

Second Quarter 2018 Private Equity Review

Firefighters' Retirement System of Louisiana

October 2018

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- 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.
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October, 2018

Firefighters' Retirement System of Louisiana (FRS)

RE: Private Markets Strategy – 2nd Quarter 2018

Dear FRS,

We are pleased to present the June 30, 2018 Private Equity Report for the Firefighters' Retirement System of Louisiana. The report provides a variety of performance analysis for the overall portfolio. The reports include trailing performance, performance by investment stage and vintage year performance.

The Firefighters' Retirement System of Louisiana experienced a positive quarter, having a nominal IRR of 4.04%. The IRR since inception is 1.41%. The overall multiple (current valuation plus cumulative distributions, divided by total capital calls) is 1.06.

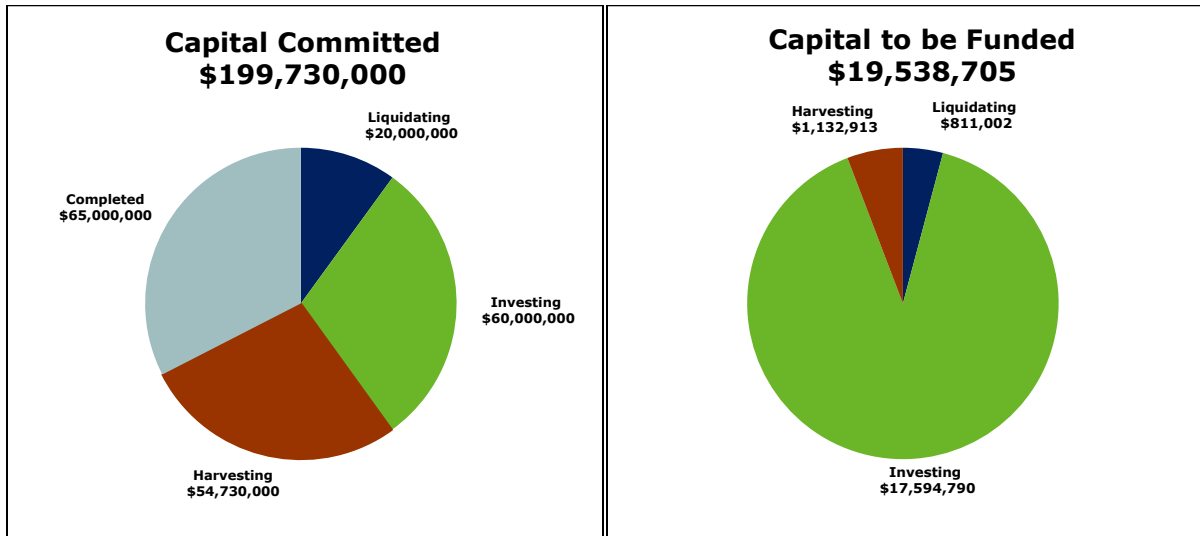
The following table presents the status of the Firefighters' Retirement System of Louisiana private markets portfolio as of June 30, 2018:

Commitments	Terminated Commitments	Amount Funded	Amount Distributed	Reported Value	Call Ratio	Distribution Ratio
\$199,730,000	\$0	\$179,618,091	\$134,258,061	\$56,647,482	89.93%	74.75%

