

# **Fourth Quarter 2017 Real Estate Review**

## **Firefighters' Retirement System of Louisiana**

**May, 2018**

**David Barnes, CFA, CAIA**  
**Senior Consultant**



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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.
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May, 2018

Firefighters' Retirement System of Louisiana

**RE:** Real Estate Strategy – 4<sup>th</sup> Quarter 2017

Dear Members,

We are pleased to present the December 31, 2017 Private Markets Real Estate 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 Real Estate portfolio of Firefighters' Retirement System of Louisiana experienced a positive quarter, having a nominal IRR of 0.54%. The IRR since inception is 1.68%. The overall multiple (current valuation plus cumulative distributions, divided by total capital calls) is 1.11.

The following table presents the status of the Real Estate portfolio as of December 31, 2017:

<b>Commitments</b>	<b>Terminated Commitments</b>	<b>Amount Funded</b>	<b>Amount Distributed</b>	<b>Reported Value</b>	<b>Call Ratio</b>	<b>Distribution Ratio</b>
\$169,021,485	\$0	\$165,831,421	\$66,112,161	\$117,701,187	98.11%	39.87%

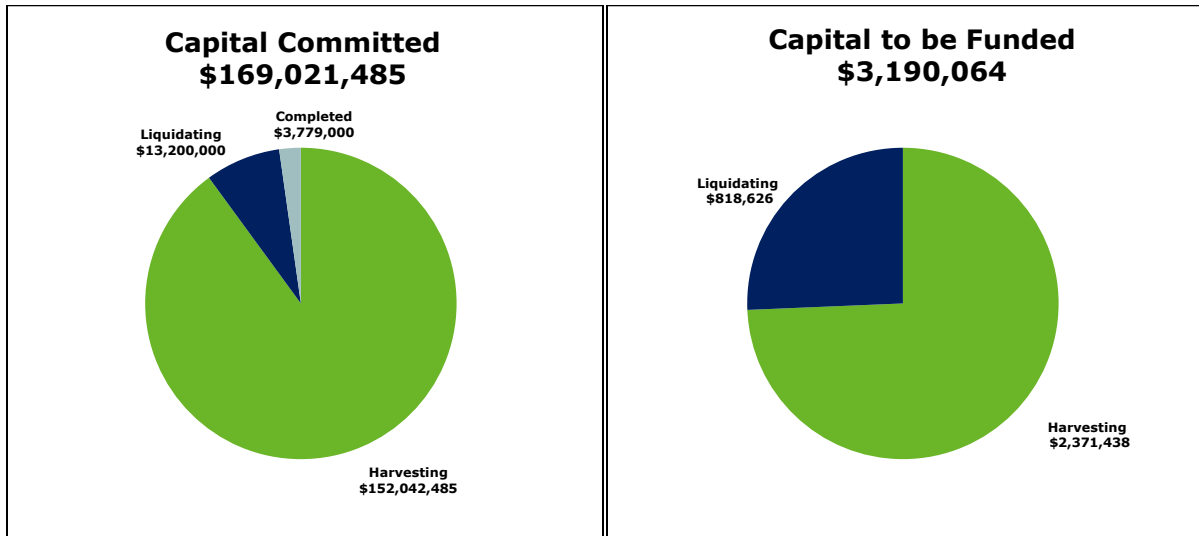
  

<b>Unfunded Commitments</b>	<b>Market Exposure (Reported Value + Unfunded Commitments)</b>	<b>Total Fund Composite as of 12/31/2017</b>	<b>Alternative Assets Target</b>	<b>Reported Value as a % of Total Fund</b>	<b>Market Exposure as a % of Total Fund</b>
\$3,190,064	\$120,891,251	\$1,660,340,773	6%*	7.09%	7.3%

