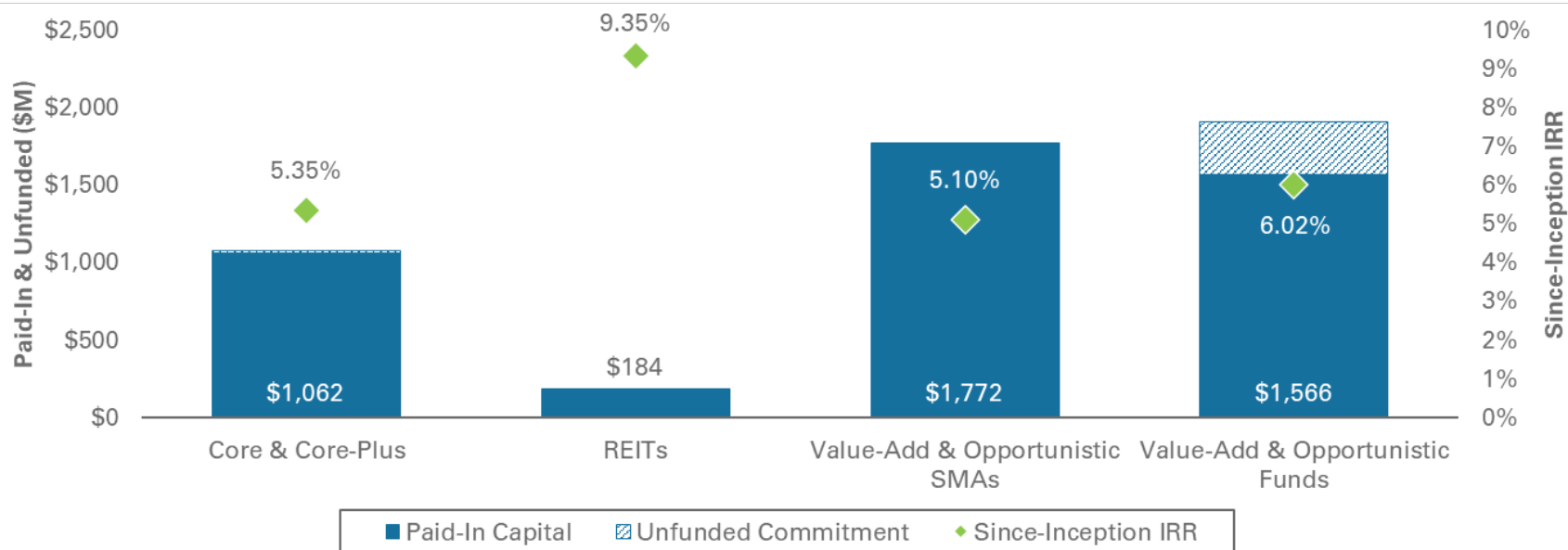


■ Open-End Private Funds
■ Public Securities
■ Private SMAs
■ Investing (Closed-End Funds)
■ Harvesting (Closed-End Funds)
■ Liquidating (Closed-End Funds)

Data as of December 31, 2024.

