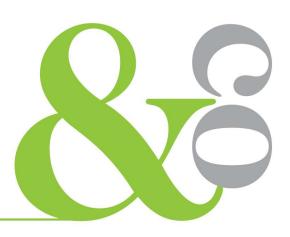
Investment Performance Review Period Ending December 31, 2019

# Southfield Fire & Police Retirement System





			Index Re	turns (%)		
<u>Equities</u>	Month	<u>3 M</u>	YTD	1 Year	3 Yr Ann	5 Yr Ann
S&P 500 Total Return	3.02	9.07	31.49	31.49	15.27	11.70
Russell Midcap Index	2.29	7.06	30.54	30.54	12.06	9.33
Russell 2000 Index	2.88	9.94	25.53	25.53	8.59	8.23
Russell 1000 Growth Indx	3.02	10.62	36.39	36.39	20.49	14.63
Russell 1000 Value Index	2.75	7.41	26.54	26.54	9.68	8.29
Russell 3000 Index	2.89	9.10	31.02	31.02	14.57	11.24
MSCI EAFE NR	3.25	8.17	22.01	22.01	9.56	5.67
MSCI EM NR	7.46	11.84	18.44	18.44	11.57	5.61

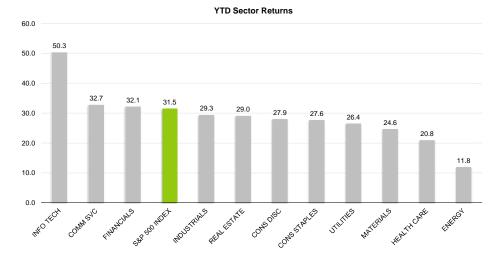
	Russell Ir	ndices Style	Returns				
	V	В	G		V	В	G
L	26.5	31.4	36.4	L	-8.3	-4.8	-1.5
M	27.0	30.5	35.5	М	-12.3	-9.1	-4.8
s	22.4	25.5	28.4	s	-12.9	-11.0	-9.3
		YTD		•		2018	

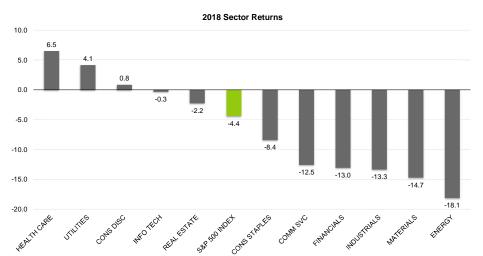
		Index Re	eturns (%)		_	
Fixed Income	<u>Month</u>	<u>3 M</u>	YTD	1 Year	Mod. Adj. Duration	Yield to Worst
U.S. Aggregate	(0.07)	0.18	8.72	8.72	5.87	2.31
U.S. Corporate Investment Grade	0.32	1.18	14.54	14.54	7.89	2.84
U.S. Corporate High Yield	2.00	2.61	14.32	14.32	3.05	5.19
Global Aggregate	0.58	0.49	6.84	6.84	7.12	1.45

		Levels	
Currencies	12/31/19	12/31/18	12/31/17
Euro Spot	1.12	1.15	1.20
British Pound Spot	1.33	1.28	1.35
Japanese Yen Spot	108.61	109.69	112.69
Swiss Franc Spot	0.97	0.98	0.97

			Levels (%)		
Key Rates	12/31/19	12/31/18	12/31/17	12/31/16	12/31/15
3 Month	1.54	2.35	1.38	0.50	0.16
US 2 Year	1.57	2.49	1.88	1.19	1.05
US 10 Year	1.92	2.68	2.41	2.44	2.27
US 30 Year	2.39	3.01	2.74	3.07	3.02
ICE LIBOR USD 3M	1.91	2.81	1.69	1.00	0.61
Euribor 3 Month ACT/360	(0.38)	(0.31)	(0.33)	(0.32)	(0.13)
Bankrate 30Y Mortgage Rates Na	3.86	4.51	3.85	4.06	3.90
Prime	4 75	5.50	4 50	3 75	3 50

		Levels	
<u>Commodities</u>	12/31/19	12/31/18	12/31/17
Oil	61.06	48.62	54.55
Gasoline	2.59	2.26	2.49
Natural Gas	2.19	3.00	3.00
Gold	1,523.10	1,318.50	1,187.30
Silver	17.92	16.05	16.50
Copper	279.70	265.15	338.00
Corn	387.75	407.00	408.25
BBG Commodity TR Idx	172.00	159.72	179.96







