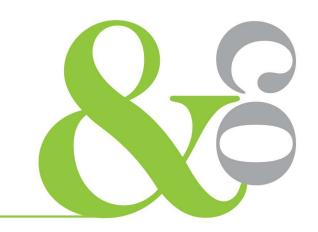
Investment Performance Review Period Ending June 30, 2018

Southfield Fire & Police Retirement System



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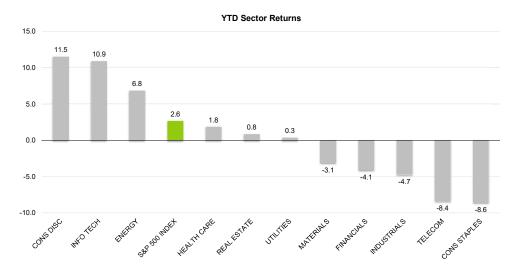
Levels

		Index Re	turns (%)			_
Month	<u>3 M</u>	YTD	<u>1 Year</u>	<u>3 Yr</u> Ann	<u>5 Yr</u> Ann	
0.62	3.43	2.65	14.37	11.92	13.41	
0.69	2.82	2.34	12.31	9.55	12.20	_ L
0.72	7.75	7.67	17.56	10.94	12.45	- M
0.96	5.76	7.25	22.51	14.96	16.34	
0.25	1.17	(1.69)	6.75	8.24	10.33	- s
0.65	3.89	3.22	14.77	11.56	13.28	3
(1.22)	(1.24)	(2.75)	6.84	4.90	6.44	
(4.15)	(7.96)	(6.66)	8.20	5.59	5.01	_
	0.62 0.69 0.72 0.96 0.25 0.65 (1.22)	0.62 3.43   0.69 2.82   0.72 7.75   0.96 5.76   0.25 1.17   0.65 3.89   (1.22) (1.24)	Month 3 M YTD   0.62 3.43 2.65   0.69 2.82 2.34   0.72 7.75 7.67   0.96 5.76 7.25   0.25 1.17 (1.69)   0.65 3.89 3.22   (1.22) (1.24) (2.75)	0.62 3.43 2.65 14.37   0.69 2.82 2.34 12.31   0.72 7.75 7.67 17.56   0.96 5.76 7.25 22.51   0.25 1.17 (1.69) 6.75   0.65 3.89 3.22 14.77   (1.22) (1.24) (2.75) 6.84	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$

	Russell Ir	ndices Style	Returns				
	v	В	G		v	В	G
•	-1.7	2.9	7.3	L	13.6	21.7	30.
1	-0.2	2.3	5.4	М	13.3	18.5	25.
5	5.5	7.7	9.7	S	7.8	14.6	22.
		YTD	•			2017	

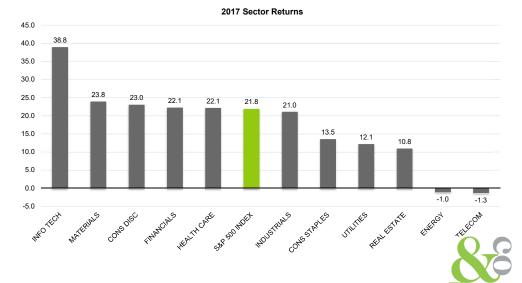
		Index Re	turns (%)		_	
Fixed Income	Month	<u>3 M</u>	YTD	<u>1 Year</u>	<u>Mod. Adj.</u> Duration	<u>Yield to</u> <u>Worst</u>
U.S. Aggregate	(0.12)	(0.16)	(1.62)	(0.40)	6.01	3.29
U.S. Corporate Investment Grade	(0.58)	(0.98)	(3.27)	(0.83)	7.26	4.02
U.S. Corporate High Yield	0.40	1.03	0.16	2.62	3.94	6.49
Global Aggregate	(0.44)	(2.78)	(1.46)	1.36	7.05	1.99

	Levels (%)												
Key Rates	06/30/18	<u>12/31/17</u>	<u>12/31/16</u>	<u>12/31/15</u>	<u>12/31/14</u>								
3 Month	1.91	1.38	0.50	0.16	0.04								
US 2 Year	2.53	1.88	1.19	1.05	0.66								
US 10 Year	2.86	2.41	2.44	2.27	2.17								
US 30 Year	2.99	2.74	3.07	3.02	2.75								
ICE LIBOR USD 3M	2.34	1.69	1.00	0.61	0.26								
Euribor 3 Month ACT/360	(0.32)	(0.33)	(0.32)	(0.13)	0.08								
Bankrate 30Y Mortgage Rates Na	4.40	3.85	4.06	3.90	3.99								
Prime	5.00	4.50	3.75	3.50	3.25								



06/30/18	<u>12/31/17</u>	<u>12/31/16</u>
1.17	1.20	1.05
1.32	1.35	1.23
110.76	112.69	116.96
0.99	0.97	1.02
	1.17 1.32 110.76	1.17 1.20   1.32 1.35   110.76 112.69

	Levels	
06/30/18	<u>12/31/17</u>	<u>12/31/16</u>
74.15	59.42	56.43
2.85	2.49	2.34
2.92	2.81	2.93
1,254.50	1,323.40	1,179.80
16.20	17.37	16.45
296.60	333.90	252.15
371.25	384.00	394.75
179.95	179.96	176.94
	74.15 2.85 2.92 1,254.50 16.20 296.60 371.25	06/30/18 12/31/17   74.15 59.42   2.85 2.49   2.92 2.81   1,254.50 1,323.40   16.20 17.37   296.60 333.90   371.25 384.00