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

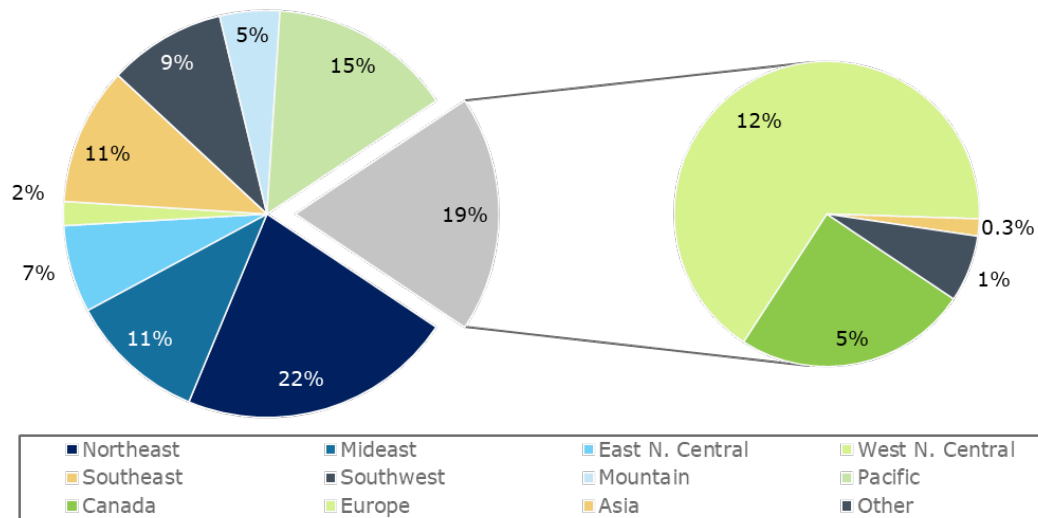


Investment Strategy	Commitment	Paid-In Capital	Unfunded Commitment	Cumulative Distributions	Valuation	Total Value	Net Benefit	Call Ratio	DPI Ratio	TVPI Ratio	IRR
Core & Core-Plus	1,077,174,584	1,061,541,976	15,632,609	423,472,734				99%			5.35%
REITs	183,616,773	183,616,773	0	211,168,336	145,657,534	356,825,870	173,209,097	100%	1.15x	1.94x	9.35%
Value-Add & Opportunistic SMAs	1,753,705,990	1,771,914,378	0	2,270,627,960	245,903,750	2,516,531,710	744,617,332	101%	1.28x	1.42x	5.10%
Value-Add & Opportunistic Funds	1,871,542,920	1,566,252,526	339,764,441	1,207,223,819	759,834,043	1,967,057,862	400,805,337	84%	0.77x	1.26x	6.02%
Total (Active Investments)	4,886,040,267	4,583,325,652	355,397,050	4,112,492,848				94%	0.90x		5.43%