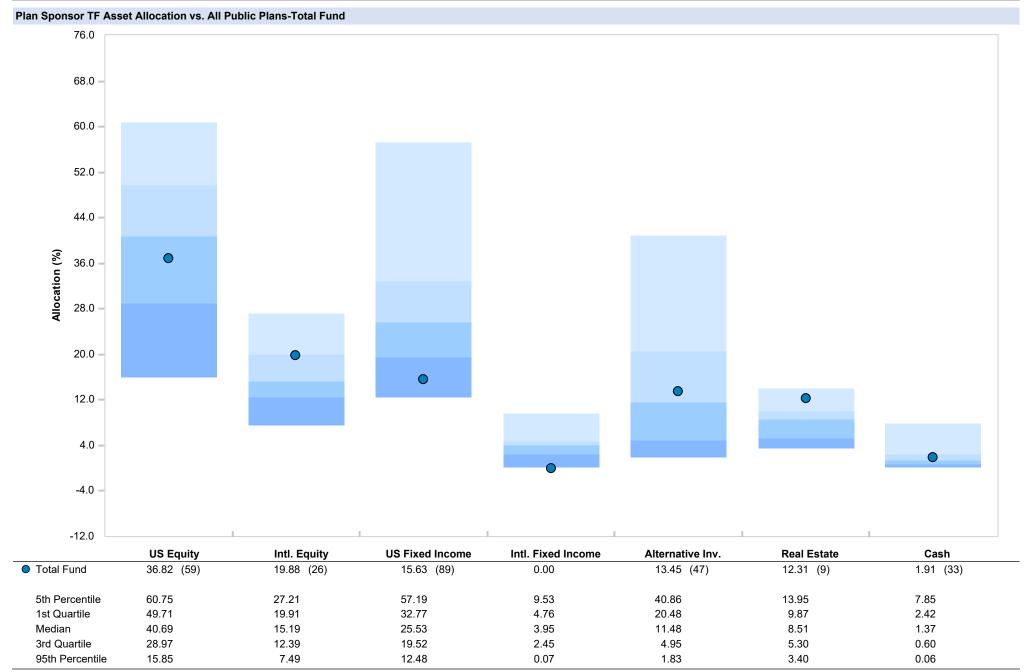
Source: Bloomberg & Investment Metrics. For informational purposes only and should not be regarded as investment agrice. Information is based on sources and data believed to be reliable, but AndCo Consulting cannot guarantee the accuracy, adequacy or completeness of the information. The material provided herein is valid only as of the date of distribution and not as of any future date.

## **Market Summary:**

The dual inspiration of a possible resolution to the trade war and stimulus from central banks drove the equity markets into full rally mode during the fourth quarter. The encouraging tone on US-China trade negotiations boosted the prospects of stronger global economic growth across the developed and emerging markets. Equities were further aided by a rate cut from the US Federal Reserve and continued stimulus from other major central banks. Domestically, small caps and growth led the way this quarter, as is often the case during strong "risk on" periods. The S&P 500 returned 9.1% during the quarter, lagging the Russell 2000's 9.9% gain (Russell 2000 Growth returned 11.4%). International markets benefited from a declining dollar with the Emerging Markets generating the biggest gains; the MSCI EAFE index rose 8.2% and the MSCI EM Index posted an 11.8%. After three quarters of strong performance to start 2019, the fixed income markets took a breather this quarter. Interest rates trended modestly higher as additional rate cuts were not anticipated. The BB US Aggregate Index returned 0.2% for the quarter; treasuries were the weakest segment (-0.8%) and investment grade corporates the strongest (1.2%). 2019 was a great year for investors – fixed income was up over 8% and equities returned 20 – 30%.

- 1. Total Fund return of +4.86% outpaced the Policy Index return of +4.59%. The primary drivers of outperformance were 1607, Loomis, PRISA and Nantucket.
- 2. Within the Large Cap allocation, all 3 large cap equity portfolios lagged the strong gain of the S&P 500.
- 3. QMA Mid Cap outperformed their benchmark by 0.23%.
- 4. The Small Cap allocation was rebalanced during the quarter, with Reinhart Partners and Champlain Small Cap being hired.
- 5. 1607 Capital Partners had a great quarter (+2.52% over index) as Emerging Markets exposure boosted returns.
- Both Domestic Fixed Income managers, Tortoise Credit and Loomis Sayles outperformed their benchmarks for the quarter as investment grade corporate bonds rallied higher. The Tortoise portfolio was consolidated into the Loomis portfolio.
- 7. Bloomfield Capital Fund V is now over 80% called. Investment activity continues as the portfolio fully deploys into loans.
- 8. Nantucket benefitted from their heavier equity exposure outperforming benchmark and peers.
- 9. KStone Partners outperformed by 0.60% for the quarter but lagged for the year. .
- 10. PRISA I, II and III were all ahead of their benchmarks for the quarter.
- 11. JCR Fund III made multiple distributions during the quarter and remains approximately 65% called. JCR Fund IV made another call during the quarter and is now just over 46% called. Both funds are expected to fully call their unfunded commitments.
- 12. Landmark Fund VII had continued activity during the guarter and is now 33% called. IRR since inception is 19.2%.
- 13. As of 12/31/2019, the Total Fund is in compliance with Public Act 314.



