



Quarterly Investment Performance Analysis

Oklahoma State Pension Commission

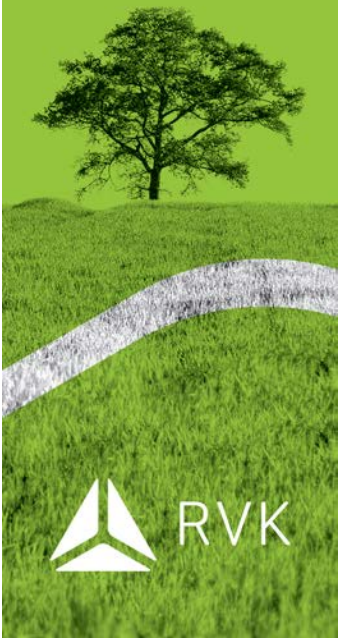
Period Ended: June 30, 2020



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Capital Markets Metrics

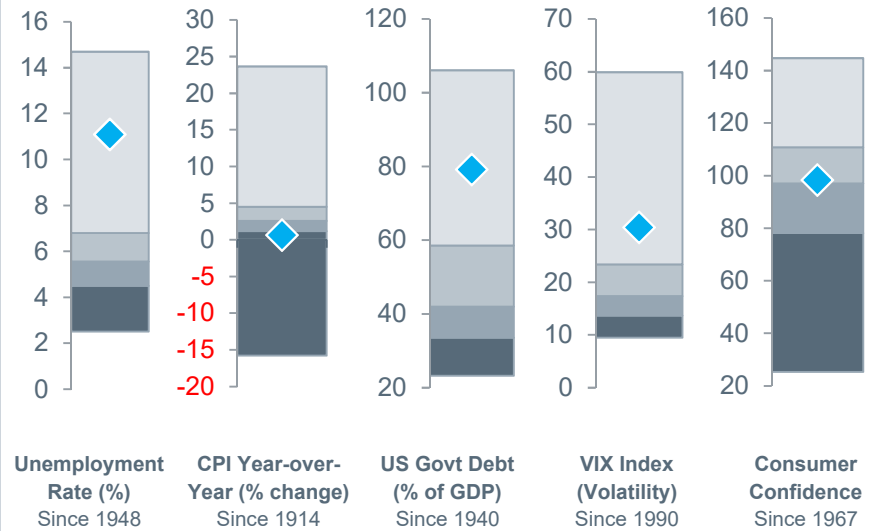


Second Quarter Economic Environment

Key Economic Indicators

The disconnect between investor risk appetite and on-the-ground economic conditions reached staggering levels during the second quarter, fueled in large part by a myriad of fiscal relief and liquidity reinforcing programs implemented by governments and global central banks. The S&P 500 returned 20.5%, bringing its YTD returns to -3.1%, as forward P/E ratios reached levels last seen during the dot-com era tech bubble. In general, the funding pressures markets experienced in the first quarter abated, as various programs enacted by the Federal Reserve proved successful in restoring normal capital markets activity amid the unprecedented economic shutdowns. While economic data generally pointed to a bottoming of global GDP growth during the month of April, the modest economic recoveries in May and June lagged significantly behind the "V" shaped recovery seen in the pricing of risk assets. The Atlanta Fed's popular GDPNow estimates for Q2-2020 growth in the US indicated a 36.8% annualized economic contraction. However, Q2 saw capital markets activity much more consistent with boom times. The NASDAQ and DJIA experienced their best quarters since 2001 and 1987, respectively, while US equity issuance hit a record of \$184 billion.

Key Economic Indicators



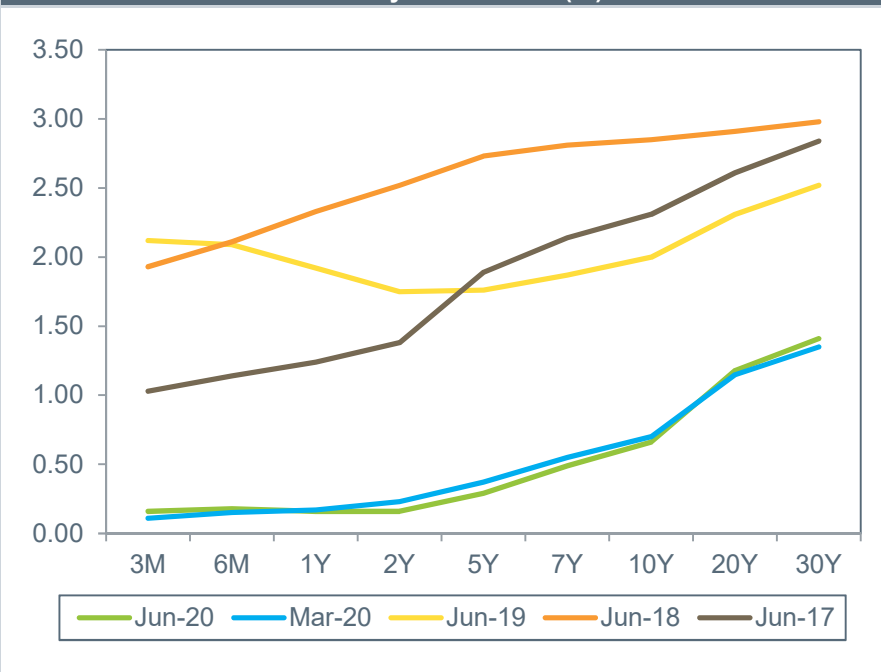
Economic Indicators

	Jun-20	Mar-20	Jun-19	Jun-17	20 Yr
Federal Funds Rate (%)	0.08 —	0.08	2.40	1.06	1.65
Breakeven Infl. - 5 Yr (%)	1.17 ▲	0.53	1.54	1.66	1.82
Breakeven Infl. - 10 Yr (%)	1.34 ▲	0.93	1.70	1.74	2.01
CPI YoY (Headline) (%)	0.6 ▼	1.5	1.6	1.6	2.1
Unemployment Rate (%)	11.1 ▲	4.4	3.7	4.3	6.0
Real GDP YoY (%)	-9.5 ▼	0.3	2.0	2.2	1.9
PMI - Manufacturing	52.6 ▲	49.1	51.6	56.4	52.5
USD Total Wtd Idx	120.86 ▼	122.82	114.56	111.97	103.13
WTI Crude Oil per Barrel (\$)	39.3 ▲	20.5	58.5	46.0	62.1
Gold Spot per Oz (\$)	1,781 ▲	1,577	1,410	1,242	969

Market Performance (%)

	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	20.54	-3.08	7.51	10.73	13.99
Russell 2000	25.42	-12.98	-6.63	4.29	10.50
MSCI EAFE (Net)	14.88	-11.34	-5.13	2.05	5.73
MSCI EAFE SC (Net)	19.88	-13.11	-3.52	3.81	8.02
MSCI Emg Mkts (Net)	18.08	-9.78	-3.39	2.86	3.27
Bloomberg US Agg Bond	2.90	6.14	8.74	4.30	3.82
ICE BofAML 3 Mo US T-Bill	0.02	0.60	1.63	1.19	0.64
NCREIF ODCE (Gross)	-1.56	-0.60	2.22	7.31	10.80
FTSE NAREIT Eq REIT (TR)	11.82	-18.71	-13.04	4.06	9.05
HFRI FOF Comp	7.89	-1.59	0.48	1.49	2.79
Bloomberg Cmnty (TR)	5.08	-19.40	-17.38	-7.69	-5.82

Treasury Yield Curve (%)

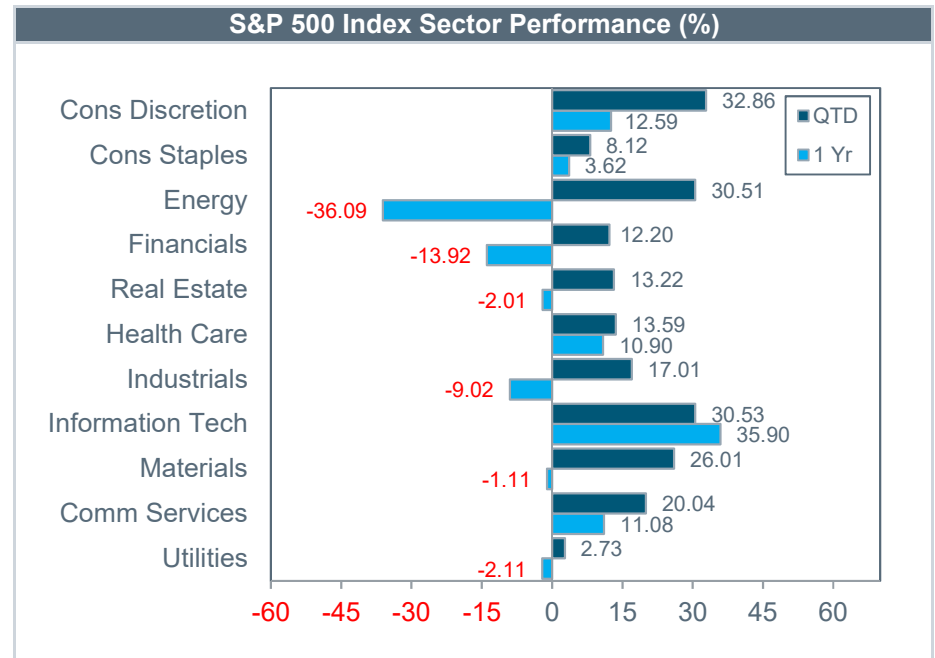
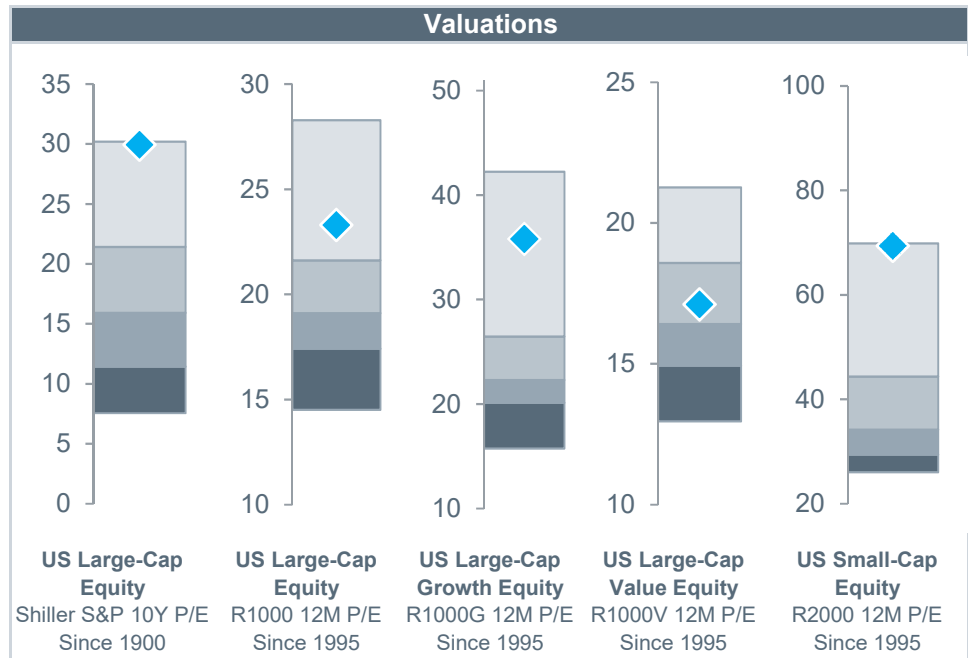
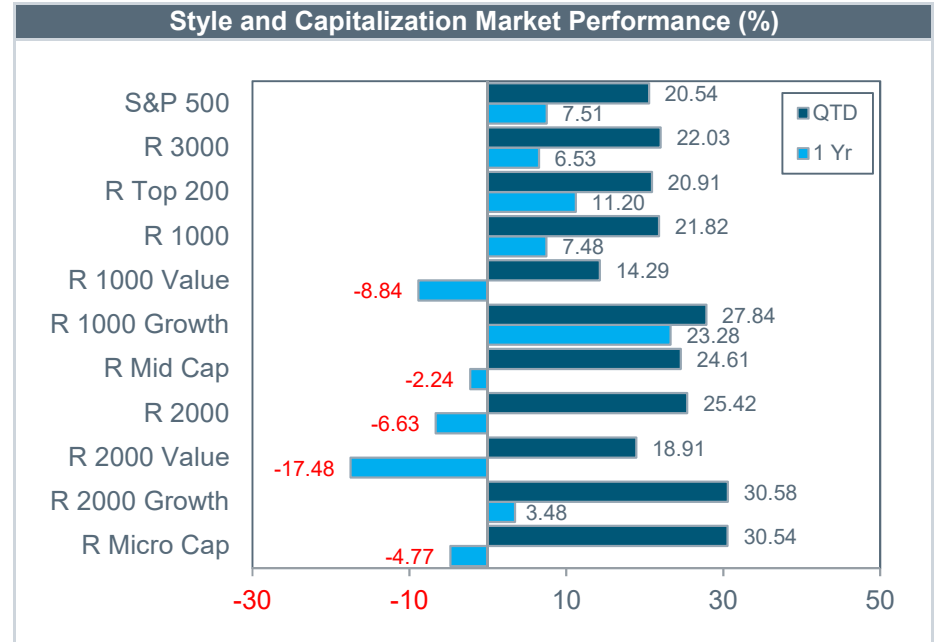