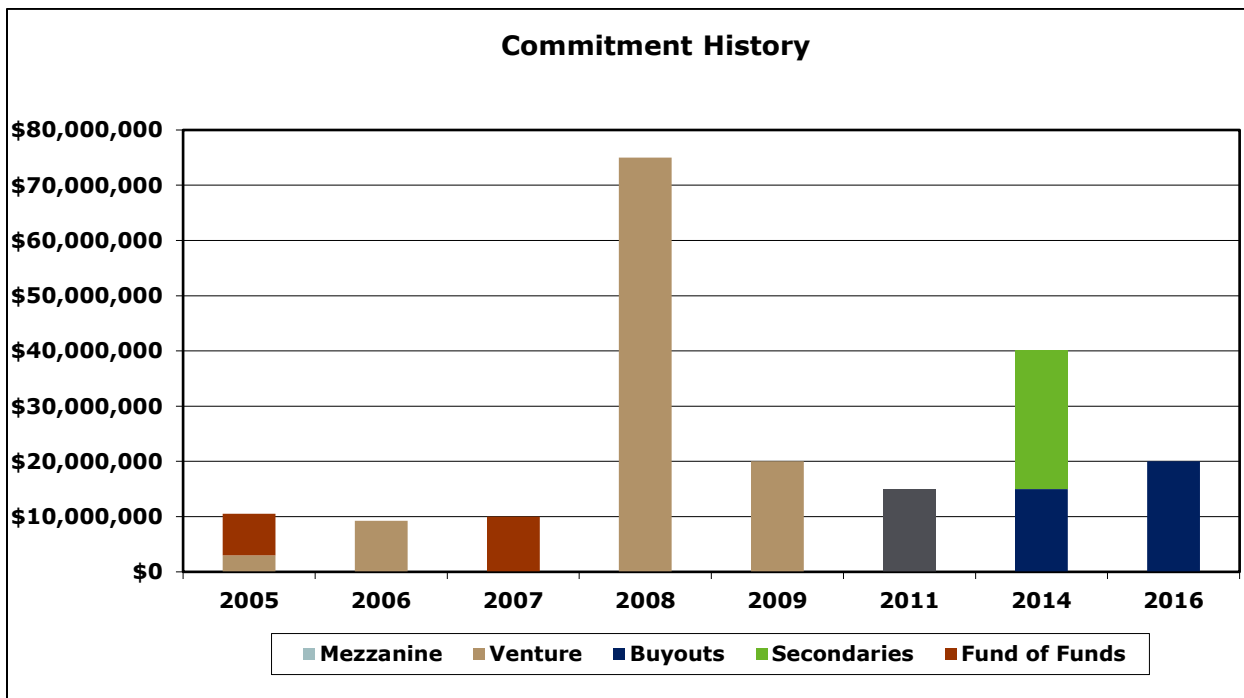
Unfunded Commitments	Market Exposure (Reported Value + Unfunded Commitments)	Total Fund Composite as of 6/30/2018	Alternative Assets Target	Reported Value as a % of Total Fund	Market Exposure as a % of Total Fund
\$19,538,705	\$76,186,187	\$1,665,480,184	4%*	3.40%	4.6%

Total Value (Reported Value + Distributions)	Total Value To Paid In Capital	Internal Rate of Return IRR, Since Inception (January 2005)
\$190,905,543	1.06	1.41%

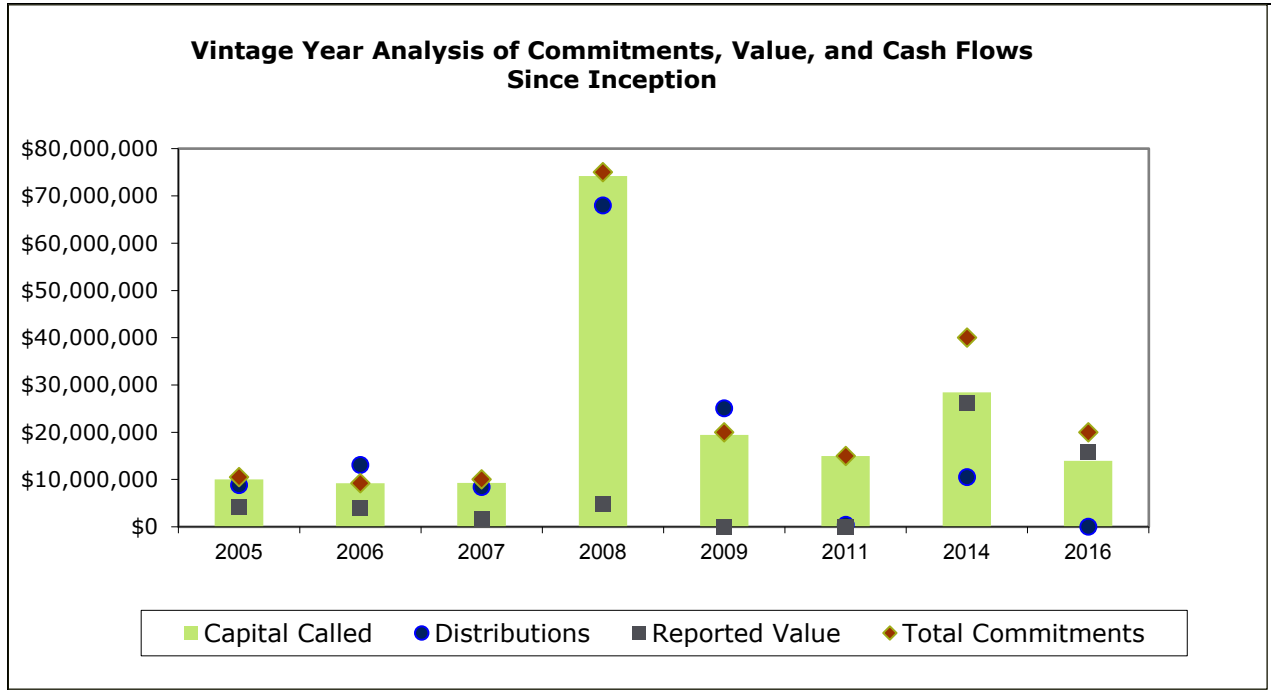
As of June 30, 2018, the Firefighters' Retirement System of Louisiana had commitments totaling \$199.73 million to 13 private markets fund. Of the 13 funds in the private equity portfolio, 3 are in the investing stage, 6 are in the harvesting stage, 1 is liquidating, and 3 have been completed. The following charts illustrate the program's current life cycle:



The following chart illustrates the commitment history of the Firefighters' Retirement System of Louisiana private markets program through the quarter end:



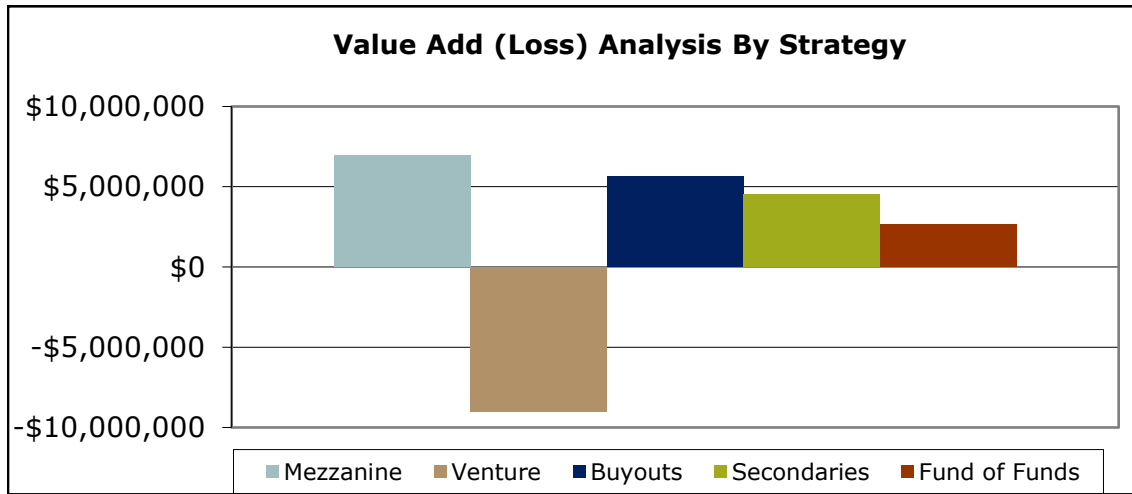
The following chart provides an analysis of the vintage year performance comparing the capital calls to the distributions and reported value:



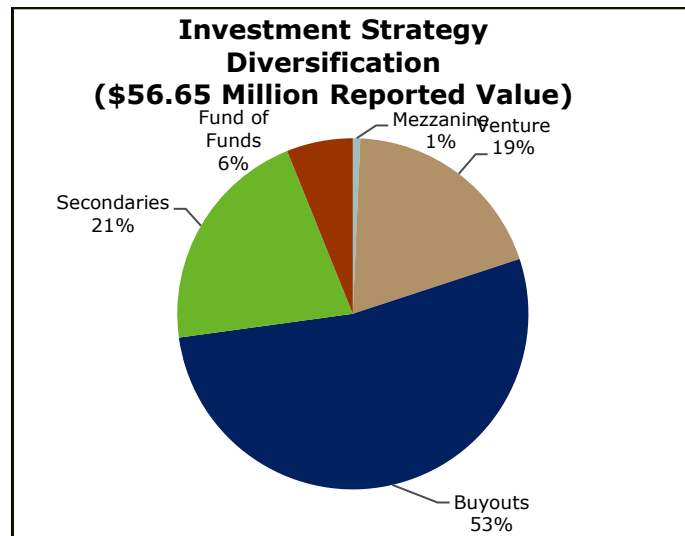
During the quarter-ended June 30, 2018 4 funds in the Firefighters’ Retirement System of Louisiana private markets portfolio drew capital and 6 funds made a distribution. The summary of the cash flow follows:

Calls & Expenses Funded for the Quarter	Number of Funds Calling Capital & Expenses	Distributions for the Quarter	Number of Funds Making Distributions	Net Cash/Stock Flows for the Quarter
\$3,009,640	4	\$1,661,162	6	(\$1,348,479)

Since inception the private markets program has gained \$10.75 million in value for the Firefighters' Retirement System of Louisiana. Mezzanine added \$6.94 million, Fund of Funds added \$2.67 million, Buyouts added \$5.63 million and Secondaries added \$4.53 million. Venture has lost (\$9.03) million.



As of June 30, 2018, the 13 private markets funds in the Firefighters' Retirement System of Louisiana portfolio had the following investment strategy diversification by the investment fund's reported value:



We thank you for the opportunity to work with the Firefighters' Retirement System of Louisiana and look forward to continued success in the future.

Best regards,

David Barnes, CFA, CAIA
Senior Consultant

Firefighters' Retirement System of Louisiana

Executive IRR Summary

6/30/2018

Investment Name	Vintage Year	Commitment Amount	QTD	YTD	1 Year	3 Year	5 Year	Inception
CCMP Capital Investors III, L.P.	2014	15,000,000	7.18	9.12	6.80	11.73		11.34
DCM Private Equity Fund II	2007	10,000,000	0.40	-0.86	0.60	-3.12	-1.23	0.14
DTC Private Equity II-Q, L.P.	2005	7,500,000	2.23	4.35	5.40	4.84	10.27	5.38
Franchise Capital Partners II, L.P.	2008	20,000,000	1.57	28.72	156.47	31.12	4.62	1.78
Franchise Capital Partners III, L.P.	2009	20,000,000				8.23	-2.10	7.91
Greenspring Crossover Ventures, L.P.	2008	25,000,000	2.34	3.49	6.12	12.92	20.78	11.64
Greenspring Global Partners III-A, L.P.	2006	9,230,000	-0.08	2.48	6.64	-2.37	15.96	11.08
HarbourVest Partners Co-Investment IV	2016	20,000,000	3.82	3.13	11.17			12.90
Landmark Equity Partners XV, L.P.	2014	25,000,000	4.57	3.97	22.18	12.60		17.64
Louisiana Fund I	2005	1,000,000	-0.16	-4.05	-5.09	-6.60	-3.80	6.12
Murphree Venture Partners VI, LP	2005	2,000,000	2.35	-9.50	-9.32	-5.78	2.88	-3.38
Sail Sustainable Louisiana LP	2011	15,000,000						
SAIL Venture Partners II	2008	30,000,000						
Total: Firefighters' Retirement System of Louisiana		199,730,000	4.04	4.38	10.05	8.17	-6.48	1.41