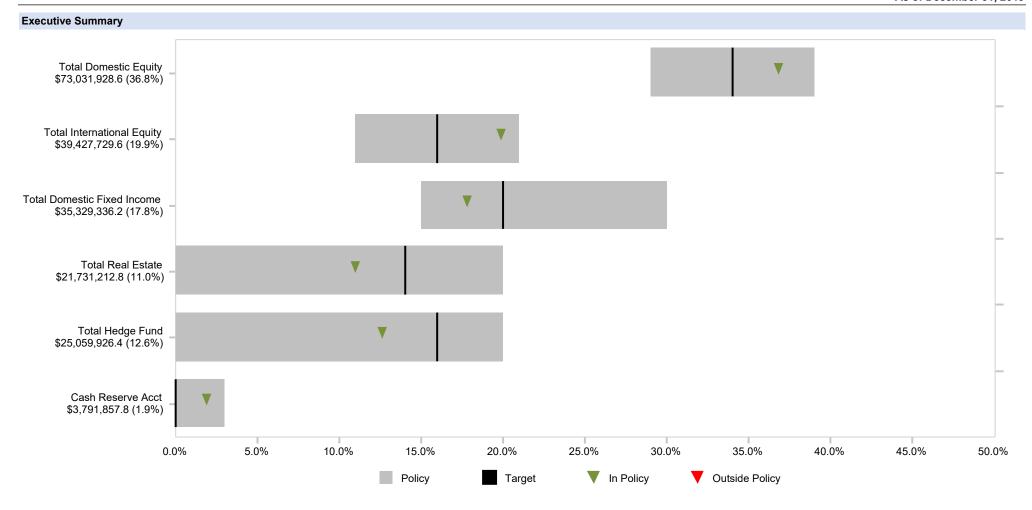




# Comparative Performance Trailing Returns Southfield Fire & Police Retirement System As of December 31, 2019

<b>Comparative Performan</b>	ce							
QT	R YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
Total Fund 4.8629	14.9842	14.9842	8.0394	6.6962	7.9850	7.5415	7.5985	01/01/1989

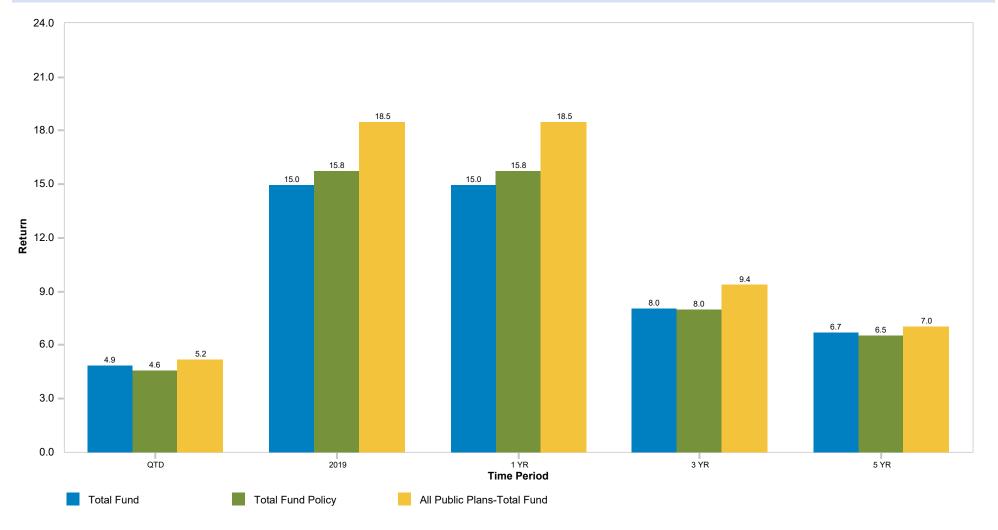




Asset Allocation Compliance								
	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)	Min. Rebal. (\$000)	Target Rebal. (\$000)	Max. Rebal. (\$000)
Total Fund	198,371,991	100.0	N/A	100.0	N/A	-	-	-
Total Domestic Equity	73,031,929	36.8	29.0	34.0	39.0	-15,504,051	-5,585,452	4,333,148
Total International Equity	39,427,730	19.9	11.0	16.0	21.0	-17,606,811	-7,688,211	2,230,389
Total Domestic Fixed Income	35,329,336	17.8	15.0	20.0	30.0	-5,573,537	4,345,062	24,182,261
Total Real Estate	21,731,213	11.0	0.0	14.0	20.0	-21,731,213	6,040,866	17,943,186
Total Hedge Fund	25,059,926	12.6	0.0	16.0	20.0	-25,059,926	6,679,592	14,614,472
Cash Reserve Acct	3,791,858	1.9	0.0	0.0	3.0	-3,791,858	-3,791,858	2,159,302



ain/Loss Summary					
	QTD	YTD	1 YR	3 YR	5 YR
Total Fund					
Beginning Market Value	192,023,697	184,485,371	184,485,371	192,844,714	197,405,258
Net Contributions	-2,722,654	-11,877,863	-11,877,863	-35,827,126	-54,822,217
Gain/Loss	9,070,949	25,764,483	25,764,483	41,354,403	55,788,950
Ending Market Value	198,371,991	198,371,991	198,371,991	198,371,991	198,371,991
Comparative Performance					