Second Quarter Review

Broad Market
 US equity markets rebounded sharply in Q2 despite weakening economic conditions and uncertainty around upcoming earnings releases. Much of the optimism was driven by trial data for COVID-19 vaccines and treatments combined with the phased openings of states across the country. The swift rally saw the S&P 500 index turn positive YTD, with QTD returns as high as 25.0% in early June before finishing Q2 up 20.5% and down -3.1% YTD.

Market Cap
 The strong performance was realized across all market caps, with smaller stocks faring best. The Russell 2000 and Mid Cap indexes returned 25.4% and 24.6%, respectively, while the Russell 1000 lagged behind its smaller-cap counterparts, finishing Q2 up 21.8%.

Style and Sector
 Growth continued to outperform value by a significant margin during Q2 across all market caps. In addition, active managers generally struggled to keep up with their respective benchmarks in Q2.



Valuation data courtesy of Bloomberg Professional Service and Robert J. Shiller, Irrational Exuberance, Second Edition. P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers.



Second Quarter Review

Developed Markets

Developed international markets had a strong quarter, although they lagged both US and emerging markets. During Q2, value stocks underperformed growth, while small-cap stocks outperformed their larger counterparts. Each developed country index generated positive returns for the quarter and the vast majority saw double digit returns. Markets were bolstered by government programs, but the near-term macro outlook remains poor.

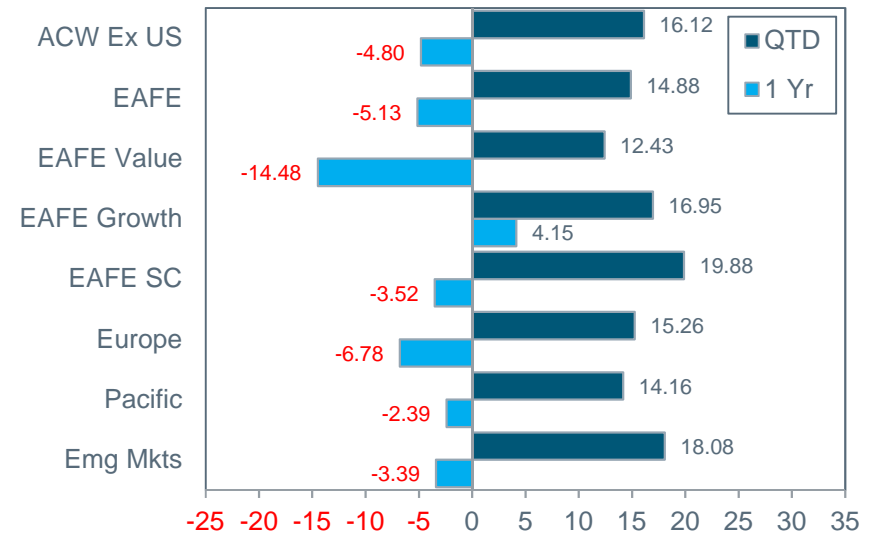
Emerging Markets

Emerging markets outpaced developed international, but lagged the US market. All emerging countries and broad sectors saw positive returns for the quarter. Latin America, a laggard in Q1, saw some mean reversion, with countries such as Brazil and Argentina leading the region higher.

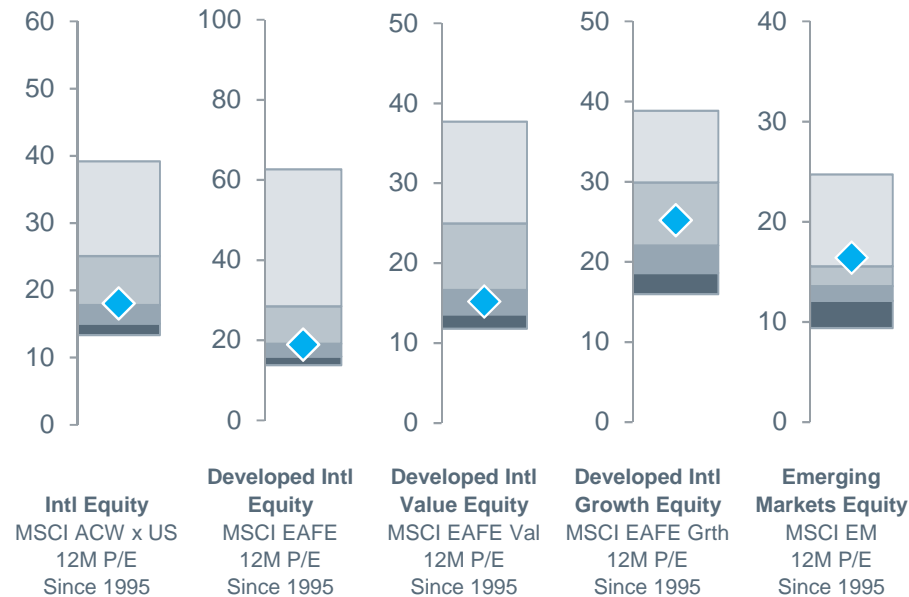
Market Cap & Style

In both developed international markets and emerging markets, value stocks continued to underperform growth, while small-cap stocks outperformed large-cap for the quarter.

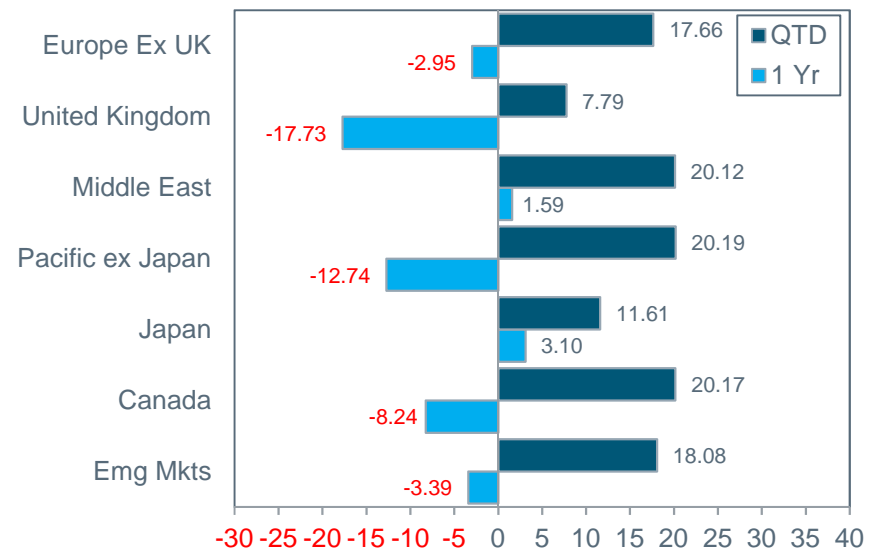
MSCI Style and Capitalization Market Performance (%)



Valuations



MSCI Region Performance (%)



Valuation data courtesy of Bloomberg Professional Service.

P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers. All returns are shown net of foreign taxes on dividends.



Second Quarter Review

Broad Market

A supportive Fed helped propel the beginning of a recovery that saw few periods of slowdown throughout the quarter. While a spike in COVID-19 cases threatened to disrupt the rally in June, a better-than-expected jobs report and the Fed's announcement of its plan to purchase corporate bonds helped the segment finish the quarter on a positive note.

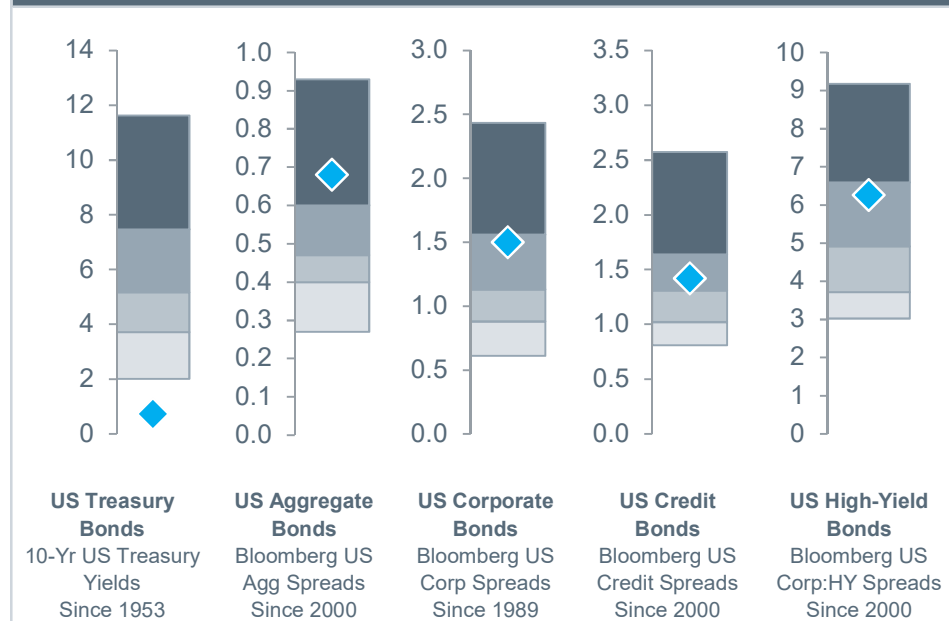
Credit Market

In contrast to Q1, investor appetite for risk returned, leading to a strong recovery in credit. Overall, the Bloomberg US Credit Index and US High Yield Index returned 8.2% and 10.2% in Q2, respectively.