Firefighters' Retirement System of Louisiana

Performance Analysis

6/30/2018

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
1 CCMP Capital Investors III, L.P.	2014	15,000,000	11,642,226	3,357,774	-103,740	1,182,125	14,180,095	15,362,220	3,823,734	78%	0.10	1.33	11.34%
2 DCM Private Equity Fund II	2007	10,000,000	9,317,087	682,913	714,269	8,382,828	1,727,569	10,110,397	79,041	93%	0.84	1.01	0.14%
3 DTC Private Equity II-Q, L.P.	2005	7,500,000	7,050,000	450,000	0	7,912,500	1,729,658	9,642,158	2,592,158	94%	1.12	1.37	5.38%
4 Franchise Capital Partners II, L.P.	2008	20,000,000	19,188,998	811,002	0	20,081,456	388,146	20,469,602	1,280,604	96%	1.05	1.07	1.78%
5 Franchise Capital Partners III, L.P.	2009	20,000,000	19,426,797	0	0	25,089,905	0	25,089,905	5,663,108	100%	1.29	1.29	7.91%
6 Greenspring Crossover Ventures, L.P.	2008	25,000,000	25,000,000	0	0	46,219,022	4,373,664	50,592,686	25,592,686	100%	1.85	2.02	11.64%
7 Greenspring Global Partners III-A, L.P.	2006	9,230,000	9,230,000	0	0	13,074,811	4,105,060	17,179,871	7,949,871	100%	1.42	1.86	11.08%
8 HarbourVest Partners Co-Investment IV	2016	20,000,000	13,972,907	6,027,093	0	0	15,779,871	15,779,871	1,806,964	70%	0.00	1.13	12.90%
9 Landmark Equity Partners XV, L.P.	2014	25,000,000	16,790,077	8,209,923	-74,562	9,316,241	11,931,304	21,247,545	4,532,030	67%	0.56	1.27	17.64%
10 Louisiana Fund I	2005	1,000,000	1,000,000	0	0	25,317	1,734,135	1,759,452	759,452	100%	0.03	1.76	6.12%
11 Murphree Venture Partners VI, LP	2005	2,000,000	2,000,000	0	0	848,459	697,980	1,546,439	-453,561	100%	0.42	0.77	-3.38%
12 Sail Sustainable Louisiana LP	2011	15,000,000	15,000,000	0	0	449,140	0	449,140	-14,550,860	100%	0.03	0.03	N/A
13 SAIL Venture Partners II	2008	30,000,000	30,000,000	0	0	1,676,258	0	1,676,258	-28,323,742	100%	0.06	0.06	N/A
Total: Firefighters' Retirement System of Louisiana		199,730,000	179,618,091	19,538,705	535,967	134,258,061	56,647,482	190,905,543	10,751,485	90%	0.75	1.06	1.41%