Asset Allocation Attributes														
	Domestic	Equity	Internation	al Equity	Domestic Inco		Real Es	state	Hedge	Fund	Cash Equ	ıivalent	Total F	und
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
Total Fund	70,800,607	35.69	37,229,292	18.77	30,411,920	15.33	25,966,127	13.09	25,059,926	12.63	8,904,118	4.49	198,371,991	100.00
Total Domestic Equity	70,800,607	96.94	-	-	-	-	-	-	-	-	2,231,321	3.06	73,031,929	36.82
LSIA LC 30/70	17,121,167	99.61	-	_	_	_	_	_	_	_	67,051	0.39	17,188,218	8.66
LSIA Dividend Aristocrats	12,800,411	99.25	-	-	-	-	-	-	-	-	96,960	0.75	12,897,372	6.50
LSIA S&P 500 Low Volatility	9,958,043	90.34	-	-	-	-	-	-	-	-	1,064,549	9.66	11,022,593	5.56
QMA US MC Equity	15,310,519	99.62	-	-	-	-	-	-	-	-	57,651	0.38	15,368,170	7.75
Reinhart Sm/Mid Cap PMV	7,891,123	94.47	-	-	-	-	-	-	-	-	461,929	5.53	8,353,052	4.21
Champlain SC[CE]	7,719,343	94.11	-	-	-	-	-	-	-	-	483,181	5.89	8,202,525	4.13
Total International Equity	-	-	37,229,292	94.42	-	-	-	-	-	-	2,198,437	5.58	39,427,730	19.88
1607 Capital Partners	-	-	37,229,292	94.42	-	-	-	-	-	-	2,198,437	5.58	39,427,730	19.88
Total Domestic Fixed Income	-	-		-	30,411,920	86.08	4,234,915	11.99	-	-	682,502	1.93	35,329,336	17.81
Tortoise Credit	_	_	_	_	75,828	11.18	_	_	_	_	602,500	88.82	678,328	0.34
Loomis Sayles Intermediate Duration	_	_	_	_	30,336,091	100.00	-	_	_	_	-	_	30,336,091	15.29
Bloomfield Capital Income Fund V	-	-	-	-	-	-	4,234,915	98.15	-	-	80,002	1.85	4,314,917	2.18
Total Real Estate	-	-	-	-	-	-	21,731,213	100.00	-	-	-	-	21,731,213	10.95
PRISA I	-	_	_	_	_	_	4,358,148	100.00	_	_	_	_	4,358,148	2.20
PRISA II	_	_	_	_	-	_	5,416,318	100.00	_	_	-	_	5,416,318	2.73
PRISA III	_	_	_	_	-	_	5,809,741	100.00	_	_	-	_	5,809,741	2.93
JCR Capital Fund 3 B	_	_	_	_	_	_	2,432,371	100.00	_	_	-	_	2,432,371	1.23
JCR Income Plus IV	_	_	-	_	-	-	2,097,055	100.00	-	-	-	_	2,097,055	1.06
Landmark Real Estate Partners VIII, L.P.	-	-	-	-	-	-	1,617,580	100.00	-	-	-	-	1,617,580	0.82
Total Hedge Fund	-	-	-	-	-	-	-	-	25,059,926	100.00	-	-	25,059,926	12.63
Nantucket Institutional	_	_	_	_	_	_	_	_	13,551,583	100.00	_	_	13,551,583	6.83
KStone Partners	-	-	-	-	-	-	-	-	11,508,343	100.00	-	-	11,508,343	5.80
Cash Reserve Acct	-	-	-	-	-	-	-	-	-	-	3,791,858	100.00	3,791,858	1.91



Comparative Performance																	
	Q.	TR	Υ٦	D	1 \	/R	3 \	′R	5 \	ΥR	<b>7</b> Y	′R	10	YR	Incep	otion	Inceptior Date
Total Fund	4.86	(73)	14.98	(92)	14.98	(92)	8.04	(89)	6.70	(61)	7.99	(58)	7.54	(76)	7.60	(91)	01/01/1989
Total Fund Policy	4.59	(81)	15.75	(88)	15.75	(88)	7.95	(90)	6.55	(68)	7.69	(66)	8.27	(41)	8.36	(59)	
All Public Plans-Total Fund Median	5.38		19.37		19.37		9.44		6.90		8.16		8.09		8.46		
Population	592		589		589		566		547		516		458		15		
Total Fund (Net of Fees)	4.75		14.52		14.52		7.55		6.08		N/A		N/A		5.96		01/01/2014
Total Domestic Equity	5.42	(90)	23.09	(82)	23.09	(82)	10.16	(64)	N/A		N/A		N/A		11.90	(64)	01/01/2016
Russell 3000 Index	9.10	(33)	31.02	(35)	31.02	(35)	14.57	(37)	11.24	(36)	14.38	(37)	13.42	(45)	14.11	(35)	
IM U.S. Equity (SA+CF) Median	8.26		28.53		28.53		12.32		10.02		13.49		13.18		12.91		
Population	2,133		2,128		2,128		2,076		1,993		1,878		1,693		2,038		
Total International Equity	11.51	(29)	26.86	(26)	26.86	(26)	13.13	(26)	N/A		N/A		N/A		11.80	(23)	01/01/2016
MSCI AC World ex USA (Net)	8.92	(69)	21.51	(59)	21.51	(59)	9.87	(62)	5.51	(73)	5.44	(75)	4.97	(84)	8.50	(58)	
IM International Equity (SA+CF) Median	9.98		22.54		22.54		10.64		6.60		6.95		6.84		9.07		
Population	989		987		987		949		862		768		623		915		
Total Fixed Income	0.70	(43)	8.20	(56)	8.20	(56)	3.97	(60)	N/A		N/A		N/A		4.22	(50)	01/01/2016
Blmbg. Barc. U.S. Aggregate Index	0.18	(85)	8.72	(50)	8.72	(50)	4.03	(59)	3.05	(64)	2.72	(64)	3.75	(63)	3.68	(62)	
IM U.S. Fixed Income (SA+CF) Median	0.63		8.72		8.72		4.36		3.48		3.22		4.35		4.17		
Population	1,291		1,289		1,289		1,255		1,214		1,149		1,033		1,237		
Total Real Estate	1.96	(38)	2.10	(97)	2.10	(97)	7.17	(75)	N/A		N/A		N/A		7.89	(65)	01/01/2016
NCREIF Fund Index-ODCE (VW)	1.51	(67)	5.34	(82)	5.34	(82)	7.09	(76)	8.97	(74)	10.17	(69)	11.42	(70)	7.51	(78)	
IM U.S. Open End Private Real Estate (SA+CF) Median	1.63		7.02		7.02		7.91		9.58		10.63		12.09		8.38		
Population	20		20		20		20		19		19		19		19		
Total Hedge Fund	3.39	(8)	9.23	(29)	9.23	(29)	5.24	(15)	N/A		N/A		N/A		4.55	(18)	01/01/2016
HFRI FOF: Diversified Index	2.63	(16)	7.97	(44)	7.97	(44)	3.72	(31)	2.27	(30)	3.38	(11)	2.86	(40)	2.89	(49)	
IM Alternative Multi-Strategy (MF) Median	1.32		7.48		7.48		2.88		1.29		2.01		2.62		2.76		
Population	163		160		160		125		88		43		19		119		



