



Alternative Investment Performance Supplement

Nebraska Investment Council
Data as of 12/31/2019

Overview

- The state of Nebraska's Defined Benefit Plan, Cash Balance Benefit Plan, and Health Care and 50/50 Endowments invest in Private Equity and Real Estate
 - 5% policy target to Private Equity (all pools)
 - 7.5% policy target to Real Estate for DB and CBB Plans, 5% policy target to Real Estate for endowments
- The slides that follow include vintage year and partnership level performance information for these investments
- We have also included summary performance information on OSERS' private market investments
- As private market investments are not valued as frequently as public market investments, performance information is reported on a time lag
 - All information presented in this presentation is as of December 31st, 2019

Real Estate–DB/CBB & Endowment Performance Summary by Vintage Year

Vintage Year Performance – DB/CBB

Vintage Year	Number of Investments	Commitment	Unfunded Commitment	Cumulative Paid-In	Cumulative Distributions	Net Asset Value	Total Value	DPI	Return Multiples	
									TVPI ¹	IRR ²
2004	0	\$0.00	\$0.00	\$183,528,392.00	\$226,385,612.00	\$0.00	\$226,385,613.00	1.23x	1.23x	11.69%
2006	2	\$250,000,000.00	\$0.00	\$264,653,173.00	\$118,527,410.00	\$354,829,327.00	\$473,356,737.00	0.45x	1.79x	5.22%
2007	3	\$124,000,000.00	\$881,917.00	\$124,200,652.00	\$81,580,063.00	\$91,316,932.00	\$172,896,995.00	0.66x	1.39x	5.57%
2008	2	\$50,000,000.00	\$821,564.00	\$49,318,825.00	\$66,629,174.00	\$5,319,492.00	\$71,948,666.00	1.35x	1.46x	7.93%
2010	2	\$150,000,000.00	\$4,909,392.00	\$145,090,608.00	\$176,173,839.00	\$69,009,915.00	\$245,183,754.00	1.21x	1.69x	11.36%
2012	2	\$45,000,000.00	\$5,572,497.00	\$41,965,251.00	\$51,052,900.00	\$12,212,036.00	\$63,264,936.00	1.22x	1.51x	13.63%
2013	1	\$20,000,000.00	\$0.00	\$21,598,377.00	\$26,339,541.00	\$3,276,556.00	\$29,616,097.00	1.22x	1.37x	9.72%
2014	1	\$50,000,000.00	\$4,901,450.00	\$45,098,550.00	\$31,765,980.00	\$23,109,651.00	\$54,875,631.00	0.70x	1.22x	10.10%
2015	3	\$200,000,000.00	\$20,975,776.00	\$185,819,724.00	\$64,477,053.00	\$167,645,640.00	\$232,122,693.00	0.35x	1.25x	8.44%
2016	1	\$40,000,000.00	\$7,862,848.00	\$32,864,425.00	\$3,609,695.00	\$32,164,614.00	\$35,774,309.00	0.11x	1.09x	5.23%
2017	1	\$40,000,000.00	\$29,327,174.00	\$16,065,520.00	\$5,392,694.00	\$12,943,986.00	\$18,336,680.00	0.34x	1.14x	15.61%
2018	3	\$232,000,000.00	\$61,264,256.00	\$178,517,739.00	\$5,542,600.00	\$181,423,987.00	\$186,966,587.00	0.03x	1.05x	6.19%
2019	1	\$40,000,000.00	\$39,735,362.00	\$264,638.00	\$0.00	(\$286,940.00)	(\$286,940.00)	0.00x	0.00x	0.00%
Total	22	\$1,241,000,000.00	\$176,252,236.00	\$1,288,985,874.00	\$857,476,561.00	\$952,965,196.00	\$1,810,441,758.00	0.67x	1.40x	6.91%

- Vintage years and investment types largely drive performance
- The 2004 vintage year consists of 100% REIT investments
- The 2006 vintage year consists of 100% open-end diversified Core equity funds

Vintage Year Performance -- Endowment

Vintage Year	Number of Investments	Commitment	Unfunded Commitment	Cumulative Paid-In	Cumulative Distributions	Net Asset Value	Total Value	DPI ¹	Return Multiples	
									TVPI ²	IRR
2008	1	\$20,000,000.00	\$1,566,177.00	\$22,108,459.00	\$31,364,111.00	\$1,541,709.00	\$32,905,820.00	1.42x	1.49x	11.30%
2009	2	\$16,000,000.00	\$1,014,151.00	\$14,966,199.00	\$11,672,251.00	\$10,856,618.00	\$22,528,869.00	0.78x	1.51x	8.09%
2010	2	\$20,000,000.00	\$0.00	\$20,000,000.00	\$16,430,151.00	\$18,872,983.00	\$35,303,134.00	0.82x	1.77x	8.90%
2014	2	\$17,500,000.00	\$2,448,948.00	\$15,025,796.00	\$10,181,826.00	\$9,020,250.00	\$19,202,076.00	0.68x	1.28x	11.58%
2016	1	\$6,000,000.00	\$0.00	\$6,000,000.00	\$720,895.00	\$6,644,553.00	\$7,365,448.00	0.12x	1.23x	5.93%
2019	1	\$11,500,000.00	\$0.00	\$10,419,630.00	\$261,712.00	\$10,560,679.00	\$10,822,391.00	0.03x	1.04x	5.82%
Total³	9	\$91,000,000.00	\$5,029,276.00	\$88,520,084.00	\$70,630,946.00	\$57,496,792.00	\$128,127,738.00	0.80x	1.45x	9.41%