- Total Fund return of +0.83% slightly trailed the Policy Index return of +0.86%
- The conversion of the NT S&P 400 Mid Cap Index fund to QMA Mid Cap was completed in late May.
- Morgan Dempsey (Micro Cap Equity) outperformed their benchmark by 1.65% for the quarter, returning +10.95% vs. +9.30% for their benchmark. This outperformance has raised their trailing 1 and 3 year returns above benchmark.
- 1607 Capital Partners underperformed their benchmark by 0.88% for the quarter. They still rank favorably over all time periods.
- In their fourth quarter of watch status, Brandes Emerging Markets underperformed by -1.35%. Their watch status was extended through 6/30/2018.
- Both Domestic Fixed Income managers, Tortoise Credit and Loomis Sayles underperformed their benchmarks for the quarter by a very small margin.
- Fintan is in the process of winding down their institutional fund. Approximately 75% of the remaining balance was distributed during the quarter.
- Nantucket outperformed for the quarter and long term. Longer term results remain strong vs. benchmark and peers.
- KStone Partners outperformed their benchmark for the quarter. Long term results remain strong.
- JCR Fund III continues to call capital, and is now 70% called. JCR Fund IV issued its first capital call in late April and another in late June.
- Landmark Fund VII made their first call in December 2017. There was no call activity during the quarter.
- As of 6/30/2018, the Total Fund is in compliance with the Investment Policy Statement and Public Act 314.



#### Plan Sponsor TF Asset Allocation vs. All Public Plans-Total Fund 76.0 68.0 60.0 52.0 44.0 Allocation (%) 36.0 28.0 $\bigcirc$ 20.0 $\bigcirc$ $\bigcirc$ 12.0 $\bigcirc$ 4.0 $\circ$ -4.0 -12.0 Intl. Fixed Income **US Equity** Intl. Equity **US Fixed Income** Alternative Inv. **Real Estate** Cash Total Fund 11.74 (11) 1.89 (30) 35.43 (74) 17.86 (47) 20.79 (74) 0.00 12.30 (43) 5th Percentile 59.24 28.33 47.21 9.22 31.39 13.95 6.79 1st Quartile 49.21 22.29 35.05 5.01 16.82 10.03 2.17 Median 42.30 17.07 27.84 4.52 9.98 7.61 1.13 3rd Quartile 34.82 13.72 20.44 3.65 4.03 5.07 0.50 95th Percentile 21.23 8.47 13.34 0.32 0.92 2.61 0.07

Parentheses contain percentile rankings.

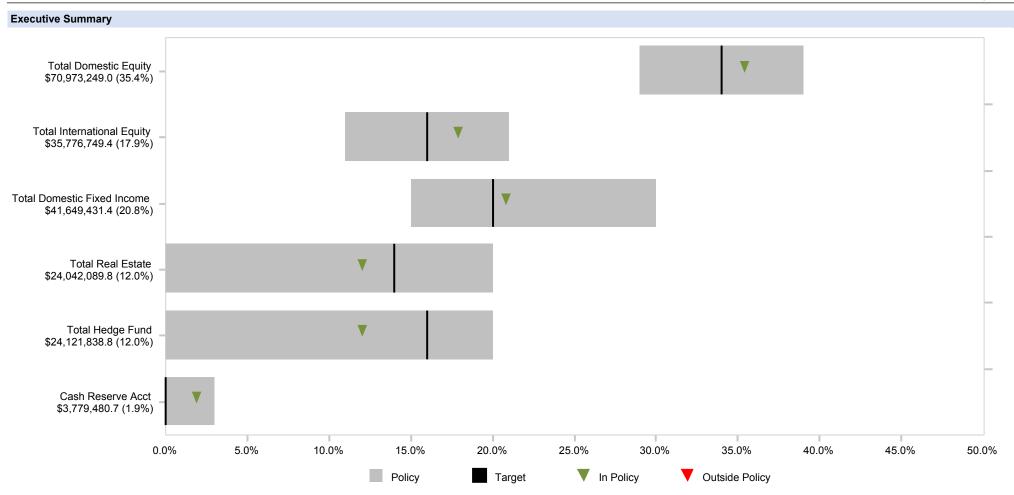
Calculation based on quarterly periodicity.



Comparative Performance Trailing Returns Southfield Fire & Police Retirement System As of June 30, 2018

									AS 01 Julie 30, 2018
Comparative	e Performance								
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
<b>Total Fund</b>	0.8335	0.4605	7.5819	7.0636	8.0953	6.9885	5.9291	7.6464	01/01/1989