	Q <sup>-</sup>	TR	Y	ΓD	1 \	1 YR 3 YR			5 \	ΥR	7 YR		10	Inception		Inception Date	
Total Domestic Equity	5.42		23.09		23.09		10.16		N/A		N/A		N/A		11.90		01/01/2016
LSIA LC 30/70	7.89	(61)	28.76	(61)	28.76	(61)	N/A		N/A		N/A		N/A		12.08	(73)	05/01/2017
S&P 500 Equal Weighted	7.61	(70)	29.24	(57)	29.24	(57)	12.38	(82)	9.77	(77)	13.88	(67)	13.53	(45)	11.52	(80)	
IM U.S. Large Cap Core Equity (SA+CF) Median	8.20		29.96		29.96		14.32		11.17		14.59		13.39		13.29		
Population	223		222		222		219		211		200		177		219		
SIA Dividend Aristocrats	6.35	(83)	27.74	(70)	27.74	(70)	14.75	(46)	11.38	(42)	14.79	(38)	N/A		14.82	(34)	07/01/2012
S&P 500 Dividend Aristocrats Index TR	6.39	(83)	27.97	(68)	27.97	(68)	14.86	(43)	11.33	(44)	14.74	(44)	14.75	(10)	14.78	(35)	
IM U.S. Large Cap Core Equity (SA+CF) Median	8.20		29.96		29.96		14.32		11.17		14.59		13.39		14.45		
Population	223		222		222		219		211		200		177		192		
SIA S&P 500 Low Volatility	1.38	(100)	27.99	(67)	27.99	(67)	14.55	(50)	N/A		N/A		N/A		14.55	(50)	01/01/2017
S&P 500 Low Volatility Index TR	1.42	(100)	28.26	(66)	28.26	(66)	14.72	(46)	11.70	(34)	14.09	(62)	13.70	(34)	14.72	(46)	
IM U.S. Large Cap Core Equity (SA+CF) Median	8.20		29.96		29.96		14.32		11.17		14.59		13.39		14.32		
Population	223		222		222		219		211		200		177		219		
QMA US MC Equity	7.29	(35)	25.09	(80)	25.09	(80)	N/A		N/A		N/A		N/A		3.13	(89)	06/01/2018
S&P MidCap 400 Index	7.06	(56)	26.20	(69)	26.20	(69)	9.26	(70)	9.03	(58)	12.34	(65)	12.72	(73)	5.52	(63)	
IM U.S. Mid Cap Core Equity (SA+CF) Median	7.09		26.78		26.78		9.51		9.06		12.43		13.00		5.61		
Population	44		44		44		44		43		40		37		44		
Reinhart Sm/Mid Cap PMV	N/A		N/A		N/A		N/A		N/A		N/A		N/A		4.07	(91)	11/01/2019
Russell 2500 Index	8.54	(35)	27.77	(60)	27.77	(60)	10.33	(53)	8.93	(57)	12.26	(61)	12.58	(62)	6.50	(46)	
IM U.S. SMID Cap Equity (SA+CF) Median	7.77		29.63		29.63		10.52		9.22		12.72		13.04		6.35		
Population	187		184		184		174		162		147		129		187		
Champlain SC[CE]	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		01/01/2020
Russell 2000 Index	9.94	(22)	25.53	(49)	25.53	(49)	8.59	(56)	8.23	(69)	11.65	(75)	11.83	(88)	N/A		
IM U.S. Small Cap Core Equity (SA+CF) Median	8.67		24.72		24.72		8.81		9.42		13.03		13.04		N/A		
Population	119		119		119		117		115		109		99		N/A		
Fotal International Equity	11.51		26.86		26.86		13.13		N/A		N/A		N/A		11.80		01/01/2016
· •		(00)		(00)		(00)		(05)		(00)		(00)		(07)		(00)	
1607 Capital Partners	11.51	(29)	26.86	(26)	26.86	(26)	13.26	(25)	7.81	(33)	7.82	(36)	8.22	(27)	6.93	(29)	07/01/2006
MSCI AC World ex USA	8.99	(67)	22.13	(53)	22.13	(53)	10.40	(53)	6.01	(62)	5.93	(70)	5.45	(76)	4.41	(80)	
IM International Equity (SA+CF) Median	9.98		22.54		22.54		10.64		6.60		6.95		6.84		5.81		
Population	989		987		987		949		862		768		623		473		