¹ DPI is the ratio of Cumulative Distributions to Cumulative Paid-In

² TVPI is the ratio of Total Value to Cumulative Paid-In

³ Total includes liquidated positions

Real Estate–DB/CBB Portfolio Time-Weighted Performance¹ by Investment

Returns (%)	Market Value (\$)	Quarter				1 Year				3 Year				5 Year				Inception		TWR Calculation Inception	Net IRR	Equity Multiple
		INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	TGRS	TNET			
Core																						
Barings Core Property Fund LP	66,218,134	1.0	0.6	1.6	1.4	4.2	2.7	7.0	6.4	4.2	3.1	7.4	6.6	4.6	4.9	9.7	8.9	10.7	9.8	1Q11	10.1	1.7
Lion Properties Fund	162,333,385	0.9	1.1	2.0	1.8	3.9	3.3	7.3	6.4									7.3	6.4	1Q19	6.4	1.1
PRISA SA	199,184,371	1.0	0.3	1.3	1.1	4.3	1.9	6.3	5.5	4.4	3.0	7.5	6.6	4.6	4.6	9.3	8.4	6.4	5.5	2Q06	5.6	1.8
UBS Trumbull Property Fund	155,644,956	1.3	-1.2	0.0	-0.1	4.8	-6.6	-2.1	-2.8	4.7	-1.0	3.6	2.8	4.7	1.4	6.1	5.2	5.9	4.9	3Q06	4.8	1.7
Core	583,380,846	1.1	0.1	1.2	1.0	4.3	0.0	4.3	3.5	4.4	1.9	6.4	5.6	4.6	3.8	8.5	7.6	6.6	5.7	2Q06	5.9	1.6
Core Debt																						
UBS Trumbull Property Income Fund	136,118,197	1.0	0.6	1.6	1.4	4.0	1.9	6.0	5.2	4.1	2.2	6.4	5.6					7.7	6.9	2Q15	6.7	1.2
Core Debt	136,118,197	1.0	0.6	1.6	1.4	4.0	1.9	6.0	5.2	4.1	2.2	6.4	5.6					7.7	6.9	2Q15	6.7	1.2
Core Plus																						
PRISA II	90,085,249	1.0	1.1	2.1	1.9	4.0	3.4	7.5	6.3	4.1	4.1	8.3	7.1	4.4	6.0	10.6	9.4	4.9	3.8	3Q07	6.9	1.7
Core Plus	90,085,249	1.0	1.1	2.1	1.9	4.0	3.4	7.5	6.3	4.1	4.1	8.3	7.1	4.4	6.0	10.6	9.4	4.9	3.8	3Q07	6.9	1.7
Value Added																						
Almanac Realty Securities V, LP	230,780	-0.1	0.2	0.1	-0.1	9.1	-2.7	7.1	5.8	26.2	-11.7	14.7	13.0	22.6	-10.6	11.8	10.3	12.8	10.0	3Q08	11.9	1.5
Almanac Realty Securities VII	17,445,257	1.9	6.8	8.6	8.3	8.9	9.1	18.6	17.3	8.3	9.4	18.4	16.2					17.9	14.2	3Q15	14.2	1.4
Almanac Realty Securities VIII	3,398,417	5.6	2.9	8.5	2.3													10.1	-3.9	3Q19	-25.2	0.9
Heltman Value Partners II	50,051	2.2	0.0	2.2	2.2	-0.1	0.0	-0.1	-0.1	10.2	2.7	13.1	13.2	8.2	4.9	13.4	13.3	5.8	5.3	1Q08	8.6	1.5
Rockwood Capital Real Estate Partners Fund IX	5,312,365	0.5	0.3	0.8	-0.1	2.9	3.3	6.3	3.4	3.0	6.2	9.4	6.6	2.7	9.3	12.2	9.7	16.5	13.3	4Q13	13.0	1.4
Rockwood Capital Real Estate Partners Fund X	32,164,614	0.6	3.2	3.8	3.3	2.5	4.9	7.6	5.5	1.7	8.2	9.9	6.3					6.3	3.2	4Q16	5.2	1.1
Rockwood Capital Real Estate Partners Fund XI	-286,940	22.7	37.8	60.5	60.5													60.5	60.5	4Q19	0.0	-1.1
Value Added	58,314,544	1.0	3.8	4.8	4.1	5.4	5.9	11.5	8.9	6.0	7.5	13.9	11.1	6.6	6.3	13.2	10.5	4.3	1.8	4Q07	6.1	1.2
Opportunistic																						
AG Realty Fund VIII	6,899,671	-0.9	-0.8	-1.7	-1.6	-3.4	-0.9	-4.3	-4.3	-2.2	6.9	4.6	2.8	-1.1	13.7	12.4	9.0	15.6	11.1	2Q12	14.0	1.6
CBRE Strategic Partners U.S. Opportunity 5	5,088,712	0.0	4.3	4.3	4.3	-0.4	8.1	7.7	7.7	1.3	7.5	8.9	8.2	4.3	6.4	11.2	10.4	-12.2	-14.1	4Q08	5.3	1.4
Landmark Real Estate Fund VI	2,791,781	1.3	-3.7	-2.4	-2.7	15.6	-20.1	-6.1	-7.4	10.9	-14.1	-3.2	-4.4	16.7	-16.2	-0.4	-1.7	8.0	6.3	1Q11	19.3	1.6
Landmark Real Estate Fund VII	23,109,651	1.6	-1.8	-0.2	-0.4	5.1	-5.0	-0.1	-1.4	8.2	-2.9	5.2	3.2	12.6	9.0	22.1	16.4	22.1	16.4	1Q15	10.1	1.2
Landmark Real Estate Fund VIII	12,943,986	-1.2	2.1	0.9	0.0	-1.0	12.7	11.9	6.0									-1.6	-6.4	4Q17	15.6	1.1
Rockpoint Real Estate Fund III	1,181,632	-0.1	3.7	3.6	2.9	2.5	5.5	8.3	5.5	1.9	4.2	6.2	3.4	1.0	5.6	6.7	2.1	9.8	3.4	2Q09	13.7	1.4
Torchlight Debt Opportunity Fund IV	3,276,556	1.1	-5.3	-4.1	-1.5	6.0	-8.0	-2.4	1.4	8.3	0.8	9.1	7.8	8.4	1.7	10.2	8.7	10.9	9.0	1Q14	9.7	1.4
Torchlight Debt Opportunity Fund V	14,082,186	2.1	3.2	5.3	3.7	8.5	4.0	12.7	8.8	11.6	6.5	18.6	12.6					20.5	10.3	3Q15	11.7	1.3
Torchlight Debt Opportunity Fund VI	15,692,185	3.0	2.2	5.2	3.4	13.6	11.5	26.2	13.7									23.1	7.4	3Q18	8.3	1.1
Opportunistic	85,066,360	1.2	0.6	1.8	1.1	5.4	0.5	5.9	3.4	7.6	2.0	9.7	6.3	9.5	3.0	12.7	9.0	1.2	-3.5	4Q08	11.3	1.3
Total Portfolio																						
NIC - DB Direct	952,965,196	1.1	0.6	1.6	1.3	4.4	1.0	5.4	4.3	4.8	2.6	7.5	6.2	5.3	4.0	9.5	8.1	8.2	7.0	1Q05	6.9	1.4
Indices																						
NCREIF Fund Index – Open End Diversified Core Equity *NFI-ODCE Value Weight*		1.0	0.5	1.5	1.3	4.2	1.1	5.3	4.4	4.2	2.8	7.1	6.1	4.4	4.4	9.0	8.0	7.7	6.7	1Q05		

¹Returns shown are time-weighted, which ignores both the timing and magnitude of cash flows into and out of the portfolio. While time-weighted returns are commonly used as a standard measure of performance in traditional asset classes, the Internal Rate of Return ("IRR") is a better and more common measure of real estate performance

