

Investment Performance Review
Period Ending June 30, 2017

Southfield Fire & Police Retirement System

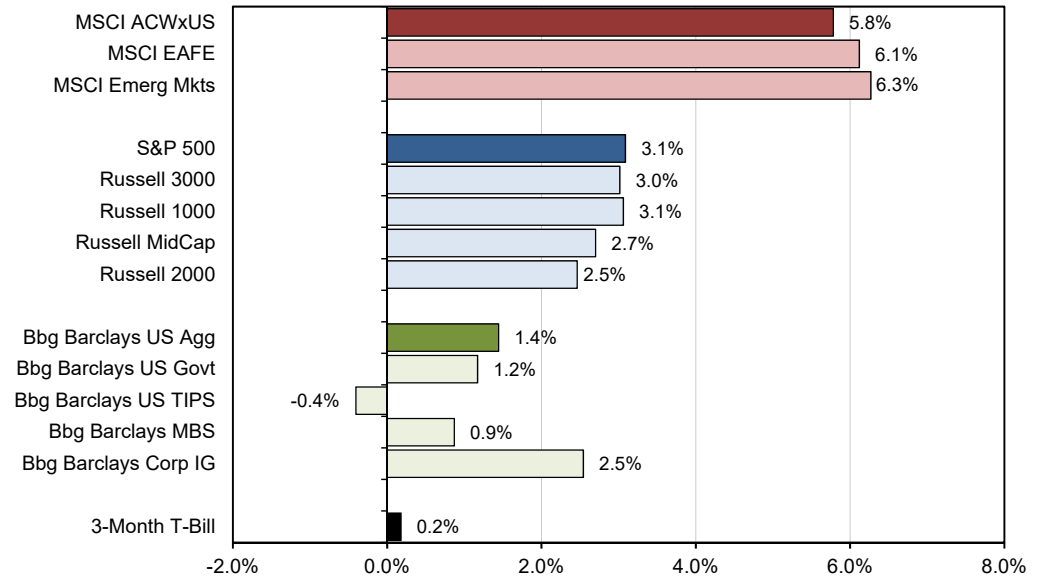


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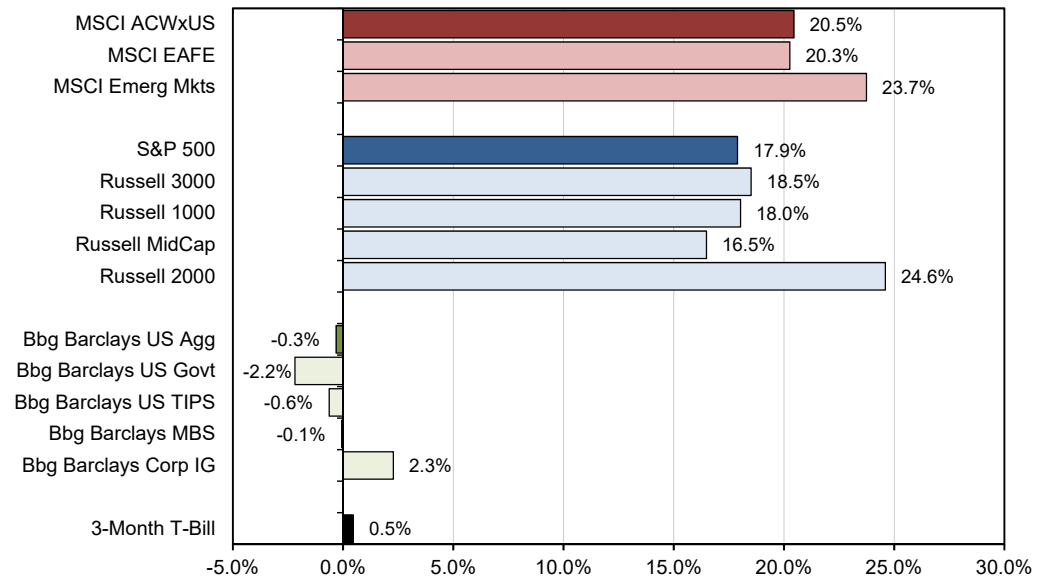
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- Returns for the 2nd quarter of 2017 were positive for most major equity and fixed income indices. Broad domestic and international equity market performance was largely fueled by continued improvement in economic data worldwide. Domestic equities trailed international indices during the quarter. While U.S. economic fundamentals and corporate earnings growth were viewed positively, political concerns surrounding the pace of implementation of Trump administration expansive fiscal policy reforms and the fallout associated with the dismissal of FBI Director James Comey dampened investor enthusiasm. Despite these concerns, investor optimism remained high and many major domestic equity indices hit record levels during the quarter. Large cap stocks continued a year-to-date trend of outperformance relative to small cap equities with the S&P 500 Index returning 3.1% versus a 2.5% return for the Russell 2000 Index. However, small cap stock returns still show substantial outperformance relative to large cap indices over the one-year period due to their remarkable performance in the second half of 2016.
- International equity market benchmarks continued to outpace U.S. markets through the 2nd quarter of 2017 as both developed and emerging market international equities saw benefits from continued strength in global macroeconomic data, a weakening U.S. Dollar (USD) and ongoing accommodative global central bank policies. While the ongoing improvement in the global economy pushed international index returns higher, gains were tempered toward the end of the quarter as central banks began to signal an increased probability of a future reduction in stimulus. Emerging markets narrowly outperformed developed markets for the quarter. The MSCI Emerging Market Index returned 6.3% for the quarter and a solid 23.7% for the 1-year period. While weaker by comparison, the developed market MSCI EAFE Index also posted robust performance returning 6.1% for the quarter and 20.3% for the year.
- The yield curve flattened through the 2nd quarter of 2017 as interest rates in the U.S. declined through the majority of the second quarter before rising moderately in June. The rise in interest rates coincided with the Federal Open Market Committee's (FOMC) June meeting and their decision to further tighten monetary policy by raising short-term interest rates by 0.25%. The Fed also announced a plan to systematically shrink the size of its balance sheet, gradually reducing its securities holdings by tapering the amount they reinvest as securities mature. This can be viewed similarly to a tightening of monetary policy. Broad fixed income indices were generally positive through the quarter with the bellwether Bloomberg Barclays U.S. Aggregate Index returning 1.4% for the quarter. Benefitting from falling credit spreads, corporate credit was the only investment grade sector to post gains over the 1-year period returning 2.3% versus a -0.3% return for the Bloomberg Barclays U.S. Aggregate Index.