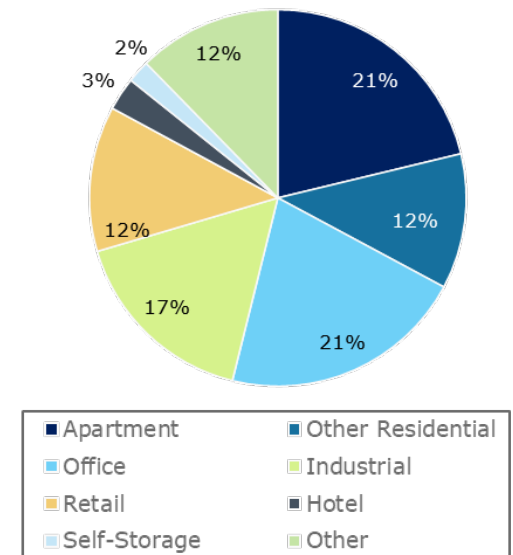
PORTFOLIO DIVERSIFICATION

- 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

Geography

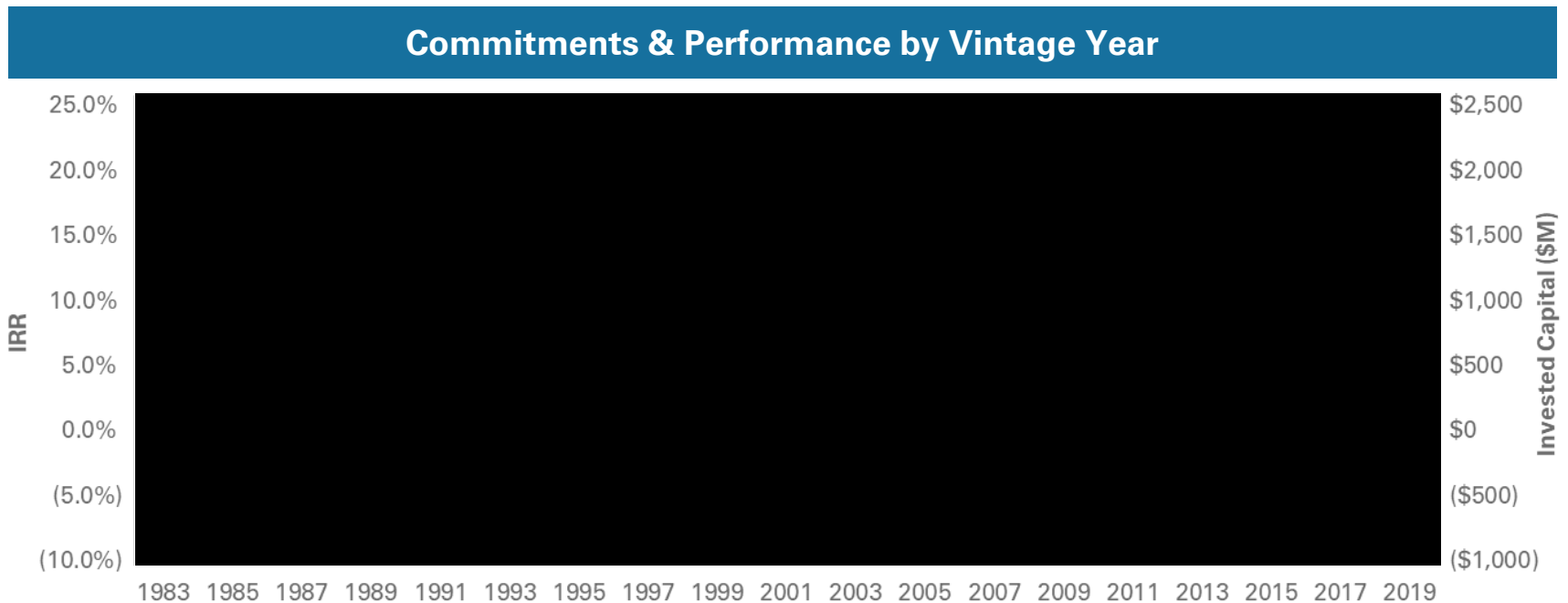


Property Type



HISTORICAL PERFORMANCE BY VINTAGE

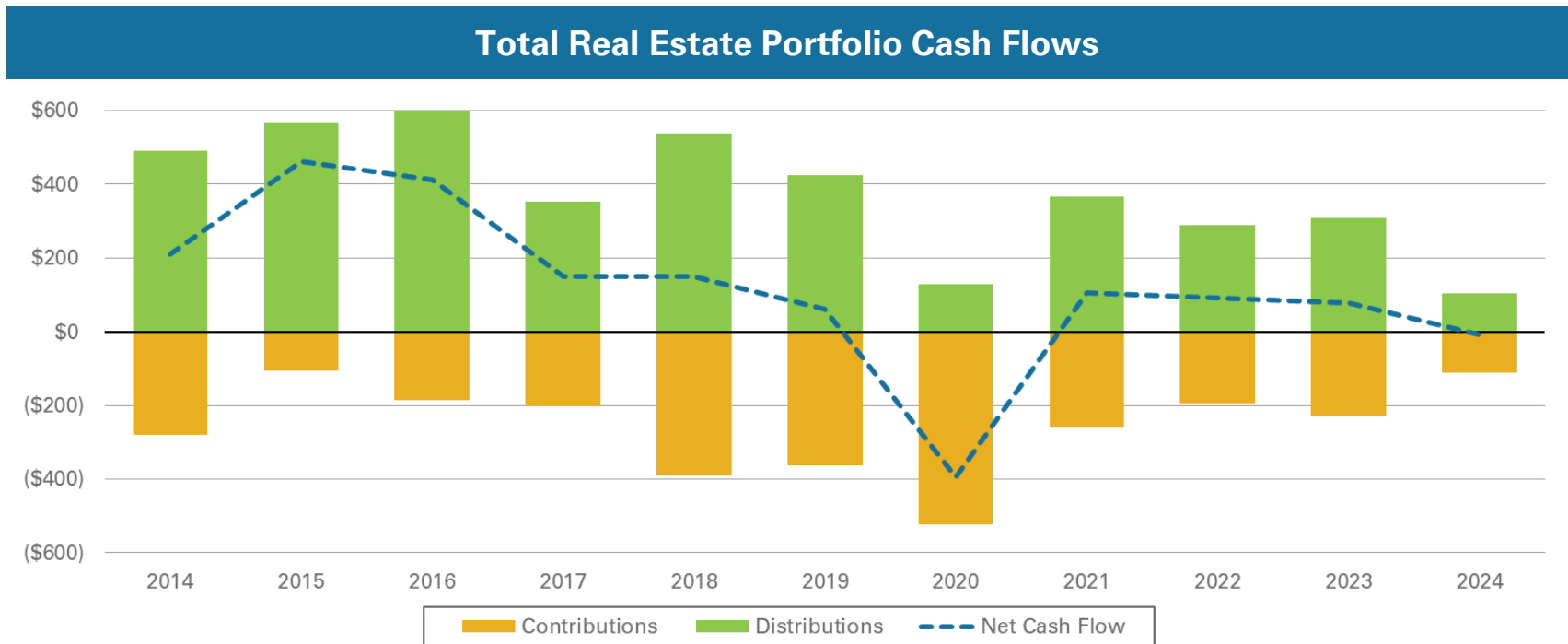
- The following chart illustrates capital invested and inception-to-date performance by vintage year as of December 31, 2024
 - Historic inconsistent pacing has negatively impacted portfolio performance
 - The PA SERS Investment Office and NEPC are focused on maintaining a more consistent investment pacing schedule to mitigate the risk of heavy capital investments in poor vintage years



Data as of December 31, 2024. Notes: Vintage years 2020 and later are excluded as data is less meaningful. 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 years
 - The portfolio is cash flow slightly negative for 2024, though overall flows (both calls and distributions) remain muted