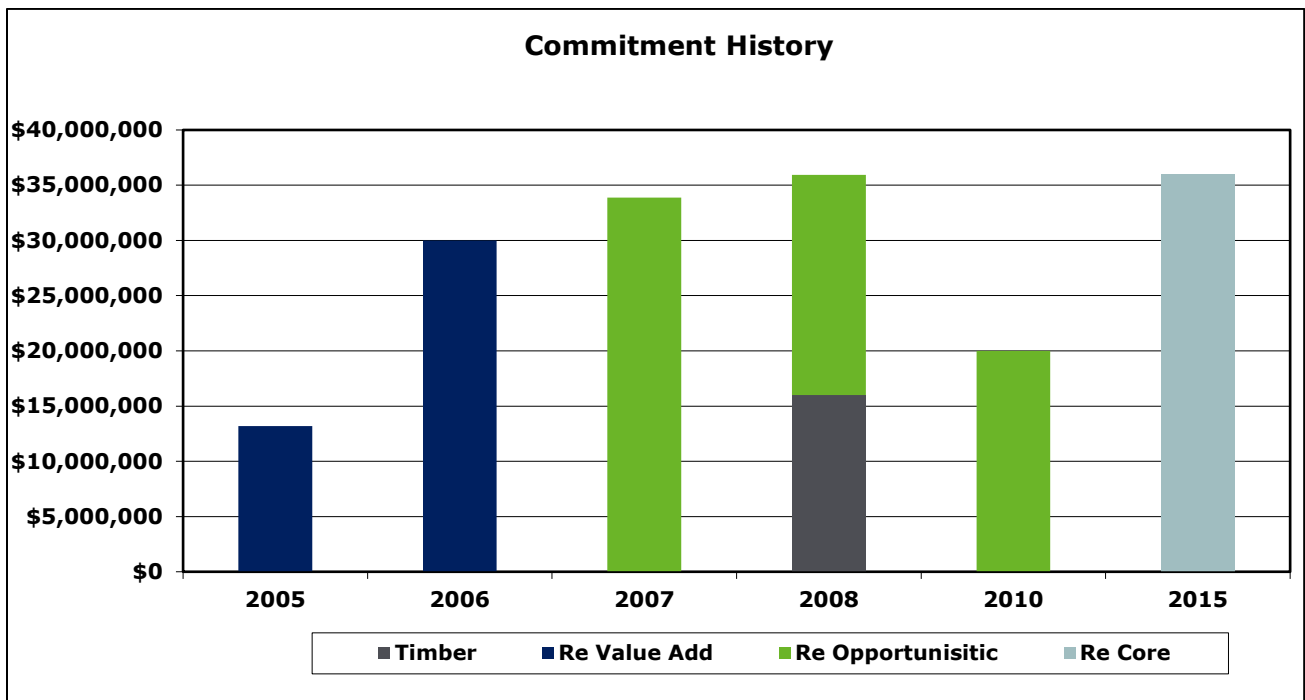
  

<b>Total Value (Reported Value + Distributions)</b>	<b>Total Value To Paid In Capital</b>	<b>Internal Rate of Return IRR, Since Inception (December 2005)</b>
\$183,813,348	1.11	1.68%