Quarter Performance



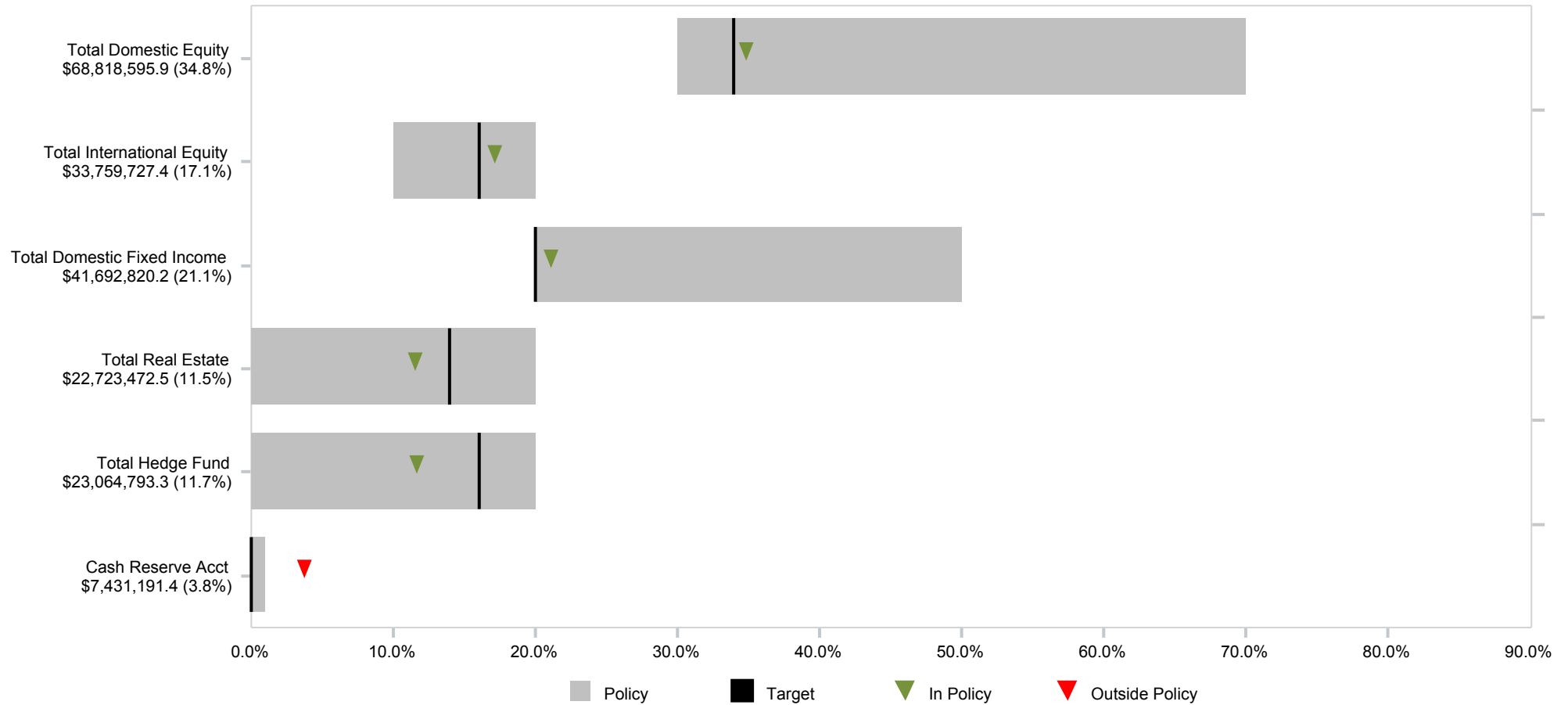
1-Year Performance



- Strong Total Fund return of +2.62% exceeded the Policy Index return of +2.26%.
- Despite strong total fund returns and several managers outperforming their benchmarks, neither Morgan Dempsey (micro cap equity) nor Brandes (emerging equity markets) performed well this quarter or the past year or so, when market opportunities were peaking for both of them. As the result of both managers failure to meet both short- and long-term expectations, we recommend both be place on a six month watch list.
- Tortoise Credit and Loomis Sayles fixed income both provided above market results, outperforming their benchmarks by +.30% and +.25% respectively.
- Avignon Holdings LLC - carried at \$3.42 million book value. No investment activity this period.
- Several private market managers have not finalized 6/30/17 information as of this report so the most current information available is used. Managers include JCR II and III.
- Fintan is in the process of winding down their institutional fund. Fintan has not been responsive to requests to discuss a shorter wind down period, as they originally committed to, nor discuss fees and expenses of their fund during liquidation.
- Year-to-date and longer period results for the Total Fund's return, market risk, peer group standing and risk-adjusted returns continue to meet expectations.
- At quarter end, Cash on hand was above the target level, offset by below target allocations to real estate and alternatives. Allocation levels are being addressed.
- As of 06/30/2017, the Total Fund is in compliance with the Investment Policy Statement and Public Act 314.



Executive Summary



Asset Allocation Compliance

	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)	Min. Rebal. (\$000)	Target Rebal. (\$000)	Max. Rebal. (\$000)
Total Fund	197,490,601	100.0	N/A	100.0	N/A	-	-	-
Total Domestic Equity	68,818,596	34.8	30.0	34.0	70.0	-9,571,416	-1,671,792	69,424,825
Total International Equity	33,759,727	17.1	10.0	16.0	20.0	-14,010,667	-2,161,231	5,738,393
Total Domestic Fixed Income	41,692,820	21.1	20.0	20.0	50.0	-2,194,700	-2,194,700	57,052,480
Total Real Estate	22,723,472	11.5	0.0	14.0	20.0	-22,723,472	4,925,212	16,774,648
Total Hedge Fund	23,064,793	11.7	0.0	16.0	20.0	-23,064,793	8,533,703	16,433,327
Cash Reserve Acct	7,431,191	3.8	0.0	0.0	1.0	-7,431,191	-7,431,191	-5,456,285



