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Dallas Police & Fire Pension System

Fourth Quarter 2016 Private Markets Performance Review (Abbreviated Report)

May, 2017

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Information Disclosure

- NEPC, LLC uses, as its data source, the plan's fund manager and custodian bank or fund service company, and NEPC, LLC relies on those sources for all transactions, including capital calls, distributions, income/expense and reported values. While NEPC, LLC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- The Investment Performance Analysis is provided as a management aid for the client's internal use only. Portfolio performance reported in the Investment Performance Analysis does not constitute a recommendation by NEPC, LLC.
- Information in this report on market indices and security characteristics is received from sources external to NEPC, LLC. While efforts are made to ensure that this external data is accurate, NEPC, LLC cannot accept responsibility for errors that may occur.



May, 2017

Trustees
 Dallas Police & Fire Pension System
 4100 Harry Hines Blvd – Suite 100
 Dallas, TX 75219

RE: Private Markets Strategy – 4th Quarter 2016

Dear Trustees:

We are pleased to present the December 31, 2016 Private Markets Report for Dallas Police & Fire Pension System, (DPFP). The report provides a variety of performance analysis for the private markets portfolio. The reports include trailing performance, performance by investment stage and vintage year performance.

The DPFP experienced a negative quarter with a nominal IRR of -1.48%. The annualized IRR of the private markets portfolio since inception was 0.99% at quarter end. Since inception, the Total Value to Paid In multiple (current valuation plus cumulative distributions, divided by total capital calls) was 1.04.

In December, the DPFP received distributions from an Evercore secondary sale of 8 funds.

The following table presents the status of the DPFP private markets portfolio as of December 31, 2016:

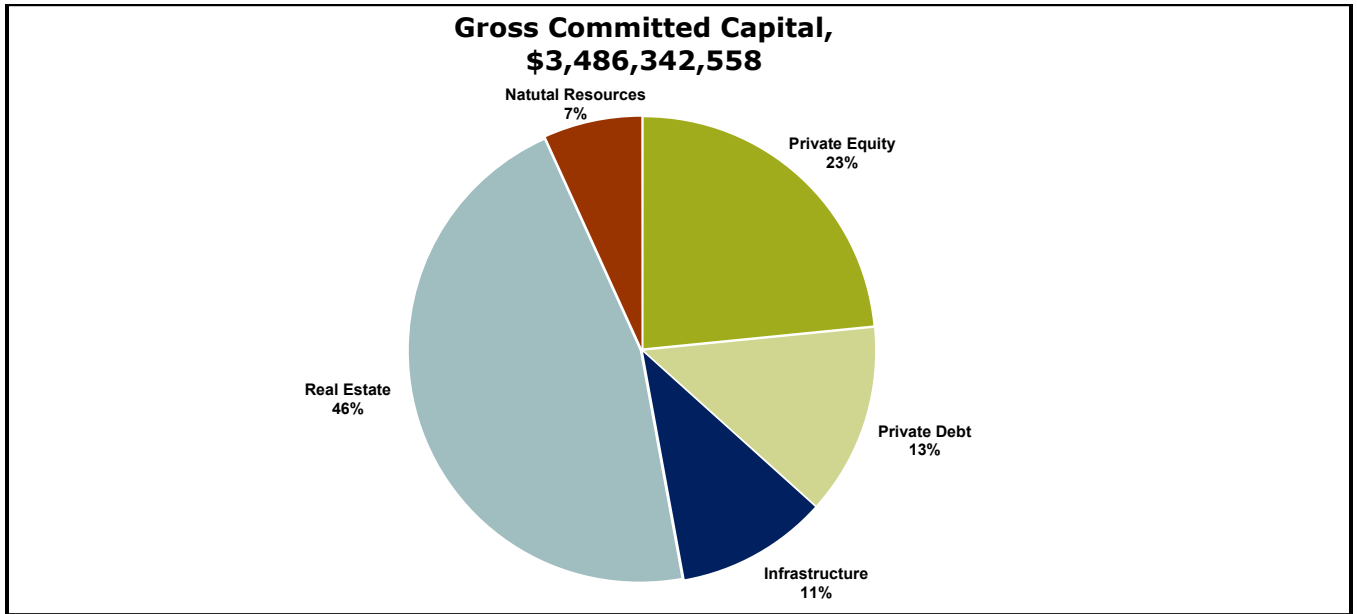
Since Inception Commitments	Terminated Commitments	Amount Funded	Amount Distributed	Reported Value	Call Ratio	Distribution Ratio
\$3,486,342,558	\$94,419,364	\$3,068,099,184	\$1,807,798,062	\$1,419,857,590	88.00%	58.92%

Unfunded Commitment	Market Exposure (Reported Value + Unfunded Commitment)	Total Fund Composite as of 12/31/2016	Private Markets Target	Reported Value of Total Fund	Market Exposure as a % Total Fund
\$343,976,950	\$1,763,834,540	\$2,148,175,753	Varies By Category	66.10%	82.11%

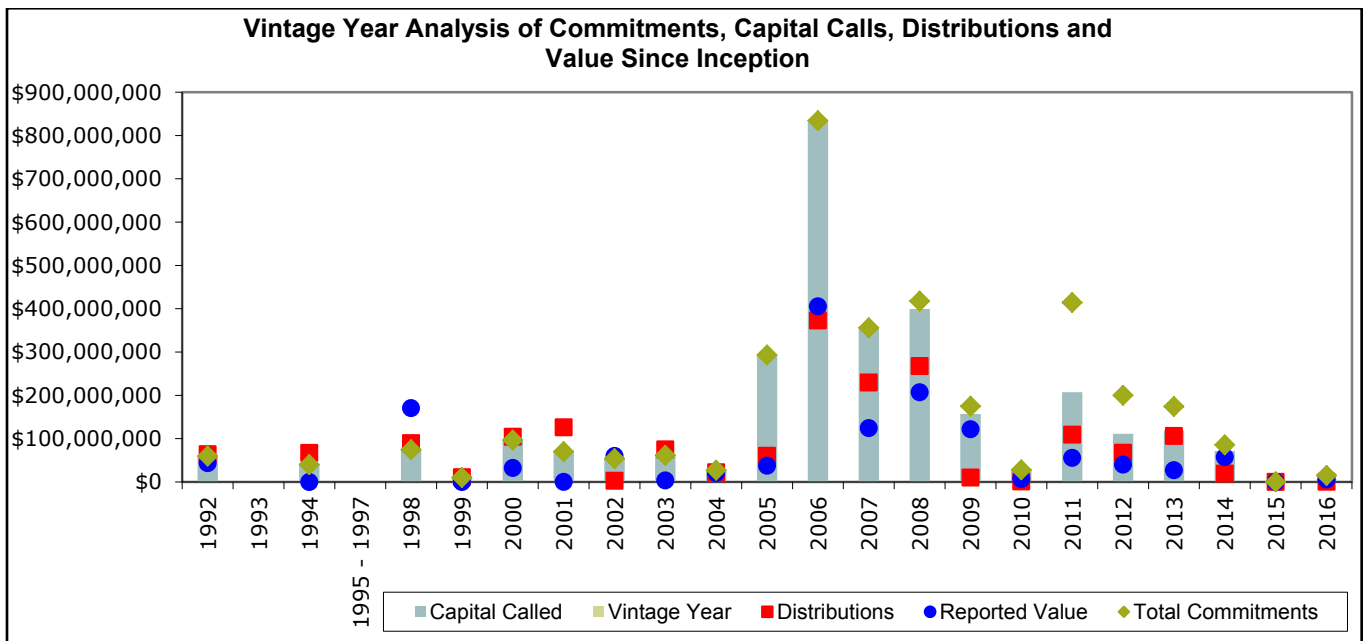
Total Value (Reported Value + Distributions)	Total Value To Capital Call Ratio	Internal Rate of Return IRR, Since Inception (October 13, 1994)
\$3,227,655,652	1.04	0.99%



As of December 31, 2016, the DFPF has made commitments totaling \$3,486.34 million to 87 private markets assets.



The following chart provides an analysis of the vintage year performance comparing the capital calls to the distributions and reported value for the private markets program:

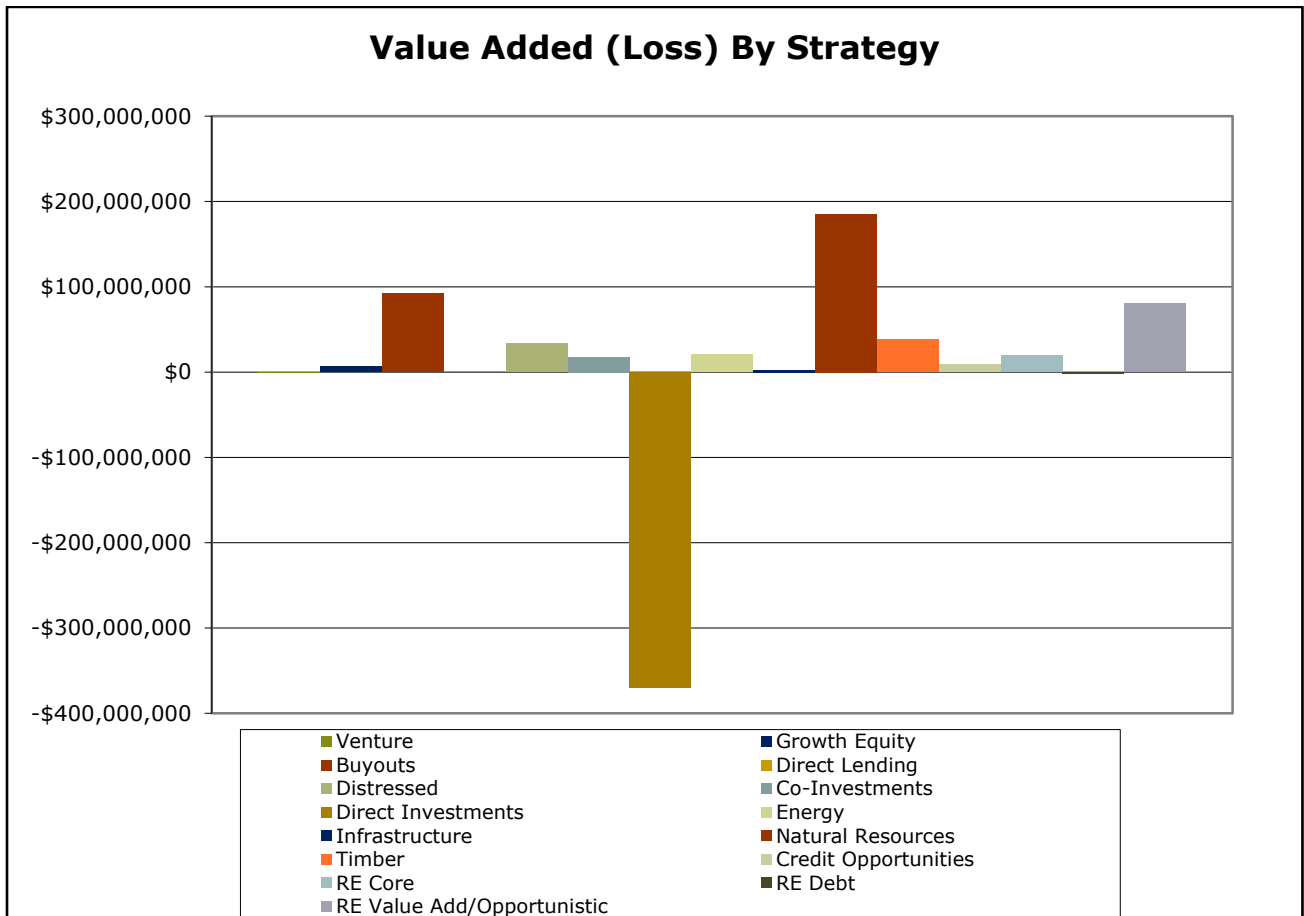




During the quarter-ended December 31, 2016, the DFPF private markets portfolio funded 32 investments and received 36 distributions from its funds. The summary of the cash flows follows:

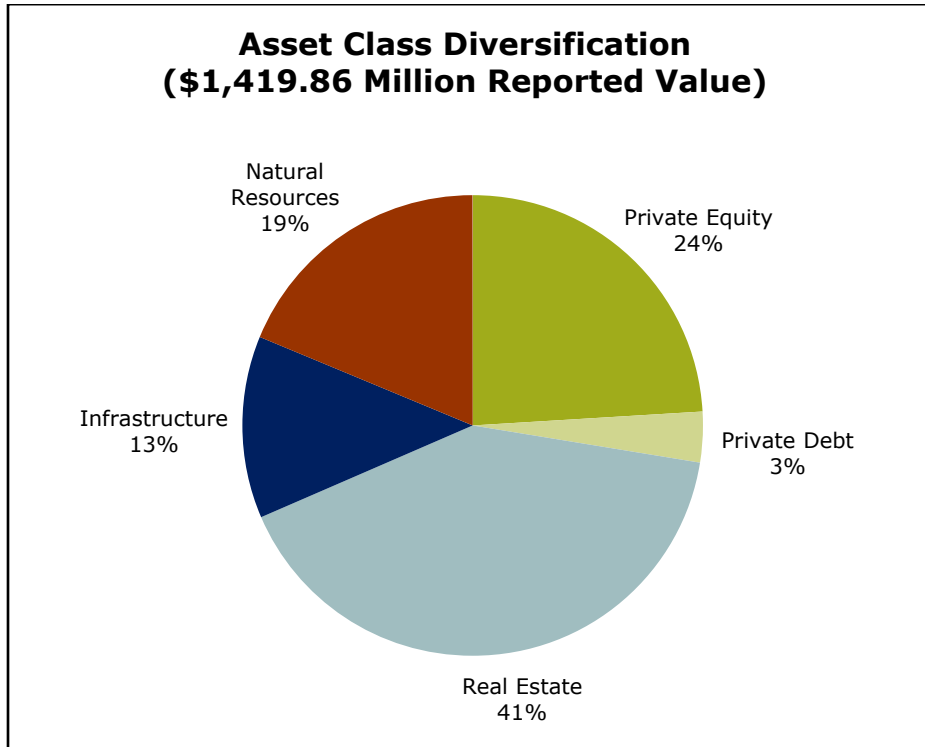
Amount Funded for the Quarter	Number of Funds Calling Capital	Distributions for the Quarter	Number of Funds Making Distributions	Net Cash/Stock Flows for the Quarter
\$69,211,699	32	\$185,797,350	36	\$116,585,650

Since inception the DFPF private markets portfolio added \$133.38 million in value to the DFPF. Investment strategies adding value include Growth Equity \$6.42 million, Buyouts \$91.85 million, Direct Lending \$0.63 million, Distressed \$33.74 million, Energy \$20.65 million, Infrastructure \$2.54 million, Natural Resources \$185.51 million, Timber \$37.79 million, Credit Opportunities \$8.53 million, RE Core \$19.39 million, RE Value Add/Opportunistic \$80.80 million, and Co-Investments \$17.49 million. Direct Investments lost (\$370.35) million, Venture lost (\$0.002) million, and RE Debt lost (\$2.24) million.





As of December 31, 2016, the private markets funds in the DFPF portfolio had the following investment strategy diversification based on the investment fund's reported value:



We thank you for the opportunity to work with the DFPF and look forward to continued success in the future.

Dallas Police & Fire Pension System
Performance Analysis - Total Private Markets Program

12/31/2016

Investment Name	Commitment Amount	Paid in Capital	Capital to be Funded	Cumulative Distributions	Valuation	Total Value	Net Benefit	Call Ratio	DPI Ratio	TVPI Ratio	IRR (SI)
Private Equity / Debt	\$ 1,278,265,642	\$ 1,151,539,041	\$ 91,693,792	\$ 963,660,723	\$ 391,648,463	\$ 1,355,309,186	\$ 177,675,548	90%	0.82	1.15	3.70%
Real Assets	\$ 2,208,076,916	\$ 1,916,560,143	\$ 252,283,158	\$ 844,137,339	\$ 1,028,209,127	\$ 1,872,346,466	\$ (44,297,021)	87%	0.44	0.98	-0.51%
Total	\$ 3,486,342,558	\$ 3,068,099,184	\$ 343,976,950	\$ 1,807,798,062	\$ 1,419,857,590	\$ 3,227,655,652	\$ 133,378,527	88%	0.58	1.04	0.99%

Performance Analysis - Private Markets Subsectors

Investment Name	Commitment Amount	Paid in Capital	Capital to be Funded	Cumulative Distributions	Valuation	Total Value	Net Benefit	Call Ratio	DPI Ratio	TVPI Ratio	IRR (SI) ¹
Private Equity	\$ 816,962,080	\$ 720,455,469	\$ 68,606,668	\$ 528,789,376	\$ 341,412,236	\$ 870,201,612	\$ 134,779,176	88%	0.72	1.18	4.16%
Private Debt	\$ 461,303,562	\$ 431,083,572	\$ 23,087,123	\$ 434,871,347	\$ 50,236,227	\$ 485,107,574	\$ 42,896,373	93%	0.98	1.10	2.78%
Natural Resources	\$ 236,397,292	\$ 236,397,292	\$ -	\$ 193,631,632	\$ 266,068,236	\$ 459,699,868	\$ 223,302,576	100%	0.82	1.94	9.99%
Real Estate	\$ 1,607,679,624	\$ 1,393,972,992	\$ 213,706,631	\$ 543,096,162	\$ 580,736,414	\$ 1,123,832,576	\$ (270,140,416)	87%	0.39	0.81	-4.50%
Infrastructure	\$ 364,000,000	\$ 286,189,859	\$ 38,576,527	\$ 107,409,546	\$ 181,404,476	\$ 288,814,022	\$ 2,540,819	79%	0.38	1.01	0.27%
Total	\$ 3,486,342,558	\$ 3,068,099,184	\$ 343,976,950	\$ 1,807,798,062	\$ 1,419,857,590	\$ 3,227,655,652	\$ 133,378,527	88%	0.58	1.04	0.99%

Notes:

1. IRR's are since inception as of the following dates: Private Equity (10.13.94), Private Debt (12.20.01), Real Estate (3.31.99), Natural Resources (3.12.99), Infrastructure (10.3.07)



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Dallas Police & Fire Pension System

Fourth Quarter 2016 *Private Equity & Private Debt*

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Private Equity and Private Debt

The following table presents the status of the DFPF PRIVATE EQUITY portfolio as of December 31, 2016:

Since Inception Commitments	Terminated Commitments	Amount Funded	Amount Distributed	Reported Value	Call Ratio	Distribution Ratio
\$816,962,080	\$48,052,883	\$720,455,469	\$528,789,376	\$341,412,236	88.19%	73.40%