Firefighters' Retirement System of Louisiana

Lifecycle Performance Analysis

6/30/2018

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
2 Investing													
1 CCMP Capital Investors III, L.P.	2014	15,000,000	11,642,226	3,357,774	-103,740	1,182,125	14,180,095	15,362,220	3,823,734	78%	0.10	1.33	11.34%
2 HarbourVest Partners Co-Investment IV	2016	20,000,000	13,972,907	6,027,093	0	0	15,779,871	15,779,871	1,806,964	70%	0.00	1.13	12.90%
3 Landmark Equity Partners XV, L.P.	2014	25,000,000	16,790,077	8,209,923	-74,562	9,316,241	11,931,304	21,247,545	4,532,030	67%	0.56	1.27	17.64%
Subtotal: 2 Investing		60,000,000	42,405,210	17,594,790	-178,302	10,498,366	41,891,270	52,389,636	10,162,728	71%	0.25	1.24	13.87%
3 Harvesting													
1 DCM Private Equity Fund II	2007	10,000,000	9,317,087	682,913	714,269	8,382,828	1,727,569	10,110,397	79,041	93%	0.84	1.01	0.14%
2 DTC Private Equity II-Q, L.P.	2005	7,500,000	7,050,000	450,000	0	7,912,500	1,729,658	9,642,158	2,592,158	94%	1.12	1.37	5.38%
3 Greenspring Crossover Ventures, L.P.	2008	25,000,000	25,000,000	0	0	46,219,022	4,373,664	50,592,686	25,592,686	100%	1.85	2.02	11.64%
4 Greenspring Global Partners III-A, L.P.	2006	9,230,000	9,230,000	0	0	13,074,811	4,105,060	17,179,871	7,949,871	100%	1.42	1.86	11.08%
5 Louisiana Fund I	2005	1,000,000	1,000,000	0	0	25,317	1,734,135	1,759,452	759,452	100%	0.03	1.76	6.12%
6 Murphree Venture Partners VI, LP	2005	2,000,000	2,000,000	0	0	848,459	697,980	1,546,439	-453,561	100%	0.42	0.77	-3.38%
Subtotal: 3 Harvesting		54,730,000	53,597,087	1,132,913	714,269	76,462,936	14,368,066	90,831,002	36,519,646	98%	1.41	1.67	8.67%
4 Liquidating													
1 Franchise Capital Partners II, L.P.	2008	20,000,000	19,188,998	811,002	0	20,081,456	388,146	20,469,602	1,280,604	96%	1.05	1.07	1.78%
Subtotal: 4 Liquidating		20,000,000	19,188,998	811,002	0	20,081,456	388,146	20,469,602	1,280,604	96%	1.05	1.07	1.78%
5 Completed													
1 Franchise Capital Partners III, L.P.	2009	20,000,000	19,426,797	0	0	25,089,905	0	25,089,905	5,663,108	100%	1.29	1.29	7.91%
2 Sail Sustainable Louisiana LP	2011	15,000,000	15,000,000	0	0	449,140	0	449,140	-14,550,860	100%	0.03	0.03	N/A
3 SAIL Venture Partners II	2008	30,000,000	30,000,000	0	0	1,676,258	0	1,676,258	-28,323,742	100%	0.06	0.06	N/A
Subtotal: 5 Completed		65,000,000	64,426,797	0	0	27,215,303	0	27,215,303	-37,211,494	99%	0.42	0.42	-22.22%
Total: Firefighters' Retirement System of Louisiana		199,730,000	179,618,091	19,538,705	535,967	134,258,061	56,647,482	190,905,543	10,751,485	90%	0.75	1.06	1.41%

Firefighters' Retirement System of Louisiana

Vintage Year Performance Analysis

6/30/2018

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
2005													
1 DTC Private Equity II-Q, L.P.	2005	7,500,000	7,050,000	450,000	0	7,912,500	1,729,658	9,642,158	2,592,158	94%	1.12	1.37	5.38%
2 Louisiana Fund I	2005	1,000,000	1,000,000	0	0	25,317	1,734,135	1,759,452	759,452	100%	0.03	1.76	6.12%
3 Murphree Venture Partners VI, LP	2005	2,000,000	2,000,000	0	0	848,459	697,980	1,546,439	-453,561	100%	0.42	0.77	-3.38%
Subtotal: 2005		10,500,000	10,050,000	450,000	0	8,786,276	4,161,773	12,948,049	2,898,049	96%	0.87	1.29	3.84%
2006													
1 Greenspring Global Partners III-A, L.P.	2006	9,230,000	9,230,000	0	0	13,074,811	4,105,060	17,179,871	7,949,871	100%	1.42	1.86	11.08%
Subtotal: 2006		9,230,000	9,230,000	0	0	13,074,811	4,105,060	17,179,871	7,949,871	100%	1.42	1.86	11.08%
2007													
1 DCM Private Equity Fund II	2007	10,000,000	9,317,087	682,913	714,269	8,382,828	1,727,569	10,110,397	79,041	93%	0.84	1.01	0.14%
Subtotal: 2007		10,000,000	9,317,087	682,913	714,269	8,382,828	1,727,569	10,110,397	79,041	93%	0.84	1.01	0.14%
2008													
1 Franchise Capital Partners II, L.P.	2008	20,000,000	19,188,998	811,002	0	20,081,456	388,146	20,469,602	1,280,604	96%	1.05	1.07	1.78%
2 Greenspring Crossover Ventures, L.P.	2008	25,000,000	25,000,000	0	0	46,219,022	4,373,664	50,592,686	25,592,686	100%	1.85	2.02	11.64%
3 SAIL Venture Partners II	2008	30,000,000	30,000,000	0	0	1,676,258	0	1,676,258	-28,323,742	100%	0.06	0.06	N/A
Subtotal: 2008		75,000,000	74,188,998	811,002	0	67,976,736	4,761,810	72,738,546	-1,450,452	99%	0.92	0.98	-0.41%
2009													
1 Franchise Capital Partners III, L.P.	2009	20,000,000	19,426,797	0	0	25,089,905	0	25,089,905	5,663,108	100%	1.29	1.29	7.91%
Subtotal: 2009		20,000,000	19,426,797	0	0	25,089,905	0	25,089,905	5,663,108	97%	1.29	1.29	7.91%
2011													
1 Sail Sustainable Louisiana LP	2011	15,000,000	15,000,000	0	0	449,140	0	449,140	-14,550,860	100%	0.03	0.03	N/A
Subtotal: 2011		15,000,000	15,000,000	0	0	449,140	0	449,140	-14,550,860	100%	0.03	0.03	N/A
2014													
1 CCMP Capital Investors III, L.P.	2014	15,000,000	11,642,226	3,357,774	-103,740	1,182,125	14,180,095	15,362,220	3,823,734	78%	0.10	1.33	11.34%
2 Landmark Equity Partners XV, L.P.	2014	25,000,000	16,790,077	8,209,923	-74,562	9,316,241	11,931,304	21,247,545	4,532,030	67%	0.56	1.27	17.64%
Subtotal: 2014		40,000,000	28,432,303	11,567,697	-178,302	10,498,366	26,111,399	36,609,765	8,355,764	71%	0.37	1.30	14.07%
2016													
1 HarbourVest Partners Co-Investment IV	2016	20,000,000	13,972,907	6,027,093	0	0	15,779,871	15,779,871	1,806,964	70%	0.00	1.13	12.90%
Subtotal: 2016		20,000,000	13,972,907	6,027,093	0	0	15,779,871	15,779,871	1,806,964	70%	0.00	1.13	12.90%
Total: Firefighters' Retirement System of Louisiana		199,730,000	179,618,091	19,538,705	535,967	134,258,061	56,647,482	190,905,543	10,751,485	90%	0.75	1.06	1.41%