Asset Allocation by Segment
Southfield Fire & Police Retirement System

As of June 30, 2017

Asset Allocation Attributes														
	Domestic Equity		International Equity		Domestic Fixed Income		Real Estate		Hedge Fund		Cash Equivalent		Total Fund	
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
Total Fund	68,497,304	34.68	31,979,678	16.19	41,235,023	20.88	22,723,472	11.51	23,064,793	11.68	9,990,331	5.06	197,490,601	100.00
Total Domestic Equity	68,497,304	99.53	-	-	-	-	-	-	-	-	321,292	0.47	68,818,596	34.85
NTGI S&P Midcap 400 - Lending	18,535,784	100.00	-	-	-	-	-	-	-	-	329	0.00	18,536,113	9.39
LSIA Dividend Aristocrats	11,698,696	99.29	-	-	-	-	-	-	-	-	84,041	0.71	11,782,738	5.97
Morgan Dempsey	10,871,017	99.05	-	-	-	-	-	-	-	-	104,554	0.95	10,975,571	5.56
LSIA S&P 500 Low Volatility	11,603,944	99.44	-	-	-	-	-	-	-	-	65,848	0.56	11,669,792	5.91
LSIA LC 30/70	15,787,862	99.58	-	-	-	-	-	-	-	-	66,519	0.42	15,854,381	8.03
Total International Equity	-	-	31,979,678	94.73	-	-	-	-	-	-	1,780,050	5.27	33,759,727	17.09
1607 Capital Partners	-	-	23,669,112	93.01	-	-	-	-	-	-	1,780,050	6.99	25,449,162	12.89
Brandes Emerging Mkts	-	-	8,310,566	100.00	-	-	-	-	-	-	-	-	8,310,566	4.21
Total Domestic Fixed Income	-	-	-	-	41,235,023	98.90	-	-	-	-	457,798	1.10	41,692,820	21.11
Avignon - Mortgage Loan	-	-	-	-	3,420,002	100.00	-	-	-	-	-	-	3,420,002	1.73
Tortoise Credit	-	-	-	-	18,835,268	97.63	-	-	-	-	457,798	2.37	19,293,065	9.77
Loomis Sayles Intermediate Duration	-	-	-	-	18,979,753	100.00	-	-	-	-	-	-	18,979,753	9.61
Total Real Estate	-	-	-	-	-	-	22,723,472	100.00	-	-	-	-	22,723,472	11.51
PRISA I	-	-	-	-	-	-	6,886,370	100.00	-	-	-	-	6,886,370	3.49
PRISA II	-	-	-	-	-	-	4,906,915	100.00	-	-	-	-	4,906,915	2.48
PRISA III	-	-	-	-	-	-	5,748,669	100.00	-	-	-	-	5,748,669	2.91
JCR Capital Fund 2	-	-	-	-	-	-	283,691	100.00	-	-	-	-	283,691	0.14
JCR Capital Fund 3	-	-	-	-	-	-	4,897,828	100.00	-	-	-	-	4,897,828	2.48
Total Hedge Fund	-	-	-	-	-	-	-	-	23,064,793	100.00	-	-	23,064,793	11.68
Nantucket Institutional	-	-	-	-	-	-	-	-	10,533,991	100.00	-	-	10,533,991	5.33
Fintan Partners	-	-	-	-	-	-	-	-	1,903,610	100.00	-	-	1,903,610	0.96
KStone Partners	-	-	-	-	-	-	-	-	10,627,193	100.00	-	-	10,627,193	5.38
Cash Reserve Acct	-	-	-	-	-	-	-	-	-	-	7,431,191	100.00	7,431,191	3.76