Real Estate–Endowment Portfolio Time-Weighted Performance by Investment

Returns (%)	Market Value (\$)	Quarter				1 Year				3 Year				5 Year				Inception		TWR Calculation Inception	Net IRR	Equity Multiple
		INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	TGRS	TNET			
Core																						
Barings Core Property Fund LP	7,168,157	1.0	0.6	1.6	1.4	4.2	2.7	7.0	6.4	4.2	3.1	7.4	6.6	4.5	4.8	9.5	8.7	10.6	9.7	1Q11	10.2	1.8
Lion Properties Fund	10,560,679	0.9	1.1	2.0	1.8													5.2	4.5	2Q19	5.8	1.0
PRISA LP	9,616,110	1.0	0.2	1.3	1.1	4.3	1.8	6.2	5.3	4.5	2.8	7.4	6.5	4.6	4.4	9.2	8.3	12.1	11.0	1Q10	10.0	1.9
UBS Trumbull Property Fund	11,704,826	1.3	-1.2	0.0	-0.1	4.8	-6.6	-2.1	-2.8	4.7	-1.0	3.6	2.8	4.7	1.4	6.1	5.2	9.2	8.3	1Q10	7.4	1.7
Core	39,049,773	1.1	0.1	1.2	1.0	4.4	-0.3	4.0	3.3	4.4	1.8	6.2	5.4	4.6	3.6	8.4	7.5	12.5	11.4	1Q10	9.1	1.6
Core Debt																						
UBS Trumbull Property Income Fund	6,644,553	1.0	0.6	1.6	1.4	4.0	1.9	6.0	5.2	4.1	2.2	6.4	5.5					6.7	5.9	2Q16	5.9	1.2
Core Debt	6,644,553	1.0	0.6	1.6	1.4	4.0	1.9	6.0	5.2	4.1	2.2	6.4	5.5					6.7	5.9	2Q16	5.9	1.2
Opportunistic																						
Landmark Real Estate Fund VII	3,466,448	1.6	-1.8	-0.2	-0.4	5.1	-5.0	-0.1	-1.4	8.2	-2.9	5.2	3.2	12.5	9.0	22.0	16.3	22.0	16.3	1Q15	10.1	1.2
Metropolitan Real Estate Partners International III, L.P.	1,240,508	0.4	0.4	0.8	0.4	2.2	-8.7	-6.7	-8.0	3.5	-3.6	-0.1	-1.1	2.8	-2.1	0.7	-0.3	-11.0	-12.0	3Q09	5.5	1.1
Metropolitan Real Estate Partners VI, L.P.*	1,541,709	3.4	-7.3	-3.8	-3.9	0.9	-4.0	-2.8	-3.5	0.8	2.0	3.1	2.1	1.5	5.3	7.1	6.0	11.8	11.3	1Q09	11.3	1.5
Metropolitan Real Estate Secondaries and Co-Investments Fund, L.P.	5,553,802	0.6	-0.9	-0.3	-0.5	1.3	4.8	6.1	4.7	1.0	12.6	13.8	11.3					11.0	8.4	1Q16	12.6	1.3
Opportunistic	11,802,466	1.3	-1.9	-0.6	-0.8	2.5	-0.7	1.7	0.4	3.3	4.0	7.5	5.7	3.6	6.1	9.8	7.7	13.2	11.9	1Q09	10.1	1.3
Total Portfolio																						
NIC - DB Endowment	57,496,792	1.1	-0.3	0.8	0.6	3.9	-0.1	3.8	2.9	4.1	2.6	6.8	5.7	4.3	4.5	8.9	7.6	12.5	11.6	1Q09	9.4	1.4
Indices																						
NCREIF Fund Index – Open End Diversified Core Equity *NFI-ODCE Value Weight		1.0	0.5	1.5	1.3	4.2	1.1	5.3	4.4	4.2	2.8	7.1	6.1	4.4	4.4	9.0	8.0	6.8	5.9	1Q09		

Private Equity–DB/CBB & Endowment Performance Summary by Vintage Year

Defined Benefit Portfolio							
Vintage Year	Number of Investments	Total Commitments	Portfolio Returns			TVPI Quartile	IRR Quartile
			DPI ³	TVPI ⁴	IRR		
2005	1	\$50,000,000	1.28x	1.46x	6.86%	2	2
2006	2	125,000,000	1.27x	1.46x	7.31%	2	2
2007	5	103,002,649	1.25x	1.60x	10.13%	2	2
2008	5	104,500,000	1.75x	1.94x	16.50%	1	1
2009	4	70,000,000	1.05x	1.61x	10.13%	3	3
2010	2	35,000,000	0.66x	1.27x	6.49%	3	3
2011	2	35,000,000	1.77x	1.84x	20.36%	2	2
2012	5	105,000,000	0.89x	1.76x	16.02%	2	2
2013	4	87,500,000	0.66x	1.50x	13.99%	2	2
2014	5	144,599,150	0.55x	1.40x	12.49%	3	3
2015	2	45,000,000	0.52x	1.73x	25.73%	1	1
2016	3	115,070,600	0.29x	1.50x	29.12%	1	1
2017	6	300,000,000	0.07x	1.20x	15.97%	2	2
2018	2	98,968,000	0.18x	1.33x	88.20%	1	1
2019	3	150,000,000	0.00x	1.06x	12.67%	1	1
Total Defined Benefit Portfolio	51	\$1,568,640,399	0.80x	1.51x	12.05%	N/A	N/A

Endowment Portfolio							
Vintage Year	Number of Investments	Total Commitments	Portfolio Returns			TVPI Quartile	IRR Quartile
			DPI ³	TVPI ⁴	IRR		
2008	1	\$45,000,000	1.06x	1.69x	12.39%	2	2
2010	1	20,000,000	1.19x	1.94x	17.69%	1	1
2012	2	25,000,000	0.99x	1.61x	19.00%	2	1
2014	1	20,000,000	0.36x	1.54x	18.05%	2	2
2017	1	20,000,000	0.19x	1.37x	28.30%	1	1
2019	1	16,000,000	N/A	N/A	N/A	N/A	N/A
Total Endowment Portfolio	7	\$146,000,000	0.87x	1.67x	15.34%	N/A	N/A

- The Defined Benefit Portfolio's performance continues to progress and remains above the benchmark performance metrics of IRR, TVPI, and DPI. For the more mature vintage years 2008 and 2011 are standouts with 2012 and 2013 performing well also. Additionally, vintage years 2015, 2016, and 2018 are performing very well, but it is still too early to determine ultimate performance.
 - Within vintage year 2008, the two biggest drivers of outperformance are Ares Corporate Opportunities Fund III and Accel-KKR Capital Partners III, both funds producing net TVPIs above 2.0x and net IRRs above 20%. It should be noted that Accel-KKR III has been fully exited.
 - Vintage year 2012 investments are generating positive, steady performance with all five funds producing a net IRR of at least 12% and net TVPI of at least 1.5x.
- The Endowment Portfolio, composed primarily of fund of funds, experienced a strong year with all performance measures up year-over-year. The portfolio is also exceeding the benchmarks across DPI, TVPI and IRR.