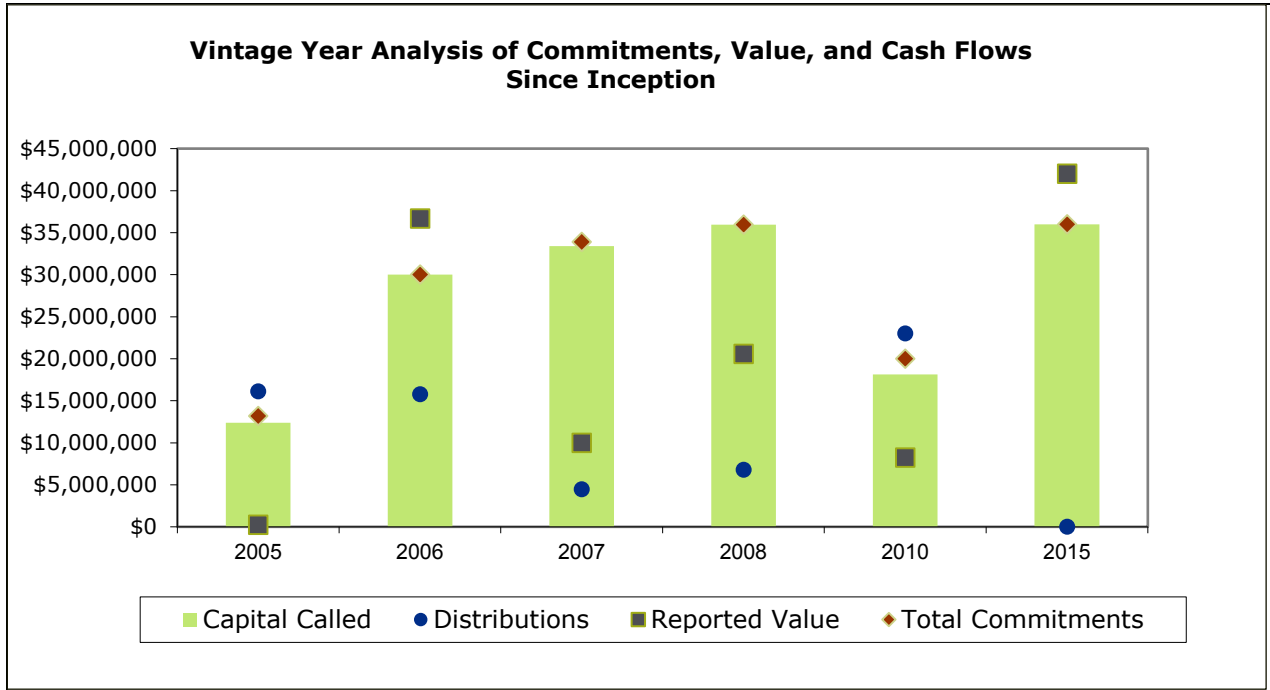
As of December 31, 2017, the Firefighters' Retirement System of Louisiana had commitments totaling \$169.02 million to 12 real estate funds. Of the 12 funds in the real estate portfolio, 10 are in the harvesting stage, 1 is in the liquidating stage, and 1 is in the completed stage. The following charts 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:



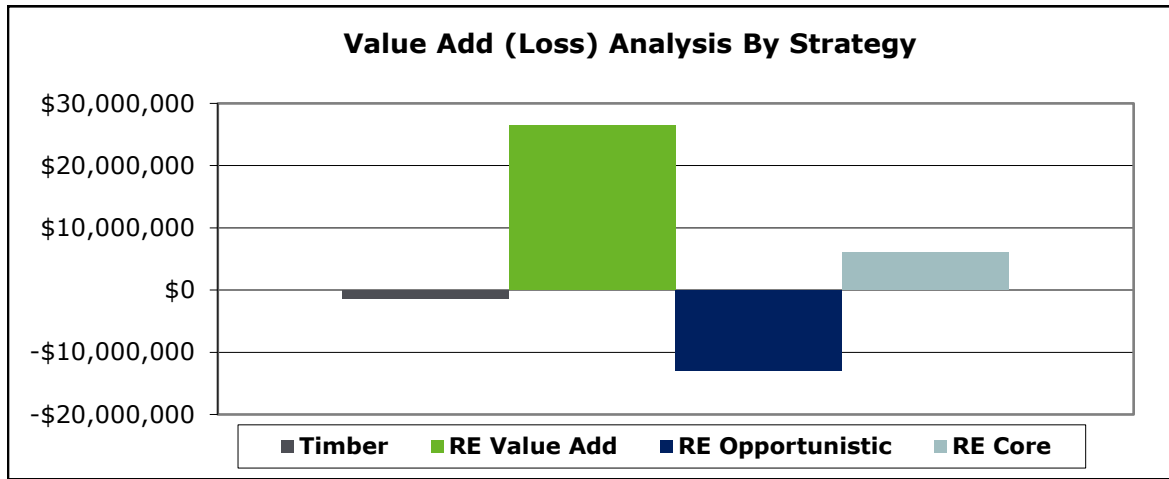
The following chart provides an analysis of the vintage year performance comparing the capital calls to the distributions and reported value:



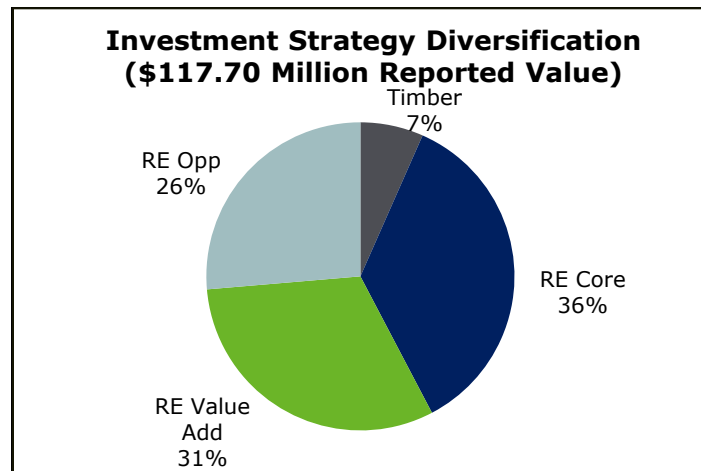
During the quarter-ended December 31, 2017, 1 fund in the Firefighters’ Retirement System of Louisiana Real Estate portfolio drew capital, and 3 funds made a distribution. The summary of the cash flow follows:

<b>Calls &amp; Expenses Funded for the Quarter</b>	<b>Number of Funds Calling Capital &amp; Expenses</b>	<b>Distributions for the Quarter</b>	<b>Number of Funds Making Distributions</b>	<b>Net Cash/Stock Flows for the Quarter</b>
\$21,861	1	\$3,346,121	2	\$3,324,260

Since inception the Real Estate program has gained \$17.95 million in value for the Firefighters' Retirement System of Louisiana. Timber lost (\$1.42) million, RE Core added \$5.98 million, RE Value added \$26.38 million, and RE Opportunistic has lost (\$12.99) million.



As of December 31, 2017, the 12 Real Estate funds in the Firefighters' Retirement System of Louisiana portfolio had the following investment strategy diversification by the investment funds' reported values:



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**

12/31/2017

<b>Investment Name</b>	<b>Vintage Year</b>	<b>Commitment Amount</b>	<b>QTD</b>	<b>YTD</b>	<b>1 Year</b>	<b>3 Year</b>	<b>5 Year</b>	<b>Inception</b>
AEW Core Property Trust	2015	12,000,000	1.82	8.02	8.02			8.65
AEW Partners VI	2010	20,000,000	3.18	9.37	9.37	15.69	16.93	15.22
Americus Real Estate Fund II, Ltd.	2005	13,200,000	0.00	-16.19	-16.19	-28.15	-8.36	4.65
ASB Allegiance Real Estate Fund II, Ltd.	2015	12,000,000	2.06	4.92	4.92			4.91
FRS-GA (Georgia)	2008	9,273,354	0.00	-26.71	-26.71	-9.49	-8.53	-9.88
FRS-LB I (NLTP AZ)	2007	24,900,208	0.00	65.79	65.79	19.91	11.51	-13.43
FRS-LB II (SMT AZ)	2008	3,779,000						
FRS-LB III (ST George UT)	2008	6,878,923	0.00	0.07	0.07	8.70	5.45	4.28
Heitman America Real Estate Trust, L.P.	2015	12,000,000	1.79	5.85	5.85			7.63
JP Morgan India Property Fund	2007	8,990,000	-4.38	-6.49	-6.49	-4.27	-5.00	-2.76
Sentinel Real Estate Fund	2006	30,000,000	2.20	6.79	6.79	9.30	11.83	5.82
Timbervest Crossover Partners II, L.P.	2008	16,000,000	-12.31	-12.24	-12.24	-7.54	-3.96	-1.59
<b>Total: Firefighters' Retirement System of Louisiana</b>		<b>169,021,485</b>	<b>0.54</b>	<b>5.24</b>	<b>5.24</b>	<b>5.13</b>	<b>6.02</b>	<b>1.68</b>