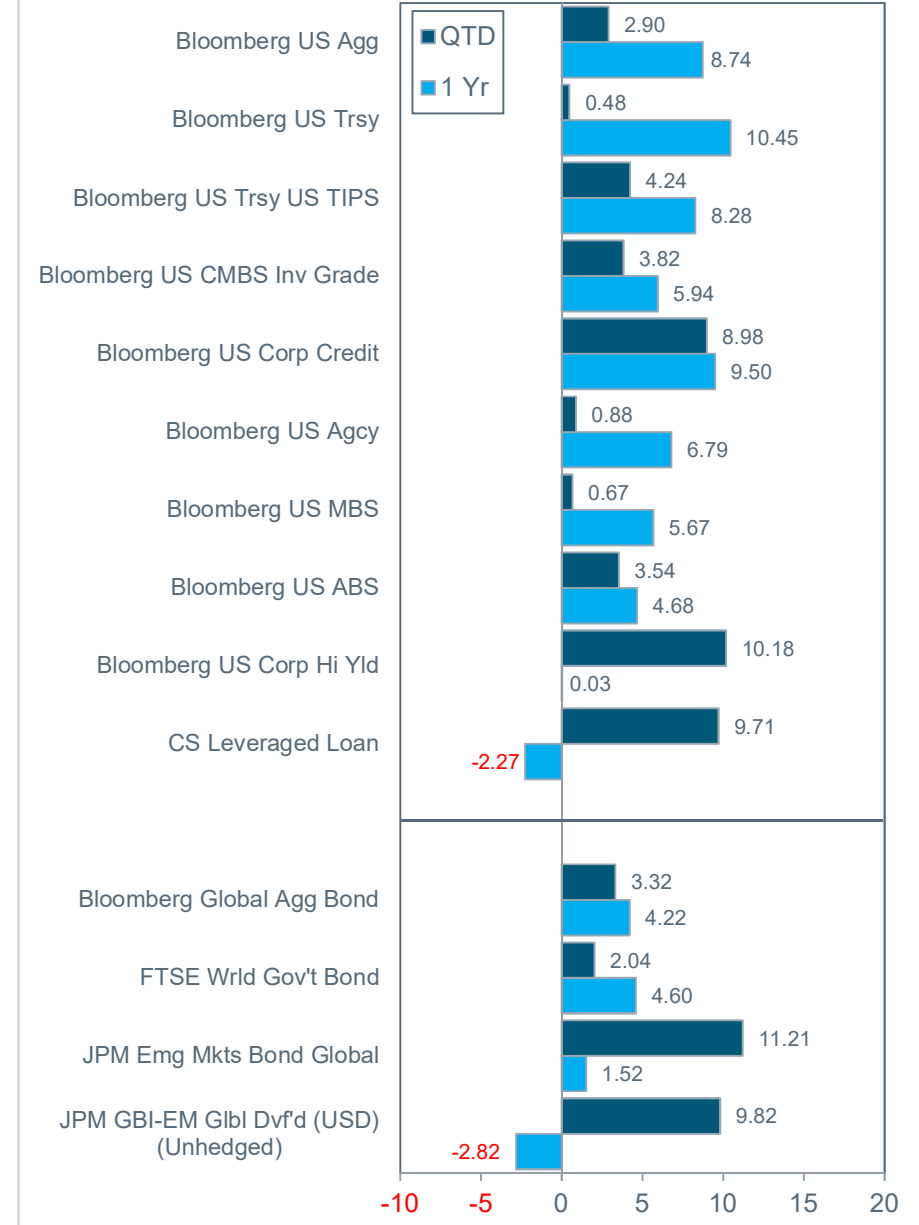
Emerging Market Debt

Emerging market debt enjoyed its own rally, erasing most of its losses of the first quarter. The JPMorgan EMBI Global Diversified Index returned 12.3%, with nearly every country in the index ending positive.

Valuations



Fixed Income Performance (%)



Valuation data courtesy of Bloomberg Professional Service. Valuations shown represent the 5th through 95th percentiles to minimize the effect of outliers.



Second Quarter Review - Absolute Return

General Market - Hedge Funds

Broad hedge fund benchmarks indicate the industry recovered relatively well from Q1-2020 drawdowns. The HFRI Fund Weighted Composite Index is down just 3.5% YTD after a 9.0% gain in Q2, led higher by the HFRI Hedged Equity Index, which finished the quarter up 13.6%. Still, YTD the vast majority of hedge fund strategies remain at least marginally negative, with those that pursue event oriented and special situations strategies, particularly within credit markets, still off from 5.0% to 7.0% YTD on average.

General Market - Global Tactical Asset Allocation (GTAA)

GTAA managers largely provided positive absolute returns during Q2. Even with positive absolute returns, long-biased strategies reported mixed performance versus a static and less diversified blend of 60% US equity and 40% US fixed income. Long-biased strategies that had relatively weaker performance versus peers tended to have more exposure to EM equities which slightly underperformed US and other developed markets. Within EM equities, growth equities once again out-paced value by a significant margin, detracting from performance for managers.

Second Quarter Review - Real Assets

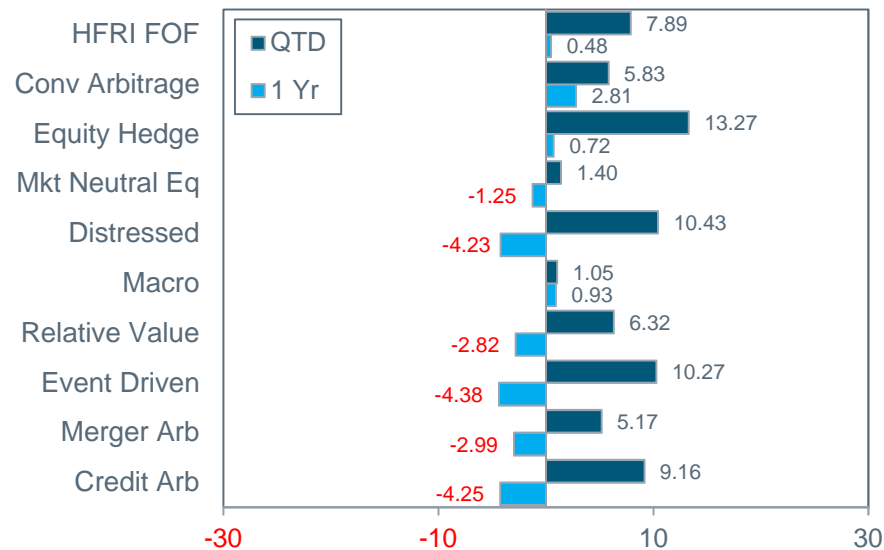
General Market - Diversified Inflation Strategies (DIS)

Performance across DIS managers RVK tracks was largely positive during Q2, ranging from the high single digits to the high teens. With the relatively strong performance across a number of risk assets, managers with larger TIPS allocations tended to underperform peers as generally riskier assets saw a bounce back from poor Q1 performance. These strategies also tended to hold higher relative allocations to commodities. Though commodities provided positive absolute returns in Q2, the asset class did not keep up with other parts of the market.

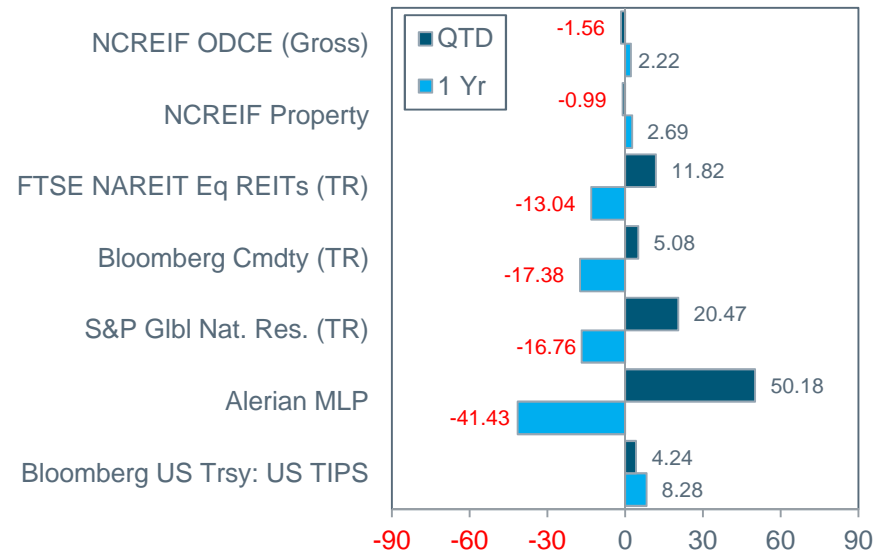
General Market - Real Estate

Core private real estate returned -1.6% during the second quarter, as reported by the NFI-ODCE Index, with the total return comprised of 0.9% from income and -2.5% from price appreciation. While the income component remained relatively healthy and in-line with historical levels, price appreciation experienced a further meaningful decrease from Q1. Investors in publicly traded real estate outperformed their private market counterparts by a wide margin.