Private Equity–DB/CBB & Endowment Performance by Investment

Partnership Name	Vintage Year	Investment Type	Total Commitments	Unfunded Commitment	Cumulative Paid-In	Cumulative Distributions	Net Asset Value	Total Value ¹	DPI ²	TVPI ³	IRR
Defined Benefit Portfolio											
TRG Growth Partnership II, L.P. ⁵	2006	Buyout - Large	\$25,000,000	\$674,886	\$24,757,592	\$25,570,271	\$3,662,256	\$29,232,526	1.03x	1.18x	3.48%
New Mountain Partners II, L.P.	2007	Buyout - Mega	25,000,000	1,714,702	25,858,710	34,052,247	19,522,345	53,574,592	1.33x	2.09x	13.54%
Presidio Partners 2007, L.P. ⁶	2007	Venture - Early	20,000,000	0	20,070,888	23,912,463	5,309,109	29,221,572	1.19x	1.46x	7.71%
Sun Capital Partners V, L.P.	2007	Turnaround	18,002,649	1,605,106	19,024,249	16,352,197	4,408,876	20,761,073	0.86x	1.09x	1.83%
The Resolute Fund I, L.P.	2007	Buyout - Large	25,000,000	2,141,983	27,566,066	30,007,390	9,688,472	39,695,862	1.09x	1.44x	8.27%
Wayzata Opportunities Fund II, L.P.	2007	Distressed Debt	15,000,000	3,000,000	17,475,000	32,711,698	227,572	32,939,270	1.87x	1.88x	16.49%
Accel-KKR Capital Partners II, L.P.	2008	Buyout - Medium	12,500,000	4,406,181	12,970,959	40,479,004	47,375	40,526,379	3.12x	3.12x	23.91%
Ares Corporate Opportunities Fund II, L.P.	2008	Buyout - Large	20,000,000	1,409,785	24,987,178	48,923,803	4,107,552	53,031,355	1.96x	2.12x	21.47%
Bridgepoint Europe IV, L.P. ⁷	2008	Buyout - Large	26,000,000	2,123,694	24,108,066	33,890,415	4,451,902	38,342,317	1.41x	1.59x	10.09%
QVC European Equity Partners V, L.P. ⁷	2008	Buyout - Mega	26,000,000	3,776,673	29,571,111	54,103,040	3,402,985	57,506,025	1.83x	1.94x	17.48%
Quantum Energy Partners V, L.P.	2008	Energy	20,000,000	2,412,870	21,448,748	20,439,535	9,205,624	29,645,159	0.95x	1.38x	8.40%
Fulcrum Growth Partners IV, L.P.	2009	Buyout - Small	10,000,000	2,017,362	8,905,639	8,130,075	9,647,167	17,777,242	0.91x	2.00x	11.28%
Lincolnshire Equity Fund IV, L.P.	2009	Buyout - Medium	20,000,000	207,037	21,792,058	25,007,689	8,555,171	33,562,860	1.15x	1.54x	10.44%
Longroad Capital Partners II, L.P.	2009	Distressed Debt	20,000,000	11,953,855	8,046,145	4,071,020	64,910	4,135,930	0.51x	0.51x	-27.80%
New Enterprise Associates 13, L.P.	2009	Venture - Balanced	20,000,000	300,000	19,702,071	24,086,310	14,579,125	38,665,435	1.22x	1.96x	13.76%
EF United States Power Fund IV, L.P.	2010	Energy	20,000,000	2	25,071,105	12,123,093	16,070,595	28,193,688	0.48x	1.12x	3.39%
Merit Mezzanine Fund V, L.P.	2010	Mezzanine	15,000,000	791,020	14,208,980	13,769,972	8,003,405	21,773,377	0.97x	1.53x	10.03%
Ares Mezzanine Partners, L.P.	2011	Mezzanine	15,000,000	722,466	8,520,566	9,780,971	63,014	9,843,985	1.15x	1.16x	8.80%
Lightyear Fund III, L.P.	2011	Buyout - Medium	20,000,000	2,466,079	23,120,352	46,353,453	2,039,305	48,392,758	2.00x	2.09x	22.83%
Ares Corporate Opportunities Fund IV, L.P.	2012	Buyout - Large	20,000,000	2,958,046	22,152,404	14,220,545	19,128,339	33,348,884	0.64x	1.51x	12.61%
Dover Street VII, L.P.	2012	Secondaries	25,000,000	2,250,000	22,750,000	27,041,539	9,704,470	36,746,009	1.19x	1.62x	20.65%
Green Equity Investors VI, L.P.	2012	Buyout - Mega	20,000,000	2,012,601	22,083,532	15,778,751	22,728,991	38,507,742	0.71x	1.74x	16.12%
McCarthy Capital V, L.P.	2012	Buyout - Small	20,000,000	1,680,253	19,976,511	18,790,527	16,615,486	35,406,013	0.94x	1.77x	13.71%
New Enterprise Associates 14, L.P.	2012	Venture - Balanced	20,000,000	900,000	19,107,229	18,109,554	24,999,474	43,109,028	0.95x	2.26x	17.77%
Accel-KKR Capital Partners IV, L.P.	2013	Buyout - Medium	12,500,000	8,559,144	11,908,233	19,188,420	11,424,782	30,613,202	1.61x	2.57x	36.82%
Beecken Petty O'Keefe Fund IV, L.P.	2013	Buyout - Medium	20,000,000	1,004,828	20,776,269	15,884,115	18,378,557	34,262,872	0.76x	1.65x	19.01%
Pine Brook Capital Partners II, L.P.	2013	Buyout - Large	30,000,000	2,176,586	35,600,356	10,964,712	33,491,922	44,456,634	0.31x	1.25x	7.10%
Wayzata Opportunities Fund II, L.P.	2013	Distressed Debt	25,000,000	19,842,312	12,358,995	7,107,312	4,373,315	11,480,627	0.58x	0.93x	-2.37%
QVC Capital Partners VI, L.P. ⁷	2014	Buyout - Mega	19,599,150	6,372,582	18,619,261	9,801,315	18,092,893	27,894,008	0.53x	1.50x	17.43%
New Mountain Partners IV, L.P.	2014	Buyout - Large	30,000,000	3,258,363	27,165,273	26,458,237	23,135,109	49,593,346	0.97x	1.83x	22.91%
Quantum Energy Partners VI, LP	2014	Energy	30,000,000	8,099,570	28,906,153	16,072,937	27,847,273	43,920,210	0.60x	1.63x	28.59%
The Energy & Minerals Group Fund III, LP	2014	Energy	35,000,000	224,795	35,161,227	3,765,448	21,871,135	25,636,583	0.11x	0.73x	-7.26%
The Resolute Fund II, L.P.	2014	Buyout - Large	30,000,000	3,223,749	33,501,401	22,048,930	28,694,954	50,743,884	0.66x	1.51x	19.54%
Francisco Partners IV, L.P.	2015	Buyout - Large	20,000,000	510,000	19,490,000	16,015,931	26,087,942	42,103,873	0.82x	2.16x	29.69%
Wynchurch Capital Partners IV, L.P.	2015	Buyout - Medium	25,000,000	5,407,607	19,592,393	4,167,411	21,168,188	25,335,599	0.21x	1.29x	16.42%

See Page 14 for notes.

Private Equity–DB/CBB & Endowment Performance by Investment (cont'd)