Unfunded Commitment	Market Exposure (Reported Value + Unfunded Commitment)	Total Fund Composite as of 12/31/2016	Private Equity Target	Reported Value of Total Fund	Market Exposure as a % Total Fund
\$68,606,668	\$410,018,904	\$2,148,175,753	5%	15.89%	19.09%

Total Value (Reported Value + Distributions)	Total Value To Capital Call Ratio	Internal Rate of Return IRR, Since Inception
\$870,201,612	1.18	4.16%

The following table presents the status of the DFPF PRIVATE DEBT portfolio as of December 31, 2016:

Since Inception Commitments	Terminated Commitments	Amount Funded	Amount Distributed	Reported Value	Call Ratio	Distribution Ratio
\$461,303,562	\$7,132,867	\$431,083,572	\$434,871,347	\$50,236,227	93.45%	100.88%

Unfunded Commitment	Market Exposure (Reported Value + Unfunded Commitment)	Total Fund Composite as of 12/31/2016	Private Debt Target	Reported Value of Total Fund	Market Exposure as a % Total Fund
\$23,087,123	\$73,323,350	\$2,148,175,753	5%	2.34%	3.41%

Total Value (Reported Value + Distributions)	Total Value To Capital Call Ratio	Internal Rate of Return IRR, Since Inception
\$485,107,574	1.10	2.78%

Dallas Police & Fire Pension System
Private Equity & Debt Funds - IRR Summary

12/31/2016

Investment Name	Vintage Year	Commitment Amount	QTD	YTD	1 Year	3 Year	5 Year	Inception
Ashmore Global Special Situations Fund IV	2007	70,000,000	-60.64	-58.09	-58.09	-18.72	-14.46	-10.13
BankCap Partners Fund I	2007	20,000,000	35.65	32.16	32.16	9.37	6.10	1.67
BankCap Partners Opportunity Fund, LP	2013	20,000,000	-7.72	-10.49	-10.49	-4.59		-5.22
Highland Credit Ops	2006	35,348,165	3.32	3.05	3.05	2.88	28.49	-2.20
Highland Crusader Fund	2003	50,955,397	-0.44	0.00	0.00	-6.79	2.58	4.31
HM Capital Sector Performance Fund	2008	47,300,000				-3.70	14.51	-4.01
Hudson Clean Energy Partners	2009	25,000,000	-20.62	-40.38	-40.38	-15.94	-16.57	-11.13
Huff Alternative Fund	2000	66,795,718	0.00	-4.67	-4.67	4.96	4.29	1.08
Huff Alternative Income Fund	1994	40,000,000						17.82
Huff Energy Fund	2006	100,000,000	0.00	16.62	16.62	-2.86	-3.76	4.65
Industry Ventures Partnership Holdings IV	2016	5,000,000	-4.11					-7.94
Kainos Capital Partners, L.P.	2013	35,000,000	-0.53	21.46	21.46	27.67		25.01
Levine Leichtman Capital Partners IV	2008	50,000,000	20.27	20.88	20.88	13.42	18.83	20.14
Levine Leichtman Capital Partners V, L.P.	2013	25,000,000	9.14	18.28	18.28	17.39		15.56
Levine Leichtman Deep Value Fund	2006	75,000,000	0.16	-15.84	-15.84	9.18	-3.38	0.73
Levine Leichtman Private Capital Solutions II, L.P.	2012	25,000,000	7.74	3.23	3.23	1.01		1.47
Lone Star CRA Fund	2008	50,000,000	-2.28	1.81	1.81	-24.09	-6.26	16.90
Lone Star Fund IX (U.S.), L.P.	2014	35,000,000	-19.74	-5.88	-5.88			-3.52
Lone Star Fund VII (U.S.), L.P.	2011	25,000,000	-15.22	-26.66	-26.66	8.71	48.97	47.68
Lone Star Fund VIII (U.S.), L.P.	2013	25,000,000	-7.78	-18.93	-18.93	16.36		17.35
Lone Star Growth Capital	2006	16,000,000	-5.17	5.38	5.38	0.67	-2.50	8.49
Lone Star Opportunities Fund V, LP	2012	75,000,000	2.04	10.96	10.96	-12.75		-1.28
Merit Energy Partners E-I	2004	7,018,930	-16.29	-21.18	-21.18	-19.76	-1.11	14.49
Merit Energy Partners F-I	2005	8,748,346	-21.91	-13.87	-13.87	-27.62	-14.61	-17.19
Merit Energy Partners G, LP	2008	39,200,000	-13.79	-23.00	-23.00	-18.58	-15.66	-9.89
Merit Energy Partners H, LP	2010	10,000,000	-21.17	-20.95	-20.95	-16.87	-13.99	-13.72
Miscellaneous Private Equity Expenses	2016	80,516						
North Texas Opportunity Fund	2000	10,000,000	-53.23	-55.51	-55.51	-39.25	-22.70	1.04
Oaktree Loan Fund 2X	2007	60,000,000	-58.08	-57.15	-57.15	-31.05	5.57	2.24
Oaktree Power Fund III	2011	30,000,000	3.64	5.91	5.91	7.72	15.43	12.59
OCM Opportunities Fund IV	2001	50,000,000	-0.37	8.90	8.90	5.46	12.46	28.36
Pharos Capital Co-Investment, LLC	2007	20,000,000				0.44	41.28	-9.92
Pharos Capital Co-Investments, LP	2008	40,000,000	-97.49	-97.49	-97.49	18.15	16.34	8.42
Pharos Capital Partners IIA, L.P.	2005	20,000,000	-54.20	-58.62	-58.62	-28.34	-15.32	-2.30
Pharos Capital Partners III, LP	2012	50,000,000	-31.16	-26.16	-26.16	-17.74		-19.52
Riverstone Credit Partners	2016	10,000,000	6.13					14.20
Yellowstone Energy Ventures II, L.P.	2008	5,283,254	0.01	17.42	17.42	-36.86	-35.52	-28.63
Total: Dallas Police & Fire Pension System		1,278,265,642	-5.57	-1.25	-1.25	-2.06	1.01	3.70

Dallas Police & Fire Pension System
Private Equity & Debt Funds - Performance Analysis by Investment Strategy