**Comparative Performance Trailing Returns
Southfield Fire & Police Retirement System**

As of June 30, 2017

Comparative Performance

	QTR		YTD		1 YR		3 YR		5 YR		7 YR		10 YR		Inception		Inception Date	
Total Fund	2.62	(76)	6.19	(87)	11.53	(63)	5.15	(57)	8.66	(59)	8.85	(73)	5.24	(74)	7.64	(95)	01/01/1989	
Total Fund Policy	2.26	(90)	5.65	(92)	10.20	(85)	5.33	(51)	8.50	(64)	9.83	(31)	5.21	(75)	8.46	(62)		
All Public Plans-Total Fund Median	2.96		7.57		12.08		5.36		8.92		9.45		5.60		8.59			
Total Fund (Net of Fees)	2.51		5.93		10.99		4.40		N/A		N/A		N/A		5.46		01/01/2014	
Total Domestic Equity																		
LSIA Dividend Aristocrats	3.25	(38)	8.41	(63)	8.70	(96)	10.60	(20)	15.13	(33)	N/A		N/A		15.13	(33)	07/01/2012	
S&P 500 Dividend Aristocrats Index TR	3.28	(36)	8.47	(61)	8.76	(96)	10.39	(23)	15.02	(37)	16.44	(17)	10.00	(3)	15.02	(37)		
IM U.S. Large Cap Core Equity (SA+CF) Median	2.92		8.98		17.53		9.22		14.54		15.32		7.53		14.54			
NTGI S&P Midcap 400 - Lending	1.98	(49)	6.01	(65)	18.64	(43)	8.70	(41)	14.67	(79)	15.30	(76)	N/A		16.52	(69)	07/01/2009	
S&P MidCap 400 Index	1.97	(55)	5.99	(69)	18.57	(53)	8.53	(52)	14.92	(70)	15.42	(68)	8.56	(65)	16.56	(65)		
IM U.S. Mid Cap Core Equity (SA+CF) Median	1.98		6.52		18.59		8.53		15.37		15.67		8.64		16.67			
Morgan Dempsey	2.04	(81)	1.53	(79)	23.33	(85)	4.31	(93)	N/A		N/A		N/A		4.47	(84)	04/01/2014	
40/60 R2000V/Russell Micro	2.57	(74)	2.75	(70)	26.54	(76)	6.87	(72)	13.64	(81)	13.87	(82)	5.70	(97)	6.36	(69)		
IM U.S. Micro Cap Equity (SA+CF) Median	4.11		5.66		30.16		8.57		15.48		16.32		8.31		8.29			
LSIA S&P 500 Low Volatility	3.39	(34)	8.74	(56)	N/A		N/A		N/A		N/A		N/A		8.74	(56)	01/01/2017	
S&P 500 Low Volatility Index TR	3.48	(32)	8.87	(52)	6.99	(97)	10.55	(20)	13.12	(80)	15.10	(56)	9.04	(8)	8.87	(52)		
IM U.S. Large Cap Core Equity (SA+CF) Median	2.92		8.98		17.53		9.22		14.54		15.32		7.53		8.98			
LSIA LC 30/70	N/A		N/A		N/A		N/A		N/A		N/A		N/A		1.73	(60)	05/01/2017	
LS Investment Advisors 30/70 EW Index	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A			
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median	2.94		8.79		18.52		9.50		15.14		15.78		7.47		1.85			
Total International Equity																		
1607 Capital Partners	7.95	(29)	18.31	(35)	25.47	(27)	3.27	(46)	9.47	(49)	9.73	(38)	4.07	(33)	6.56	(34)	07/01/2006	
MSCI AC World ex USA	5.99	(67)	14.45	(72)	21.00	(55)	1.27	(77)	7.70	(72)	7.14	(76)	1.59	(83)	3.90	(84)		
IM International Equity (SA+CF) Median	6.76		16.35		21.76		2.95		9.38		8.90		3.12		5.58			
Brandes Emerging Mkts	3.12	(93)	14.09	(92)	22.32	(58)	-0.26	(85)	N/A		N/A		N/A		-0.26	(85)	07/01/2014	
MSCI Emerging Markets Index	6.38	(52)	18.60	(59)	24.17	(47)	1.44	(65)	4.33	(79)	4.22	(79)	2.25	(74)	1.44	(65)		
IM Emerging Markets Equity (SA+CF) Median	6.47		19.31		23.74		2.26		5.82		5.60		3.06		2.26			