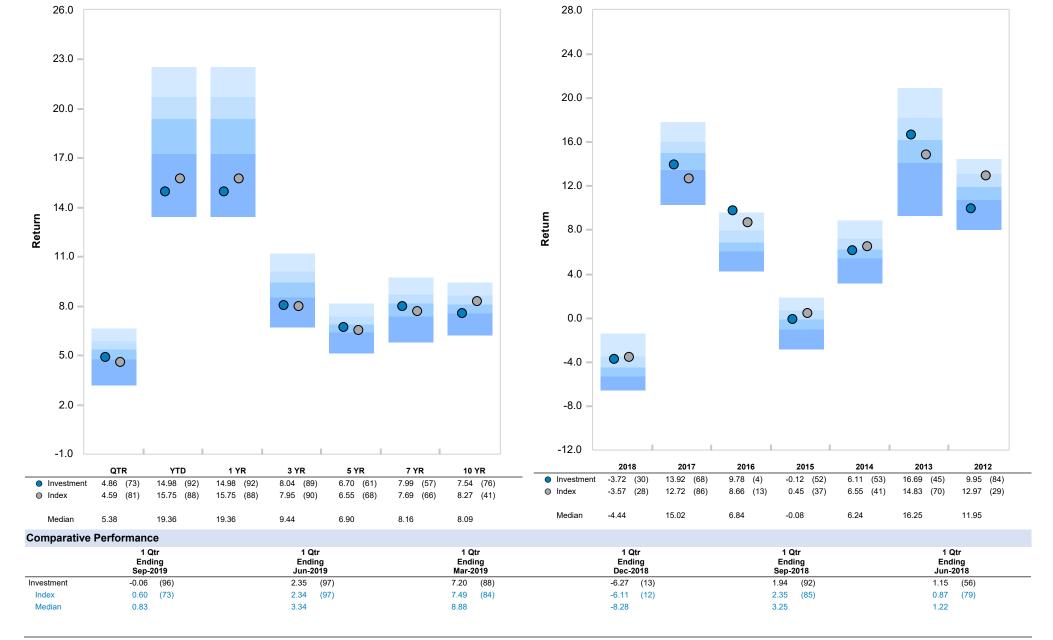
	Q	TR	Y	ΓD	1 \	/R	3 \	/R	5 \	YR	7 \	/R	10	YR	Ince	otion	Inception Date
Total Domestic Fixed Income	0.70		8.20		8.20		3.97		N/A		N/A		N/A		4.22		01/01/2016
Tortoise Credit	0.46	(46)	7.87	(12)	7.87	(12)	4.09	(9)	3.67	(6)	N/A		N/A		3.88	(7)	10/01/2013
Bloomberg Barclays Intermed Aggregate Index	0.47	(46)	6.67	(64)	6.67	(64)	3.26	(76)	2.59	(82)	2.28	(70)	3.15	(75)	2.70	(72)	
IM U.S. Intermediate Duration (SA+CF) Median	0.44		6.93		6.93		3.45		2.83		2.47		3.40		2.88		
Population	158		158		158		155		153		146		135		149		
Loomis Sayles Intermediate Duration	0.57	(26)	8.18	(9)	8.18	(9)	3.98	(14)	N/A		N/A		N/A		3.05	(13)	08/01/2016
Bloomberg Barclays Intermediate US Govt/Credit Idx	0.37	(69)	6.80	(59)	6.80	(59)	3.24	(77)	2.57	(83)	2.15	(84)	3.05	(84)	2.18	(88)	
IM U.S. Intermediate Duration (SA+CF) Median	0.44		6.93		6.93		3.45		2.83		2.47		3.40		2.52		
Population	158		158		158		155		153		146		135		155		
PRISA Real Estate Composite	2.65		8.11		8.11		8.76		10.99		12.00		13.23		8.26		07/01/1993
PRISA I	1.34	(84)	6.34	(68)	6.34	(68)	7.51	(63)	9.30	(59)	10.63	(52)	12.11	(50)	6.76	(65)	01/01/2006
NCREIF Fund Index-ODCE (VW)	1.51	(67)	5.34	(82)	5.34	(82)	7.09	(76)	8.97	(74)	10.17	(69)	11.42	(70)	6.81	(63)	0.70.72000
IM U.S. Open End Private Real Estate (SA+CF) Median	1.63	(- )	7.02	(- /	7.02	(- )	7.91	( - /	9.58	, ,	10.63	()	12.09	( - /	7.05	()	
Population	20		20		20		20		19		19		19		14		
PRISA II	2.15	(27)	7.52	(32)	7.52	(32)	8.33	(43)	10.59	(28)	11.75	(28)	14.14	(17)	6.54	(75)	01/01/2006
NCREIF Fund Index-ODCE (VW)	1.51	(67)	5.34	(82)	5.34	(82)	7.09	(76)	8.97	(74)	10.17	(69)	11.42	(70)	6.81	(63)	
IM U.S. Open End Private Real Estate (SA+CF) Median	1.63		7.02		7.02		7.91		9.58		10.63		12.09		7.05		
Population	20		20		20		20		19		19		19		14		
PRISA III	4.54	(1)	10.62	(11)	10.62	(11)	10.60	(6)	14.20	(6)	N/A		N/A		15.05	(6)	04/01/2013
NCREIF Fund Index-ODCE (VW)	1.51	(67)	5.34	(82)	5.34	(82)	7.09	(76)	8.97	(74)	10.17	(69)	11.42	(70)	10.13	(65)	
IM U.S. Open End Private Real Estate (SA+CF) Median	1.63		7.02		7.02		7.91		9.58		10.63		12.09		10.52		
Population	20		20		20		20		19		19		19		19		