ACTIVE DIVERSE-LED INVESTMENTS

- The table below displays the since-inception performance of active (non-liquidated) investments managed by diverse-owned and diverse-led 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	2,000,000	53,441,001	55,441,001	7,472,169	0.04x	1.16x	4.47%
Blue Moon Senior Housing II, L.P.	2019	50,000,000	48,051,089	1,948,911	279,720	48,723,790	49,003,510	952,421	0.01x	1.02x	0.63%
HotelAVE Separate Account	2018	95,994,432	95,994,432	0	57,691,396	10,684,636	68,376,032	(27,618,400)	0.60x	0.71x	(14.18%)
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	18,448,303	18,448,303	(3,126,437)	0.00x	0.86x	(10.92%)
Scout Fund II-A, L.P.	2016	30,000,000	30,000,000	0	3,238,651	12,063,158	15,301,808	(14,698,192)	0.11x	0.51x	(9.20%)
Total		275,994,432	259,683,648	16,342,205	63,209,767						(4.98%)

NM - Not Meaningful

Data as of December 31, 2024. 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 December 31, 2024. 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.

2. REAL ESTATE MARKET & PORTFOLIO UPDATE

REAL ESTATE MARKET UPDATE

- **Real estate markets seem to have turned a corner, but uncertainty persists**
 - The NCREIF ODCE Index is now in positive territory for the trailing one-year period through the first quarter of 2025
 - While quarterly core returns have been positive, this has been primarily driven by current income, as asset appreciation remains muted
 - Broader market volatility and economic concerns fuel investor uncertainty
- **NEPC continues to believe that opportunistic strategies and select sector-focused 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 healthcare-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



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	45%	70%
REITs	7%	5%



APPENDIX 1:

Investment Level
Performance
as of December 31, 2024

ACTIVE INVESTMENTS

Investments		
Investment Name	Vintage Year	Commitment
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
Ares PA Opportunities Fund, L.P. - Opportunistic Real Estate	2023	100,000,000
Blackstone Property Partners, L.P.	2017	300,000,000
Blackstone Real Estate Partners IV, L.P.	2003	25,000,000
Blackstone Real Estate Partners V, L.P.	2006	50,000,000
Blackstone Real Estate Partners VI, L.P.	2007	75,000,000
Blackstone Real Estate Partners VII, L.P.	2011	75,000,000
Blackstone Real Estate Partners X, L.P.	2022	75,000,000
Blue Moon Senior Housing II Sidecar L.P.	2019	50,000,000
Blue Moon Senior Housing II, L.P.	2019	50,000,000
Blue Owl Real Estate Capital Fund IV, L.P.	2017	100,000,000
Blue Owl Real Estate Capital Fund V, L.P.	2020	50,000,000
Blue Owl Real Estate Capital Fund VI, L.P.	2022	75,000,000
Blue Owl Real Estate Capital Net Lease Property Fund, L.P.	2018	309,743,743
BPG Investment Partnership IX, L.P.	2012	25,000,000
BPG Investment Partnership VI, L.P.	2002	25,000,000
BPG Investment Partnership VII, L.P.	2005	25,000,000
C-III Recovery Fund III, L.P.	2017	100,000,000
CenterSquare Real Estate Securities	2002	183,616,773
Heitman America Real Estate Trust, L.P.	2007	100,000,000
Heitman Separate Account	1988	813,992,364
Henderson Park Enhanced Income Fund, SCSp	2019	300,000,000
HotelAVE Separate Account	2018	95,994,432