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



**Comparative Performance Trailing Returns
Southfield Fire & Police Retirement System**

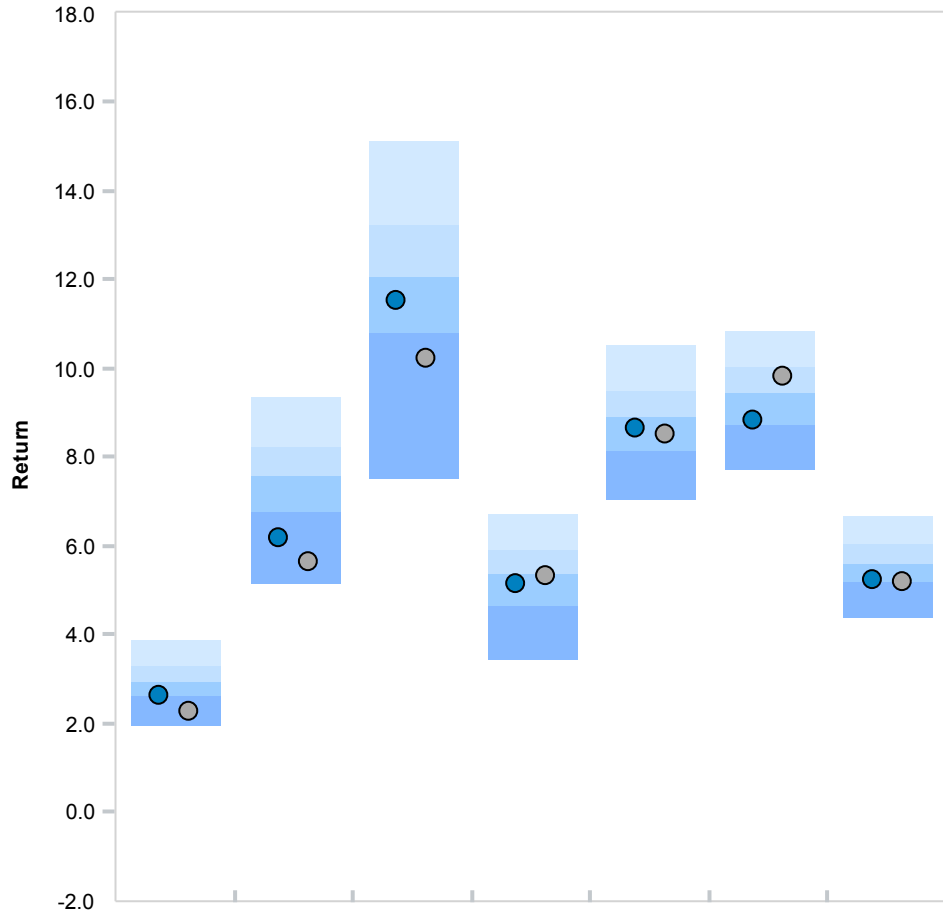
As of June 30, 2017

	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
Total Domestic Fixed Income									
Tortoise Credit	1.22 (15)	2.41 (12)	2.19 (6)	3.10 (4)	N/A	N/A	N/A	3.84 (4)	10/01/2013
Bloomberg Barclays Intermed Aggregate Index	0.92 (74)	1.61 (78)	-0.16 (84)	2.01 (67)	1.87 (76)	2.66 (76)	4.04 (81)	2.33 (66)	
IM U.S. Intermediate Duration (SA+CF) Median	1.02	1.83	0.38	2.18	2.15	2.93	4.35	2.48	
Loomis Sayles Intermediate Duration	1.19 (17)	2.07 (23)	N/A	N/A	N/A	N/A	N/A	0.59 (21)	08/01/2016
Bloomberg Barclays Intermediate US Govt/Credit Idx	0.94 (71)	1.73 (65)	-0.21 (85)	1.92 (79)	1.77 (84)	2.57 (84)	3.87 (89)	-0.49 (87)	
IM U.S. Intermediate Duration (SA+CF) Median	1.02	1.83	0.38	2.18	2.15	2.93	4.35	0.04	
PRISA Real Estate Composite									
	2.22	4.11	9.29	13.57	13.23	14.62	5.10	8.20	07/01/1993
PRISA I	1.64 (77)	3.17 (79)	7.75 (69)	11.52 (53)	11.79 (64)	13.44 (69)	4.92 (71)	6.55 (70)	01/01/2006
NCREIF Fund Index-ODCE (VW)	1.70 (72)	3.50 (64)	7.87 (66)	11.34 (58)	11.79 (64)	13.08 (74)	5.25 (41)	6.75 (50)	
IM U.S. Open End Private Real Estate (SA+CF) Median	1.91	3.77	8.31	11.81	12.39	13.98	5.05	6.75	
PRISA II	2.32 (22)	3.58 (59)	8.95 (32)	12.92 (32)	13.35 (37)	15.85 (37)	4.05 (94)	6.10 (84)	01/01/2006