## Firefighters' Retirement System of Louisiana

### Performance Analysis

12/31/2017

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 AEW Core Property Trust	2015	12,000,000	12,000,000	0	0	0	15,030,771	15,030,771	3,030,771	100%	0.00	1.25	8.65%
2 AEW Partners VI	2010	20,000,000	18,136,793	1,863,207	0	22,989,390	8,248,405	31,237,795	13,101,002	91%	1.27	1.72	15.22%
3 Americus Real Estate Fund II, Ltd.	2005	13,200,000	12,381,374	818,626	0	16,107,426	229,032	16,336,458	3,955,084	94%	1.30	1.32	4.65%
4 ASB Allegiance Real Estate Fund II, Ltd.	2015	12,000,000	12,000,000	0	34,085	0	13,095,177	13,095,177	1,061,092	100%	0.00	1.09	4.91%
5 FRS-GA (Georgia)	2008	9,273,354	9,273,354	0	0	0	3,490,920	3,490,920	-5,782,434	100%	0.00	0.38	-9.88%
6 FRS-LB I (NLTP AZ)	2007	24,900,208	24,900,208	0	0	0	7,400,101	7,400,101	-17,500,107	100%	0.00	0.30	-13.43%
7 FRS-LB II (SMT AZ)	2008	3,779,000	3,779,000	0	0	0	0	0	-3,779,000	100%	0.00	0.00	N/A
8 FRS-LB III (ST George UT)	2008	6,878,923	6,878,923	0	0	0	9,286,064	9,286,064	2,407,141	100%	0.00	1.35	4.28%
9 Heitman America Real Estate Trust, L.P.	2015	12,000,000	12,000,000	0	0	0	13,888,559	13,888,559	1,888,559	100%	0.00	1.16	7.63%
10 JP Morgan India Property Fund	2007	8,990,000	8,481,769	508,231	0	4,452,289	2,589,067	7,041,356	-1,440,414	94%	0.52	0.83	-2.76%
11 Sentinel Real Estate Fund	2006	30,000,000	30,000,000	0	0	15,771,056	36,655,755	52,426,811	22,426,811	100%	0.53	1.75	5.82%
12 Timbervest Crossover Partners II, L.P.	2008	16,000,000	16,000,000	0	0	6,792,000	7,787,336	14,579,336	-1,420,664	100%	0.42	0.91	-1.59%
<b>Total: Firefighters' Retirement System of Louisiana</b>		<b>169,021,485</b>	<b>165,831,421</b>	<b>3,190,064</b>	<b>34,085</b>	<b>66,112,161</b>	<b>117,701,187</b>	<b>183,813,348</b>	<b>17,947,841</b>	<b>98%</b>	<b>0.40</b>	<b>1.11</b>	<b>1.68%</b>



## Firefighters' Retirement System of Louisiana

### Lifecycle Performance Analysis

12/31/2017

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
<b>3 Harvesting</b>													
1 AEW Core Property Trust	2015	12,000,000	12,000,000	0	0	0	15,030,771	15,030,771	3,030,771	100%	0.00	1.25	8.65%