#### **Asset Allocation Compliance**

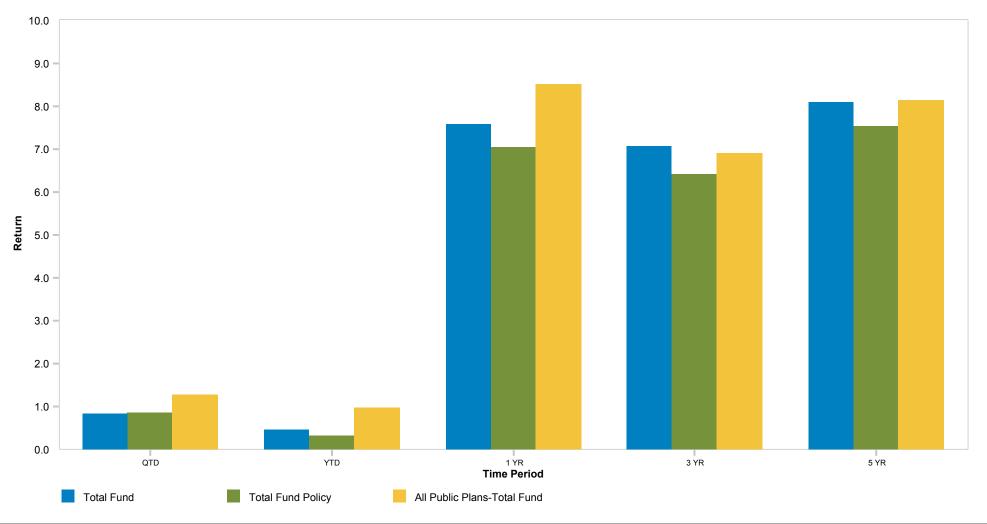
	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)	Min. Rebal. (\$000)	Target Rebal. (\$000)	Max. Rebal. (\$000)
Total Fund	200,342,839	100.0	N/A	100.0	N/A	-	-	-
Total Domestic Equity	70,973,249	35.4	29.0	34.0	39.0	-12,873,826	-2,856,684	7,160,458
Total International Equity	35,776,749	17.9	11.0	16.0	21.0	-13,739,037	-3,721,895	6,295,247
Total Domestic Fixed Income	41,649,431	20.8	15.0	20.0	30.0	-11,598,005	-1,580,864	18,453,420
Total Real Estate	24,042,090	12.0	0.0	14.0	20.0	-24,042,090	4,005,908	16,026,478
Total Hedge Fund	24,121,839	12.0	0.0	16.0	20.0	-24,121,839	7,933,015	15,946,729
Cash Reserve Acct	3,779,481	1.9	0.0	0.0	3.0	-3,779,481	-3,779,481	2,230,804



#### Performance At-A-Glance Total Fund As of June 30, 2018

Gain/Loss Summary					
	QTD	YTD	1 YR	3 YR	5 YR
Fotal Fund					
Beginning Market Value	202,764,865	205,832,327	197,867,629	196,664,430	181,675,012
Net Contributions	-3,757,801	-5,721,982	-10,803,301	-31,876,005	-49,188,572
Gain/Loss	1,335,775	232,495	13,278,511	35,554,415	67,856,399
Ending Market Value	200,342,839	200,342,839	200,342,839	200,342,839	200,342,839

#### **Comparative Performance**





Asset Allocation Attributes														
	Domestic	Equity	Internation	al Equity	Domestic Incor		Real E	state	Hedge	Fund	Cash Eq	uivalent	Total F	und
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
Total Fund	70,688,327	35.28	34,220,731	17.08	41,220,238	20.57	24,042,090	12.00	24,021,162	11.99	6,150,292	3.07	200,342,839	100.00
Total Domestic Equity	70,688,327	99.60	-	-	-	-	-	-	-	-	284,922	0.40	70,973,249	35.43
LSIA LC 30/70	15,703,936	99.77	-	-	-	-	-	-	-	-	36,371	0.23	15,740,307	7.86
LSIA Dividend Aristocrats	11,476,744	99.66	-	-	-	-	-	-	-	-	39,129	0.34	11,515,874	5.75
LSIA S&P 500 Low Volatility	11,100,038	99.62	-	-	-	-	-	-	-	-	42,771	0.38	11,142,809	5.56
NTGI S&P Midcap 400 - Lending	-	-	-	-	-	-	-	-	-	-	-2,018	100.00	-2,018	0.00
QMA US MC Equity	20,854,921	99.74	-	-	-	-	-	-	-	-	53,729	0.26	20,908,650	10.44
Morgan Dempsey	11,552,687	99.01	-	-	-	-	-	-	-	-	114,941	0.99	11,667,628	5.82
Total International Equity	-	-	34,220,731	95.65	-	-	-	-	-	-	1,556,018	4.35	35,776,749	17.86
1607 Capital Partners	-	-	25,817,385	94.32	-	-	-	-	-	-	1,556,018	5.68	27,373,403	13.66
Brandes Emerging Mkts	-	-	8,403,346	100.00	-	-	-	-	-	-	-	-	8,403,346	4.19
Total Domestic Fixed Income	-	-	-	-	41,220,238	98.97	-	-	-	-	429,193	1.03	41,649,431	20.79
Avignon - Mortgage Loan	_	-	-	_	3.420.002	100.00	-	-	_	_	-	-	3,420,002	1.71
Tortoise Credit	-	-	-	_	18,867,460	97.78	-	-	-	-	429,193	2.22	19,296,653	9.63
Loomis Sayles Intermediate Duration	-	-	-	-	18,932,777	100.00	-	-	-	-	-	-	18,932,777	9.45
Total Real Estate	-	-	-	-	-	-	24,042,090	100.00	-	-	-	-	24,042,090	12.00
							0 404 005	100.00					0 404 005	0.00
PRISA I	-	-	-	-	-	-	6,121,025	100.00	-	-	-	-	6,121,025	3.06
PRISA II	-	-	-	-	-	-	5,195,419	100.00	-	-	-	-	5,195,419	2.59
PRISA III	-	-	-	-	-	-	5,863,324	100.00	-	-	-	-	5,863,324	2.93
JCR Capital Fund 3 B	-	-	-	-	-	-	5,780,470	100.00	-	-	-	-	5,780,470	2.89
JCR Income Plus IV	-	-	-	-	-	-	555,000	100.00	-	-	-	-	555,000	0.28
Landmark Real Estate Partners VIII, L.P.	-	-	-	-	-	-	526,852	100.00	-	-	-	-	526,852	0.26
Total Hedge Fund	-	-	-	-	-	-	-	-	24,021,162	99.58	100,677	0.42	24,121,839	12.04
Nantucket Institutional	_	_	_	_	_	_	_	_	12,792,080	100.00	_	_	12,792,080	6.39
Fintan Partners	-	-	-	-	-	-	-	-			100,677	100.00	100,677	0.05
KStone Partners	-	_	-	-	-	-	-	-	- 11,229,082	- 100.00	100,077	100.00	11,229,082	5.60
	-	-	-	-	-	-	-	-	11,229,002	100.00	-	-	11,229,002	5.00
Cash Reserve Acct	-	-	-	-	-	-	-	-	-	-	3,779,481	100.00	3,779,481	1.89