NCREIF Fund Index-ODCE (VW)	1.70 (72)	3.50 (64)	7.87 (66)	11.34 (58)	11.79 (64)	13.08 (74)	5.25 (41)	6.75 (50)	
IM U.S. Open End Private Real Estate (SA+CF) Median	1.91	3.77	8.31	11.81	12.39	13.98	5.05	6.75	
PRISA III	2.83 (10)	5.73 (11)	11.48 (22)	19.38 (1)	N/A	N/A	N/A	17.90 (1)	04/01/2013
NCREIF Fund Index-ODCE (VW)	1.70 (72)	3.50 (64)	7.87 (66)	11.34 (58)	11.79 (64)	13.08 (74)	5.25 (41)	11.96 (62)	
IM U.S. Open End Private Real Estate (SA+CF) Median	1.91	3.77	8.31	11.81	12.39	13.98	5.05	12.68	
Total Hedge Fund									
Nantucket Institutional	2.00 (6)	5.46 (4)	12.53 (1)	4.70 (2)	7.84 (1)	7.14 (1)	N/A	4.97 (1)	07/01/2008
HFRI FOF: Diversified Index	0.20 (63)	2.10 (46)	5.08 (34)	1.25 (45)	3.65 (33)	2.93 (62)	0.85 (42)	1.01 (58)	
IM Alternative Multi-Strategy (MF) Median	0.49	1.91	2.86	1.07	2.92	3.46	0.65	1.02	
Fintan Partners	-9.01 (100)	-11.55 (100)	-10.54 (100)	N/A	N/A	N/A	N/A	-5.79 (100)	10/01/2015
90 Day T-Bill +5%/Yr	1.43 (38)	2.78 (49)	5.46 (54)	5.21 (3)	5.15 (2)	5.14 (4)	5.58 (1)	5.33 (33)	
IM Alternative Credit Focus (MF) Median	1.26	2.76	5.62	1.52	2.57	3.20	3.58	4.54	
KStone Partners	1.74 (20)	3.80 (30)	9.05 (19)	N/A	N/A	N/A	N/A	4.32 (54)	10/01/2015
90 Day T-Bill +3.5%/Yr	1.07 (60)	2.04 (66)	3.96 (73)	3.71 (12)	3.65 (11)	3.64 (34)	4.07 (35)	3.83 (63)	
IM Alternative Credit Focus (MF) Median	1.26	2.76	5.62	1.52	2.57	3.20	3.58	4.54	