Partnership Name	Vintage Year	Investment Type	Total Com mitments	Unfunded Com mitment	Cum ulative Paid-In	Cum ulative Distributions	Net Asset Value	Total Value ¹	DPF ²	TVPI ³	IRR
Defined Benefit Portfolio											
Bridgepoint Europe V, L.P.	2016	Buyout - Large	\$25,070,600	\$3,572,333	\$22,276,272	\$7,898,148	\$23,598,168	\$31,496,316	0.35x	1.41x	17.33%
Dover Street IX, L.P.	2016	Secondaries	50,000,000	14,000,000	36,000,000	13,034,438	38,812,942	51,847,380	0.36x	1.44x	34.67%
McCarthy Capital VI, L.P.	2016	Buyout - Small	40,000,000	9,577,711	33,909,685	5,492,907	49,587,845	55,080,752	0.16x	1.62x	36.68%
Ares Corporate Opportunities Fund V, L.P.	2017	Buyout - Mega	50,000,000	11,265,370	43,203,487	4,696,637	42,870,734	47,567,371	0.11x	1.10x	8.67%
Francisco Partners V, L.P.	2017	Buyout - Large	50,000,000	24,375,000	25,625,000	0	29,232,605	29,232,605	0.00x	1.14x	12.67%
Genstar Capital Partners VIII, L.P.	2017	Buyout - Large	50,000,000	7,046,795	47,536,025	4,220,937	64,932,992	69,153,929	0.09x	1.45x	39.02%
Green Equity Investors VI, L.P.	2017	Buyout - Mega	50,000,000	15,561,424	34,886,027	447,451	42,046,313	42,493,764	0.01x	1.22x	13.40%
New Mountain Partners V, L.P.	2017	Buyout - Mega	50,000,000	23,408,798	26,591,202	621,700	30,627,890	31,249,590	0.02x	1.18x	15.15%
Quantum Energy Partners VII, LP	2017	Energy	50,000,000	25,700,165	28,051,757	3,833,067	23,824,683	27,657,750	0.14x	0.99x	-1.11%
Bridgepoint Europe VI, L.P.	2018	Buyout - Large	48,968,000	47,572,165	6,587,414	0	7,224,410	7,224,410	0.00x	1.10x	16.97%
The Resolute Fund IV, L.P.	2018	Buyout - Large	50,000,000	32,185,560	20,607,484	4,935,510	24,025,779	28,961,289	0.24x	1.41x	109.48%
Genstar Capital Partners X, L.P.	2019	Buyout - Mega	50,000,000	38,411,698	11,588,302	0	11,895,890	11,895,890	0.00x	1.03x	7.06%
New Enterprise Associates 17, L.P.	2019	Venture - Balanced	50,000,000	44,250,000	5,750,000	0	5,765,645	5,765,645	0.00x	1.00x	0.35%
Dover Street X, L.P.	2019	Secondaries	50,000,000	50,000,000	0	0	690,858	690,858	N/A	N/A	N/A
Total Direct Portfolio			1,418,640,399	457,131,155	1,086,767,174	794,361,123	845,936,143	1,640,297,266	0.73x	1.51x	13.58%
Abbott Capital Private Equity Fund V, L.P.	2005	Fund of Funds	50,000,000	1,700,000	48,300,000	61,966,982	8,580,696	70,547,678	1.28x	1.46x	6.86%
Pathway Private Equity Fund XVIII, LLC	2006	Fund of Funds	100,000,000	7,552,152	103,248,623	137,148,753	20,257,274	157,406,027	1.33x	1.52x	8.04%
Total Fund of Funds Portfolio			150,000,000	9,252,152	151,548,623	199,115,734	28,837,970	227,953,704	1.31x	1.50x	7.65%
Total Defined Benefit Portfolio			\$1,568,640,399	\$466,383,307	\$1,238,315,797	\$993,476,857	\$874,774,113	\$1,868,250,971	0.80x	1.51x	12.05%
Endowment Portfolio											
Dover Street VII, L.P.	2012	Secondaries	\$15,000,000	\$1,350,000	\$13,650,000	\$16,224,925	\$5,822,886	\$22,047,611	1.19x	1.62x	20.65%
Dover Street X, L.P.	2019	Secondaries	16,000,000	16,000,000	0	0	221,074	221,074	N/A	N/A	N/A
Total Direct Portfolio			31,000,000	17,350,000	13,650,000	16,224,925	6,043,760	22,268,685	1.19x	1.63x	20.97%
Abbott Capital Private Equity Fund VI, L.P.	2008	Fund of Funds	45,000,000	450,000	44,550,000	47,428,064	27,913,905	75,341,969	1.06x	1.69x	12.39%
RCP Fund VII, L.P.	2010	Fund of Funds	20,000,000	42,799	21,495,444	25,605,242	16,142,819	41,748,061	1.19x	1.94x	17.69%
RCP Fund VIII, L.P.	2012	Fund of Funds	10,000,000	2,054,803	10,268,047	7,490,098	9,048,750	16,538,848	0.73x	1.61x	17.02%
Abbott Capital Private Equity Fund VII, L.P.	2014	Fund of Funds	20,000,000	600,000	19,400,630	7,000,000	22,884,256	29,884,256	0.36x	1.54x	18.05%
Ironrides Partnership Fund IV, L.P.	2017	Fund of Funds	20,000,000	10,154,615	12,221,064	2,368,345	14,379,590	16,747,935	0.19x	1.37x	28.30%
Total Fund of Funds Portfolio			115,000,000	13,302,216	107,935,184	89,891,749	90,369,320	180,261,070	0.83x	1.67x	14.89%
Total Endowment Portfolio			\$146,000,000	\$30,652,216	\$121,585,184	\$106,116,674	\$96,413,080	\$202,529,755	0.87x	1.67x	15.34%

See Page 14 for notes.