12/31/2016

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	Net Benefit	Call Ratio	DPI Ratio	TVPI Ratio	IRR
100 Venture													
1 Industry Ventures Partnership Holdings IV	2016	5,000,000	425,000	4,575,000	0	0	401,063	401,063	-23,937	9%	0.00	0.94	-7.94%
Subtotal: 100 Venture		5,000,000	425,000	4,575,000	0	0	401,063	401,063	-23,937	9%	0.00	0.94	-7.94%
110 Growth Equity													
1 BankCap Partners Fund I	2007	20,000,000	20,000,000	0	0	5,885,019	17,006,617	22,891,636	2,891,636	100%	0.29	1.14	1.67%
2 BankCap Partners Opportunity Fund, LP ⁴	2013	20,000,000	19,480,769	0	0	18,266,454	0	18,266,454	-1,214,314	97%	0.94	0.94	-5.22%
3 Hudson Clean Energy Partners	2009	25,000,000	24,912,744	87,256	0	3,661,896	10,689,705	14,351,601	-10,561,143	100%	0.15	0.58	-11.13%
4 Lone Star CRA Fund	2008	50,000,000	57,352,941	0	0	12,928,698	59,541,782	72,470,480	15,117,539	115%	0.23	1.26	16.90%
5 Lone Star Growth Capital	2006	16,000,000	12,800,000	16,000,000	0	12,800,000	10,193,552	22,993,552	10,193,552	80%	1.00	1.80	8.49%
6 Lone Star Opportunities Fund V, LP	2012	75,000,000	41,250,000	33,750,000	0	531,444	40,063,273	40,594,717	-655,283	55%	0.01	0.98	-1.28%
7 North Texas Opportunity Fund ¹	2000	10,000,000	10,000,000	0	0	8,798,464	2,131,900	10,930,364	930,364	100%	0.88	1.09	1.04%
8 Pharos Capital Partners IIA, L.P. ⁴	2005	20,000,000	20,000,000	0	0	17,715,199	0	17,715,199	-2,284,801	100%	0.89	0.89	-2.30%
9 Pharos Capital Partners III, LP ⁴	2012	50,000,000	28,250,000	0	-54,286	20,196,932	0	20,196,932	-7,998,782	57%	0.72	0.72	-19.52%
Subtotal: 110 Growth Equity		286,000,000	234,046,453	49,837,256	-54,286	100,784,106	139,626,829	240,410,935	6,418,767	82%	0.43	1.03	0.88%
120 Buyouts													
1 HM Capital Sector Performance Fund	2008	47,300,000	44,354,248	0	1,933,378	39,792,545	0	39,792,545	-6,495,081	100%	0.86	0.86	-4.01%
2 Huff Alternative Fund ²	2000	66,795,718	66,795,718	0	12,022,676	54,931,727	30,038,169	84,969,896	6,151,502	100%	0.70	1.08	1.08%
3 Huff Alternative Income Fund	1994	40,000,000	40,000,000	0	2,018,676	66,940,198	0	66,940,198	24,921,522	100%	1.59	1.59	17.82%
4 Kainos Capital Partners, L.P. ⁴	2013	35,000,000	30,163,455	0	0	43,263,688	0	43,263,688	13,100,233	86%	1.43	1.43	25.01%
5 Levine Leichtman Capital Partners IV ⁴	2008	50,000,000	37,933,751	0	0	78,916,788	0	78,916,788	40,983,037	76%	2.08	2.08	20.14%
6 Levine Leichtman Capital Partners V, L.P. ⁴	2013	25,000,000	19,064,894	0	-4,405	24,506,336	0	24,506,336	5,445,847	76%	1.29	1.29	15.56%
7 Oaktree Power Fund III ³	2011	30,000,000	16,096,514	13,903,486	0	11,940,647	11,899,312	23,839,959	7,743,445	54%	0.74	1.48	12.59%
Subtotal: 120 Buyouts		294,095,718	254,408,580	13,903,486	15,970,325	320,291,929	41,937,481	362,229,410	91,850,506	95%	1.18	1.34	8.16%
135 Direct Lending													
1 Riverstone Credit Partners	2016	10,000,000	5,373,854	4,626,146	102,142	679,425	5,424,424	6,103,849	627,853	54%	0.12	1.11	14.20%
Subtotal: 135 Direct Lending		10,000,000	5,373,854	4,626,146	102,142	679,425	5,424,424	6,103,849	627,853	54%	0.12	1.11	14.20%
150 Distressed													
1 Ashmore Global Special Situations Fund IV ³	2007	70,000,000	70,000,000	0	0	37,580,583	2,072,128	39,652,711	-30,347,289	100%	0.54	0.57	-10.13%
2 Levine Leichtman Deep Value Fund	2006	75,000,000	75,000,000	0	11,025,662	88,688,224	0	88,688,224	2,662,562	100%	1.03	1.03	0.73%
3 Levine Leichtman Private Capital Solutions II, L.P. ⁴	2012	25,000,000	17,867,133	0	-175	18,691,764	0	18,691,764	824,805	71%	1.05	1.05	1.47%
4 Lone Star Fund IX (U.S.), L.P. ³	2014	35,000,000	22,701,874	12,298,126	0	2,043,505	19,987,411	22,030,916	-670,958	65%	0.09	0.97	-3.52%
5 Lone Star Fund VII (U.S.), L.P. ³	2011	25,000,000	23,459,112	1,540,888	0	39,541,921	2,082,645	41,624,566	18,165,453	94%	1.69	1.77	47.68%
6 Lone Star Fund VIII (U.S.), L.P. ³	2013	25,000,000	20,378,036	4,621,964	0	15,135,714	10,755,531	25,891,245	5,513,210	82%	0.74	1.27	17.35%
7 Oaktree Loan Fund 2X ³	2007	60,000,000	60,000,000	0	0	64,287,256	779,695	65,066,951	5,066,951	100%	1.07	1.08	2.24%
8 OCM Opportunities Fund IV	2001	50,000,000	50,000,000	0	0	82,364,001	162,273	82,526,274	32,526,274	100%	1.65	1.65	28.36%
Subtotal: 150 Distressed		365,000,000	339,406,155	18,460,978	11,025,487	348,332,969	35,839,683	384,172,652	33,741,009	95%	0.99	1.10	3.47%
200 Co-Investment													
1 Pharos Capital Co-Investment, LLC	2007	20,000,000	20,000,000	0	0	10,019,157	0	10,019,157	-9,980,843	100%	0.50	0.50	-9.92%
2 Pharos Capital Co-Investments, LP	2008	40,000,000	40,000,000	0	0	67,397,892	70,866	67,468,758	27,468,758	100%	1.68	1.69	8.42%
Subtotal: 200 Co-Investment		60,000,000	60,000,000	0	0	77,417,049	70,866	77,487,915	17,487,915	100%	1.29	1.29	3.88%

1. Net asset value reflects preliminary value from manager pending final audit
2. Net asset value is cash-adjusted pending final audit
3. Net asset value reflects cash-adjusted Evercore purchase prices which occurred during Q1 2017
4. Funds sold in Evercore secondary sale during Q4 2016

Dallas Police & Fire Pension System
Private Equity & Debt Funds - Performance Analysis by Investment Strategy

12/31/2016

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	Net Benefit	Call Ratio	DPI Ratio	TVPI Ratio	IRR
210 Direct Investment													
1 Miscellaneous Private Equity Expenses	2016	80,516	80,516	0	0	8,866	0	8,866	-71,651	100%	0.11	0.11	N/A
Subtotal: 210 Direct Investment		1,615,832	1,615,832	0	0	8,866	0	8,866	-1,606,966	100%	0.01	0.01	-23.17%
400 Energy													
1 Huff Energy Fund	2006	100,000,000	99,880,021	119,979	-947,331	4,477,394	131,208,655	135,686,049	36,753,359	100%	0.05	1.37	4.65%
2 Merit Energy Partners E-I ³	2004	7,018,930	7,018,930	0	-1,741	12,933,530	2,042,246	14,975,776	7,958,587	100%	1.84	2.13	14.49%
3 Merit Energy Partners F-I ³	2005	8,748,346	8,748,346	0	0	3,644,724	156,482	3,801,206	-4,947,140	100%	0.42	0.43	-17.19%
4 Merit Energy Partners G, LP ³	2008	39,200,000	39,200,000	0	0	6,532,135	20,224,516	26,756,651	-12,443,349	100%	0.17	0.68	-9.89%
5 Merit Energy Partners H, LP ³	2010	10,000,000	10,000,000	0	0	1,241,072	5,629,379	6,870,451	-3,129,549	100%	0.12	0.69	-13.72%
6 Yellowstone Energy Ventures II, L.P.	2008	5,283,254	5,112,307	170,947	0	1,458,572	114,719	1,573,291	-3,539,016	97%	0.29	0.31	-28.63%
Subtotal: 400 Energy		170,250,530	169,959,604	290,926	-949,072	30,287,427	159,375,997	189,663,424	20,652,892	100%	0.18	1.12	2.02%
502 Credit Opportunities													
1 Highland Credit Ops	2006	35,348,165	35,348,165	0	0	23,595,921	6,216,120	29,812,041	-5,536,124	100%	0.67	0.84	-2.20%
2 Highland Crusader Fund	2003	50,955,397	50,955,397	0	0	62,263,032	2,756,000	65,019,032	14,063,635	100%	1.22	1.28	4.31%
Subtotal: 502 Credit Opportunities		86,303,562	86,303,562	0	0	85,858,953	8,972,120	94,831,073	8,527,511	100%	0.99	1.10	1.54%
Total: Dallas Police & Fire Pension System		1,278,265,642	1,151,539,041	91,693,792	26,094,596	963,660,723	391,648,463	1,355,309,186	177,675,548	90%	0.82	1.15	3.70%

1. Net asset value reflects preliminary value from manager pending final audit
2. Net asset value is cash-adjusted pending final audit
3. Net asset value reflects cash-adjusted Evercore purchase prices which occurred during Q1 2017
4. Funds sold in Evercore secondary sale during Q4 2016

Dallas Police & Fire Pension System
As of 12/31/2016

Growth Equity			IRR				DPI				TVPI				Quartile Rank			Benchmark
Fund Name	Vintage Year	Sample Size	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	IRR	DPI	TVPI	
BankCap Partners Fund I	2007	18	1.67%	15.25%	10.75%	3.02%	0.29x	1.31x	0.96x	0.37x	1.14x	2.31x	1.57x	1.15x	4	1	1	
BankCap Partners Opportunity Fund, LP	2013	12	-5.22%	12.29%	10.04%	5.92%	0.94x	0.05x	0.00x	0.00x	0.94x	1.30x	1.20x	1.11x	4	1	1	U.S. Growth Equity
Hudson Clean Energy Partners	2009	7	-11.13%	---	10.77%	---	0.15x	---	0.50x	---	0.58x	---	1.60x	---	NA	NA	NA	U.S. Growth Equity
Lone Star CRA Fund	2008	6	16.90%	---	10.13%	---	0.23x	---	0.83x	---	1.26x	---	1.56x	---	NA	NA	NA	U.S. Growth Equity
Lone Star Growth Capital	2006	12	8.49%	13.90%	6.96%	4.35%	1.00x	1.48x	1.23x	1.11x	1.80x	1.96x	1.36x	1.22x	2	1	1	U.S. Growth Equity
Lone Star Opportunities Fund V, LP	2012	12	-1.28%	16.82%	13.26%	11.00%	0.01x	0.24x	0.15x	0.03x	0.98x	1.44x	1.34x	1.30x	4	1	1	U.S. Growth Equity
North Texas Opportunity Fund	2000	13	1.04%	9.59%	4.40%	-4.42%	0.88x	1.59x	1.33x	0.76x	1.09x	1.66x	1.33x	0.78x	3	3	1	U.S. Growth Equity
Pharos Capital Partners IIA, L.P.	2005	15	-2.30%	15.94%	10.18%	5.80%	0.89x	1.92x	1.31x	0.38x	0.89x	2.33x	1.62x	1.40x	4	1	1	U.S. Growth Equity
Pharos Capital Partners III, LP	2012	12	-19.52%	16.82%	13.26%	11.00%	0.72x	0.24x	0.15x	0.03x	0.72x	1.44x	1.34x	1.30x	4	1	1	U.S. Growth Equity