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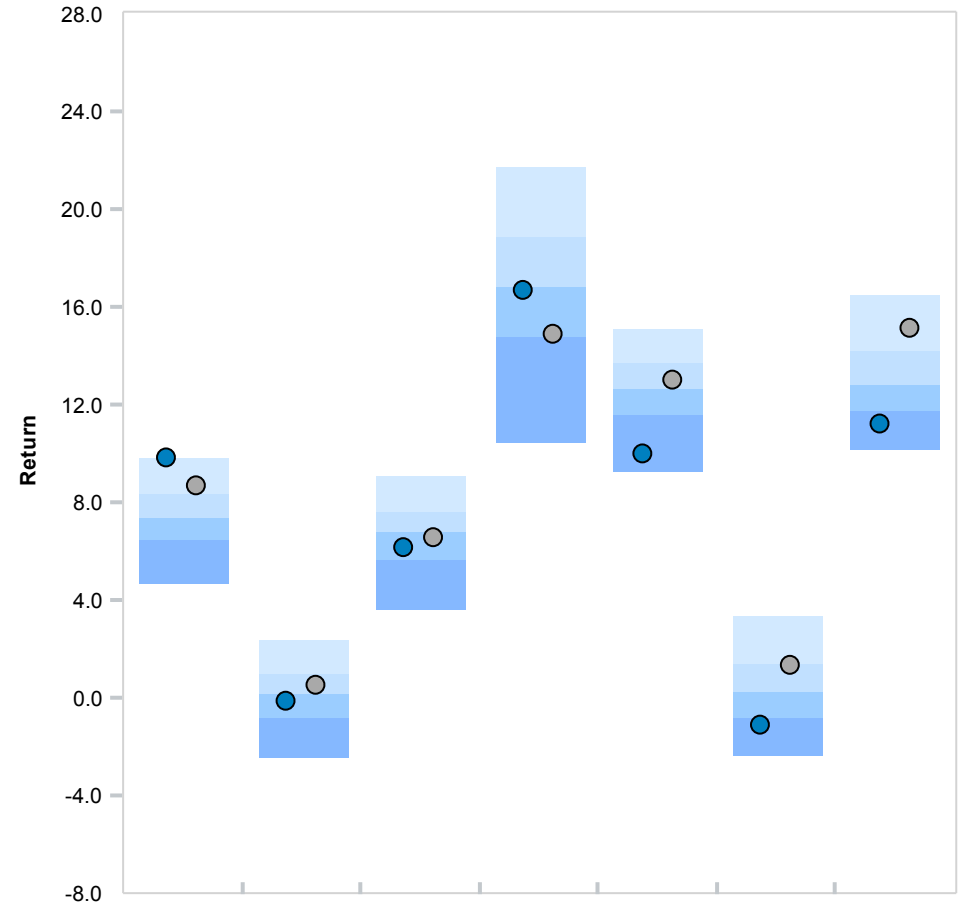