Firefighters' Retirement System of Louisiana

Investment Strategy Performance Analysis

6/30/2018

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 Greenspring Crossover Ventures, L.P.	2008	25,000,000	25,000,000	0	0	46,219,022	4,373,664	50,592,686	25,592,686	100%	1.85	2.02	11.64%
2 Greenspring Global Partners III-A, L.P.	2006	9,230,000	9,230,000	0	0	13,074,811	4,105,060	17,179,871	7,949,871	100%	1.42	1.86	11.08%
3 Louisiana Fund I	2005	1,000,000	1,000,000	0	0	25,317	1,734,135	1,759,452	759,452	100%	0.03	1.76	6.12%
4 Murphree Venture Partners VI, LP	2005	2,000,000	2,000,000	0	0	848,459	697,980	1,546,439	-453,561	100%	0.42	0.77	-3.38%
5 Sail Sustainable Louisiana LP	2011	15,000,000	15,000,000	0	0	449,140	0	449,140	-14,550,860	100%	0.03	0.03	N/A
6 SAIL Venture Partners II	2008	30,000,000	30,000,000	0	0	1,676,258	0	1,676,258	-28,323,742	100%	0.06	0.06	N/A
Subtotal: 100 Venture		82,230,000	82,230,000	0	0	62,293,007	10,910,839	73,203,846	-9,026,154	100%	0.76	0.89	-2.26%
120 Buyouts													
1 CCMP Capital Investors III, L.P.	2014	15,000,000	11,642,226	3,357,774	-103,740	1,182,125	14,180,095	15,362,220	3,823,734	78%	0.10	1.33	11.34%
2 HarbourVest Partners Co-Investment IV	2016	20,000,000	13,972,907	6,027,093	0	0	15,779,871	15,779,871	1,806,964	70%	0.00	1.13	12.90%
Subtotal: 120 Buyouts		35,000,000	25,615,133	9,384,867	-103,740	1,182,125	29,959,966	31,142,091	5,630,698	73%	0.05	1.22	11.77%
130 Mezzanine													
1 Franchise Capital Partners II, L.P.	2008	20,000,000	19,188,998	811,002	0	20,081,456	388,146	20,469,602	1,280,604	96%	1.05	1.07	1.78%
2 Franchise Capital Partners III, L.P.	2009	20,000,000	19,426,797	0	0	25,089,905	0	25,089,905	5,663,108	100%	1.29	1.29	7.91%
Subtotal: 130 Mezzanine		40,000,000	38,615,795	811,002	0	45,171,361	388,146	45,559,507	6,943,712	97%	1.17	1.18	4.75%
140 Secondaries													
1 Landmark Equity Partners XV, L.P.	2014	25,000,000	16,790,077	8,209,923	-74,562	9,316,241	11,931,304	21,247,545	4,532,030	67%	0.56	1.27	17.64%
Subtotal: 140 Secondaries		25,000,000	16,790,077	8,209,923	-74,562	9,316,241	11,931,304	21,247,545	4,532,030	67%	0.56	1.27	17.64%
170 Fund of Funds													
1 DCM Private Equity Fund II	2007	10,000,000	9,317,087	682,913	714,269	8,382,828	1,727,569	10,110,397	79,041	93%	0.84	1.01	0.14%
2 DTC Private Equity II-Q, L.P.	2005	7,500,000	7,050,000	450,000	0	7,912,500	1,729,658	9,642,158	2,592,158	94%	1.12	1.37	5.38%
Subtotal: 170 Fund of Funds		17,500,000	16,367,087	1,132,913	714,269	16,295,328	3,457,227	19,752,555	2,671,199	94%	0.95	1.16	2.57%
Total: Firefighters' Retirement System of Louisiana		199,730,000	179,618,091	19,538,705	535,967	134,258,061	56,647,482	190,905,543	10,751,485	90%	0.75	1.06	1.41%