Buyouts			IRR				DPI				TVPI				Quartile Rank			Benchmark
Fund Name	Vintage Year	Sample Size	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	IRR	DPI	TVPI	
HM Capital Sector Performance Fund	2008	53	-4.01%	19.57%	13.65%	8.62%	0.86x	1.36x	0.99x	0.68x	0.86x	1.92x	1.59x	1.46x	4	1	1	
Huff Alternative Fund	2000	55	1.08%	21.55%	14.35%	10.51%	0.70x	2.22x	1.81x	1.50x	1.08x	2.32x	1.91x	1.53x	4	1	1	U.S. Buyout
Huff Alternative Income Fund	1994	21	17.82%	28.17%	14.44%	7.13%	1.59x	2.41x	1.64x	1.34x	1.59x	2.43x	1.64x	1.34x	2	3	3	U.S. Buyout
Kainos Capital Partners, L.P.	2013	35	25.01%	21.62%	10.76%	6.19%	1.43x	0.26x	0.06x	0.00x	1.43x	1.34x	1.20x	1.10x	1	1	1	U.S. Buyout
Levine Leichtman Capital Partners IV	2008	53	20.14%	19.57%	13.65%	8.62%	2.08x	1.36x	0.99x	0.68x	2.08x	1.92x	1.59x	1.46x	1	1	1	U.S. Buyout
Levine Leichtman Capital Partners V, L.P.	2013	35	15.56%	21.62%	10.76%	6.19%	1.29x	0.26x	0.06x	0.00x	1.29x	1.34x	1.20x	1.10x	2	1	2	U.S. Buyout
Oaktree Power Fund III	2011	24	12.59%	17.14%	13.81%	8.18%	0.74x	0.52x	0.36x	0.24x	1.48x	1.61x	1.39x	1.27x	3	1	2	U.S. Buyout

Direct Lending			IRR				DPI				TVPI				Quartile Rank			Benchmark
Fund Name	Vintage Year	Sample Size	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	IRR	DPI	TVPI	
Riverstone Credit Partners	2016	83	14.20%	0.74%	-10.08%	-21.22%	0.12x	0.00x	0.00x	0.00x	1.11x	1.00x	0.95x	0.85x	1	NA	1	

Distressed			IRR				DPI				TVPI				Quartile Rank			Benchmark
Fund Name	Vintage Year	Sample Size	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	IRR	DPI	TVPI	
Ashmore Global Special Situations Fund IV	2007	6	-10.13%	---	8.04%	---	0.54x	---	1.32x	---	0.57x	---	1.55x	---	NA	NA	NA	
Levine Leichtman Deep Value Fund	2006	14	0.73%	13.12%	8.30%	6.36%	1.03x	1.66x	1.19x	1.05x	1.03x	1.88x	1.66x	1.38x	4	1	1	U.S. Distressed
Levine Leichtman Private Capital Solutions II, L.P.	2012	11	1.47%	16.10%	9.55%	8.84%	1.05x	0.74x	0.52x	0.12x	1.05x	1.40x	1.27x	1.23x	4	1	1	U.S. Distressed
Lone Star Fund IX (U.S.), L.P.	2014	11	-3.52%	17.24%	8.03%	3.42%	0.09x	0.20x	0.03x	0.00x	0.97x	1.29x	1.11x	1.05x	4	2	1	U.S. Distressed
Lone Star Fund VII (U.S.), L.P.	2011	3	47.68%	---	---	---	1.69x	---	---	---	1.77x	---	---	---	NA	NA	NA	Global Distressed
Lone Star Fund VIII (U.S.), L.P.	2013	4	17.35%	---	---	---	0.74x	---	---	---	1.27x	---	---	---	NA	NA	NA	Global Distressed
Oaktree Loan Fund 2X	2007	6	2.24%	---	8.04%	---	1.07x	---	1.32x	---	1.08x	---	1.55x	---	NA	NA	NA	Global Distressed
OCM Opportunities Fund IV	2001	4	28.36%	---	---	---	1.65x	---	---	---	1.65x	---	---	---	NA	NA	NA	U.S. Distressed

Co-Investment			IRR				DPI				TVPI				Quartile Rank			Benchmark
Fund Name	Vintage Year	Sample Size	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	IRR	DPI	TVPI	
Pharos Capital Co-Investment, LLC	2007	18	-9.92%	15.25%	10.75%	3.02%	0.50x	1.31x	0.96x	0.37x	0.50x	2.31x	1.57x	1.15x	4	1	1	
Pharos Capital Co-Investments, LP	2008	6	8.42%	---	10.13%	---	1.68x	---	0.83x	---	1.69x	---	1.56x	---	NA	NA	NA	U.S. Growth Equity

Note:
Benchmark data from Thomson One/Cambridge Associates as of 12.31.16

Dallas Police & Fire Pension System
As of 12/31/2016

Energy			IRR				DPI				TVPI				Quartile Rank			Benchmark
Fund Name	Vintage Year	Sample Size	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	IRR	DPI	TVPI	
Huff Energy Fund	2006	10	4.65%	10.44%	2.08%	-6.70%	0.05x	1.38x	1.02x	0.49x	1.37x	1.57x	1.09x	0.76x	2	1	1	U.S. Energy
Merit Energy Partners E-I	2004	7	14.49%	---	17.68%	---	1.84x	---	1.68x	---	2.13x	---	1.75x	---	NA	NA	NA	U.S. Energy
Merit Energy Partners F-I	2005	8	-17.19%	9.54%	4.72%	-1.69%	0.42x	1.64x	1.11x	0.83x	0.43x	1.66x	1.21x	0.94x	4	1	1	U.S. Energy
Merit Energy Partners G, LP	2008	13	-9.89%	14.20%	5.77%	-2.05%	0.17x	0.69x	0.63x	0.42x	0.68x	1.63x	1.31x	0.91x	4	4	1	U.S. Energy
Merit Energy Partners H, LP	2010	8	-13.72%	26.26%	8.88%	0.84%	0.12x	1.24x	0.53x	0.38x	0.69x	1.90x	1.34x	1.02x	4	1	1	U.S. Energy
Yellowstone Energy Ventures II, L.P.	2008	13	-28.63%	14.20%	5.77%	-2.05%	0.29x	0.69x	0.63x	0.42x	0.31x	1.63x	1.31x	0.91x	4	1	1	U.S. Energy

Credit Opportunities			IRR				DPI				TVPI				Quartile Rank			Benchmark
Fund Name	Vintage Year	Sample Size	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	IRR	DPI	TVPI	
Highland Credit Ops	2006	4	-2.20%	---	---	---	0.67x	---	---	---	0.84x	---	---	---	NA	NA	NA	Global Distressed
Highland Crusader Fund	2003	3	4.31%	---	---	---	1.22x	---	---	---	1.28x	---	---	---	NA	NA	NA	Global Distressed

Venture			IRR				DPI				TVPI				Quartile Rank			Benchmark
Fund Name	Vintage Year	Sample Size	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	IRR	DPI	TVPI	
Industry Ventures Partnership Holdings IV	2016	31	-7.94%	-3.59%	-14.44%	-20.47%	0.00x	0.00x	0.00x	0.00x	0.94x	0.97x	0.90x	0.85x	2	NA	2	U.S. Venture

Note:
Benchmark data is from Thomson One/Cambridge Associates as of 12.31.16

Dallas Police & Fire Pension System
Private Equity & Debt Funds - Vintage Year Performance Analysis