2 AEW Partners VI	2010	20,000,000	18,136,793	1,863,207	0	22,989,390	8,248,405	31,237,795	13,101,002	91%	1.27	1.72	15.22%
3 ASB Allegiance Real Estate Fund II, Ltd.	2015	12,000,000	12,000,000	0	34,085	0	13,095,177	13,095,177	1,061,092	100%	0.00	1.09	4.91%
4 FRS-GA (Georgia)	2008	9,273,354	9,273,354	0	0	0	3,490,920	3,490,920	-5,782,434	100%	0.00	0.38	-9.88%
5 FRS-LB I (NLTP AZ)	2007	24,900,208	24,900,208	0	0	0	7,400,101	7,400,101	-17,500,107	100%	0.00	0.30	-13.43%
6 FRS-LB III (ST George UT)	2008	6,878,923	6,878,923	0	0	0	9,286,064	9,286,064	2,407,141	100%	0.00	1.35	4.28%
7 Heitman America Real Estate Trust, L.P.	2015	12,000,000	12,000,000	0	0	0	13,888,559	13,888,559	1,888,559	100%	0.00	1.16	7.63%
8 JP Morgan India Property Fund	2007	8,990,000	8,481,769	508,231	0	4,452,289	2,589,067	7,041,356	-1,440,414	94%	0.52	0.83	-2.76%
9 Sentinel Real Estate Fund	2006	30,000,000	30,000,000	0	0	15,771,056	36,655,755	52,426,811	22,426,811	100%	0.53	1.75	5.82%
10 Timbervest Crossover Partners II, L.P.	2008	16,000,000	16,000,000	0	0	6,792,000	7,787,336	14,579,336	-1,420,664	100%	0.42	0.91	-1.59%
<b>Subtotal: 3 Harvesting</b>		<b>152,042,485</b>	<b>149,671,047</b>	<b>2,371,438</b>	<b>34,085</b>	<b>50,004,735</b>	<b>117,472,155</b>	<b>167,476,889</b>	<b>17,771,757</b>	<b>98%</b>	<b>0.33</b>	<b>1.12</b>	<b>1.84%</b>
<b>4 Liquidating</b>													
1 Americus Real Estate Fund II, Ltd.	2005	13,200,000	12,381,374	818,626	0	16,107,426	229,032	16,336,458	3,955,084	94%	1.30	1.32	4.65%
<b>Subtotal: 4 Liquidating</b>		<b>13,200,000</b>	<b>12,381,374</b>	<b>818,626</b>	<b>0</b>	<b>16,107,426</b>	<b>229,032</b>	<b>16,336,458</b>	<b>3,955,084</b>	<b>94%</b>	<b>1.30</b>	<b>1.32</b>	<b>4.65%</b>
<b>5 Completed</b>													
1 FRS-LB II (SMT AZ)	2008	3,779,000	3,779,000	0	0	0	0	0	-3,779,000	100%	0.00	0.00	N/A
<b>Subtotal: 5 Completed</b>		<b>3,779,000</b>	<b>3,779,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-3,779,000</b>	<b>100%</b>	<b>0.00</b>	<b>0.00</b>	<b>N/A</b>
<b>Total: Firefighters' Retirement System of Louisiana</b>		<b>169,021,485</b>	<b>165,831,421</b>	<b>3,190,064</b>	<b>34,085</b>	<b>66,112,161</b>	<b>117,701,187</b>	<b>183,813,348</b>	<b>17,947,841</b>	<b>98%</b>	<b>0.40</b>	<b>1.11</b>	<b>1.68%</b>