Comparative Performance																	
	Q.	TR	Y	ГD	1	ſR	3 \	(R	5	ŕR	7	(R	10	YR	Ince	otion	Inception Date
Total Fund	0.83	(76)	0.46	(73)	7.58	(73)	7.06	(44)	8.10	(52)	6.99	(79)	5.93	(88)	7.65	(95)	01/01/1989
Total Fund Policy	0.86	(75)	0.33	(76)	7.04	(82)	6.43	(69)	7.54	(72)	7.32	(65)	6.45	(75)	8.41	(59)	
All Public Plans-Total Fund Median	1.27		0.97		8.50		6.90		8.14		7.66		6.89		8.57		
Population	529		529		526		498		478		463		426		40		
Total Fund (Net of Fees)	0.71		0.22		7.04		6.41		N/A		N/A		N/A		5.86		01/01/2014
Tetel Deve d'a Frank	0.70	(55)	0.00	(00)	40.00	(05)			<b>N1/A</b>						44.50	(==)	04/04/0040
Total Domestic Equity	3.72	• •	2.23	• •	12.69	(65)	N/A	(40)	N/A	(45)	N/A	(40)	N/A	(00)	14.53	(55)	01/01/2016
Russell 3000 Index	3.89	(51)	3.22	(53)	14.78	(50)	11.58	(40)	13.29	(45)	13.01	(43)	10.23	(63)	14.72	(54)	
IM U.S. Equity (SA+CF) Median	3.93		3.46		14.68		10.91		12.98		12.66		10.76		14.89		
Population	2,183		2,183		2,171		2,117		2,024		1,914		1,700		2,139		
Total International Equity	-4.84	(70)	-4.88	(67)	6.80	(64)	N/A		N/A		N/A		N/A		12.96	(40)	01/01/2016
MSCI AC World ex USA (Net)	-2.61	(50)	-3.77	(54)	7.28	(58)	5.07	(73)	5.99	(75)	3.81	(78)	2.54	(88)	10.35	(62)	
IM International Equity (SA+CF) Median	-2.62		-3.46		8.13		6.41		7.58		5.95		4.67		11.66		
Population	946		940		937		894		826		724		605		917		
Total Fixed Income	-0.05	(71)	-0.71	(55)	0.22	(62)	N/A		N/A		N/A		N/A		2.88	(48)	01/01/2016
Blmbg. Barc. U.S. Aggregate Index	-0.16	(78)	-1.62	(81)	-0.40	(87)	1.72	(71)	2.27	(66)	2.57	(66)	3.72	(65)	1.80	(71)	
IM U.S. Fixed Income (SA+CF) Median	0.24		-0.52		0.52		2.33		2.85		3.28		4.37		2.71		
Population	1,289		1,289		1,286		1,248		1,200		1,139		954		1,265		
Total Real Estate	1.50	(100)	2.96	(100)	9.29	(42)	N/A		N/A		N/A		N/A		10.02	(28)	01/01/2016
NCREIF Fund Index-ODCE (VW)	2.05	(67)	4.30	(63)	8.44	(65)	9.37	(73)	11.04	(64)	11.39	(71)	5.29	(69)	8.31	(69)	
IM U.S. Open End Private Real Estate (SA+CF) Median	2.20		4.48		8.87		9.83		11.66		11.91		5.61		8.61		
Population	18		18		18		18		18		18		18		18		
Total Hedge Fund	2.21	(9)	3.27	(4)	7.82	(7)	N/A		N/A		N/A		N/A		5.26	(14)	01/01/2016
HFRI FOF: Diversified Index	0.60	(39)	0.67	(15)	5.19	(12)	1.75	(34)	3.30	(5)	2.79	(19)	1.44	(39)	3.15	(35)	
IM Alternative Multi-Strategy (MF) Median	-0.25		-1.23		1.47		0.92		1.95		2.14		1.18		2.13		
Population	231		227		211		166		75		38		14		183		



Returns for periods greater than one year are annualized. Returns are expressed as percentages.

Comparative Performance Trailing Returns Southfield Fire & Police Retirement System