12/31/2016

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	Net Benefit	Call Ratio	DPI Ratio	TVPI Ratio	IRR
1994													
1 Huff Alternative Income Fund	1994	40,000,000	40,000,000	0	2,018,676	66,940,198	0	66,940,198	24,921,522	100%	1.59	1.59	17.82%
Subtotal: 1994		40,000,000	40,000,000	0	2,018,676	66,940,198	0	66,940,198	24,921,522	100%	1.59	1.59	17.82%
2000													
1 Huff Alternative Fund	2000	66,795,718	66,795,718	0	12,022,676	54,931,727	30,038,169	84,969,896	6,151,502	100%	0.70	1.08	1.08%
2 North Texas Opportunity Fund	2000	10,000,000	10,000,000	0	0	8,798,464	2,131,900	10,930,364	930,364	100%	0.88	1.09	1.04%
Subtotal: 2000		76,795,718	76,795,718	0	12,022,676	63,730,191	32,170,069	95,900,260	7,081,866	100%	0.72	1.08	1.07%
2001													
1 OCM Opportunities Fund IV	2001	50,000,000	50,000,000	0	0	82,364,001	162,273	82,526,274	32,526,274	100%	1.65	1.65	28.36%
Subtotal: 2001		50,000,000	50,000,000	0	0	82,364,001	162,273	82,526,274	32,526,274	100%	1.65	1.65	28.36%
2003													
1 Highland Crusader Fund	2003	50,955,397	50,955,397	0	0	62,263,032	2,756,000	65,019,032	14,063,635	100%	1.22	1.28	4.31%
Subtotal: 2003		50,955,397	50,955,397	0	0	62,263,032	2,756,000	65,019,032	14,063,635	100%	1.22	1.28	4.31%
2004													
1 Merit Energy Partners E-I	2004	7,018,930	7,018,930	0	-1,741	12,933,530	2,042,246	14,975,776	7,958,587	100%	1.84	2.13	14.49%
Subtotal: 2004		7,018,930	7,018,930	0	-1,741	12,933,530	2,042,246	14,975,776	7,958,587	100%	1.84	2.13	14.49%
2005													
1 Merit Energy Partners F-I	2005	8,748,346	8,748,346	0	0	3,644,724	156,482	3,801,206	-4,947,140	100%	0.42	0.43	-17.19%
2 Pharos Capital Partners IIA, L.P.	2005	20,000,000	20,000,000	0	0	17,715,199	0	17,715,199	-2,284,801	100%	0.89	0.89	-2.30%
Subtotal: 2005		28,748,346	28,748,346	0	0	21,359,923	156,482	21,516,405	-7,231,941	100%	0.74	0.75	-5.28%
2006													
1 Highland Credit Ops	2006	35,348,165	35,348,165	0	0	23,595,921	6,216,120	29,812,041	-5,536,124	100%	0.67	0.84	-2.20%
2 Huff Energy Fund	2006	100,000,000	99,880,021	119,979	-947,331	4,477,394	131,208,655	135,686,049	36,753,359	100%	0.05	1.37	4.65%
3 Levine Leichtman Deep Value Fund	2006	75,000,000	75,000,000	0	11,025,662	88,688,224	0	88,688,224	2,662,562	100%	1.03	1.03	0.73%
4 Lone Star Growth Capital	2006	16,000,000	12,800,000	16,000,000	0	12,800,000	10,193,552	22,993,552	10,193,552	80%	1.00	1.80	8.49%
Subtotal: 2006		226,348,165	223,028,186	16,119,979	10,078,331	129,561,539	147,618,327	277,179,866	44,073,349	93%	0.56	1.19	2.82%
2007													
1 Ashmore Global Special Situations Fund IV	2007	70,000,000	70,000,000	0	0	37,580,583	2,072,128	39,652,711	-30,347,289	100%	0.54	0.57	-10.13%
2 BankCap Partners Fund I	2007	20,000,000	20,000,000	0	0	5,885,019	17,006,617	22,891,636	2,891,636	100%	0.29	1.14	1.67%
3 Oaktree Loan Fund 2X	2007	60,000,000	60,000,000	0	0	64,287,256	779,695	65,066,951	5,066,951	100%	1.07	1.08	2.24%
4 Pharos Capital Co-Investment, LLC	2007	20,000,000	20,000,000	0	0	10,019,157	0	10,019,157	-9,980,843	100%	0.50	0.50	-9.92%
Subtotal: 2007		170,000,000	170,000,000	0	0	117,772,014	19,858,440	137,630,454	-32,369,545	100%	0.69	0.81	-4.01%
2008													
1 HM Capital Sector Performance Fund	2008	47,300,000	44,354,248	0	1,933,378	39,792,545	0	39,792,545	-6,495,081	100%	0.86	0.86	-4.01%
2 Levine Leichtman Capital Partners IV	2008	50,000,000	37,933,751	0	0	78,916,788	0	78,916,788	40,983,037	76%	2.08	2.08	20.14%
3 Lone Star CRA Fund	2008	50,000,000	57,352,941	0	0	12,928,698	59,541,782	72,470,480	15,117,539	115%	0.23	1.26	16.90%
4 Merit Energy Partners G, LP	2008	39,200,000	39,200,000	0	0	6,532,135	20,224,516	26,756,651	-12,443,349	100%	0.17	0.68	-9.89%
5 Pharos Capital Co-Investments, LP	2008	40,000,000	40,000,000	0	0	67,397,892	70,866	67,468,758	27,468,758	100%	1.68	1.69	8.42%
6 Yellowstone Energy Ventures II, L.P.	2008	5,283,254	5,112,307	170,947	0	1,458,572	114,719	1,573,291	-3,539,016	97%	0.29	0.31	-28.63%

Dallas Police & Fire Pension System
Private Equity & Debt Funds - Vintage Year Performance Analysis

12/31/2016

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	Net Benefit	Call Ratio	DPI Ratio	TVPI Ratio	IRR
Subtotal: 2008		233,318,570	225,488,562	170,947	1,933,378	207,026,630	79,951,883	286,978,513	59,556,573	100%	0.91	1.26	6.34%
2009													
1 Hudson Clean Energy Partners	2009	25,000,000	24,912,744	87,256	0	3,661,896	10,689,705	14,351,601	-10,561,143	100%	0.15	0.58	-11.13%
Subtotal: 2009		25,000,000	24,912,744	87,256	0	3,661,896	10,689,705	14,351,601	-10,561,143	100%	0.15	0.58	-11.13%
2010													
1 Merit Energy Partners H, LP	2010	10,000,000	10,000,000	0	0	1,241,072	5,629,379	6,870,451	-3,129,549	100%	0.12	0.69	-13.72%
Subtotal: 2010		10,000,000	10,000,000	0	0	1,241,072	5,629,379	6,870,451	-3,129,549	100%	0.12	0.69	-13.72%
2011													
1 Lone Star Fund VII (U.S.), L.P.	2011	25,000,000	23,459,112	1,540,888	0	39,541,921	2,082,645	41,624,566	18,165,453	94%	1.69	1.77	47.68%
2 Oaktree Power Fund III	2011	30,000,000	16,096,514	13,903,486	0	11,940,647	11,899,312	23,839,959	7,743,445	54%	0.74	1.48	12.59%
Subtotal: 2011		55,000,000	39,555,626	15,444,374	0	51,482,568	13,981,957	65,464,525	25,908,898	72%	1.30	1.65	28.35%
2012													
1 Levine Leichtman Private Capital Solutions II, L.P.	2012	25,000,000	17,867,133	0	-175	18,691,764	0	18,691,764	824,805	71%	1.05	1.05	1.47%
2 Lone Star Opportunities Fund V, LP	2012	75,000,000	41,250,000	33,750,000	0	531,444	40,063,273	40,594,717	-655,283	55%	0.01	0.98	-1.28%
3 Pharos Capital Partners III, LP	2012	50,000,000	28,250,000	0	-54,286	20,196,932	0	20,196,932	-7,998,782	57%	0.72	0.72	-19.52%
Subtotal: 2012		150,000,000	87,367,133	33,750,000	-54,461	39,420,140	40,063,273	79,483,413	-7,829,260	72%	0.45	0.91	-5.32%
2013													
1 BankCap Partners Opportunity Fund, LP	2013	20,000,000	19,480,769	0	0	18,266,454	0	18,266,454	-1,214,314	97%	0.94	0.94	-5.22%
2 Kainos Capital Partners, L.P.	2013	35,000,000	30,163,455	0	0	43,263,688	0	43,263,688	13,100,233	86%	1.43	1.43	25.01%
3 Levine Leichtman Capital Partners V, L.P.	2013	25,000,000	19,064,894	0	-4,405	24,506,336	0	24,506,336	5,445,847	76%	1.29	1.29	15.56%
4 Lone Star Fund VIII (U.S.), L.P.	2013	25,000,000	20,378,036	4,621,964	0	15,135,714	10,755,531	25,891,245	5,513,210	82%	0.74	1.27	17.35%
Subtotal: 2013		105,000,000	89,087,154	4,621,964	-4,405	101,172,193	10,755,531	111,927,724	22,844,976	95%	1.14	1.26	16.12%
2014													
1 Lone Star Fund IX (U.S.), L.P.	2014	35,000,000	22,701,874	12,298,126	0	2,043,505	19,987,411	22,030,916	-670,958	65%	0.09	0.97	-3.52%
Subtotal: 2014		35,000,000	22,701,874	12,298,126	0	2,043,505	19,987,411	22,030,916	-670,958	65%	0.09	0.97	-3.52%
2016													
1 Industry Ventures Partnership Holdings IV	2016	5,000,000	425,000	4,575,000	0	0	401,063	401,063	-23,937	9%	0.00	0.94	-7.94%
2 Miscellaneous Private Equity Expenses	2016	80,516	80,516	0	0	8,866	0	8,866	-71,651	100%	0.11	0.11	N/A
3 Riverstone Credit Partners	2016	10,000,000	5,373,854	4,626,146	102,142	679,425	5,424,424	6,103,849	627,853	54%	0.12	1.11	14.20%
Subtotal: 2016		15,080,516	5,879,370	9,201,146	102,142	688,291	5,825,487	6,513,778	532,265	39%	0.12	1.09	11.43%
Total: Dallas Police & Fire Pension System		1,278,265,642	1,151,539,041	91,693,792	26,094,596	963,660,723	391,648,463	1,355,309,186	177,675,548	90%	0.82	1.15	3.70%



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Dallas Police & Fire Pension System

Fourth Quarter 2016 *Private Real Assets Program* (Real Estate, Infrastructure, Natural Resources)

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Real Estate and Real Assets

The following table presents the status of the DFPF **REAL ESTATE** portfolio as of December 31, 2016:

Since Inception Commitments	Terminated Commitments	Amount Funded	Amount Distributed	Reported Value	Call Ratio	Distribution Ratio
\$1,607,679,624	\$0	\$1,393,972,992	\$543,096,162	\$580,736,414	86.71%	38.96%
Unfunded Commitment	Market Exposure (Reported Value + Unfunded Commitment)		Total Fund Composite as of 12/31/2016	Real Estate Target	Reported Value of Total Fund	Market Exposure as a % Total Fund
\$213,706,631	\$794,443,045		\$2,148,175,753	12%	27.03%	36.98%
Total Value (Reported Value + Distributions)			Total Value To Capital Call Ratio		Internal Rate of Return IRR, Since Inception	
\$1,123,832,576			0.81		-4.50%	

The following table presents the status of the DFPF **NATURAL RESOURCES** portfolio as of December 31, 2016:

Since Inception Commitments	Terminated Commitments	Amount Funded	Amount Distributed	Reported Value	Call Ratio	Distribution Ratio
\$236,397,292	\$0	\$236,397,292	\$193,631,632	\$266,068,236	100.00%	81.91%
Unfunded Commitment	Market Exposure (Reported Value + Unfunded Commitment)		Total Fund Composite as of 12/31/2016	Natural Resources Target	Reported Value of Total Fund	Market Exposure as a % Total Fund
\$0	\$266,068,236		\$2,148,175,753	3%	12.39%	12.39%
Total Value (Reported Value + Distributions)			Total Value To Capital Call Ratio		Internal Rate of Return IRR, Since Inception	
\$459,699,868			1.94		9.99%	