## Firefighters' Retirement System of Louisiana

### Vintage Year Performance Analysis

12/31/2017

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
<b>2005</b>													
1 Americus Real Estate Fund II, Ltd.	2005	13,200,000	12,381,374	818,626	0	16,107,426	229,032	16,336,458	3,955,084	94%	1.30	1.32	4.65%
<b>Subtotal: 2005</b>		<b>13,200,000</b>	<b>12,381,374</b>	<b>818,626</b>	<b>0</b>	<b>16,107,426</b>	<b>229,032</b>	<b>16,336,458</b>	<b>3,955,084</b>	<b>94%</b>	<b>1.30</b>	<b>1.32</b>	<b>4.65%</b>
<b>2006</b>													
1 Sentinel Real Estate Fund	2006	30,000,000	30,000,000	0	0	15,771,056	36,655,755	52,426,811	22,426,811	100%	0.53	1.75	5.82%
<b>Subtotal: 2006</b>		<b>30,000,000</b>	<b>30,000,000</b>	<b>0</b>	<b>0</b>	<b>15,771,056</b>	<b>36,655,755</b>	<b>52,426,811</b>	<b>22,426,811</b>	<b>100%</b>	<b>0.53</b>	<b>1.75</b>	<b>5.82%</b>
<b>2007</b>													
1 FRS-LB I (NLTP AZ)	2007	24,900,208	24,900,208	0	0	0	7,400,101	7,400,101	-17,500,107	100%	0.00	0.30	-13.43%
2 JP Morgan India Property Fund	2007	8,990,000	8,481,769	508,231	0	4,452,289	2,589,067	7,041,356	-1,440,414	94%	0.52	0.83	-2.76%
<b>Subtotal: 2007</b>		<b>33,890,208</b>	<b>33,381,977</b>	<b>508,231</b>	<b>0</b>	<b>4,452,289</b>	<b>9,989,168</b>	<b>14,441,457</b>	<b>-18,940,521</b>	<b>99%</b>	<b>0.13</b>	<b>0.43</b>	<b>-10.31%</b>
<b>2008</b>													
1 FRS-GA (Georgia)	2008	9,273,354	9,273,354	0	0	0	3,490,920	3,490,920	-5,782,434	100%	0.00	0.38	-9.88%
2 FRS-LB II (SMT AZ)	2008	3,779,000	3,779,000	0	0	0	0	0	-3,779,000	100%	0.00	0.00	N/A
3 FRS-LB III (ST George UT)	2008	6,878,923	6,878,923	0	0	0	9,286,064	9,286,064	2,407,141	100%	0.00	1.35	4.28%
4 Timbervest Crossover Partners II, L.P.	2008	16,000,000	16,000,000	0	0	6,792,000	7,787,336	14,579,336	-1,420,664	100%	0.42	0.91	-1.59%
<b>Subtotal: 2008</b>		<b>35,931,277</b>	<b>35,931,277</b>	<b>0</b>	<b>0</b>	<b>6,792,000</b>	<b>20,564,320</b>	<b>27,356,320</b>	<b>-8,574,957</b>	<b>100%</b>	<b>0.19</b>	<b>0.76</b>	<b>-3.76%</b>
<b>2010</b>													
1 AEW Partners VI	2010	20,000,000	18,136,793	1,863,207	0	22,989,390	8,248,405	31,237,795	13,101,002	91%	1.27	1.72	15.22%
<b>Subtotal: 2010</b>		<b>20,000,000</b>	<b>18,136,793</b>	<b>1,863,207</b>	<b>0</b>	<b>22,989,390</b>	<b>8,248,405</b>	<b>31,237,795</b>	<b>13,101,002</b>	<b>91%</b>	<b>1.27</b>	<b>1.72</b>	<b>15.22%</b>
<b>2015</b>													
1 AEW Core Property Trust	2015	12,000,000	12,000,000	0	0	0	15,030,771	15,030,771	3,030,771	100%	0.00	1.25	8.65%
2 ASB Allegiance Real Estate Fund II, Ltd.	2015	12,000,000	12,000,000	0	34,085	0	13,095,177	13,095,177	1,061,092	100%	0.00	1.09	4.91%
3 Heitman America Real Estate Trust, L.P.	2015	12,000,000	12,000,000	0	0	0	13,888,559	13,888,559	1,888,559	100%	0.00	1.16	7.63%
<b>Subtotal: 2015</b>		<b>36,000,000</b>	<b>36,000,000</b>	<b>0</b>	<b>34,085</b>	<b>0</b>	<b>42,014,507</b>	<b>42,014,507</b>	<b>5,980,422</b>	<b>100%</b>	<b>0.00</b>	<b>1.17</b>	<b>7.37%</b>
<b>Total: Firefighters' Retirement System of Louisiana</b>		<b>169,021,485</b>	<b>165,831,421</b>	<b>3,190,064</b>	<b>34,085</b>	<b>66,112,161</b>	<b>117,701,187</b>	<b>183,813,348</b>	<b>17,947,841</b>	<b>98%</b>	<b>0.40</b>	<b>1.11</b>	<b>1.68%</b>