HFRI Hedge Fund Performance (%)



Real Asset Performance (%)



Annual Asset Class Performance

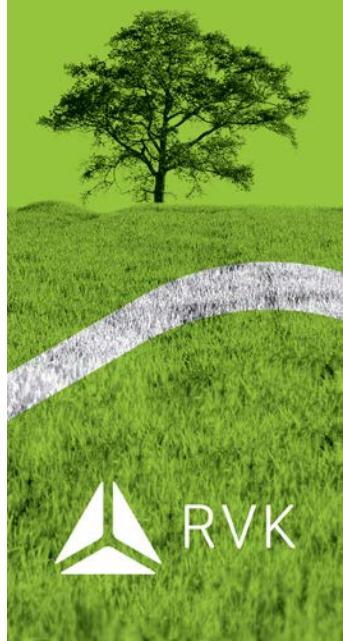
As of June 30, 2020

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	YTD
Best	35.03	39.38	8.44	78.51	27.94	22.49	20.00	38.82	30.14	15.02	21.31	37.28	8.35	31.49	12.82
	32.18	16.23	5.24	58.21	26.85	15.99	18.23	32.39	19.31	9.59	17.13	33.01	1.87	26.00	6.14
	26.34	15.97	2.06	46.78	22.04	13.56	18.06	29.30	13.69	3.20	11.96	25.03	0.01	25.53	6.01
	19.31	11.63	-2.35	31.78	18.88	8.29	17.32	22.78	12.50	1.38	11.77	21.83	-1.26	24.96	0.60
	18.37	11.17	-10.01	28.01	16.83	7.84	16.35	13.94	5.97	0.55	11.19	14.65	-2.08	22.01	-0.60
	16.32	10.25	-21.37	27.17	16.36	4.98	16.00	8.96	4.89	0.05	8.77	10.71	-4.02	19.59	-1.59
	15.79	6.97	-26.16	26.46	15.12	2.11	15.81	7.44	3.64	-0.27	8.52	7.77	-4.38	18.44	-3.08
	11.86	6.60	-33.79	18.91	15.06	0.10	10.94	2.47	3.37	-0.81	6.67	7.62	-4.62	14.32	-3.80
	10.39	5.49	-35.65	11.47	10.16	-4.18	8.78	0.07	2.45	-1.44	4.68	7.50	-4.68	8.72	-9.78
	4.85	5.00	-37.00	11.41	7.75	-5.72	6.98	-2.02	0.04	-3.30	2.65	5.23	-11.01	8.43	-11.34
	4.34	1.87	-37.74	5.93	6.54	-12.14	4.79	-2.60	-2.19	-4.41	2.18	3.54	-11.25	8.39	-12.98
	2.72	1.45	-43.38	1.92	6.31	-13.32	4.21	-8.61	-4.90	-4.47	1.00	3.01	-13.79	7.69	-13.11
	2.07	-1.57	-47.01	0.21	5.70	-15.94	0.11	-8.83	-4.95	-14.92	0.51	1.70	-14.58	5.34	-18.71
Worst	0.49	-15.70	-53.33	-29.76	0.13	-18.42	-1.06	-9.52	-17.01	-24.66	0.33	0.86	-17.89	2.28	-19.40
	S&P 500 - US Large Cap	R 2000 - US Small Cap	MSCI EAFE (Net) - Int'l Dev.	MSCI EAFE SC (Net) - Int'l SC	MSCI EM (Net) - Int'l Emg Mkts	Bloombg US Agg Bond - FI	Bloombg US Corp Hi Yield - FI	Bloombg US Trsy US TIPS - FI	Bloombg US Gov Credit Lng - FI	NCREIF ODCE (Gross) - Real Estate	FTSE NAREIT Eq REITs Index (TR)	HFRI FOF Comp Index - ARS	Bloombg Cmdty (TR) - Commod.	ICE BofAML 3 Mo T-Bill - Cash Equiv	

NCREIF ODCE (Gross) performance is reported quarterly; performance is shown N/A in interim-quarter months.



Oklahoma State Pension Commission



All Plans Summary

Asset Allocation & Performance - Net of Fees

	Allocation		Performance (%)											
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Oklahoma State Pension Commission	33,952,484,800	100.00												
OTRS (Teachers) Total Fund	16,897,902,887	49.77	12.49	-4.77	0.62	0.62	5.08	5.45	7.45	9.37	19.42	-5.33	15.82	11.28
OTRS Policy Index			15.80	-3.18	3.23	3.23	5.94	6.15	7.11	8.91	21.09	-5.12	14.05	10.61
Difference			-3.31	-1.59	-2.61	-2.61	-0.86	-0.70	0.34	0.46	-1.67	-0.21	1.77	0.67
OTRS Actual Allocation Index			14.94	-1.99	3.74	3.74	6.03	6.16	7.66	9.14	18.94	-4.70	14.35	10.93
Difference			-2.45	-2.78	-3.12	-3.12	-0.95	-0.71	-0.21	0.23	0.48	-0.63	1.47	0.35
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			10.67	-8.45	-6.88	-6.88	-2.42	-2.05	-0.05	1.87	11.92	-12.83	8.32	3.78
OPERS (Public Employees) Total Fund	10,082,562,274	29.70	14.05	-2.09	4.58	4.58	6.25	6.27	7.43	8.64	21.18	-6.60	16.98	7.64
OPERS Policy Index			14.18	-2.06	4.72	4.72	6.50	6.55	7.46	8.57	21.46	-6.09	16.86	8.12
Difference			-0.13	-0.03	-0.14	-0.14	-0.25	-0.28	-0.03	0.07	-0.28	-0.51	0.12	-0.48
OPERS Actual Allocation Index			13.37	-2.56	4.07	4.07	5.98	6.23	7.24	8.28	20.87	-6.49	16.51	8.09
Difference			0.68	0.47	0.51	0.51	0.27	0.04	0.19	0.36	0.31	-0.11	0.47	-0.45
Actuarial Discount Rate (7.0%)			1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Difference			12.34	-5.53	-2.42	-2.42	-0.75	-0.73	0.43	1.64	14.18	-13.60	9.98	0.64
OFPRS (Firefighters) Total Fund	2,904,632,636	8.55	12.52	-2.07	3.46	3.46	7.62	7.57	8.72	9.64	20.17	-2.39	18.70	7.32
OFPRS Policy Index			12.98	-3.11	3.92	3.92	6.92	7.41	8.48	9.83	21.76	-3.80	16.41	8.76
Difference			-0.46	1.04	-0.46	-0.46	0.70	0.16	0.24	-0.19	-1.59	1.41	2.29	-1.44
OFPRS Actual Allocation Index			12.92	-1.97	4.62	4.62	6.98	7.03	8.07	9.44	20.30	-3.93	15.64	9.45
Difference			-0.40	-0.10	-1.16	-1.16	0.64	0.54	0.65	0.20	-0.13	1.54	3.06	-2.13
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			10.70	-5.75	-4.04	-4.04	0.12	0.07	1.22	2.14	12.67	-9.89	11.20	-0.18
OPPRS (Police) Total Fund	2,601,598,897	7.66	9.14	-3.01	2.23	2.23	4.93	5.01	6.16	7.37	15.37	-2.78	12.88	7.05
OPPRS Policy Index			12.02	-2.24	3.68	3.68	5.68	5.49	6.35	8.13	18.62	-5.34	15.45	7.07
Difference			-2.88	-0.77	-1.45	-1.45	-0.75	-0.48	-0.19	-0.76	-3.25	2.56	-2.57	-0.02
OPPRS Actual Allocation Index			12.02	-1.16	3.70	3.70	5.45	5.18	6.18	7.92	15.02	-3.70	13.78	6.66
Difference			-2.88	-1.85	-1.47	-1.47	-0.52	-0.17	-0.02	-0.55	0.35	0.92	-0.90	0.39
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			7.32	-6.69	-5.27	-5.27	-2.57	-2.49	-1.34	-0.13	7.87	-10.28	5.38	-0.45

Performance shown is net of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



All Plans Summary

Asset Allocation & Performance - Net of Fees

	Allocation		Performance (%)											
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
OLERS (Law Enforcement) Total Fund	997,043,603	2.94	11.29	-3.58	1.79	1.79	4.94	5.00	6.43	7.95	17.48	-4.74	14.53	7.07
OLERS Policy Index			12.63	-2.27	4.15	4.15	6.18	6.34	7.39	8.64	19.12	-3.67	13.36	8.64
Difference			-1.34	-1.31	-2.36	-2.36	-1.24	-1.34	-0.96	-0.69	-1.64	-1.07	1.17	-1.57
OLERS Actual Allocation Index			10.92	-1.80	4.35	4.35	6.09	6.25	7.20	8.45	17.33	-3.47	14.63	8.27
Difference			0.37	-1.78	-2.56	-2.56	-1.15	-1.25	-0.77	-0.50	0.15	-1.27	-0.10	-1.20
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			9.47	-7.26	-5.71	-5.71	-2.56	-2.50	-1.07	0.45	9.98	-12.24	7.03	-0.43
OURSJJ (Judges) Total Fund	350,348,363	1.03	13.69	-2.42	4.32	4.32	6.23	6.31	7.34	8.50	21.35	-6.45	16.83	8.05
OURSJJ Policy Index			14.18	-2.06	4.76	4.76	6.51	6.55	7.47	8.57	21.51	-6.09	16.86	8.12
Difference			-0.49	-0.36	-0.44	-0.44	-0.28	-0.24	-0.13	-0.07	-0.16	-0.36	-0.03	-0.07
OURSJJ Actual Allocation Index			13.43	-2.49	4.15	4.15	6.05	6.16	7.17	8.26	21.01	-6.52	16.63	7.90
Difference			0.26	0.07	0.17	0.17	0.18	0.15	0.17	0.24	0.34	0.07	0.20	0.15
Actuarial Discount Rate (7.0%)			1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Difference			11.98	-5.86	-2.68	-2.68	-0.77	-0.69	0.34	1.50	14.35	-13.45	9.83	1.05
OWCRS (Wildlife) Total Fund	118,396,141	0.35	13.16	-0.24	5.58	5.58	6.83	6.35	7.25	7.98	19.24	-3.78	13.98	6.27
OWCRS Policy Index			12.37	-2.35	2.80	2.80	4.93	5.26	6.00	7.49	17.53	-4.95	12.96	7.34
Difference			0.79	2.11	2.78	2.78	1.90	1.09	1.25	0.49	1.71	1.17	1.02	-1.07
OWCRS Actual Allocation Index			12.44	-2.81	3.69	3.69	6.49	6.50	7.26	7.99	20.53	-3.71	14.38	8.04
Difference			0.72	2.57	1.89	1.89	0.34	-0.15	-0.01	-0.01	-1.29	-0.07	-0.40	-1.77
Actuarial Discount Rate (7.0%)			1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Difference			11.45	-3.68	-1.42	-1.42	-0.17	-0.65	0.25	0.98	12.24	-10.78	6.98	-0.73

Performance shown is net of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.