Private Equity–DB/CBB & Endowment Evolution of Portfolio Performance

Partnership Name	Vintage Year	Investment Type	IRR as of									
			12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019
Defined Benefit Portfolio												
Abbott Capital Private Equity Fund V, L.P.	2006	Fund of Funds	0.08%	3.48%	4.99%	6.93%	7.60%	7.29%	7.03%	6.98%	6.89%	6.86%
Pathway Private Equity Fund XVII, LLC ⁶	2006	Fund of Funds	-2.96%	0.66%	3.01%	6.22%	7.65%	7.81%	8.12%	8.46%	8.35%	8.04%
TRG Growth Partnership I, L.P. ⁵	2006	Buyout- Large	5.35%	2.30%	4.77%	4.85%	5.91%	5.35%	5.58%	5.24%	3.84%	3.48%
New Mountain Partners II, L.P.	2007	Buyout- Mega	-1.61%	6.95%	8.94%	11.17%	8.24%	11.41%	12.85%	13.60%	13.32%	13.54%
Presidio Partners 2007, L.P. ¹⁰	2007	Venture - Early	-10.34%	-1.79%	-8.82%	-4.24%	5.97%	10.45%	9.36%	9.37%	7.62%	7.71%
Sun Capital Partners V, L.P.	2007	Turnaround	5.91%	9.71%	10.32%	11.20%	10.20%	8.12%	7.09%	5.56%	2.67%	1.83%
The Resolute Fund II, L.P.	2007	Buyout- Large	-0.60%	3.33%	6.71%	10.55%	10.33%	10.36%	9.06%	9.15%	8.66%	8.27%
Wayzata Opportunities Fund II, L.P.	2007	Distressed Debt	16.81%	16.01%	15.43%	16.88%	17.04%	16.32%	16.34%	16.55%	16.45%	16.49%
Acoal-KKR Capital Partners II, L.P.	2008	Buyout- Medium	2.82%	18.21%	13.06%	17.30%	15.06%	14.07%	13.69%	18.37%	21.24%	23.91%
Ares Corporate Opportunities Fund II, L.P.	2008	Buyout- Large	41.10%	29.67%	27.14%	24.90%	23.64%	22.21%	22.34%	23.72%	21.37%	21.47%
Bridgepoint Europe IV, L.P. ⁷	2008	Buyout- Large	-11.75%	1.78%	9.70%	12.62%	11.12%	10.87%	10.68%	12.04%	11.38%	10.09%
CVC European Equity Partners V, L.P. ⁷	2008	Buyout- Mega	14.05%	10.55%	11.76%	12.64%	11.30%	12.17%	14.96%	16.58%	17.43%	17.48%
Quantum Energy Partners V, L.P.	2008	Energy	-32.63%	-25.04%	7.75%	19.73%	16.59%	7.90%	18.35%	17.10%	10.90%	8.40%
Fulcrum Growth Partners IV, L.P.	2009	Buyout- Small	100.09%	17.23%	11.60%	7.23%	9.56%	9.88%	9.98%	9.35%	10.02%	11.26%
Lincolnshire Equity Fund IV, L.P.	2009	Buyout- Medium	-65.41%	-27.71%	-14.24%	0.46%	7.26%	8.08%	10.12%	9.36%	11.02%	10.44%
Longroad Capital Partners II, L.P.	2009	Distressed Debt	-32.27%	-21.75%	-9.10%	-21.56%	-28.60%	-22.38%	-35.02%	-28.99%	-28.44%	-27.80%
New Enterprise Associates 13, L.P.	2009	Venture - Balanced	3.76%	12.98%	17.39%	20.77%	21.05%	19.37%	19.28%	15.54%	13.73%	13.76%
EIF United States Power Fund IV, L.P.	2010	Energy	NM	-7.93%	-16.68%	-6.39%	17.53%	13.33%	11.21%	6.26%	5.04%	3.39%
Merit Mezzanine Fund V, L.P.	2010	Mezzanine	-6.47%	-16.19%	-5.13%	0.76%	8.08%	8.04%	9.57%	9.60%	9.36%	10.03%
Ares Mezzanine Partners, L.P.	2011	Mezzanine	N/A	-3.32%	8.03%	9.72%	8.12%	9.07%	8.87%	8.85%	8.86%	8.80%
Lightyear Fund II, L.P.	2011	Buyout- Medium	N/A	17.70%	16.32%	14.93%	20.11%	18.59%	18.32%	20.46%	22.42%	22.83%
Ares Corporate Opportunities Fund IV, L.P.	2012	Buyout- Large	N/A	NA	-8.82%	-12.60%	8.28%	8.66%	14.02%	15.65%	12.03%	12.61%
Dover Street VII, L.P.	2012	Secondaries	N/A	NA	95.48%	92.76%	49.90%	32.28%	22.95%	22.29%	21.07%	20.65%
Green Equity Investors VI, L.P.	2012	Buyout- Mega	N/A	NA	1.81%	2.75%	8.52%	12.32%	13.01%	15.35%	15.97%	16.12%
McCarthy Capital V, L.P.	2012	Buyout- Small	N/A	NA	-13.25%	23.32%	11.98%	12.60%	11.24%	11.37%	13.27%	13.71%
New Enterprise Associates 14, L.P.	2012	Venture - Balanced	N/A	NA	-6.40%	8.14%	15.93%	20.24%	17.29%	16.06%	17.47%	17.77%
Acoal-KKR Capital Partners IV, L.P.	2013	Buyout- Medium	N/A	NA	NA	-56.68%	-21.06%	12.66%	10.09%	21.96%	37.25%	36.82%
Beecken Petty O'Keefe Fund IV, L.P.	2013	Buyout- Medium	N/A	NA	NA	-13.60%	-4.86%	-4.62%	16.20%	18.38%	19.35%	19.01%
Fine Brook Capital Partners II, L.P.	2013	Buyout- Large	N/A	NA	NA	NA	-16.55%	-10.20%	7.99%	11.30%	10.03%	7.10%
Wayzata Opportunities Fund II, L.P.	2013	Distressed Debt	N/A	NA	NA	-24.10%	-14.58%	-17.42%	-0.33%	-0.53%	-1.89%	-2.37%
CVC Capital Partners VI, L.P. ⁷	2014	Buyout- Mega	N/A	NA	NA	NA	-26.58%	-21.88%	6.70%	15.13%	14.95%	17.43%
New Mountain Partners IV, L.P.	2014	Buyout- Large	N/A	NA	NA	NA	3.24%	25.76%	23.86%	20.78%	20.20%	22.91%
Quantum Energy Partners VI, L.P.	2014	Energy	N/A	NA	NA	NA	NM	58.40%	61.00%	48.33%	40.38%	28.59%
The Energy & Minerals Group Fund II, LP	2014	Energy	N/A	NA	NA	NA	-1.25%	-18.34%	-7.81%	-3.39%	-4.28%	-7.26%
The Resolute Fund II, L.P.	2014	Buyout- Large	N/A	NA	NA	NA	-5.28%	8.02%	15.78%	20.16%	21.62%	19.54%
Francisco Partners IV, L.P.	2015	Buyout- Large	N/A	NA	NA	NA	NA	-0.06%	7.60%	18.09%	26.32%	29.69%
Wynmchurch Capital Partners IV, L.P.	2015	Buyout- Medium	N/A	NA	NA	NA	NA	-0.33%	15.79%	35.58%	22.25%	16.42%

Private Equity–DB/CBB & Endowment Evolution of Portfolio Performance (cont'd)

Partnership Name	Vintage Year	Investment Type	IRR as of									
			12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019
Bridgepoint Europe V, L.P.	2016	Buyout- Large	N/A	N/A	N/A	N/A	NM	NA	21.07%	24.45%	18.24%	17.33%
Dover Street X, L.P.	2016	Secondaries	N/A	N/A	N/A	N/A	NA	NA	68.91%	84.89%	43.42%	34.67%
McCarthy Capital VI, L.P.	2016	Buyout- Small	N/A	N/A	N/A	N/A	NA	NA	-11.42%	9.75%	19.71%	36.68%
Ares Corporate Opportunities Fund V, L.P.	2017	Buyout- Mega	N/A	N/A	N/A	N/A	NA	NA	NA	-8.03%	-2.50%	8.67%
Francisco Partners V, L.P.	2017	Buyout- Large	N/A	N/A	N/A	N/A	NA	NA	NA	NA	3.15%	12.67%
Genstar Capital Partners VII, L.P.	2017	Buyout- Large	N/A	N/A	N/A	N/A	NA	NA	NA	41.89%	50.54%	39.02%
Green Equity Investors VII, L.P.	2017	Buyout- Mega	N/A	N/A	N/A	N/A	NA	NA	NA	-10.61%	8.01%	13.40%
New Mountain Partners V, L.P.	2017	Buyout- Mega	N/A	N/A	N/A	N/A	NA	NA	NA	-11.82%	2.46%	15.15%
Quantum Energy Partners VI, LP	2017	Energy	N/A	N/A	N/A	N/A	NA	NA	NA	10.08%	7.35%	-1.11%
Bridgepoint Europe VI, L.P.	2018	Buyout- Large	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NM	16.97%
The Resolute Fund IV, L.P.	2018	Buyout- Large	N/A	N/A	N/A	N/A	NA	NA	NA	NA	25.15%	109.48%
Genstar Capital Partners K, L.P.	2019	Buyout- Mega	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	7.06%
New Enterprise Associates 17, L.P.	2019	Venture - Balanced	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	0.35%
Dover Street X, L.P.	2019	Secondaries	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA
Total Defined Benefit Portfolio			2.14%	4.74%	6.59%	9.02%	9.90%	9.78%	10.67%	11.40%	11.55%	12.05%
Endowment Portfolio												
Abbott Capital Private Equity Fund VI, L.P.	2008	Fund of Funds	-16.87%	-7.23%	-0.65%	5.07%	8.03%	9.59%	10.33%	11.77%	12.27%	12.39%
RCP Fund VII, L.P.	2010	Fund of Funds	N/A	-42.38%	-24.35%	-1.65%	11.14%	14.73%	19.61%	17.80%	17.13%	17.69%
Dover Street VII, L.P.	2012	Secondaries	N/A	NA	95.48%	92.76%	49.90%	32.28%	22.95%	22.29%	21.07%	20.65%
RCP Fund VIII, L.P.	2012	Fund of Funds	N/A	NA	-47.52%	-33.15%	-7.63%	5.48%	9.60%	15.93%	17.99%	17.02%
Abbott Capital Private Equity Fund VII, L.P.	2014	Fund of Funds	N/A	NA	NA	NA	-24.03%	-4.31%	6.28%	13.92%	16.57%	18.05%
Ironsides Partnership Fund IV, L.P.	2017	Fund of Funds	N/A	NA	NA	NA	NA	NA	NA	1.24%	19.78%	28.30%
Dover Street X, L.P.	2019	Secondaries	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Endowment Portfolio			-16.87%	-13.03%	-1.59%	4.89%	10.13%	11.93%	13.36%	14.29%	14.77%	15.34%
Total Portfolio			1.90%	4.43%	6.37%	8.87%	9.92%	9.90%	10.85%	11.61%	11.80%	12.31%