As of June 30, 2018

		QTR		YTD 1 YR		3 YR		5 YR				7 YR		7 YR		7 YR 10 Y		Inception		Inception Date
Total Domestic Equity	3.72		2.23		12.69		N/A		N/A		N/A		N/A		14.53		01/01/2016			
LSIA LC 30/70	2.73	(62)	1.51	(63)	11.99	(83)	N/A		N/A		N/A		N/A		11.83	(82)	05/01/2017			
S&P 500 Equal Weighted	2.80	(61)	1.77	(61)	11.98	(83)	10.49	(81)	12.76	(77)	12.65	(81)	11.62	(13)	11.89	(82)				
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median	3.19		2.06		14.80		11.77		13.68		13.68		10.64		14.38					
Population	58		58		58		56		56		54		53		58					
LSIA Dividend Aristocrats	1.02	(91)	-1.27	(95)	10.73	(84)	11.06	(52)	12.72	(67)	N/A		N/A		14.39	(57)	07/01/2012			
S&P 500 Dividend Aristocrats Index TR	0.92	(93)	-1.35	(96)	10.71	(85)	10.90	(55)	12.58	(69)	13.71	(32)	13.28	(2)	14.29	(59)				
IM U.S. Large Cap Core Equity (SA+CF) Median	2.89		2.38		14.24		11.12		13.35		13.12		10.18		14.60					
Population	240		240		239		235		227		212		190		215					
LSIA S&P 500 Low Volatility	1.53	(83)	0.64	(81)	8.49	(92)	N/A		N/A		N/A		N/A		11.65	(88)	01/01/2017			
S&P 500 Low Volatility Index TR	1.59	(82)	0.71	(81)	8.61	(92)	11.63	(41)	11.54	(85)	12.63	(64)	11.40	(14)	11.82	(88)				
IM U.S. Large Cap Core Equity (SA+CF) Median	2.89		2.38		14.24		11.12		13.35		13.12		10.18		15.92					
Population	240		240		239		235		227		212		190		239					
QMA US MC Equity	N/A		N/A		N/A		N/A		N/A		N/A		N/A		-0.07	(69)	06/01/2018			
Russell Midcap Index	2.82	(58)	2.35	(54)	12.33	(65)	9.58	(64)	12.22	(75)	11.89	(75)	10.23	(75)	0.69	(15)				
IM U.S. Mid Cap Core Equity (SA+CF) Median	3.51		2.60		13.51		10.57		12.94		12.32		10.82		0.23					
Population	48		48		48		47		45		41		38		48					
Morgan Dempsey	10.95	(42)	7.47	(69)	19.65	(54)	13.64	(47)	N/A		N/A		N/A		7.86	(84)	04/01/2014			
40/60 R2000V/Russell Micro	9.30	(60)	8.59	(61)	17.33	(67)	10.83	(73)	12.18	(81)	11.95	(82)	10.38	(94)	8.85	(77)				
IM U.S. Micro Cap Equity (SA+CF) Median	10.66		10.07		20.07		13.45		14.00		13.72		13.44		11.31					
Population	55		55		55		50		48		45		38		50					
Total International Equity	-4.84		-4.88		6.80		N/A		N/A		N/A		N/A		12.96		01/01/2016			
1607 Capital Partners	-3.27	(59)	-3.36	(49)	8.64	(46)	7.06	(43)	8.21	(42)	6.23	(46)	5.56	(36)	6.73	(36)	07/01/2006			
MSCI AC World ex USA	-3.27	. ,	-3.30	(49)	0.04 7.79	(40)	5.56	(43)	6.48	(42) (70)	4.28	(40)	3.01	(80)	4.22	. ,	07/01/2000			
IM International Equity (SA+CF) Median	-2.59	(+/)	-3.44	(00)	8.13	(00)	6.41	(00)	7.58	(10)	5.95	(1-1)	4.67	(02)	5.97	(02)				
Population	946		940		937		894		826		724		605		503					
Brandes Emerging Mkts	-9.61	(76)	-9.50	(90)	2.07	(85)	7.21	(36)	N/A		N/A		N/A		0.32	(89)	07/01/2014			
MSCI Emerging Markets Index	-7.86	• •	-6.51	(46)	8.59	(38)	5.98	(57)	5.39	(58)	1.78	(77)	2.60	(74)	3.19	· /				
IM Emerging Markets Equity (SA+CF) Median	-8.40	()	-6.72	(-0)	7.07	(00)	6.18	(01)	5.88	(00)	3.16	(**)	3.56	(++)	3.60	(00)				
Population	268		267		267		255		221		174		126		238					

Returns for periods greater than one year are annualized. Returns are expressed as percentages.

Comparative Performance Trailing Returns Southfield Fire & Police Retirement System