Oklahoma State Pension Commission
All Plans Summary
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)											
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Oklahoma State Pension Commission	33,952,484,800	100.00												
All Public Plans-Total Fund Median			12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	18.59	-4.15	15.21	7.42
OTRS (Teachers) Total Fund	16,897,902,887	49.77	12.54	-4.86	0.85	0.85	5.38	5.69	7.63	9.49	19.75	-5.03	16.16	11.39
OTRS Policy Index			15.80	-3.18	3.23	3.23	5.94	6.15	7.11	8.91	21.09	-5.12	14.05	10.61
Difference			-3.26	-1.48	-2.38	-2.38	-0.56	-0.46	0.52	0.58	-1.34	0.09	2.11	0.78
OTRS Actual Allocation Index			14.94	-1.99	3.74	3.74	6.03	6.16	7.66	9.14	18.94	-4.70	14.35	10.93
Difference			-2.40	-2.67	-2.89	-2.89	-0.65	-0.47	-0.03	0.35	0.81	-0.33	1.81	0.46
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			10.72	-8.34	-6.65	-6.65	-2.12	-1.81	0.13	1.99	12.25	-12.53	8.66	3.89
Rank			42	85	84	84	60	57	19	7	33	73	32	2
OPERS (Public Employees) Total Fund	10,082,562,274	29.70	14.07	-2.06	4.71	4.71	6.36	6.36	7.49	8.71	21.34	-6.51	17.11	7.67
OPERS Policy Index			14.18	-2.06	4.72	4.72	6.50	6.55	7.46	8.57	21.46	-6.09	16.86	8.12
Difference			-0.11	0.00	-0.01	-0.01	-0.14	-0.19	0.03	0.14	-0.12	-0.42	0.25	-0.45
OPERS Actual Allocation Index			13.37	-2.56	4.07	4.07	5.98	6.23	7.24	8.28	20.87	-6.49	16.51	8.09
Difference			0.70	0.50	0.64	0.64	0.38	0.13	0.25	0.43	0.47	-0.02	0.60	-0.42
Actuarial Discount Rate (7.0%)			1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Difference			12.36	-5.50	-2.29	-2.29	-0.64	-0.64	0.49	1.71	14.34	-13.51	10.11	0.67
Rank			20	38	24	24	29	27	23	26	12	93	16	42
OFPRS (Firefighters) Total Fund	2,904,632,636	8.55	12.52	-2.07	3.46	3.46	7.62	7.57	8.73	9.65	20.17	-2.39	18.70	7.33
OFPRS Policy Index			12.98	-3.11	3.92	3.92	6.92	7.41	8.48	9.83	21.76	-3.80	16.41	8.76
Difference			-0.46	1.04	-0.46	-0.46	0.70	0.16	0.25	-0.18	-1.59	1.41	2.29	-1.43
OFPRS Actual Allocation Index			12.92	-1.97	4.62	4.62	6.98	7.03	8.07	9.44	20.30	-3.93	15.64	9.45
Difference			-0.40	-0.10	-1.16	-1.16	0.64	0.54	0.66	0.21	-0.13	1.54	3.06	-2.12
Rank			43	39	45	45	5	3	2	4	28	18	6	53

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
All Plans Summary
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)											
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
OPPRS (Police) Total Fund	2,601,598,897	7.66	9.15	-2.91	2.50	2.50	5.27	5.35	6.49	7.65	15.77	-2.45	13.22	7.45
OPPRS Policy Index			12.02	-2.24	3.68	3.68	5.68	5.49	6.35	8.13	18.62	-5.34	15.45	7.07
Difference			-2.87	-0.67	-1.18	-1.18	-0.41	-0.14	0.14	-0.48	-2.85	2.89	-2.23	0.38
OPPRS Actual Allocation Index			12.02	-1.16	3.70	3.70	5.45	5.18	6.18	7.92	15.02	-3.70	13.78	6.66
Difference			-2.87	-1.75	-1.20	-1.20	-0.18	0.17	0.31	-0.27	0.75	1.25	-0.56	0.79
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			7.33	-6.59	-5.00	-5.00	-2.23	-2.15	-1.01	0.15	8.27	-9.95	5.72	-0.05
Rank			82	54	59	59	63	72	64	64	83	19	77	49
OLERS (Law Enforcement) Total Fund	997,043,603	2.94	11.29	-3.55	1.91	1.91	5.09	5.16	6.57	8.07	17.67	-4.56	14.65	7.24
OLERS Policy Index			12.63	-2.27	4.15	4.15	6.18	6.34	7.39	8.64	19.12	-3.67	13.36	8.64
Difference			-1.34	-1.28	-2.24	-2.24	-1.09	-1.18	-0.82	-0.57	-1.45	-0.89	1.29	-1.40
OLERS Actual Allocation Index			10.92	-1.80	4.35	4.35	6.09	6.25	7.20	8.45	17.33	-3.47	14.63	8.27
Difference			0.37	-1.75	-2.44	-2.44	-1.00	-1.09	-0.63	-0.38	0.34	-1.09	0.02	-1.03
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			9.47	-7.23	-5.59	-5.59	-2.41	-2.34	-0.93	0.57	10.17	-12.06	7.15	-0.26
Rank			62	66	71	71	70	77	62	48	62	59	60	56
OURSJJ (Judges) Total Fund	350,348,363	1.03	13.69	-2.42	4.34	4.34	6.28	6.35	7.38	8.54	21.39	-6.39	16.89	8.05
OURSJJ Policy Index			14.18	-2.06	4.76	4.76	6.51	6.55	7.47	8.57	21.51	-6.09	16.86	8.12
Difference			-0.49	-0.36	-0.42	-0.42	-0.23	-0.20	-0.09	-0.03	-0.12	-0.30	0.03	-0.07
OURSJJ Actual Allocation Index			13.43	-2.49	4.15	4.15	6.05	6.16	7.17	8.26	21.01	-6.52	16.63	7.90
Difference			0.26	0.07	0.19	0.19	0.23	0.19	0.21	0.28	0.38	0.13	0.26	0.15
Actuarial Discount Rate (7.0%)			1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Difference			11.98	-5.86	-2.66	-2.66	-0.72	-0.65	0.38	1.54	14.39	-13.39	9.89	1.05
Rank			26	44	30	30	31	27	28	33	11	92	20	34
OWCRS (Wildlife) Total Fund	118,396,141	0.35	13.22	-0.08	5.88	5.88	7.10	6.64	7.49	8.18	19.49	-3.52	14.27	6.59
OWCRS Policy Index			12.37	-2.35	2.80	2.80	4.93	5.26	6.00	7.49	17.53	-4.95	12.96	7.34
Difference			0.85	2.27	3.08	3.08	2.17	1.38	1.49	0.69	1.96	1.43	1.31	-0.75
OWCRS Actual Allocation Index			12.44	-2.81	3.69	3.69	6.49	6.50	7.26	7.99	20.53	-3.71	14.38	8.04
Difference			0.78	2.73	2.19	2.19	0.61	0.14	0.23	0.19	-1.04	0.19	-0.11	-1.45
Actuarial Discount Rate (7.0%)			1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Difference			11.51	-3.52	-1.12	-1.12	0.10	-0.36	0.49	1.18	12.49	-10.52	7.27	-0.41
Rank			31	12	11	11	12	17	23	45	37	37	65	70

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
All Plans Summary
Asset Class Performance - Net of Fees

As of June 30, 2020

	Performance (%)											
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
US Equity												
OTRS US Equity	22.10	-10.62	-3.30	-3.30	5.56	6.61	9.36	12.02	29.14	-8.14	20.22	15.43
S&P 500 Index (Cap Wtd)	20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	31.49	-4.38	21.83	11.96
Difference	1.56	-7.54	-10.81	-10.81	-5.17	-4.12	-2.77	-1.97	-2.35	-3.76	-1.61	3.47
OPERS US Equity	23.00	-4.52	4.36	4.36	8.86	8.97	11.01	13.35	29.26	-6.44	21.21	12.82
OPERS US Equity Custom Index	22.27	-4.08	5.68	5.68	9.58	9.73	11.46	13.57	30.70	-5.54	20.81	13.21
Difference	0.73	-0.44	-1.32	-1.32	-0.72	-0.76	-0.45	-0.22	-1.44	-0.90	0.40	-0.39
OFPRS US Equity	24.46	-1.87	5.91	5.91	10.67	10.02	11.95	13.31	30.46	-4.57	22.68	10.97
Russell 3000 Index	22.03	-3.48	6.53	6.53	10.04	10.03	11.68	13.72	31.02	-5.24	21.13	12.74
Difference	2.43	1.61	-0.62	-0.62	0.63	-0.01	0.27	-0.41	-0.56	0.67	1.55	-1.77
OPPRS US Equity	24.57	-4.62	4.72	4.72	8.61	9.20	10.68	13.09	30.00	-5.57	18.65	15.43
S&P 500 Index (Cap Wtd)	20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	31.49	-4.38	21.83	11.96
Difference	4.03	-1.54	-2.79	-2.79	-2.12	-1.53	-1.45	-0.90	-1.49	-1.19	-3.18	3.47
OLERS US Equity	23.92	-7.41	1.69	1.69	7.15	7.67	10.26	12.88	32.84	-10.11	21.37	13.76
S&P 500 Index (Cap Wtd)	20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	31.49	-4.38	21.83	11.96
Difference	3.38	-4.33	-5.82	-5.82	-3.58	-3.06	-1.87	-1.11	1.35	-5.73	-0.46	1.80
OURSJJ US Equity	22.35	-4.96	4.59	4.59	9.06	9.40	11.22	13.40	30.50	-5.80	20.57	13.47
OURSJJ US Equity Custom Index	22.03	-3.48	6.54	6.54	10.04	9.75	N/A	N/A	31.02	-5.25	20.33	14.59
Difference	0.32	-1.48	-1.95	-1.95	-0.98	-0.35	N/A	N/A	-0.52	-0.55	0.24	-1.12
OWCRS US Equity	21.03	-2.23	6.13	6.13	9.93	9.48	11.62	13.21	28.92	-5.64	22.16	10.64
Russell 3000 Index	22.03	-3.48	6.53	6.53	10.04	10.03	11.68	13.72	31.02	-5.24	21.13	12.74
Difference	-1.00	1.25	-0.40	-0.40	-0.11	-0.55	-0.06	-0.51	-2.10	-0.40	1.03	-2.10

Performance shown is net of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.

Oklahoma State Pension Commission
All Plans Summary
Asset Class Performance - Net of Fees

As of June 30, 2020

	Performance (%)											
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
International Equity												
OTRS International Equity	18.41	-10.96	-4.72	-4.72	0.63	2.21	4.20	6.06	21.07	-16.32	31.44	-1.19
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	2.29	0.04	0.08	0.08	-0.50	-0.05	0.49	1.09	-0.44	-2.12	4.25	-5.69
OPERS International Equity	16.77	-10.30	-3.31	-3.31	1.81	2.94	4.26	5.62	23.20	-13.79	27.26	3.87
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	0.65	0.70	1.49	1.49	0.68	0.68	0.55	0.65	1.69	0.41	0.07	-0.63
OFPRS International Equity	17.16	1.33	7.86	7.86	8.48	7.89	7.66	7.24	27.26	-13.22	35.99	1.44
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	1.04	12.33	12.66	12.66	7.35	5.63	3.95	2.27	5.75	0.98	8.80	-3.06
OPPRS International Equity	12.86	-12.35	-5.38	-5.38	0.27	2.18	3.47	4.46	20.91	-13.85	27.82	2.56
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	-3.26	-1.35	-0.58	-0.58	-0.86	-0.08	-0.24	-0.51	-0.60	0.35	0.63	-1.94
OLERS International Equity	17.61	-9.52	-1.44	-1.44	2.53	3.29	4.07	4.68	23.97	-14.43	30.46	1.37
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	1.49	1.48	3.36	3.36	1.40	1.03	0.36	-0.29	2.46	-0.23	3.27	-3.13
OURSJJ International Equity	16.25	-10.84	-4.58	-4.58	1.40	2.52	3.95	5.22	21.85	-13.97	27.47	4.80
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	0.13	0.16	0.22	0.22	0.27	0.26	0.24	0.25	0.34	0.23	0.28	0.30
OWCRS International Equity	18.56	-11.57	-4.52	-4.52	1.13	2.56	4.12	5.51	23.05	-13.82	29.05	4.22
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	2.44	-0.57	0.28	0.28	0.00	0.30	0.41	0.54	1.54	0.38	1.86	-0.28

Performance shown is net of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.