**Firefighters' Retirement System of Louisiana  
Investment Strategy Performance Analysis**

12/31/2017

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
<b>501 Timber</b>													
1 Timbervest Crossover Partners II, L.P.	2008	16,000,000	16,000,000	0	0	6,792,000	7,787,336	14,579,336	-1,420,664	100%	0.42	0.91	-1.59%
<b>Subtotal: 501 Timber</b>		<b>16,000,000</b>	<b>16,000,000</b>	<b>0</b>	<b>0</b>	<b>6,792,000</b>	<b>7,787,336</b>	<b>14,579,336</b>	<b>-1,420,664</b>	<b>100%</b>	<b>0.42</b>	<b>0.91</b>	<b>-1.59%</b>
<b>610 RE Core</b>													
1 AEW Core Property Trust	2015	12,000,000	12,000,000	0	0	0	15,030,771	15,030,771	3,030,771	100%	0.00	1.25	8.65%
2 ASB Allegiance Real Estate Fund II, Ltd.	2015	12,000,000	12,000,000	0	34,085	0	13,095,177	13,095,177	1,061,092	100%	0.00	1.09	4.91%
3 Heitman America Real Estate Trust, L.P.	2015	12,000,000	12,000,000	0	0	0	13,888,559	13,888,559	1,888,559	100%	0.00	1.16	7.63%
<b>Subtotal: 610 RE Core</b>		<b>36,000,000</b>	<b>36,000,000</b>	<b>0</b>	<b>34,085</b>	<b>0</b>	<b>42,014,507</b>	<b>42,014,507</b>	<b>5,980,422</b>	<b>100%</b>	<b>0.00</b>	<b>1.17</b>	<b>7.37%</b>
<b>615 RE Value Add</b>													
1 Americus Real Estate Fund II, Ltd.	2005	13,200,000	12,381,374	818,626	0	16,107,426	229,032	16,336,458	3,955,084	94%	1.30	1.32	4.65%
2 Sentinel Real Estate Fund	2006	30,000,000	30,000,000	0	0	15,771,056	36,655,755	52,426,811	22,426,811	100%	0.53	1.75	5.82%
<b>Subtotal: 615 RE Value Add</b>		<b>43,200,000</b>	<b>42,381,374</b>	<b>818,626</b>	<b>0</b>	<b>31,878,482</b>	<b>36,884,787</b>	<b>68,763,269</b>	<b>26,381,895</b>	<b>98%</b>	<b>0.75</b>	<b>1.62</b>	<b>5.60%</b>
<b>630 RE Opportunistic</b>													
1 AEW Partners VI	2010	20,000,000	18,136,793	1,863,207	0	22,989,390	8,248,405	31,237,795	13,101,002	91%	1.27	1.72	15.22%
2 FRS-GA (Georgia)	2008	9,273,354	9,273,354	0	0	0	3,490,920	3,490,920	-5,782,434	100%	0.00	0.38	-9.88%
3 FRS-LB I (NLTP AZ)	2007	24,900,208	24,900,208	0	0	0	7,400,101	7,400,101	-17,500,107	100%	0.00	0.30	-13.43%
4 FRS-LB II (SMT AZ)	2008	3,779,000	3,779,000	0	0	0	0	0	-3,779,000	100%	0.00	0.00	N/A
5 FRS-LB III (ST George UT)	2008	6,878,923	6,878,923	0	0	0	9,286,064	9,286,064	2,407,141	100%	0.00	1.35	4.28%
6 JP Morgan India Property Fund	2007	8,990,000	8,481,769	508,231	0	4,452,289	2,589,067	7,041,356	-1,440,414	94%	0.52	0.83	-2.76%
<b>Subtotal: 630 RE Opportunistic</b>		<b>73,821,485</b>	<b>71,450,047</b>	<b>2,371,438</b>	<b>0</b>	<b>27,441,679</b>	<b>31,014,557</b>	<b>58,456,236</b>	<b>-12,993,812</b>	<b>97%</b>	<b>0.38</b>	<b>0.82</b>	<b>-3.01%</b>
<b>Total: Firefighters' Retirement System of Louisiana</b>		<b>169,021,485</b>	<b>165,831,421</b>	<b>3,190,064</b>	<b>34,085</b>	<b>66,112,161</b>	<b>117,701,187</b>	<b>183,813,348</b>	<b>17,947,841</b>	<b>98%</b>	<b>0.40</b>	<b>1.11</b>	<b>1.68%</b>

**Firefighters' Retirement System of Louisiana**

**Transaction Summary**

10/1/2017 - 12/31/2017

	<b>Date</b>	<b>Paid in Capital</b>	<b>Additional Fees</b>	<b>Distributions</b>	<b>Net Cash Flow</b>
<b>Firefighters' Retirement System of Louisiana</b>					
AEW Partners VI					
	10/12/2017			2,235,741.00	-2,235,741.00
	12/28/2017			563,530.00	-2,799,271.00
Total: AEW Partners VI				<b>2,799,271.00</b>	<b>-2,799,271.00</b>
JP Morgan India Property Fund					
	10/25/2017			78,811.80	-78,811.80
	10/25/2017	21,860.79			-56,951.01
Total: JP Morgan India Property Fund		<b>21,860.79</b>		<b>78,811.80</b>	<b>-56,951.01</b>
Sentinel Real Estate Fund					
	10/13/2017			468,038.25	-468,038.25
Total: Sentinel Real Estate Fund				<b>468,038.25</b>	<b>-468,038.25</b>
<b>Total:</b>		<b>21,860.79</b>		<b>3,346,121.05</b>	<b>-3,324,260.26</b>