Peer Group Analysis - All Public Plans-Total Fund



	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR
● Investment	2.62 (76)	6.19 (87)	11.53 (63)	5.15 (57)	8.66 (59)	8.85 (73)	5.24 (74)
● Index	2.26 (90)	5.65 (92)	10.20 (85)	5.33 (51)	8.50 (64)	9.83 (31)	5.21 (75)
Median	2.96	7.57	12.08	5.36	8.92	9.45	5.60

Peer Group Analysis - All Public Plans-Total Fund



	2016	2015	2014	2013	2012	2011	2010
● Investment	9.76 (6)	-0.12 (57)	6.11 (66)	16.69 (54)	9.95 (92)	-1.11 (79)	11.15 (85)
● Index	8.66 (17)	0.45 (40)	6.55 (56)	14.83 (75)	12.97 (42)	1.28 (29)	15.12 (13)
Median	7.32	0.14	6.74	16.85	12.64	0.25	12.81

Comparative Performance

	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016	1 Qtr Ending Jun-2016	1 Qtr Ending Mar-2016	1 Qtr Ending Dec-2015
Investment	3.47 (91)	1.80 (12)	3.18 (62)	2.66 (10)	1.79 (14)	2.27 (78)
Index	3.31 (93)	1.28 (27)	3.00 (70)	2.21 (30)	1.92 (10)	2.44 (71)
Median	4.44	0.79	3.41	1.90	1.05	2.88



Southfield Fire and Police Retirement System
Total Fund Asset Allocation Compliance Summary

June 30, 2017

Total Portfolio Compliance Summary							
	June 30, 2017 Market Value \$	Current Allocation %	IPS Target Allocation %	IPS Range Allocation %	Act 314 Limit %	Compliance within Ranges	Compliance w/314 Limits
Total Portfolio (excluding Unfunded Commitments)	197,490,600.63	100.0%					
Total Equity (14)	102,578,323.33	51.9%	50.0%	40.0% - 70.0%	70.0%	YES	YES
Domestic Equity (14)	68,818,595.91	34.8%	34.0%	30.0% - 70.0%	70.0%	YES	YES
International Equity (14)	33,759,727.42	17.1%	16.0%	10.0% - 20.0%	70.0%	YES	YES
Total US Fixed Income (17 & 17.1.a.iii)	41,692,820.22	21.1%	20.0%	20.0% - 50.0%	100.0%	YES	YES
US Investment Grade Fixed Income (17)	41,692,820.22	21.1%	20.0%	20.0% - 50.0%	100.0%	YES	YES
US Non-Investment Grade Fixed Income (17.1.a.iii)	-	0.0%	0.0%	0.0% - 0.0%	100.0%	YES	YES
Total Non US Fixed Income (20k)	-	0.0%	0.0%	0.0% - 0.0%	20.0%	YES	YES
Total Real Estate (18 & 19)	22,723,472.45	11.5%	14.0%	0.0% - 20.0%	20.0%	YES	YES
Alternative Investments (20d)	23,064,793.27	11.7%	16.0%	0.0% - 20.0%	20.0%	YES	YES
Short Term/Cash Reserves	7,431,191.36	3.8%	0.0%	0.0% - 1.0%	N/A	NO	YES



Total Fund Objectives:

- To earn an annual average return of 7.75% 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 50th percentile over twelve month rolling periods and in the 40th 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%	30 – 70%
Non-U.S. Equities	16%	10 – 20%
Global Fixed Income	20%	20 – 50%
Real Estate	14%	0 – 20%
Alternative Investments	16%	0 – 20%
Cash & Equivalent	0%	0 – 1%

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.

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