# Comparative Performance Trailing Returns Southfield Fire & Police Retirement System As of December 31, 2019

	Q	TR	Y	ΓD	1 \	ΥR	3 \	/R	5 `	ΥR	7 \	/R	10	YR	Incer	otion	Inception Date
Total Hedge Fund	3.39		9.23		9.23		5.24		N/A		N/A		N/A		4.55		01/01/2016
Nantucket Institutional	4.66	(2)	13.08	(12)	13.08	(12)	7.83	(1)	5.63	(2)	7.36	(1)	7.01	(1)	5.44	(1)	07/01/2008
HFRI FOF: Diversified Index	2.63	(16)	7.97	(44)	7.97	(44)	3.72	(31)	2.27	(30)	3.38	(11)	2.86	(40)	1.57	(40)	
IM Alternative Multi-Strategy (MF) Median	1.32		7.48		7.48		2.88		1.29		2.01		2.62		1.27		
Population	163		160		160		125		88		43		19		12		
KStone Partners	1.93	(29)	5.01	(78)	5.01	(78)	3.98	(40)	N/A		N/A		N/A		3.68	(53)	10/01/2015
90 Day T-Bill +3.5%/Yr	1.33	(48)	5.86	(69)	5.86	(69)	5.23	(17)	4.59	(8)	4.29	(2)	4.08	(27)	4.78	(22)	
IM Alternative Credit Focus (MF) Median	1.27		6.85		6.85		3.49		2.90		2.50		3.06		3.73		
Population	219		214		214		200		158		94		50		175		





Peer Group Analysis - All Public Plans-Total Fund

Peer Group Analysis - All Public Plans-Total Fund



Type of Fund:DirectVintage Year:2018Strategy Type:OtherManagement Fee:1.5%

Size of Fund: 300,000,000 Preferred Return: 8.5% (Series A only)

Inception: 11/16/2018 General Partner: Bloomfield Capital Partners V, LLC Final Close: 11/16/2019

Investment Strategy:

The investment strategy of each Series of the Fund will have a primary focus on private credit and specialty finance assets (which is expected to include real estate debt and other general debt and debt-related investments) with short to intermediate-term durations and often contractual cash flows. The Managing Member's goal is to preserve invested capital, and generate returns that have a low correlation to traditional public markets (although there can be no assurances that this goal will be realized). The Fund will target middle market opportunities in real estate debt and other general debt and debt-related transactions (including REO properties, and preferred equity, that would include debt-like characteristics). The Fund generally will not invest in traditional leveraged common equity positions in real estate; however, the Fund may acquire REO and similar non-traditional properties and may also take incidental or pledged equity positions in connection with certain loans in order to obtain supplemental collateral to enhance the strength of the primary credit investment, and/or to expedite any requisite foreclosure process with such loan for the benefit of the Fund. The primary focus of private credit and specialty finance assets (including real estate debt and other general debt and debt-related investments) will be to capitalize on gap, transitional, bridge, special situation and opportunistic financings that are time sensitive, complex, and that the Managing Member believes offer attractive risk-adjusted returns. Each Series of the Fund may also variously co-invest in opportunities originated by other investors where the overall investment opportunity is of the same or similar nature as the Series typically investss.

#### **Cash Flow Summary Capital Committed:** \$5,000,000 **Capital Contributed:** \$4,279,924 Management Fees: **Expenses:** Catch Up Interest: **Remaining Capital Commitment:** \$720,076 Distributions (Income + Return of Capital): \$134.349 Market Value: \$4.314.917 **Inception Date:** 03/25/2019 Inception IRR: 4.65 TVPI: 1.04 DPI: 0.03





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.