Trailing Period Returns (IRR) %							
(QTD)	(YTD)	(1 Yr)	(3 Yrs)	(5 Yrs)	(7 Yrs)	(10 Yrs)	SI IRR
-1.46%	-4.92%	-4.92%	-7.33%	9.17%	4.97%	-3.76%	3.22%
NM	NM	NM	NM	NM	NM	NM	NM
-3.30%	-5.82%	-5.82%	-3.83%	1.10%			2.73%
12.28%	-7.80%	-7.80%	-4.23%	37.72%	13.38%	1.09%	11.97%
4.00%	-0.08%	-0.08%	23.71%	24.67%	5.44%	10.04%	10.73%
1.05%	5.10%	5.10%	-1.32%	-4.77%	6.48%	7.32%	12.69%
-4.42%	-15.87%	-15.87%	-11.20%	-1.30%	2.54%	7.80%	14.17%
NM	NM	NM	NM	NM	NM	NM	NM
5.25%	15.30%	15.30%	6.55%				4.47%
3.03%	11.29%	11.29%	2.92%	1.07%			0.63%
-8.68%	-17.11%	-17.11%	3.77%	18.47%	17.10%		16.88%
0.59%	0.10%	0.10%	7.79%				11.99%
NM	NM	NM	NM	NM	NM	NM	NM
1.28%	2.25%	2.25%	6.61%	10.49%			10.20%
-0.73%	7.50%	7.50%	-0.79%	-2.26%	15.25%	16.13%	15.00%
-6.17%	-7.80%	-7.80%	141.95%	25.89%	13.98%	10.98%	13.51%
0.44%	1.58%	1.58%	-8.38%	1.59%	1.06%	5.99%	-0.64%
-5.37%	11.23%	11.23%	-7.67%	3.04%	5.83%	5.95%	9.35%
1.21%	-0.54%	-0.54%	-0.88%	3.87%	4.17%	6.65%	6.81%
1.22%	1.31%	1.31%	-0.14%	10.20%	8.54%	12.34%	4.58%
-1.98%	-5.36%	-5.36%	-27.65%	-21.83%			-14.18%



Data as of December 31, 2024. Performance metrics calculated by NEPC based on data provided by the investment managers.

NM - Not Meaningful

ACTIVE INVESTMENTS (CONTINUED)

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	512,111,494	4.27%	-47.62%	-47.62%	-42.24%	-31.59%	-16.93%	-2.12%	8.15%
LaSalle Takeover Account	2018	331,607,700	0.35%	-37.42%	-37.42%	-23.88%	-6.31%			1.05%
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	-0.26%	0.39%	0.39%	-11.57%	-9.48%	-3.51%	-0.43%	-0.71%
Mesirow Financial Real Estate Value Fund III, L.P.	2018	25,000,000	-0.42%	2.22%	2.22%	1.18%	10.89%			10.35%
Rockpoint Real Estate Fund III, L.P.	2007	50,000,000	-2.77%	3.09%	3.09%	-8.44%	-5.48%	-0.91%	0.12%	13.39%
Rockpoint Real Estate Fund V, L.P.	2015	50,000,000	-0.87%	-10.87%	-10.87%	-23.67%	-11.20%	-4.96%		-3.33%
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	-0.99%	2.18%	2.18%	-7.57%				-10.92%
Scout Fund II-A, L.P.	2016	30,000,000	1.33%	-7.54%	-7.54%	-25.34%	-16.11%	-9.98%		-9.20%
Senior Housing Partners V, L.P.	2015	45,727,881	-1.77%	-13.07%	-13.07%	-10.30%	-5.20%	-1.25%		0.25%
Senior Housing Partners VI, L.P.	2019	100,000,000	-1.87%	-9.11%	-9.11%	-7.18%	-5.94%			-6.08%
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	0.73%	-2.62%	-2.62%	-4.30%	-0.23%	1.25%	4.66%	6.77%
ValStone Opportunity Fund V, LLC	2014	14,663,402	4.56%	1.17%	1.17%	0.38%	1.62%	4.74%	6.05%	6.20%
Westbrook Real Estate Fund VI, L.P.	2006	35,000,000	0.38%	0.72%	0.72%	-0.07%	-0.28%	-0.85%	-0.32%	0.23%
Westbrook Real Estate Fund VII, L.P.	2007	50,000,000	-0.17%	-2.41%	-2.41%	-14.75%	-10.94%	-7.88%	-1.53%	1.44%
Westbrook Real Estate Fund VIII, L.P.	2009	50,000,000	-11.59%	-27.04%	-27.04%	-17.79%	-15.92%	-11.68%	-5.86%	8.41%
Total			-1.83%	-7.37%	-7.37%	-7.84%	-0.33%	2.02%	3.55%	5.43%



Data as of December 31, 2024. Performance metrics calculated by NEPC based on data provided by the investment managers.