OSERS Real Estate / Real Assets Portfolio Overview

Real Estate Portfolio

Partnership Name	Vintage Year	RE Strategy	Commitment	Unfunded Commitment	Cumulative Paid-In	Cumulative Distributions	Net Asset Value	Total Value ¹	DPI ²	TVPI ³	IRR
UBS Trumbull Property Fund	1995	Core	\$33,615,067	\$0	\$33,615,067	\$73,139,241	\$14,125,197	\$87,264,438	2.03x	2.43x	10.3%
JPMorgan Strategic Property Fund	1998	Core	48,165,726	0	48,165,726	77,189,178	15,436,895	92,626,073	1.51x	1.81x	9.6%
Subtotal Core			81,780,793	0	81,780,793	150,328,420	29,562,092	179,890,511	1.72x	2.06x	10.0%
Almanac Realty Securities Fund IV, L.P.	2004	Value Added	20,287,514	0	21,896,333	32,443,815	0	32,443,815	1.48x	1.48x	9.2%
Fremont Strategic Property Partners II, L.P.	2004	Value Added	10,000,000	0	9,564,781	7,209,280	0	7,209,280	0.75x	0.75x	-4.2%
JPMorgan Special Situations Property Fund	2005	Value Added	9,269,715	0	9,269,715	16,757,356	0	16,757,356	1.61x	1.61x	6.4%
Almanac Realty Securities Fund VI, L.P.	2011	Value Added	25,000,000	0	17,644,890	19,254,229	4,441,652	23,695,881	1.09x	1.34x	11.4%
Almanac Realty Securities Fund VII, L.P.	2015	Value Added	30,000,000	8,788,128	24,997,089	20,359,147	13,083,948	33,443,095	0.81x	1.34x	14.2%
Subtotal Value Added			94,557,229	8,788,128	83,372,809	96,023,827	17,525,600	113,549,427	1.14x	1.34x	7.0%
Mariner Real Estate Partners III, L.P.	2011	Opportunistic	50,000,000	0	50,045,613	61,310,652	18,392,193	79,702,845	1.23x	1.59x	9.4%
25 Capital Residential Mortgage Opportunities Fund	2012	Opportunistic	50,000,000	0	109,416,991	101,223,960	18,634,080	119,858,040	0.93x	1.10x	3.9%
JP Morgan India Property Fund II	2012	Opportunistic	25,000,000	1,176,334	30,579,680	7,428,335	12,765,460	20,193,796	0.24x	0.66x	-13.0%
Mariner Real Estate Partners IV, L.P.	2014	Opportunistic	60,000,000	0	97,065,628	54,957,466	67,663,040	122,620,506	0.57x	1.26x	14.5%
Subtotal Opportunistic			185,000,000	1,176,334	287,107,912	224,920,412	117,454,774	342,375,186	0.78x	1.19x	6.5%
Total Real Estate Portfolio			\$361,338,022	\$9,964,462	\$452,261,514	\$471,272,659	\$164,542,465	\$635,815,125	1.03x	1.39x	8.6%

Real Assets Portfolio

Partnership Name	Vintage Year	RA Strategy	Commitment	Unfunded Commitment	Cumulative Paid-In	Cumulative Distributions	Net Asset Value	Total Value ¹	DPI ²	TVPI ³	IRR
JP Morgan Maritime Global	2010	Infrastructure	\$25,000,000	\$682,971	\$25,085,937	\$2,498,949	\$15,173,500	\$17,672,449	0.10x	0.70x	-7.3%
Subtotal Infrastructure			25,000,000	682,971	25,085,937	2,498,949	15,173,500	17,672,449	0.10x	0.70x	-7.3%
BTG Pactual Timberland	2004	Real Estate	25,000,000	0	25,000,000	25,614,245	3,316,983	28,931,228	1.02x	1.16x	1.2%
Subtotal Real Estate			25,000,000	0	25,000,000	25,614,245	3,316,983	28,931,228	1.02x	1.16x	1.2%
Total Real Assets Portfolio			\$50,000,000	\$682,971	\$50,085,937	\$28,113,194	\$18,490,483	\$46,603,677	0.56x	0.93x	-0.9%

OSERS Real Estate / Real Assets Portfolio Overview (cont'd)

Real Estate Portfolio																				
Partnership Name	Vintage		IRR as of										TVPI as of							
	Year	RE Strategy	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019
UBS Trumbull Property Fund	1995	Core	N/A	10.75%	10.71%	10.69%	10.68%	10.55%	10.45%	10.42%	10.31%	1.00x	2.19x	2.22x	2.27x	2.35x	2.38x	2.41x	2.44x	2.43x
JPMorgan Strategic Property Fund	1998	Core	N/A	9.94%	10.06%	10.00%	9.96%	9.80%	9.72%	9.68%	9.61%	1.00x	1.61x	1.65x	1.69x	1.73x	1.75x	1.78x	1.80x	1.81x
Subtotal Core			N/A	10.41%	10.43%	10.40%	10.38%	10.23%	10.14%	10.10%	10.01%	1.00x	1.84x	1.88x	1.92x	1.98x	2.01x	2.04x	2.06x	2.06x
Almanac Realty Securities Fund IV, L.P.	2004	Value Added	0.00%	9.16%	8.73%	9.30%	9.25%	9.24%	9.24%	9.24%	9.24%	1.00x	1.40x	1.42x	1.48x	1.48x	1.48x	1.48x	1.48x	1.48x
Fremont Strategic Property Partners II, L.P.	2004	Value Added	0.00%	-3.48%	-3.34%	-4.18%	-4.14%	-4.72%	-4.50%	-4.24%	-4.24%	1.00x	0.85x	0.84x	0.78x	0.77x	0.74x	0.74x	0.75x	0.75x
JPMorgan Special Situations Property Fund	2005	Value Added	0.00%	3.41%	4.72%	5.47%	6.39%	6.43%	6.41%	6.41%	6.41%	1.00x	1.17x	1.27x	1.37x	1.51x	1.58x	1.61x	1.61x	1.61x
Almanac Realty Securities Fund VI, L.P.	2011	Value Added	N/A	15.38%	20.76%	16.27%	17.81%	16.98%	14.16%	12.75%	11.44%	N/A	1.04x	1.19x	1.22x	1.29x	1.35x	1.35x	1.35x	1.34x
Almanac Realty Securities Fund VII, L.P.	2015	Value Added	N/A	N/A	N/A	N/A	8.70%	10.46%	14.10%	13.96%	14.21%	N/A	N/A	N/A	1.04x	1.10x	1.15x	1.25x	1.34x	1.34x
Subtotal Value Added			0.00%	4.92%	5.41%	5.94%	6.48%	6.62%	6.74%	6.90%	7.04%	1.00x	1.19x	1.24x	1.28x	1.30x	1.30x	1.32x	1.34x	
Mariner Real Estate Partners III, L.P.	2011	Opportunistic	0.22%	13.75%	13.10%	13.37%	12.48%	11.24%	10.18%	9.42%	9.38%	1.00x	1.14x	1.27x	1.43x	1.54x	1.58x	1.58x	1.56x	1.59x
25 Capital Residential Mortgage Opportunities Fund	2012	Opportunistic	N/A	-19.90%	13.93%	9.85%	7.29%	6.48%	5.50%	4.79%	3.89%	N/A	0.95x	1.06x	1.08x	1.08x	1.10x	1.11x	1.11x	1.10x
JP Morgan India Property Fund II	2012	Opportunistic	N/A	-7.93%	-2.69%	3.10%	4.08%	4.94%	2.02%	-11.40%	-12.96%	N/A	0.92x	0.97x	1.04x	1.07x	1.10x	1.04x	0.74x	0.66x
Mariner Real Estate Partners IV, L.P.	2014	Opportunistic	N/A	N/A	N/A	32.98%	2.59%	28.68%	17.30%	15.96%	14.50%	N/A	N/A	1.32x	1.02x	1.25x	1.26x	1.26x	1.26x	1.26x
Subtotal Opportunistic			0.22%	11.18%	11.92%	12.41%	9.94%	10.43%	8.67%	7.02%	6.54%	1.00x	1.10x	1.14x	1.20x	1.19x	1.24x	1.23x	1.20x	1.19x
Total Real Estate Portfolio			0.01%	9.62%	9.78%	9.93%	9.70%	9.70%	9.29%	8.86%	8.64%	1.00x	1.44x	1.40x	1.42x	1.40x	1.42x	1.42x	1.39x	1.39x