# Cash Flow Summary

 Capital Committed:
 \$10,000,000

 Capital Contributed:
 \$6,571,770

 Management Fees:
 \$429,658

 Expenses:
 \$232

 Catch Up Interest:
 \$185,555

 Remaining Capital Commitment:
 \$3,428,230

Distributions (Income + Return of Capital): \$13,085,258 Market Value: \$2,432,371

 Inception Date:
 06/02/2014

 Inception IRR:
 5.60

 TVPI:
 1.06

 DPI:
 0.89





Final Close:

Type of Fund:PartnershipVintage Year:2017Strategy Type:Value-Add Real EstateManagement 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

Investment Strategy: The

TBD

The JCR Income Plus Fund IV, L.P. (the "Fund" or "Fund IV") will seek to provide high current returns as well as long-term capital appreciation to its investors by providing short-term, customized capital solutions to middle market commercial real estate operators for value-add, underperforming, undermanaged and opportunistic properties. Fund IV will seek to invest in a diversified portfolio which will primarily consist of high yield debt, participating debt, structured preferred equity and structured equity positions primarily in cash flowing commercial real estate properties in the United States. The Fund will seek to invest in a variety of property types including multifamily, industrial, office, retail and unique middle market special situations. The Fund will generally seek to make investments between \$5 million and \$15 million in large liquid markets in the U.S. with durations ranging from six to 36 months. Fund IV will have a total target capitalization of \$300 million, with over \$14 million being committed by JCR affiliates. To date, Fund IV has \$225 million in total commitments, and has made 8 investments

Cash Flow Summary	
Capital Committed:	\$5,000,000
Capital Contributed:	\$2,315,000
Management Fees:	-
Expenses:	-
Catch Up Interest:	-
Remaining Capital Commitment:	\$2,685,000
Distributions (Income + Return of Capital):	\$298,916
Market Value:	\$2,097,055
Inception Date:	05/04/2018
Inception IRR:	4.24
TVPI:	1.04
DPI:	0.13





**Cash Flow Summary** 

DPI:

Type of Fund:PartnershipVintage Year:2016Strategy Type:SecondariesManagement Fee:1.00%Size of Fund:3,333,000,000Preferred Return:8.00%Inception:12/15/2016General Partner:Landmark Real Estate Fund-GP VIII, L.P.

Inception: 12/15/2016
Final Close: March 2018

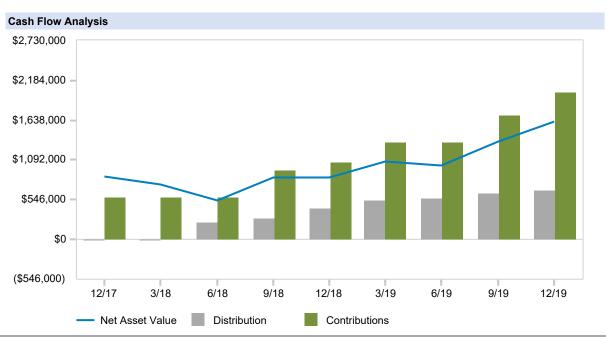
Investment Strategy: Landmark Real Estate Partners VIII, L.P., a Delaware limited partnership or the "Fund"), is being established to provide investors access to a diversified private equity

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 RÉIT vehicles.

#### **Capital Committed:** \$5,000,000 **Capital Contributed:** \$1,984,805 **Management Fees: Expenses:** Catch Up Interest: \$11,138 **Remaining Capital Commitment:** \$3,015,195 Distributions (Income + Return of Capital): \$676.223 Market Value: \$1.617.580 **Inception Date:** 12/21/2017 Inception IRR: 19.18 TVPI: 1.14

0.34





Total Portfolio Compliance Summary							
	December 31, 2019	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)	198,371,991.26	100.0%					
Total Equity (14)	112,459,658.14	56.7%	50.0%	40.0% - 70.0%	70.0%	YES	YES
Domestic Equity (14)	73,031,928.57	36.8%	34.0%	29.0% - 39.0%	70.0%	YES	YES
International Equity (14)	39,427,729.57	19.9%	16.0%	11.0% - 21.0%	70.0%	YES	YES
momatona =quity (11)	33,121,123.01	101070	1010 /0	111070 211070	101070	120	.20
Total US Fixed Income (17 & 17.1.a.iii)	35,329,336.18	17.8%	20.0%	20.0% - 50.0%	100.0%	NO	YES
US Investment Grade Fixed Income (17)	35,329,336.18	17.8%	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
Total Noti OS Fixed income (20k)	•	0.0%	0.0%	0.0% - 0.0%	20.0%	123	TES
Total Real Estate (18 & 19)	21,731,212.75	11.0%	14.0%	0.0% - 20.0%	20.0%	YES	YES
Alternative Investments (20d)	25,059,926.42	12.6%	16.0%	0.0% - 20.0%	20.0%	YES	YES
Short Term/Cash Reserves	3,791,857.77	1.9%	0.0%	0.0% - 3.0%	N/A	YES	YES



## **Commission Recapture Program**

Broker	2002 thru 2011	2012	2013	2014	2015	2016	2017	2018	YTD 19
Bank of New York*	\$108,718	\$5200	\$2796	\$2501	\$1,325	\$1,613	\$1,000	\$392	\$837
Income to Fund	\$108,718	\$5,200	\$2,796	\$2,501	\$1,325	\$1,613	\$1,000	\$392	\$837

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 2011	2012	2013	2014	2015	2016	2017	2018	YTD 19
Gross Income	\$620,738	\$98,488	\$110,349	\$131,990	\$123,118	\$147,987	\$134,192	\$134,018	\$97,197
Less: Program Fees	\$248,788	\$39,342	\$44,072	\$52,698	\$49,144	\$59,108	\$53,576	\$53,491	\$40,715
Income To Fund	\$371,950	\$59,146	\$66,277	\$79,292	\$73,974	\$88,879	\$80,616	\$80,527	\$56,482



# Notes:

As of report run date statements for JCR accounts and Landmark were not released.



## **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.



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