As of June 30, 2018

	Q	TR	Y	TD	1	<b>ŕ</b> R	3 \	′R	5 ۲	/R	ר 7	′R	10	YR	Ince	ption	Inception Date
Total Domestic Fixed Income	-0.05		-0.71		0.22		N/A		N/A		N/A		N/A		2.88		01/01/2016
Tortoise Credit	-0.06	(92)	-0.63	(30)	0.42	(18)	2.60	(5)	N/A		N/A		N/A		3.11	(4)	10/01/2013
Bloomberg Barclays Intermed Aggregate Index	0.09	(60)	-0.97	(78)	-0.32	(81)	1.27	(82)	1.83	(69)	2.04	(78)	3.29	(81)	1.77	(70)	
IM U.S. Intermediate Duration (SA+CF) Median	0.12		-0.83		-0.03		1.53		1.98		2.33		3.67		1.93		
Population	156		156		155		153		147		142		128		149		
Loomis Sayles Intermediate Duration	-0.05	(91)	-0.92	(70)	0.06	(41)	N/A		N/A		N/A		N/A		0.34	(26)	08/01/2016
Bloomberg Barclays Intermediate US Govt/Credit Idx	0.01	(86)	-0.97	(79)	-0.58	(97)	1.16	(92)	1.60	(88)	1.95	(85)	3.08	(91)	-0.56	(92)	
IM U.S. Intermediate Duration (SA+CF) Median	0.12		-0.83		-0.03		1.53		1.98		2.33		3.67		-0.06		
Population	156		156		155		153		147		142		128		155		
PRISA Real Estate Composite	2.08		4.69		9.68		11.55		13.01		12.92		5.16		8.26		07/01/1993
PRISA I	1.81	(85)	4.28	(64)	8.62	(59)	9.69	(64)	11.36	(59)	11.60	(59)	4.79	(89)	6.71	(75)	01/01/2006
NCREIF Fund Index-ODCE (VW)	2.05	(67)	4.30	(63)	8.44	(65)	9.37	(73)	11.04	(64)	11.39	(71)	5.29	(69)	6.88	(59)	0 110 112000
IM U.S. Open End Private Real Estate (SA+CF) Median	2.20	()	4.48	()	8.87	()	9.83	(1-)	11.66	(	11.91	( )	5.61	()	7.10	()	
Population	18		18		18		18		18		18		18		15		
PRISA II	2.25	(44)	5.45	(19)	10.01	(25)	11.41	(30)	13.04	(25)	13.45	(36)	4.38	(94)	6.41	(85)	01/01/2006
NCREIF Fund Index-ODCE (VW)	2.05	(67)	4.30	(63)	8.44	(65)	9.37	(73)	11.04	(64)	11.39	(71)	5.29	(69)	6.88	(59)	
IM U.S. Open End Private Real Estate (SA+CF) Median	2.20		4.48		8.87		9.83		11.66		11.91		5.61		7.10		
Population	18		18		18		18		18		18		18		15		
PRISA III	2.22	(48)	4.48	(51)	10.65	(18)	14.67	(6)	16.33	(6)	N/A		N/A		16.48	(1)	04/01/2013
NCREIF Fund Index-ODCE (VW)	2.05	(67)	4.30	(63)	8.44	(65)	9.37	(73)	11.04	(64)	11.39	(71)	5.29	(69)	11.28	(62)	
IM U.S. Open End Private Real Estate (SA+CF) Median	2.20		4.48		8.87		9.83		11.66		11.91		5.61		12.02		
Population	18		18		18		18		18		18		18		18		



Returns for periods greater than one year are annualized. Returns are expressed as percentages.

Comparative Performance Trailing Returns Southfield Fire & Police Retirement System

As of June 30, 2018

	QT	R	Y	D	1 ۱	<b>ŕ</b> R	3 \	(R	5 ١	(R	7 א	′R	10	YR	Ince	ption	Inceptior Date
Total Hedge Fund	2.21		3.27		7.82		N/A		N/A		N/A		N/A		5.26		01/01/2016
Nantucket Institutional	2.88	(4)	4.36	(3)	10.11	(4)	4.58	(8)	7.66	(1)	7.40	(1)	5.52	(1)	5.52	(1)	07/01/2008
HFRI FOF: Diversified Index	0.60	(39)	0.67	(15)	5.19	(12)	1.75	(34)	3.30	(5)	2.79	(19)	1.44	(39)	1.44	(39)	
IM Alternative Multi-Strategy (MF) Median	-0.25		-1.23		1.47		0.92		1.95		2.14		1.18		1.18		
Population	231		227		211		166		75		38		14		14		
-intan Partners	-0.28	(53)	0.00	(44)	6.20	(2)	N/A		N/A		N/A		N/A		-1.60	(100)	10/01/2015
90 Day T-Bill +5%/Yr	1.69	(3)	3.30	(2)	6.43	(2)	5.68	(2)	5.42	(1)	5.32	(1)	5.35	(5)	5.73	(12)	
IM Alternative Credit Focus (MF) Median	-0.24		-0.27		1.06		2.57		2.16		2.67		3.87		3.44		
Population	258		254		247		191		106		74		38		209		
KStone Partners	1.53	(3)	2.17	(6)	5.66	(3)	N/A		N/A		N/A		N/A		4.81	(24)	10/01/2015
90 Day T-Bill +3.5%/Yr	1.32	(4)	2.56	(3)	4.91	(8)	4.17	(15)	3.91	(5)	3.81	(6)	3.85	(52)	4.22	(38)	
IM Alternative Credit Focus (MF) Median	-0.24		-0.27		1.06		2.57		2.16		2.67		3.87		3.44		
Population	258		254		247		191		106		74		38		209		



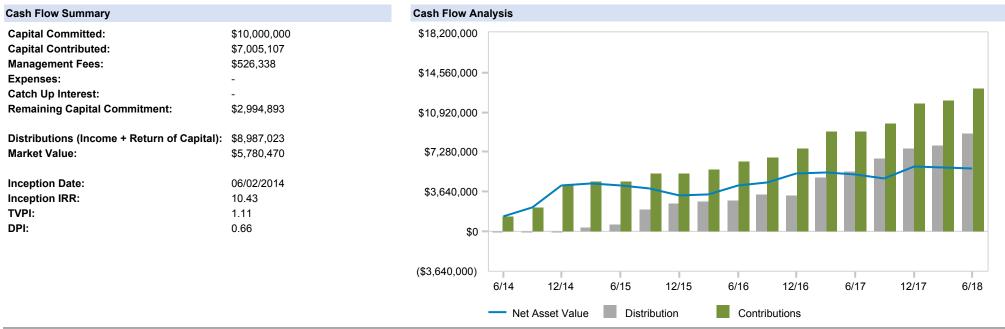
#### Strategy Review Total Fund | Total Fund Policy As of June 30, 2018





Fund Information							
Type of Fund:	Direct	Vintage Year:	2014				
Strategy Type:	Value-Add Real Estate	Management Fee:	1.50% on Committed Capital plus 20% after 9% Preferred Return				
Size of Fund:	329,500,000	Preferred Return:	9.00%				
Inception:	06/02/2014	General Partner:	JCR Capital				
Final Close:	01/14/2016						
Investment Strategy: In line with the prior JCR funds, Fund III B is credit-focused with a mandate of protecting principal while providing investors with attractive risk adjusted returns, including current yield							

and profit participation components. Fund III B's investment strategy is to provide capital to middle market sponsors for value-add, opportunistic and special situations. The fund targets a variety of asset classes and typically provides high leverage senior debt, mezzanine debt, preferred equity, joint venture equity and programmatic joint venture facilities.