NM - Not Meaningful

PERFORMANCE BY STRATEGY

Investments		Commitments		Contributions & Distributions		Valuations			Performance		
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	\$24,533,637	\$333,308,973	\$357,842,610	\$57,842,610	0.08	1.19	2.73%
Blue Owl Real Estate Capital Net Lease Property Fund, L.P.	2018	\$309,743,743	\$0	\$309,743,743	\$90,777,189	\$354,529,838	\$445,307,027	\$135,563,284	0.29	1.44	10.20%
Heitman America Real Estate Trust, L.P.	2007	\$100,000,000	\$0	\$100,000,000	\$104,036,693	\$145,625,340	\$249,662,033	\$149,662,033	1.04	2.50	6.81%
Henderson Park Enhanced Income Fund, SCSp	2019	\$341,872,317	\$15,632,609	\$326,239,708	\$75,467,864						
Trumbull Property Fund, L.P.	1988	\$25,558,525	\$0	\$25,558,525	\$128,657,350	\$15,787,339	\$144,444,689	\$118,886,164	5.03	5.65	6.77%
Total Core/Core-Plus		\$1,077,174,584	\$15,632,609	\$1,061,541,976	\$423,472,734						5.35%
Value-Add/Opportunistic SMAs											
Heitman Separate Account	1988	\$813,992,364	\$0	\$825,635,117	\$1,230,476,873	\$25,904,729	\$1,256,381,602	\$430,746,485	1.49	1.52	4.58%
HotelAVE Separate Account	2018	\$95,994,432	\$0	\$95,994,432	\$57,691,396	\$10,684,636	\$68,376,032	-\$27,618,400	0.60	0.71	-14.18%
LaSalle Separate Account	1994	\$512,111,494	\$0	\$515,172,073	\$792,997,999	\$50,921,888	\$843,919,887	\$328,747,814	1.54	1.64	8.15%
LaSalle Takeover Account	2018	\$331,607,700	\$0	\$335,112,756	\$189,461,692	\$158,392,497	\$347,854,189	\$12,741,433	0.57	1.04	1.05%
Total Value-Add/Opportunistic SMAs		\$1,753,705,990	\$0	\$1,771,914,378	\$2,270,627,960	\$245,903,750	\$2,516,531,710	\$744,617,332	1.28	1.42	5.10%
REIT											
CenterSquare Real Estate Securities	2002	\$183,616,773	\$0	\$183,616,773	\$211,168,336	\$145,657,534	\$356,825,870	\$173,209,097	1.15	1.94	9.35%
Total REIT		\$183,616,773	\$0	\$183,616,773	\$211,168,336	\$145,657,534	\$356,825,870	\$173,209,097	1.15	1.94	9.35%
Value Add/Opportunistic											
Activum SG Fund VI L.P.	2019	\$57,035,257	\$3,298,961	\$53,727,863	\$9,726,373						
Activum SG Fund VI Pennsylvania Side-Car L.P.	2019	\$54,792,221	\$20,691,496	\$34,100,725	\$438,595						
AG Asia Realty Fund, L.P.	2007	\$23,500,000	\$1,340,156	\$23,500,000	\$27,487,500	\$42,853	\$27,530,353	\$4,030,353	1.17	1.17	3.22%
Ares PA Opportunities Fund, L.P. - Opportunistic Real Estate	2023	\$100,000,000	\$93,042,801	\$6,957,199	\$0	NM	NM	NM	NM	NM	NM
Blackstone Real Estate Partners IV, L.P.	2003	\$25,000,000	\$0	\$25,004,498	\$41,355,631	\$0	\$41,355,631	\$16,351,133	1.65	1.65	11.97%
Blackstone Real Estate Partners V, L.P.	2006	\$50,000,000	\$208,703	\$49,791,297	\$102,189,651	\$61,318	\$102,250,969	\$52,459,672	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	\$39,152	\$158,008,847	\$83,217,743	2.11	2.11	12.69%
Blackstone Real Estate Partners VII, L.P.	2011	\$75,000,000	\$5,714,150	\$72,044,203	\$123,475,872	\$9,254,714	\$132,730,586	\$60,686,384	1.71	1.84	14.17%
Blackstone Real Estate Partners X, L.P.	2022	\$75,000,000	\$55,716,642	\$21,405,205	\$55,706	NM	NM	NM	NM	NM	NM
Blue Moon Senior Housing II Sidecar L.P.	2019	\$50,000,000	\$2,062,589	\$47,968,832	\$2,000,000	\$53,441,001	\$55,441,001	\$7,472,169	0.04	1.16	4.47%
Blue Moon Senior Housing II, L.P.	2019	\$50,000,000	\$1,948,911	\$48,051,089	\$279,720	\$48,723,790	\$49,003,510	\$952,421	0.01	1.02	0.63%
Blue Owl Real Estate Capital Fund IV, L.P.	2017	\$100,000,000	\$0	\$100,000,000	\$119,222,832	\$31,169,825	\$150,392,657	\$50,392,657	1.19	1.50	16.88%
Blue Owl Real Estate Capital Fund V, L.P.	2020	\$50,000,000	\$0	\$49,996,863	\$19,547,140	\$43,735,416	\$63,282,556	\$13,285,693	0.39	1.27	11.99%
Blue Owl Real Estate Capital Fund VI, L.P.	2022	\$75,000,000	\$44,285,052	\$30,589,338	\$926,523	NM	NM	NM	NM	NM	NM



Data as of December 31, 2024. Performance metrics calculated by NEPC based on data provided by the investment managers. Note that, due to rounding, there may be slight differences between the summed figures, subtotals, totals, and amounts shown elsewhere in this presentation.