Oklahoma State Pension Commission
All Plans Summary
Asset Class Performance - Net of Fees

As of June 30, 2020

	Performance (%)											
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Fixed Income												
OTRS Fixed Income	6.08	7.05	10.37	10.37	6.54	5.75	5.57	6.14	11.86	-1.50	6.46	7.72
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	3.18	0.91	1.63	1.63	1.22	1.45	1.61	2.32	3.14	-1.51	2.92	5.07
OPERS Fixed Income	3.45	8.60	11.64	11.64	6.61	5.19	4.77	4.78	10.11	-0.33	4.42	2.82
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	0.55	2.46	2.90	2.90	1.29	0.89	0.81	0.96	1.39	-0.34	0.88	0.17
OFPRS Fixed Income	2.19	-0.86	1.41	1.41	2.15	2.86	2.89	3.75	7.26	-1.78	7.24	3.19
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	-0.71	-7.00	-7.33	-7.33	-3.17	-1.44	-1.07	-0.07	-1.46	-1.79	3.70	0.54
OPPRS Fixed Income	6.64	2.77	4.78	4.78	4.10	4.04	3.77	4.54	8.81	-1.47	6.31	6.13
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	3.74	-3.37	-3.96	-3.96	-1.22	-0.26	-0.19	0.72	0.09	-1.48	2.77	3.48
OLERS Fixed Income	3.41	3.66	4.16	4.16	3.70	3.60	3.55	4.10	6.10	0.30	4.37	4.54
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	0.51	-2.48	-4.58	-4.58	-1.62	-0.70	-0.41	0.28	-2.62	0.29	0.83	1.89
OURSJJ Fixed Income	3.35	8.73	11.75	11.75	6.64	5.19	4.75	4.77	10.06	-0.31	4.37	2.78
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	0.45	2.59	3.01	3.01	1.32	0.89	0.79	0.95	1.34	-0.32	0.83	0.13
OWCRS Fixed Income	3.39	5.19	7.29	7.29	4.83	3.54	3.07	3.35	7.73	0.79	2.78	0.81
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	0.49	-0.95	-1.45	-1.45	-0.49	-0.76	-0.89	-0.47	-0.99	0.78	-0.76	-1.84

Performance shown is net of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.

Oklahoma State Pension Commission
All Plans Summary
Asset Class Performance - Net of Fees

As of June 30, 2020

	Performance (%)											
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Real Estate												
OTRS Real Estate	-2.26	-1.56	-1.58	-1.58	4.73	6.98	8.31	N/A	5.56	7.45	6.50	9.55
NCREIF ODCE Index (AWA) (Net)	-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.39	7.36	6.66	7.79
Difference	-0.51	-0.55	-2.91	-2.91	0.01	0.63	0.22	N/A	1.17	0.09	-0.16	1.76
OPERS Real Estate	-11.60	-10.16	-6.33	-6.33	-4.47	-0.87	N/A	N/A	2.89	-2.93	-2.13	9.00
NCREIF ODCE Index (AWA) (Net)	-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.39	7.36	6.66	7.79
Difference	-9.85	-9.15	-7.66	-7.66	-9.19	-7.22	N/A	N/A	-1.50	-10.29	-8.79	1.21
OFPRS Real Estate	-0.99	0.70	2.91	2.91	6.21	7.81	9.13	9.06	4.89	9.38	8.02	9.41
NCREIF Property Index	-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	6.42	6.72	6.96	7.97
Difference	0.00	0.99	0.22	0.22	0.77	1.04	0.87	-0.64	-1.53	2.66	1.06	1.44
NCREIF ODCE Index (AWA) (Net)	-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.39	7.36	6.66	7.79
Difference	0.76	1.71	1.58	1.58	1.49	1.46	1.04	-0.72	0.50	2.02	1.36	1.62
OPPRS Real Estate	-2.88	-0.97	1.89	1.89	5.39	7.05	8.85	N/A	5.09	8.63	7.67	8.34
NCREIF ODCE Index (AWA) (Net)	-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.39	7.36	6.66	7.79
Difference	-1.13	0.04	0.56	0.56	0.67	0.70	0.76	N/A	0.70	1.27	1.01	0.55
OLERS Real Estate	-2.00	-0.85	0.96	0.96	3.17	3.39	4.69	N/A	2.84	3.23	5.55	7.48
NCREIF ODCE Index (AWA) (Net)	-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.39	7.36	6.66	7.79
Difference	-0.25	0.16	-0.37	-0.37	-1.55	-2.96	-3.40	N/A	-1.55	-4.13	-1.11	-0.31

Performance shown is net of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.

Oklahoma State Pension Commission
 All Plans Summary
 Asset Class Performance - Net of Fees

As of June 30, 2020

	Performance (%)											
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Hedge Funds												
OFPRS Hedge Fund	-9.21	-9.86	-11.35	-11.35	-2.04	-0.36	0.51	2.18	3.52	-2.86	10.18	1.46
HFRI FOF: Cnsvt Index	5.66	-1.94	-0.39	-0.39	1.93	1.49	2.39	2.57	6.30	-0.87	4.12	1.89
Difference	-14.87	-7.92	-10.96	-10.96	-3.97	-1.85	-1.88	-0.39	-2.78	-1.99	6.06	-0.43
OPPRS Long/Short Equity	16.15	6.26	11.79	11.79	7.39	5.26	6.54	N/A	16.38	-4.94	11.59	2.08
HFRI FOF: Strategic Index	11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	10.52	-6.67	11.22	-0.05
Difference	5.12	8.40	11.27	11.27	5.33	3.82	3.59	N/A	5.86	1.73	0.37	2.13
OPPRS Absolute Return	2.33	-2.08	-1.01	-1.01	1.41	0.18	1.74	N/A	4.10	1.07	2.98	0.04
HFRI FOF: Cnsvt Index	5.66	-1.94	-0.39	-0.39	1.93	1.49	2.39	2.57	6.30	-0.87	4.12	1.89
Difference	-3.33	-0.14	-0.62	-0.62	-0.52	-1.31	-0.65	N/A	-2.20	1.94	-1.14	-1.85
OLERS Long/Short Equity	6.33	-3.65	-0.35	-0.35	2.40	2.15	4.27	N/A	12.36	-5.53	11.66	1.05
HFRI FOF: Strategic Index	11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	10.52	-6.67	11.22	-0.05
Difference	-4.70	-1.51	-0.87	-0.87	0.34	0.71	1.32	N/A	1.84	1.14	0.44	1.10

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Oklahoma State Pension Commission
All Plans Summary
Asset Class Performance - Net of Fees

As of June 30, 2020

	Performance (%)											
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Private Equity												
OTRS Private Equity	-3.35	-2.18	6.28	6.28	12.54	12.43	14.31	N/A	15.04	21.04	13.19	13.66
R 2000 Index+4%	26.65	-11.25	-2.89	-2.89	6.09	8.46	11.46	14.92	30.55	-7.45	19.23	26.16
Difference	-30.00	9.07	9.17	9.17	6.45	3.97	2.85	N/A	-15.51	28.49	-6.04	-12.50
OFPRS Private Equity	-5.19	-2.04	3.17	3.17	10.82	9.84	N/A	N/A	6.41	19.34	19.06	3.07
Cambridge US Prvt Eq Index	0.00	-10.07	-5.51	-5.51	7.26	8.37	10.39	12.06	13.89	10.15	17.99	13.33
Difference	-5.19	8.03	8.68	8.68	3.56	1.47	N/A	N/A	-7.48	9.19	1.07	-10.26
OPPRS Private Equity	-5.55	-3.57	2.27	2.27	9.52	7.76	9.86	10.42	11.35	14.99	9.51	5.32
Cambridge US Prvt Eq Index	0.00	-10.07	-5.51	-5.51	7.26	8.37	10.39	12.06	13.89	10.15	17.99	13.33
Difference	-5.55	6.50	7.78	7.78	2.26	-0.61	-0.53	-1.64	-2.54	4.84	-8.48	-8.01
OLERS Private Equity	-4.12	-2.84	4.50	4.50	8.78	6.21	8.98	N/A	6.95	15.92	7.59	2.46
Cambridge US Prvt Eq Index	0.00	-10.07	-5.51	-5.51	7.26	8.37	10.39	12.06	13.89	10.15	17.99	13.33
Difference	-4.12	7.23	10.01	10.01	1.52	-2.16	-1.41	N/A	-6.94	5.77	-10.40	-10.87
Other Alternatives												
OWCRS Alternative Investments	10.44	-5.29	-0.64	-0.64	2.48	3.08	2.50	N/A	15.27	-5.85	9.20	11.03
OWCRS Alternatives Custom Index	7.89	-1.59	0.48	0.48	2.24	1.40	N/A	N/A	8.38	-4.02	7.06	3.07
Difference	2.55	-3.70	-1.12	-1.12	0.24	1.68	N/A	N/A	6.89	-1.83	2.14	7.96

Performance shown is net of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.