The following table presents the status of the DFPF **INFRASTRUCTURE** portfolio as of December 31, 2016:

Since Inception Commitments	Terminated Commitments	Amount Funded	Amount Distributed	Reported Value	Call Ratio	Distribution Ratio
\$364,000,000	\$39,233,614	\$286,189,859	\$107,409,546	\$181,404,476	78.62%	37.53%
Unfunded Commitment	Market Exposure (Reported Value + Unfunded Commitment)		Total Fund Composite as of 12/31/2016	Infrastructure Target	Reported Value of Total Fund	Market Exposure as a % Total Fund
\$38,576,527	\$219,981,003		\$2,148,175,753	5%	8.44%	10.24%
Total Value (Reported Value + Distributions)			Total Value To Capital Call Ratio		Internal Rate of Return IRR, Since Inception	
\$288,814,022			1.01		0.27%	

Dallas Police & Fire Pension System
Investment Strategy Performance Analysis

12/31/2016¹

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	Net Benefit	Call Ratio	DPI Ratio	TVPI Ratio
Real Estate												
Direct Investments ²	Various	1,384,976,032	1,195,622,663	189,353,369	0	321,358,709	528,014,026	849,372,735	-346,249,927	86%	0.27	0.71
CDK Multifamily I	2014	10,522,376	10,522,376	0	0	42,934	10,786,650	10,829,584	307,208	100%	0.00	1.03
Hearthstone MS II Homebuilding Investors	1999	10,000,000	7,970,115	2,029,885	0	10,989,565	959	10,990,524	3,020,409	80%	1.38	1.38
Hearthstone MS III Homebuilding Investors	2003	10,587,389	10,587,389	0	0	12,863,833	628,450	13,492,283	2,904,894	100%	1.22	1.27
Lone Star Fund III (U.S.), L.P.	2000	20,000,000	19,827,415	172,585	0	40,674,181	27,069	40,701,250	20,873,835	99%	2.05	2.05
Lone Star Fund IV (U.S.), L.P.	2001	20,000,000	19,045,201	954,799	0	43,786,407	112,035	43,898,442	24,853,241	95%	2.30	2.30
Lone Star Fund V (U.S.), L.P.	2005	22,500,000	22,254,975	245,025	0	17,060,116	3,545,779	20,605,895	-1,649,080	99%	0.77	0.93
Lone Star Fund VI (U.S.), L.P.	2008	25,000,000	20,005,358	4,994,642	0	26,884,679	4,828,289	31,712,968	11,707,610	80%	1.34	1.59
Lone Star Real Estate Fund (U.S.), L.P.	2008	25,000,000	20,719,418	4,280,582	0	22,817,586	2,586,121	25,403,707	4,684,289	83%	1.10	1.23
Lone Star Real Estate Fund II	2011	25,000,000	22,152,461	2,847,539	0	29,728,497	3,060,873	32,789,370	10,636,909	89%	1.34	1.48
Lone Star Real Estate Fund III	2014	25,000,000	23,360,962	1,639,038	0	11,807,078	14,786,650	26,593,728	3,232,766	93%	0.51	1.14
M&G Real Estate Debt Fund II	2013	29,093,826	21,904,659	7,189,167	0	5,082,577	12,359,513	17,442,090	-4,462,569	75%	0.23	0.80
Subtotal: Real Estate		1,607,679,624	1,393,972,992	213,706,631	0	543,096,162	580,736,414	1,123,832,576	-270,140,416	87%	0.39	0.81
Infrastructure												
AIRRO Consolidated (2 investments)	Various	77,000,000	43,281,535	33,718,465	-762,541	4,677,250	39,899,077	44,576,327	2,057,333	56%	0.11	1.03
JP Morgan Consolidated (2 Investments)	Various	87,000,000	82,141,937	4,858,063	-404	15,524,562	54,533,818	70,058,381	-12,083,153	94%	0.19	0.85
LBJ Infrastructure Group Holding, LLC (LBJ)	2009	50,000,000	44,346,229	0	0	1,782,000	44,346,035	46,128,035	1,781,806	89%	0.04	1.04
NTE 3a-3b	2012	50,000,000	23,794,565	0	0	28,186,978	0	28,186,978	4,392,413	48%	1.18	1.18
NTE Mobility Partners Holding, LLC (NTE)	2009	50,000,000	42,625,592	0	0	2,000,000	42,625,545	44,625,545	1,999,953	85%	0.05	1.05
RREEF North American Infrastructure Fund	2007	50,000,000	50,000,000	0	846,289	55,238,755	0	55,238,755	4,392,466	100%	1.09	1.09
Subtotal: Infrastructure		364,000,000	286,189,859	38,576,527	83,344	107,409,546	181,404,476	288,814,022	2,540,819	79%	0.38	1.01
Natural Resources												
Hancock Agricultural	1998	74,420,001	74,420,001	0	0	89,596,343	170,334,050	259,930,393	185,510,392	100%	1.20	3.49
BTG Timberland	2007	22,230,000	22,230,000	0	0	33,056,506	13,324	33,069,830	10,839,830	100%	1.49	1.49
FIA Timberland	1992	59,649,696	59,649,696	0	0	63,978,783	43,536,008	107,514,791	47,865,095	100%	1.07	1.80
Subtotal: Natural Resources		236,397,292	236,397,292	0	0	193,631,632	266,068,236	459,699,868	223,302,576	100%	0.82	1.94
Total: Real Assets		2,208,076,916	1,916,560,143	252,283,158	83,344	844,137,339	1,028,209,127	1,872,346,466	-44,297,021	87%	0.44	0.98

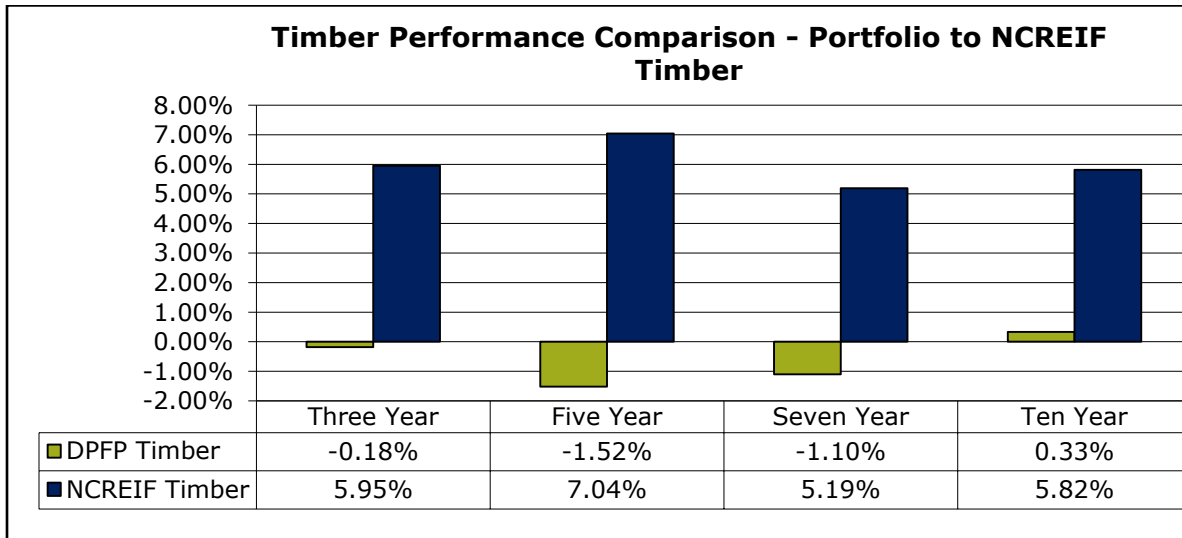
Notes:

1. Data provided from managers as of December 31, 2016

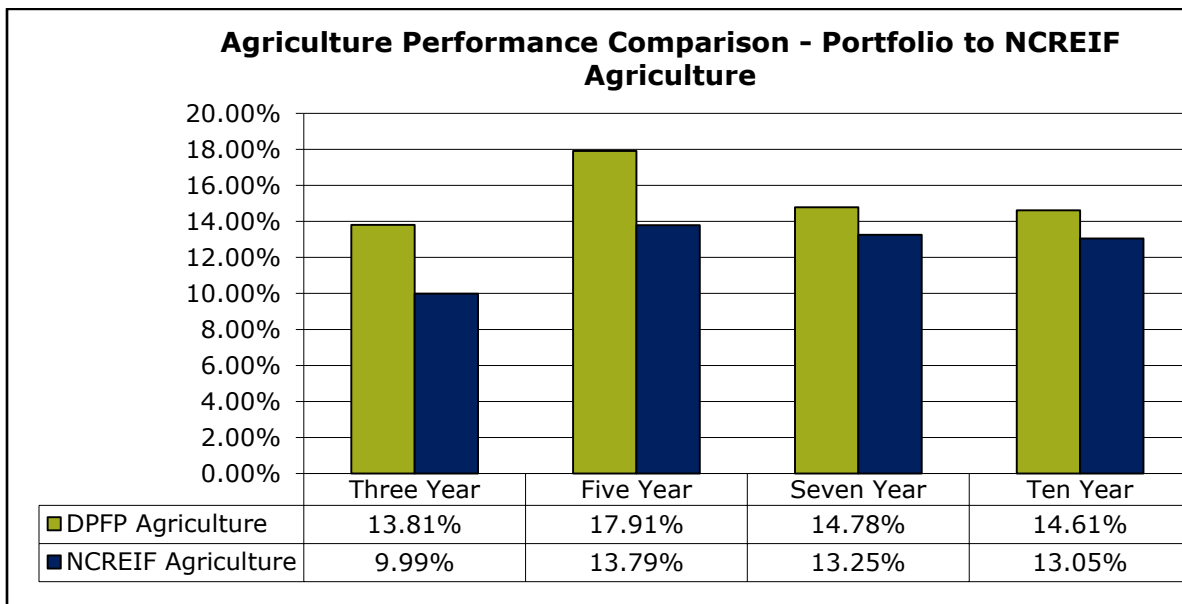
2. Unfunded commitment includes Sumitomo line of credit of \$188,900,000