Real Assets Portfolio																				
Partnership Name	Vintage		IRR as of										TVPI as of							
	Year	RA Strategy	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019
BTG Pactual Timberland	2004	Real Estate	0.00%	4.15%	4.38%	3.91%	3.53%	3.15%	2.63%	1.30%	1.21%	1.00x	1.33x	1.41x	1.40x	1.39x	1.38x	1.33x	1.16x	1.16x
JP Morgan Maritime Global	2010	Infrastructure	0.00%	-86.16%	7.20%	-1.93%	-18.11%	-23.19%	-10.76%	-6.96%	-7.29%	1.00x	0.32x	1.10x	0.97x	0.74x	0.60x	0.73x	0.76x	0.70x
Total Real Assets Portfolio			0.00%	2.90%	4.47%	3.58%	1.69%	0.05%	0.42%	-0.51%	-0.88%	1.00x	1.20x	1.34x	1.25x	1.11x	1.00x	1.03x	0.96x	0.93x

OSERS Private Equity Portfolio Overview

Private Equity Portfolio

Partnership Name	Vintage Year	PE Strategy	Commitment	Unfunded		Cumulative Distributions	Net Asset Value	Total Value ¹	DPI ²	TVPI ³	IRR
				Commitment	Cumulative Paid-In						
FCP Fund II	2011	Mezzanine	\$30,000,000	\$5,443,873	\$24,556,127	\$22,382,068	\$13,426,660	\$35,808,728	0.91x	1.46x	8.5%
AAVIN Mezzanine Fund, LP	2014	Mezzanine	5,000,000	375,000	4,625,000	99,159	5,998,199	6,097,358	0.02x	1.32x	10.2%
AAVIN Equity Partners II, LP	2015	Mezzanine	25,000,000	4,796,351	20,203,649	3,516,421	21,870,527	25,386,948	0.17x	1.26x	11.3%
Subtotal Mezzanine			60,000,000	10,615,224	49,384,776	25,997,648	41,295,386	67,293,034	0.53x	1.36x	9.1%
SPC IHV	2001	Fund of Funds	163,958,323	17,034,592	193,823,785	166,908,863	81,258,063	248,166,926	0.86x	1.28x	5.7%
Stonetree IV	2012	Fund of Funds	53,152,755	11,460,732	39,341,232	19,192,290	34,675,167	53,867,457	0.49x	1.37x	6.3%
Subtotal Fund of Funds			217,111,078	28,495,324	233,165,017	186,101,153	115,933,230	302,034,383	0.80x	1.30x	5.8%
Total Private Equity Portfolio			\$277,111,078	\$39,110,548	\$282,549,793	\$212,098,801	\$157,228,616	\$369,327,417	0.75x	1.31x	6.2%

Private Equity Portfolio

Partnership Name	Vintage Year	PE Strategy	IRR as of										TVPI as of							
			12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019
			SPC IHV	2001	Fund of Funds	6.33%	6.08%	6.03%	5.26%	4.70%	4.75%	5.66%	5.76%	5.73%	1.23x	1.24x	1.26x	1.23x	1.21x	1.20x
FCP Fund II	2011	Mezzanine	-11.52%	-5.94%	2.26%	2.27%	8.33%	8.71%	9.21%	8.55%	8.46%	0.92x	0.94x	1.03x	1.05x	1.25x	1.28x	1.39x	1.41x	1.46x
Stonetree IV	2012	Fund of Funds	36.95%	9.45%	6.11%	6.15%	2.47%	2.83%	5.81%	6.39%	6.31%	1.19x	1.08x	1.08x	1.12x	1.06x	1.10x	1.25x	1.33x	1.37x
AAVIN Mezzanine Fund, LP	2014	Mezzanine	N/A	N/A	N/A	0.00%	-60.40%	-32.92%	-18.79%	-5.41%	10.21%	N/A	N/A	N/A	1.00x	0.34x	0.77x	0.88x	1.32x	
AAVIN Equity Partners II, LP	2015	Mezzanine	N/A	N/A	N/A	N/A	-66.88%	-15.16%	-5.60%	1.51%	11.27%	N/A	N/A	N/A	0.74x	0.90x	0.94x	1.03x	1.26x	
Total Private Equity Portfolio			6.46%	5.97%	5.92%	5.18%	4.63%	4.71%	5.79%	5.95%	6.21%	1.22x	1.21x	1.22x	1.19x	1.18x	1.18x	1.25x	1.27x	1.31x

Notes

1. Total Value = Cumulative Distributions + Net Asset Value
2. DPI = Cumulative Distributions/Cumulative Paid-In
3. TVPI = Total Value/Cumulative Paid-In
4. Potential Market Exposure = Net Asset Value + Unfunded Commitments
5. Does not include exposure from fund of funds managers
6. Formerly known as Citigroup Venture Capital International Growth Partnership II, L.P. The Rohatyn Group acquisition finalized in Q4 2013
7. Commitments to Bridgepoint Europe IV and CVC European Equity Partners V were both EUR 20.0mm. The USD commitments were converted at an exchange rate of 1.30 USD/EUR. The commitment to CVC Capital Partners VI was EUR 15.0mm with a converted exchange rate of 1.30661 USD/EUR. The commitment to Bridgepoint Europe V was EUR 20.0mm with a converted exchange rate of 1.25353 USD/EUR. The commitment to Bridgepoint Europe VI was EUR 40.0mm with a converted exchange rate of 1.2242 USD/EUR.
8. Source: Burgiss. Benchmark returns for each vintage year are calculated based on the pooled cash flows of all relevant vintage year funds in the Burgiss database. Benchmark returns are as of December 31, 2019. The total portfolio peer universe returns are the commitment-weighted averages of the individual vintage year benchmark returns
9. Formerly known as CMEA Ventures VII, L.P.
10. The Public Market Equivalent (PME) return is measured against the Wilshire 5000 using the Long-Nickels/Index Comparison Method (ICM) methodology. This methodology calculates the hypothetical return that could have been achieved by purchasing/selling shares in the index on the same dates and in the same amounts as the cash flows to/from the private market portfolio

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