Oklahoma State Pension Commission
All Plans Summary
Asset Class Performance - Gross of Fees

As of June 30, 2020

	Performance (%)											
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
US Equity												
OTRS US Equity	22.16	-10.53	-3.07	-3.07	5.89	6.86	9.55	12.16	29.52	-7.82	20.62	15.57
S&P 500 Index (Cap Wtd)	20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	31.49	-4.38	21.83	11.96
Difference	1.62	-7.45	-10.58	-10.58	-4.84	-3.87	-2.58	-1.83	-1.97	-3.44	-1.21	3.61
OPERS US Equity	23.01	-4.50	4.55	4.55	8.98	9.09	11.12	13.45	29.50	-6.38	21.32	12.86
OPERS US Equity Custom Index	22.27	-4.08	5.68	5.68	9.58	9.73	11.46	13.57	30.70	-5.54	20.81	13.21
Difference	0.74	-0.42	-1.13	-1.13	-0.60	-0.64	-0.34	-0.12	-1.20	-0.84	0.51	-0.35
OFPRS US Equity	24.46	-1.87	5.92	5.92	10.69	10.03	11.96	13.32	30.49	-4.56	22.70	10.98
Russell 3000 Index	22.03	-3.48	6.53	6.53	10.04	10.03	11.68	13.72	31.02	-5.24	21.13	12.74
Difference	2.43	1.61	-0.61	-0.61	0.65	0.00	0.28	-0.40	-0.53	0.68	1.57	-1.76
OPPRS US Equity	24.53	-4.57	4.82	4.82	8.82	9.43	10.91	13.29	30.20	-5.35	18.93	15.68
S&P 500 Index (Cap Wtd)	20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	31.49	-4.38	21.83	11.96
Difference	3.99	-1.49	-2.69	-2.69	-1.91	-1.30	-1.22	-0.70	-1.29	-0.97	-2.90	3.72
OLERS US Equity	23.92	-7.41	1.69	1.69	7.16	7.67	10.26	12.88	32.84	-10.10	21.37	13.76
S&P 500 Index (Cap Wtd)	20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	31.49	-4.38	21.83	11.96
Difference	3.38	-4.33	-5.82	-5.82	-3.57	-3.06	-1.87	-1.11	1.35	-5.72	-0.46	1.80
OURSJJ US Equity	22.35	-4.96	4.59	4.59	9.06	9.41	11.23	13.41	30.51	-5.79	20.58	13.47
OURSJJ US Equity Custom Index	22.03	-3.48	6.54	6.54	10.04	9.75	N/A	N/A	31.02	-5.25	20.33	14.59
Difference	0.32	-1.48	-1.95	-1.95	-0.98	-0.34	N/A	N/A	-0.51	-0.54	0.25	-1.12
OWCRS US Equity	21.05	-2.06	6.44	6.44	10.21	9.76	11.86	13.41	29.17	-5.38	22.45	10.96
Russell 3000 Index	22.03	-3.48	6.53	6.53	10.04	10.03	11.68	13.72	31.02	-5.24	21.13	12.74
Difference	-0.98	1.42	-0.09	-0.09	0.17	-0.27	0.18	-0.31	-1.85	-0.14	1.32	-1.78

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Oklahoma State Pension Commission
All Plans Summary
Asset Class Performance - Gross of Fees

As of June 30, 2020

	Performance (%)											
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
International Equity												
OTRS International Equity	18.52	-10.73	-4.27	-4.27	1.11	2.58	4.47	6.25	21.59	-15.88	32.02	-1.06
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	2.40	0.27	0.53	0.53	-0.02	0.32	0.76	1.28	0.08	-1.68	4.83	-5.56
OPERS International Equity	16.79	-10.25	-3.22	-3.22	1.93	3.08	4.40	5.77	23.34	-13.70	27.47	4.01
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	0.67	0.75	1.58	1.58	0.80	0.82	0.69	0.80	1.83	0.50	0.28	-0.49
OFPRS International Equity	17.16	1.33	7.86	7.86	8.48	7.89	7.68	7.25	27.26	-13.22	35.99	1.44
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	1.04	12.33	12.66	12.66	7.35	5.63	3.97	2.28	5.75	0.98	8.80	-3.06
OPPRS International Equity	12.90	-12.26	-5.13	-5.13	0.52	2.48	3.81	4.82	21.27	-13.65	28.12	3.02
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	-3.22	-1.26	-0.33	-0.33	-0.61	0.22	0.10	-0.15	-0.24	0.55	0.93	-1.48
OLERS International Equity	17.61	-9.44	-1.16	-1.16	2.94	3.74	4.51	5.10	24.39	-14.03	31.03	1.84
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	1.49	1.56	3.64	3.64	1.81	1.48	0.80	0.13	2.88	0.17	3.84	-2.66
OURSJJ International Equity	16.25	-10.84	-4.58	-4.58	1.42	2.55	3.99	5.26	21.85	-13.93	27.51	4.86
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	0.13	0.16	0.22	0.22	0.29	0.29	0.28	0.29	0.34	0.27	0.32	0.36
OWCRS International Equity	18.70	-11.33	-3.93	-3.93	1.85	3.34	4.72	5.93	23.86	-13.14	30.11	5.09
MSCI ACW Ex US Index (USD) (Net)	16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	21.51	-14.20	27.19	4.50
Difference	2.58	-0.33	0.87	0.87	0.72	1.08	1.01	0.96	2.35	1.06	2.92	0.59

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Oklahoma State Pension Commission
All Plans Summary
Asset Class Performance - Gross of Fees

As of June 30, 2020

	Performance (%)											
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Fixed Income												
OTRS Fixed Income	6.13	7.15	10.59	10.59	6.75	5.91	5.68	6.22	12.06	-1.29	6.69	7.77
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	3.23	1.01	1.85	1.85	1.43	1.61	1.72	2.40	3.34	-1.30	3.15	5.12
OPERS Fixed Income	3.48	8.64	11.75	11.75	6.70	5.28	4.86	4.85	10.20	-0.23	4.51	2.91
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	0.58	2.50	3.01	3.01	1.38	0.98	0.90	1.03	1.48	-0.24	0.97	0.26
OFPRS Fixed Income	2.19	-0.86	1.41	1.41	2.15	2.87	2.90	3.76	7.26	-1.78	7.26	3.20
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	-0.71	-7.00	-7.33	-7.33	-3.17	-1.43	-1.06	-0.06	-1.46	-1.79	3.72	0.55
OPPRS Fixed Income	6.62	2.81	4.97	4.97	4.37	4.34	4.05	4.75	9.12	-1.15	6.59	6.49
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	3.72	-3.33	-3.77	-3.77	-0.95	0.04	0.09	0.93	0.40	-1.16	3.05	3.84
OLERS Fixed Income	3.41	3.69	4.26	4.26	3.80	3.66	3.59	4.13	6.25	0.41	4.38	4.54
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	0.51	-2.45	-4.48	-4.48	-1.52	-0.64	-0.37	0.31	-2.47	0.40	0.84	1.89
OURSJJ Fixed Income	3.35	8.75	11.81	11.81	6.72	5.26	4.83	4.86	10.15	-0.22	4.45	2.82
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	0.45	2.61	3.07	3.07	1.40	0.96	0.87	1.04	1.43	-0.23	0.91	0.17
OWCRS Fixed Income	3.43	5.23	7.44	7.44	4.98	3.72	3.26	3.51	7.90	0.94	2.99	1.01
Bloomberg US Agg Bond Index	2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	8.72	0.01	3.54	2.65
Difference	0.53	-0.91	-1.30	-1.30	-0.34	-0.58	-0.70	-0.31	-0.82	0.93	-0.55	-1.64

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Oklahoma State Pension Commission
 All Plans Summary
 Asset Class Performance - Gross of Fees

As of June 30, 2020

	Performance (%)											
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Real Estate												
OTRS Real Estate	-2.25	-1.48	-1.43	-1.43	4.99	7.22	8.48	N/A	5.83	7.70	6.72	9.83
NCREIF ODCE Index (AWA) (Net)	-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.39	7.36	6.66	7.79
Difference	-0.50	-0.47	-2.76	-2.76	0.27	0.87	0.39	N/A	1.44	0.34	0.06	2.04
OPERS Real Estate	-11.60	-10.16	-6.33	-6.33	-4.47	-0.87	N/A	N/A	2.89	-2.93	-2.13	9.00
NCREIF ODCE Index (AWA) (Net)	-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.39	7.36	6.66	7.79
Difference	-9.85	-9.15	-7.66	-7.66	-9.19	-7.22	N/A	N/A	-1.50	-10.29	-8.79	1.21
OFPRS Real Estate	-0.99	0.70	2.91	2.91	6.21	7.81	9.13	9.06	4.89	9.38	8.02	9.41
NCREIF Property Index	-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	6.42	6.72	6.96	7.97
Difference	0.00	0.99	0.22	0.22	0.77	1.04	0.87	-0.64	-1.53	2.66	1.06	1.44
NCREIF ODCE Index (AWA) (Net)	-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.39	7.36	6.66	7.79
Difference	0.76	1.71	1.58	1.58	1.49	1.46	1.04	-0.72	0.50	2.02	1.36	1.62
OPPRS Real Estate	-2.79	-0.56	2.66	2.66	6.18	7.80	9.65	N/A	5.85	9.54	8.33	8.99
NCREIF ODCE Index (AWA) (Net)	-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.39	7.36	6.66	7.79
Difference	-1.04	0.45	1.33	1.33	1.46	1.45	1.56	N/A	1.46	2.18	1.67	1.20
OLERS Real Estate	-2.00	-0.69	1.52	1.52	3.79	4.06	5.41	N/A	3.65	4.03	6.05	8.30
NCREIF ODCE Index (AWA) (Net)	-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.39	7.36	6.66	7.79
Difference	-0.25	0.32	0.19	0.19	-0.93	-2.29	-2.68	N/A	-0.74	-3.33	-0.61	0.51

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Oklahoma State Pension Commission
 All Plans Summary
 Asset Class Performance - Gross of Fees

As of June 30, 2020

	Performance (%)											
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Hedge Funds												
OFPRS Hedge Fund	-9.21	-9.86	-11.35	-11.35	-2.04	-0.36	0.51	2.18	3.52	-2.86	10.18	1.46
HFRI FOF: Cnsvt Index	5.66	-1.94	-0.39	-0.39	1.93	1.49	2.39	2.57	6.30	-0.87	4.12	1.89
Difference	-14.87	-7.92	-10.96	-10.96	-3.97	-1.85	-1.88	-0.39	-2.78	-1.99	6.06	-0.43
OPPRS Long/Short Equity	16.15	6.26	12.04	12.04	7.77	5.63	6.88	N/A	16.84	-4.52	12.05	2.42
HFRI FOF: Strategic Index	11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	10.52	-6.67	11.22	-0.05
Difference	5.12	8.40	11.52	11.52	5.71	4.19	3.93	N/A	6.32	2.15	0.83	2.47
OPPRS Absolute Return	2.33	-1.93	-0.55	-0.55	2.02	0.87	2.38	N/A	4.74	1.77	3.68	0.89
HFRI FOF: Cnsvt Index	5.66	-1.94	-0.39	-0.39	1.93	1.49	2.39	2.57	6.30	-0.87	4.12	1.89
Difference	-3.33	0.01	-0.16	-0.16	0.09	-0.62	-0.01	N/A	-1.56	2.64	-0.44	-1.00
OLERS Long/Short Equity	6.33	-3.65	-0.35	-0.35	2.40	2.15	4.27	N/A	12.36	-5.53	11.66	1.05
HFRI FOF: Strategic Index	11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	10.52	-6.67	11.22	-0.05
Difference	-4.70	-1.51	-0.87	-0.87	0.34	0.71	1.32	N/A	1.84	1.14	0.44	1.10

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 All Plans Summary
 Asset Class Performance - Gross of Fees