Firefighters' Retirement System of Louisiana

Transaction Summary

4/1/2018 - 6/30/2018

Date	Paid in Capital	Additional Fees	Distributions	Net Cash Flow
Firefighters' Retirement System of Louisiana				
CCMP Capital Investors III, L.P.				
05/24/2018	239.00			239.00
05/24/2018			168,573.00	-168,334.00
Total: CCMP Capital Investors III, L.P.				
	239.00		168,573.00	-168,334.00
DCM Private Equity Fund II				
04/16/2018	4,031.98			4,031.98
04/23/2018			108,263.27	-104,231.29
04/23/2018	-1,130.74			-105,362.03
04/23/2018	-136,992.37			-242,354.40
06/29/2018			93,837.27	-336,191.67
06/29/2018		3,501.19		-332,690.48
Total: DCM Private Equity Fund II				
	-134,091.13	3,501.19	202,100.54	-332,690.48
Franchise Capital Partners II, L.P.				
05/08/2018			22,000.00	-22,000.00
Total: Franchise Capital Partners II, L.P.				
			22,000.00	-22,000.00
Greenspring Crossover Ventures, L.P.				
04/20/2018			554,810.00	-554,810.00
Total: Greenspring Crossover Ventures, L.P.				
			554,810.00	-554,810.00
Greenspring Global Partners III-A, L.P.				
05/03/2018			138,450.00	-138,450.00
06/14/2018			119,990.00	-258,440.00
Total: Greenspring Global Partners III-A, L.P.				
			258,440.00	-258,440.00
HarbourVest Partners Co-Investment IV				
04/11/2018	1,950,000.00			1,950,000.00
05/14/2018	522,907.00			2,472,907.00
Total: HarbourVest Partners Co-Investment IV				
	2,472,907.00			2,472,907.00

Firefighters' Retirement System of Louisiana

Transaction Summary

4/1/2018 - 6/30/2018

Date	Paid in Capital	Additional Fees	Distributions	Net Cash Flow
Firefighters' Retirement System of Louisiana				
Landmark Equity Partners XV, L.P.				
04/17/2018	153,852.00			153,852.00
04/30/2018			270,829.00	-116,977.00
05/23/2018	296,994.00			180,017.00
06/19/2018			184,409.00	-4,392.00
06/20/2018	216,238.00			211,846.00
Total: Landmark Equity Partners XV, L.P.				
	667,084.00		455,238.00	211,846.00
Total:	3,006,138.87	3,501.19	1,661,161.54	1,348,478.52