Timber and Agriculture Benchmarks

The following graph shows the performance of the DFPF **Timber** portfolio vs. the NCREIF Timber Index* as of December 31, 2016:



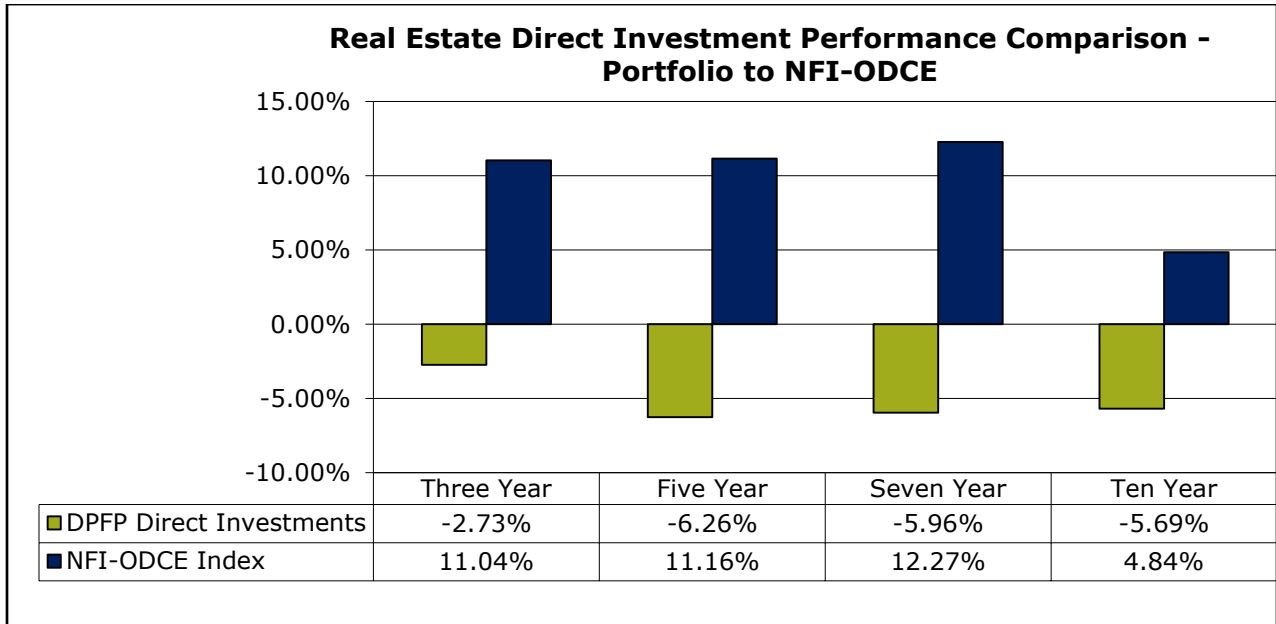
The following graph shows the performance of the DFPF **Agriculture** portfolio vs. the NCREIF Agriculture Index* as of December 31, 2016:



*NCREIF Agriculture and Timber index returns are calculated gross of fees and on a time-weighted basis, NEPC has used an assumed fee of 100 basis points. DFPF returns are calculated net of fees using a money-weighted return

Real Estate Benchmark

The following graph shows the performance of the DPFP **Direct Investment Real Estate** portfolio vs. the NCREIF NFI-ODCE Index** as of December 31, 2016:



**NFI-ODCE Index returns are net of fees and calculated on a time-weighted basis; DPFP returns are calculated net of fees using a money-weighted return

Dallas Police & Fire Pension System
As of 12/31/2016

U.S. RE			IRR				DPI				TVPI				Quartile Rank			
Fund Name	Vintage Year	Sample Size	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	IRR	DPI	TVPI	Benchmark
CDK Multifamily I	2014	35	1.22%	14.82%	11.42%	7.33%	0.00x	0.15x	0.06x	0.00x	1.03x	1.21x	1.15x	1.08x	4	4	4	U.S RE
Hearthstone MS II Homebuilding Investors	1999	16	26.70%	17.81%	10.22%	9.23%	1.38x	1.78x	1.46x	1.40x	1.38x	1.81x	1.48x	1.40x	1	4	4	U.S RE
Hearthstone MS III Homebuilding Investors	2003	25	24.71%	20.10%	10.81%	-1.62%	1.22x	1.76x	1.39x	0.91x	1.27x	1.76x	1.52x	0.91x	1	3	3	U.S RE

European RE			IRR				DPI				TVPI				Quartile Rank			
Fund Name	Vintage Year	Sample Size	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	IRR	DPI	TVPI	Benchmark
M&G Real Estate Debt Fund II	2013	12	-16.48%	6.81%	-0.32%	-2.71%	0.23x	0.27x	0.20x	0.04x	0.80x	1.12x	0.99x	0.93x	4	2	4	European RE

Global RE			IRR				DPI				TVPI				Quartile Rank			
Fund Name	Vintage Year	Sample Size	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	IRR	DPI	TVPI	Benchmark
Lone Star Fund III (U.S.), L.P.	2000	17	31.88%	24.23%	18.37%	13.29%	2.05x	2.18x	1.53x	1.37x	2.05x	2.19x	1.75x	1.46x	1	2	2	Global RE
Lone Star Fund IV (U.S.), L.P.	2001	21	30.15%	25.99%	18.82%	7.95%	2.30x	1.89x	1.65x	1.30x	2.30x	1.89x	1.65x	1.43x	1	1	1	Global RE
Lone Star Fund V (U.S.), L.P.	2005	66	-1.40%	2.53%	-1.49%	-7.76%	0.77x	1.07x	0.72x	0.46x	0.93x	1.20x	0.92x	0.68x	2	2	2	Global RE
Lone Star Fund VI (U.S.), L.P.	2008	51	21.98%	11.96%	8.04%	4.87%	1.34x	1.42x	1.10x	0.71x	1.59x	1.56x	1.38x	1.25x	1	2	1	Global RE
Lone Star Real Estate Fund (U.S.), L.P.	2008	51	5.19%	11.96%	8.04%	4.87%	1.10x	1.42x	1.10x	0.71x	1.23x	1.56x	1.38x	1.25x	3	3	4	Global RE
Lone Star Real Estate Fund II	2011	53	24.96%	21.26%	16.44%	12.81%	1.34x	1.29x	1.09x	0.71x	1.48x	1.71x	1.49x	1.37x	1	1	3	Global RE
Lone Star Real Estate Fund III	2014	47	9.19%	14.09%	8.59%	1.39%	0.51x	0.15x	0.07x	0.01x	1.14x	1.19x	1.12x	1.02x	2	1	2	Global RE

Infrastructure			IRR				DPI				TVPI				Quartile Rank			
Fund Name	Vintage Year	Sample Size	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	Fund	1st Quartile	Median	3rd Quartile	IRR	DPI	TVPI	Benchmark
AIRRO	2008	9	2.47%	12.48%	7.83%	6.32%	0.13x	0.61x	0.50x	0.41x	1.14x	1.54x	1.51x	1.36x	4	4	4	Infrastructure
AIRRO II	2013	8	-15.68%	---	---	---	0.00x	---	---	---	0.60x	---	---	---	NA	NA	NA	Infrastructure
J.P. Morgan Maritime Fund, L.P.	2009	3	-22.98%	---	---	---	0.06x	---	---	---	0.59x	---	---	---	NA	NA	NA	Infrastructure
JP Morgan Infrastructure Investments Fund	2007	7	2.23%	---	---	---	0.35x	---	---	---	1.17x	---	---	---	NA	NA	NA	Infrastructure
LBJ Infrastructure Group Holding, LLC (LBJ)	2009	3	1.04%	---	---	---	0.04x	---	---	---	1.04x	---	---	---	NA	NA	NA	Infrastructure
NTE 3a-3b	2012	9	16.03%	21.20%	7.46%	2.03%	1.18x	0.49x	0.16x	0.09x	1.18x	1.47x	1.15x	1.04x	2	1	2	Infrastructure
NTE Mobility Partners Holding, LLC (NTE)	2009	3	1.11%	---	---	---	0.05x	---	---	---	1.05x	---	---	---	NA	NA	NA	Infrastructure
RREEF North American Infrastructure Fund	2007	7	12.59%	---	8.11%	---	1.09x	---	0.58x	---	1.09x	---	1.42x	---	NA	NA	NA	Infrastructure

Note:
Benchmark data is from Thomson One/Cambridge Associates as of 12.31.16