PERFORMANCE BY STRATEGY (CONTINUED)

Investments		Commitments		Contributions & Distributions		Valuations			Performance		
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	\$8,309	\$44,929,689	\$20,385,977	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	\$10,246,172						
LEM Multifamily Fund VI, L.P.	2022	\$75,000,000	\$33,937,500	\$41,062,500	\$1,304,348	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	\$8,083,306	\$23,395,050	-\$979,950	0.63	0.96	-0.71%
Mesirow Financial Real Estate Value Fund III, L.P.	2018	\$25,647,559	\$0	\$25,859,215	\$10,600,399	\$30,728,279	\$41,328,678	\$15,469,464	0.41	1.60	10.35%
Rockpoint Real Estate Fund III, L.P.	2007	\$50,632,887	\$4,241,165	\$50,675,144	\$68,151,141	\$1,112,551	\$69,263,692	\$18,588,548	1.34	1.37	13.39%
Rockpoint Real Estate Fund V, L.P.	2015	\$50,000,000	\$7,108,485	\$48,314,982	\$25,396,310	\$16,669,477	\$42,065,787	-\$6,249,195	0.53	0.87	-3.33%
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	\$18,448,303	\$18,448,303	-\$3,126,437	0.00	0.86	-10.92%
Scout Fund II-A, L.P.	2016	\$30,000,000	\$0	\$30,000,000	\$3,238,651	\$12,063,158	\$15,301,808	-\$14,698,192	0.11	0.51	-9.20%
Senior Housing Partners V, L.P.	2015	\$45,727,881	\$4,590,192	\$41,137,690	\$6,017,640	\$35,809,251	\$41,826,891	\$689,201	0.15	1.02	0.25%
Senior Housing Partners VI, L.P.	2019	\$100,000,000	\$12,939,604	\$86,966,354	\$0	\$73,113,982	\$73,113,982	-\$13,852,372	0.00	0.84	-6.08%
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	\$73,854,062						
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	\$12,536,490	\$22,701,324	\$8,037,547	0.69	1.55	6.20%
Westbrook Real Estate Fund VI, L.P.	2006	\$35,000,000	\$0	\$38,550,099	\$38,837,150	\$145,779	\$38,982,929	\$432,830	1.01	1.01	0.23%
Westbrook Real Estate Fund VII, L.P.	2007	\$50,000,000	\$0	\$56,376,719	\$56,575,755	\$5,004,019	\$61,579,774	\$5,203,055	1.00	1.09	1.44%
Westbrook Real Estate Fund VIII, L.P.	2009	\$50,000,000	\$0	\$54,366,448	\$63,418,319	\$4,137,971	\$67,556,290	\$13,189,842	1.17	1.24	8.41%
Total Value Add/Opportunistic		\$1,871,542,920	\$339,764,441	\$1,566,252,526	\$1,207,223,819	\$759,834,043	\$1,967,057,862	\$400,805,337	0.77	1.26	6.02%
Total		\$4,886,040,267	\$355,397,050	\$4,583,325,652	\$4,112,492,848				0.90		5.43%



Data as of December 31, 2024. Performance metrics calculated by NEPC based on data provided by the investment managers. Note that, due to rounding, there may be slight differences between the summed figures, subtotals, totals, and amounts shown elsewhere in this presentation.



APPENDIX 2:

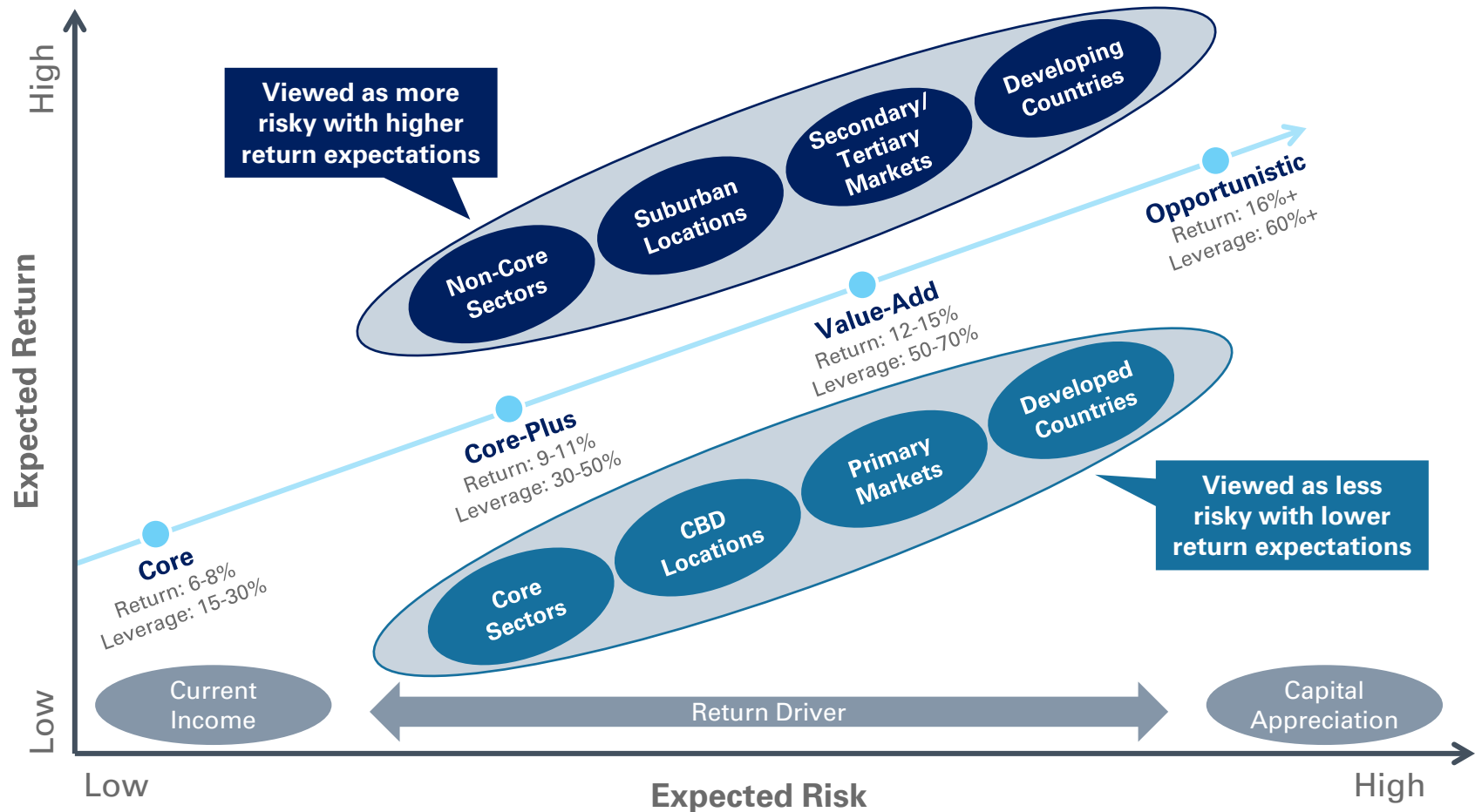
Real Estate Strategy Summaries

SPECTRUM OF REAL ESTATE INVESTMENT STRATEGIES

	Real Estate Investment Style / Overview	Investment Strategy	Portfolio Role	Considerations
Core Strategies	Core / Core-Plus <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Current income Broad exposure to commercial real estate (asset class beta) Inflation protection 	<ul style="list-style-type: none"> Vehicles are semi-liquid (entrance/exit queues) Limited alpha producing opportunities
	RE Securities <ul style="list-style-type: none"> Return driver: income Primary vehicle: REIT funds Historical avg. returns: 7-9% Leverage: 30-50% Hold period: long-term 	Stabilized income producing assets	<ul style="list-style-type: none"> Current income (dividends) Long-term exposure to commercial real estate (beta) Long-term inflation protection 	<ul style="list-style-type: none"> Volatility Equity correlation
Non-Core Strategies	Value-Add <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Provides part current income and capital appreciation Some inflation protection 	<ul style="list-style-type: none"> Vehicles are semi-liquid or illiquid Vintage year is important Higher leverage vs. core Poor benchmarks
	Opportunistic <ul style="list-style-type: none"> Return driver: appreciation Primary vehicle: closed-end funds Historical avg. returns: 10-12% Leverage: 60%+ Hold period: varies 	Distressed investments, recapitalizations, development, etc.	<ul style="list-style-type: none"> Real estate alpha through capital appreciation with minimal current income 	<ul style="list-style-type: none"> Vehicles are illiquid Vintage year is important High leverage Poor benchmarks

RELATIVE EXPECTED RISK RETURN PROFILE

ILLUSTRATIVE RISK / RETURN PROFILE





APPENDIX 3:

Disclaimers & Disclosures

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