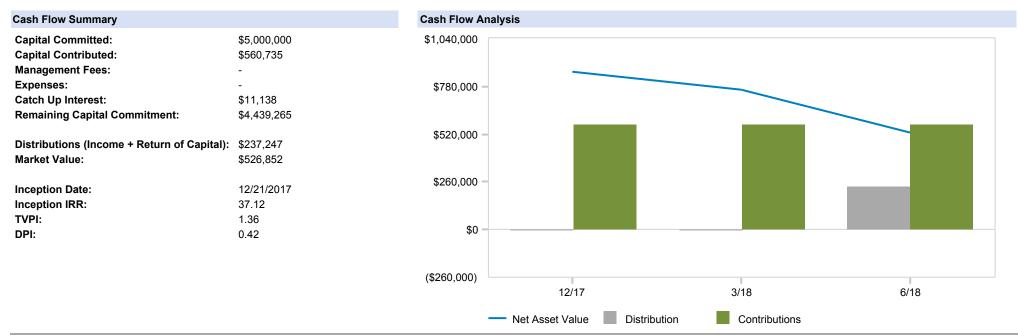
Fund Information			
Type of Fund:	Partnership	Vintage Year:	2017
Strategy Type:	Value-Add Real Estate	Management Fee:	1.50%
Size of Fund:	216,495,000	Preferred Return:	8.00% Incentive Fee 20.00%
Inception:	10/20/2017	General Partner:	JCR Capital Investment Company, LLC
Final Close:	TBD		
Investment Strategy:	The JCR Income Plus Fund IV, L.P. (the "Fund" or "Fund IV") will seek to provide customized capital solutions to middle market commercial real estate operators for diversified portfolio which will primarily consist of high yield debt, participating debt estate properties in the United States. The Fund will seek to invest in a variety of The Fund will generally seek to make investments between \$5 million and \$15 mit total target capitalization of \$300 million, with over \$14 million being committed by representing \$36 million in investment commitments.	or value-add, underperfo ot, structured preferred e property types includin Illion in large liquid mark	prming, undermanaged and opportunistic properties. Fund IV will seek to invest in a equity and structured equity positions primarily in cash flowing commercial real g multifamily, industrial, office, retail and unique middle market special situations. tets in the U.S. with durations ranging from six to 36 months. Fund IV will have a

**Cash Flow Summary Cash Flow Analysis Capital Committed:** \$5,000,000 \$800,000 **Capital Contributed:** \$555,000 Management Fees: \_ \$640,000 Expenses: \_ Catch Up Interest: Remaining Capital Commitment: \$4,445,000 \$480,000 Distributions (Income + Return of Capital): -\$320,000 Market Value: \$555,000 Inception Date: 05/04/2018 \$160,000 Inception IRR: 0.00 TVPI: 1.00 DPI: 0.00 \$0 (\$160,000) 8/18 Distribution Contributions Net Asset Value 



Fund Information				
Type of Fund:	Partnership	Vintag	ge Year:	2016
Strategy Type:	Secondaries	Mana	gement Fee:	1.00%
Size of Fund:	2,647,000,000,000	Prefe	rred Return:	8.00%
Inception:	12/15/2016	Gene	ral Partner:	Landmark Real Estate Fund-GP VIII, L.P.
Final Close:	Anticipated March 2018			
Investment Strategy:	Landmark Real Estate Partners VIII, L.P.,	a Delaware limited partnership (the "Partnershi	ip" or the "Fund"),	is being established to provide investors access to a diversified private

Strategy: Landmark Real Estate Partners VIII, L.P., a Delaware limited partnership (the "Partnership" or the "Fund"), is being established to provide investors access to a diversified private equity portfolio of real estate related investments, primarily through secondary market transactions. The Fund expects to make secondary investments principally in various types of real estate and real estate related entities, such as commingled real estate funds, limited partnerships, joint ventures, real estate operating companies and non-traded REIT vehicles.





Total Portfolio Compliance Summary							
	June 30, 2018	Current	IPS Target	IPS Range	Act 314	Compliance	Compliance
	Market Value \$	Allocation %	Allocation %	Allocation %	Limit %	within Ranges	w/314 Limits
Total Portfolio (excluding Unfunded Commitments)	205,832,326.59	100.0%					
Total Equity (14)	112,277,753.98	54.5%	50.0%	40.0% - 70.0%	70.0%	YES	YES
Total Equity (14)	112,211,153.96	54.5%	50.0%	40.0% - 70.0%	70.0%	TES	TES
Domestic Equity (14)	74,518,411.95	36.2%	34.0%	29.0% - 39.0%	70.0%	YES	YES
International Equity (14)	37,759,342.03	18.3%	16.0%	11.0% - 21.0%	70.0%	YES	YES
Total US Fixed Income (17 & 17.1.a.iii)	42,019,217.61	20.4%	20.0%	20.0% - 50.0%	100.0%	YES	YES
	42,019,217.01	20.4%	20.0%	20.0% - 30.0%	100.0%	TES	TES
US Investment Grade Fixed Income (17)	42,019,217.61	20.4%	20.0%	15.0% - 30.0%	100.0%	YES	YES
US Non-Investment Grade Fixed Income (17.1.a.iii)	-	0.0%	0.0%	0.0% - 5.0%	100.0%	YES	YES
Total Non US Fixed Income (20k)	-	0.0%	0.0%	0.0% - 0.0%	20.0%	YES	YES
		0.076	0.070	0.070 - 0.070	20.070	120	120
Total Real Estate (18 & 19)	24,507,284.63	11.9%	14.0%	0.0% - 20.0%	20.0%	YES	YES
Alternative Investments (20d)	23,730,555.64	11.5%	16.0%	0.0% - 20.0%	20.0%	YES	YES
Short Term/Cash Reserves	3,297,514.73	1.6%	0.0%	0.0% - 3.0%	N/A	YES	YES
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#### Commission Recapture Program

Broker	2002 thru 2010	2011	2012	2013	2014	2015	2016	2017	YTD 18
Bank of New York*	\$102,260	\$6,458	\$5200	\$2796	\$2501	\$1,325	\$1,613	\$1,000	\$237
Income to Fund	\$102,260	\$6,458	\$5,200	\$2,796	\$2,501	\$1,325	\$1,613	\$1,000	\$237

NOTE: \* (formerly L, J&R) Participants may include: Loomis Sayles, Fiduciary, WHV, and 1607 Capital

\*Participants may include: Loomis Sayles, Fiduciary, WHV, and 1607 Capital

## Securities Lending Program (Northern Trust)

	2002 thru 2010	2011	2012	2013	2014	2015	2016	2017	YTD 18
Gross Income	\$522,900	\$97,838	\$98,488	\$110,349	\$131,990	\$123,118	\$147,987	\$134,192	\$64,099
Less: Program Fees	\$209,695	\$39,093	\$39,342	\$44,072	\$52,698	\$49,144	\$59,108	\$53,576	\$25,583
Income To Fund	\$313,205	\$58,745	\$59,146	\$66,277	\$79,292	\$73,974	\$88,879	\$80,616	\$38,516



## **Total Fund Objectives:**

- To earn an annual average return of 7.50% over rolling 5 year periods.
- To earn an average annual, real return of 3.75% after inflation over rolling five year periods.
- To meet the assumed actuarial rate of return with a high degree of probability.
- To rank in the 50<sup>th</sup> percentile over twelve month rolling periods and in the 40<sup>th</sup> percentile over rolling five year periods, among public employee retirement funds.

#### **Manager Objectives:**

• To exceed their performance return standard with equal or less risk over all three year periods.

#### **Asset Allocation Policy:**

Asset Class	Target	Ranges
U.S. Equities	34%	29 – 39%
Non-U.S. Equities	16%	11 – 21%
Global Fixed Income	20%	15 - 30%
Real Estate	14%	0-20%
Alternative Investments	16%	0-20%
Cash & Equivalents	0%	0 – 3%

#### **Equity Portfolio Guidelines:**

- No more than 5% of the portfolio may be invested in the stock of any one company.
- No more than 10% of the portfolio may be invested in ADRs.

#### **Fixed Income Portfolio Guidelines:**

- No more than 5% of the portfolio may be invested with one issuer, except for the U.S. Treasury and Agency securities.
- No more than 15% of the portfolio in below investment grade.
- No more than 30% of total assets in non-U.S. dollar denominated securities. At least 75% of any non-U.S. currency exposure must be hedged. May invest beyond the 30% limit in Yankee and Euro issues.

#### **Other Portfolio Guidelines:**

- Managers are expected to be fully invested at all times, however they may raise cash if this is deemed appropriate under the circumstances.
- Leveraging the portfolio is prohibited.
- Derivative contracts only as permitted.
- Additional investment policies and guidelines are contained in the formal Statement of Investment Policies, Procedures and Objectives.
- All investment managers should follow State of Michigan laws governing the investment of public retirement plan assets.



Active Return	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.
Alpha	- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.
Beta	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.
Consistency	- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.
Distributed to Paid In (DPI)	- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.
Down Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance
Downside Risk	- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.
Excess Return	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.
Excess Risk	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.
Information Ratio	- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.
Public Market Equivalent (PME)	- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.
R-Squared	- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.
Return	- Compounded rate of return for the period.
Sharpe Ratio	- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.
Standard Deviation	- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.
Total Value to Paid In (TVPI)	- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life
Tracking Error	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.
Treynor Ratio	- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.
Up Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.



AndCo compiled this report for the sole use of the client for which it was prepared. AndCo is responsible for evaluating the performance results of the Total Fund along with the investment advisors by comparing their performance with indices and other related peer universe data that is deemed appropriate. AndCo uses the results from this evaluation to make observations and recommendations to the client.

AndCo uses time-weighted calculations which are founded on standards recommended by the CFA Institute. The calculations and values shown are based on information that is received from custodians. AndCo analyzes transactions as indicated on the custodian statements and reviews the custodial market values of the portfolio. As a result, this provides AndCo with a reasonable basis that the investment information presented is free from material misstatement. This methodology of evaluating and measuring performance provides AndCo with a practical foundation for our observations and recommendations. Nothing came to our attention that would cause AndCo to believe that the information presented is significantly misstated.

This performance report is based on data obtained by the client's custodian(s), investment fund administrator, or other sources believed to be reliable. While these sources are believed to be reliable, the data providers are responsible for the accuracy and completeness of their statements. Clients are encouraged to compare the records of their custodian(s) to ensure this report fairly and accurately reflects their various asset positions.

The strategies listed may not be suitable for all investors. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. Past performance is not an indication of future performance. Any information contained in this report is for informational purposes only and should not be construed to be an offer to buy or sell any securities, investment consulting, or investment management services.

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