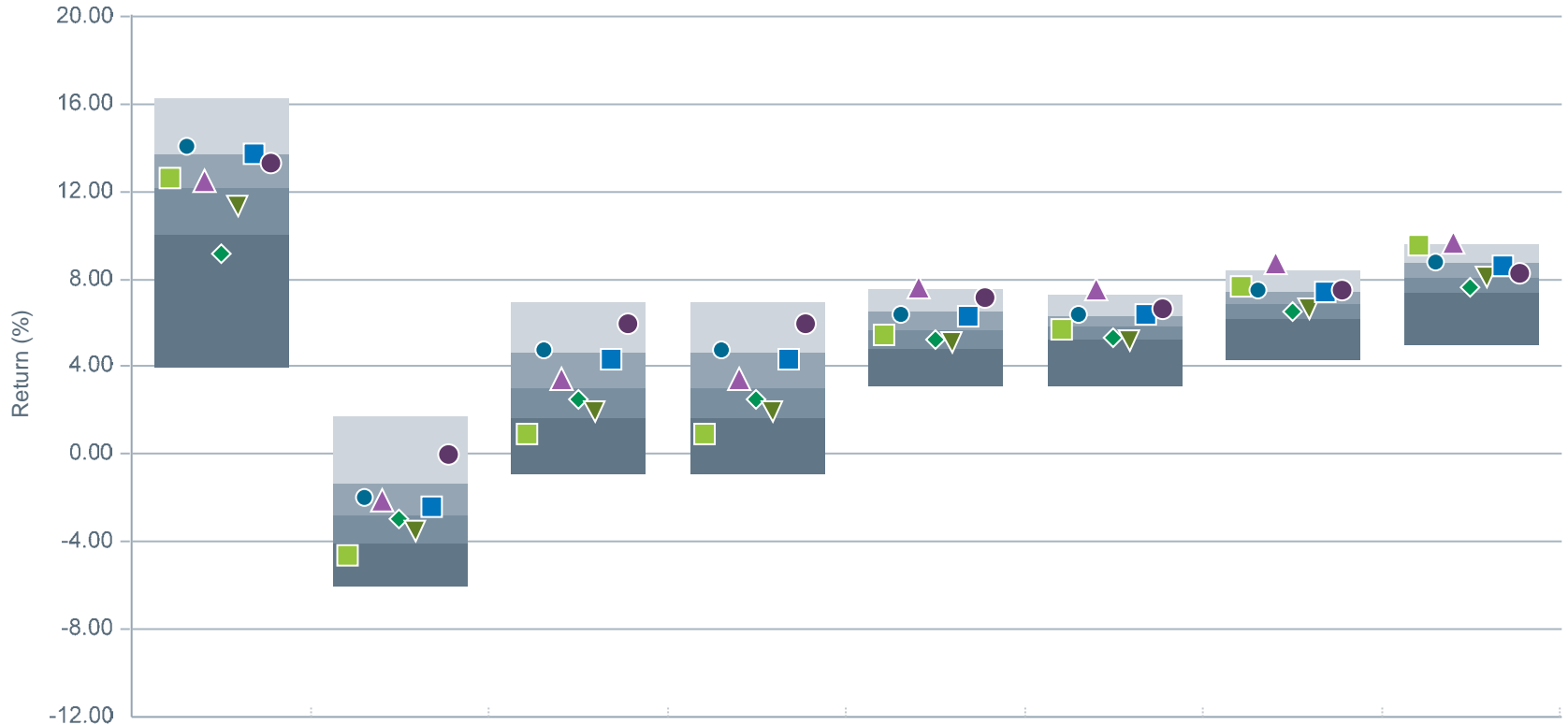
As of June 30, 2020

	Performance (%)											
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Private Equity												
OTRS Private Equity	-3.35	-2.13	6.28	6.28	12.54	12.43	14.31	N/A	15.04	21.04	13.19	13.66
R 2000 Index+4%	26.65	-11.25	-2.89	-2.89	6.09	8.46	11.46	14.92	30.55	-7.45	19.23	26.16
Difference	-30.00	9.07	9.17	9.17	6.45	3.97	2.85	N/A	-15.51	28.49	-6.04	-12.50
OFPRS Private Equity	-5.19	-2.04	3.17	3.17	10.82	9.84	N/A	N/A	6.41	19.34	19.06	3.07
Cambridge US Prvt Eq Index	0.00	-10.07	-5.51	-5.51	7.26	8.37	10.39	12.06	13.89	10.15	17.99	13.33
Difference	-5.19	8.03	8.68	8.68	3.56	1.47	N/A	N/A	-7.48	9.19	1.07	-10.26
OPPRS Private Equity	-5.43	-3.44	2.41	2.41	9.57	7.81	9.92	10.56	11.35	14.99	9.51	5.34
Cambridge US Prvt Eq Index	0.00	-10.07	-5.51	-5.51	7.26	8.37	10.39	12.06	13.89	10.15	17.99	13.33
Difference	-5.43	6.63	7.92	7.92	2.31	-0.56	-0.47	-1.50	-2.54	4.84	-8.48	-7.99
OLERS Private Equity	-4.12	-2.84	4.50	4.50	8.78	6.21	8.98	N/A	6.95	15.92	7.59	2.46
Cambridge US Prvt Eq Index	0.00	-10.07	-5.51	-5.51	7.26	8.37	10.39	12.06	13.89	10.15	17.99	13.33
Difference	-4.12	7.23	10.01	10.01	1.52	-2.16	-1.41	N/A	-6.94	5.77	-10.40	-10.87
Other Alternatives												
OWCRS Alternative Investments	10.64	-4.95	0.07	0.07	3.25	3.90	3.08	N/A	16.09	-5.10	10.08	11.99
OWCRS Alternatives Custom Index	7.89	-1.59	0.48	0.48	2.24	1.40	N/A	N/A	8.38	-4.02	7.06	3.07
Difference	2.75	-3.36	-0.41	-0.41	1.01	2.50	N/A	N/A	7.71	-1.08	3.02	8.92

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.

Oklahoma State Pension Commission
 All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

As of June 30, 2020



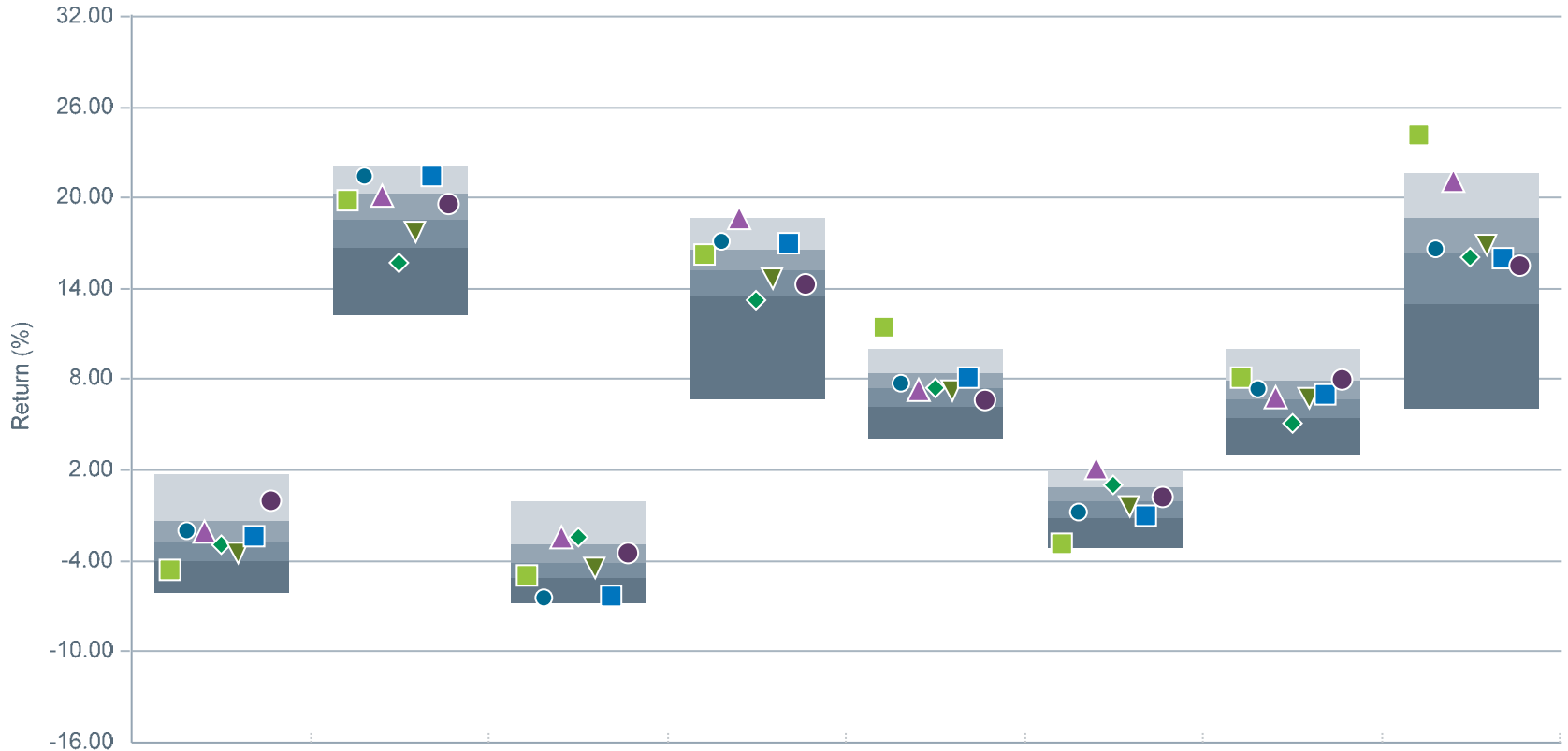
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OTRS (Teachers)	12.54 (42)	-4.66 (85)	0.85 (84)	0.85 (84)	5.38 (60)	5.69 (57)	7.63 (19)	9.49 (7)
● OPERS (Public Employees)	14.07 (20)	-2.06 (38)	4.71 (24)	4.71 (24)	6.36 (29)	6.36 (27)	7.49 (23)	8.71 (26)
▲ OFPRS (Firefighters)	12.52 (43)	-2.07 (39)	3.46 (45)	3.46 (45)	7.62 (5)	7.57 (3)	8.73 (2)	9.65 (4)
◆ OPPRS (Police)	9.15 (82)	-2.91 (54)	2.50 (59)	2.50 (59)	5.27 (63)	5.35 (72)	6.49 (64)	7.65 (64)
▼ OLERS (Law Enforcement)	11.29 (62)	-3.55 (66)	1.91 (71)	1.91 (71)	5.09 (70)	5.16 (77)	6.57 (62)	8.07 (48)
■ OURSJJ (Judges)	13.69 (26)	-2.42 (44)	4.34 (30)	4.34 (30)	6.28 (31)	6.35 (27)	7.38 (28)	8.54 (33)
● OWCRS (Wildlife)	13.22 (31)	-0.08 (12)	5.88 (11)	5.88 (11)	7.10 (12)	6.64 (17)	7.49 (23)	8.18 (45)
5th Percentile	16.24	1.72	6.92	6.92	7.58	7.27	8.39	9.57
1st Quartile	13.69	-1.37	4.60	4.60	6.52	6.39	7.45	8.75
Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03
3rd Quartile	10.05	-4.03	1.63	1.63	4.84	5.22	6.14	7.36
95th Percentile	3.97	-6.07	-0.88	-0.88	3.12	3.11	4.27	4.96

Performance shown is gross of fees. Parentheses contain percentile ranks. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

As of June 30, 2020



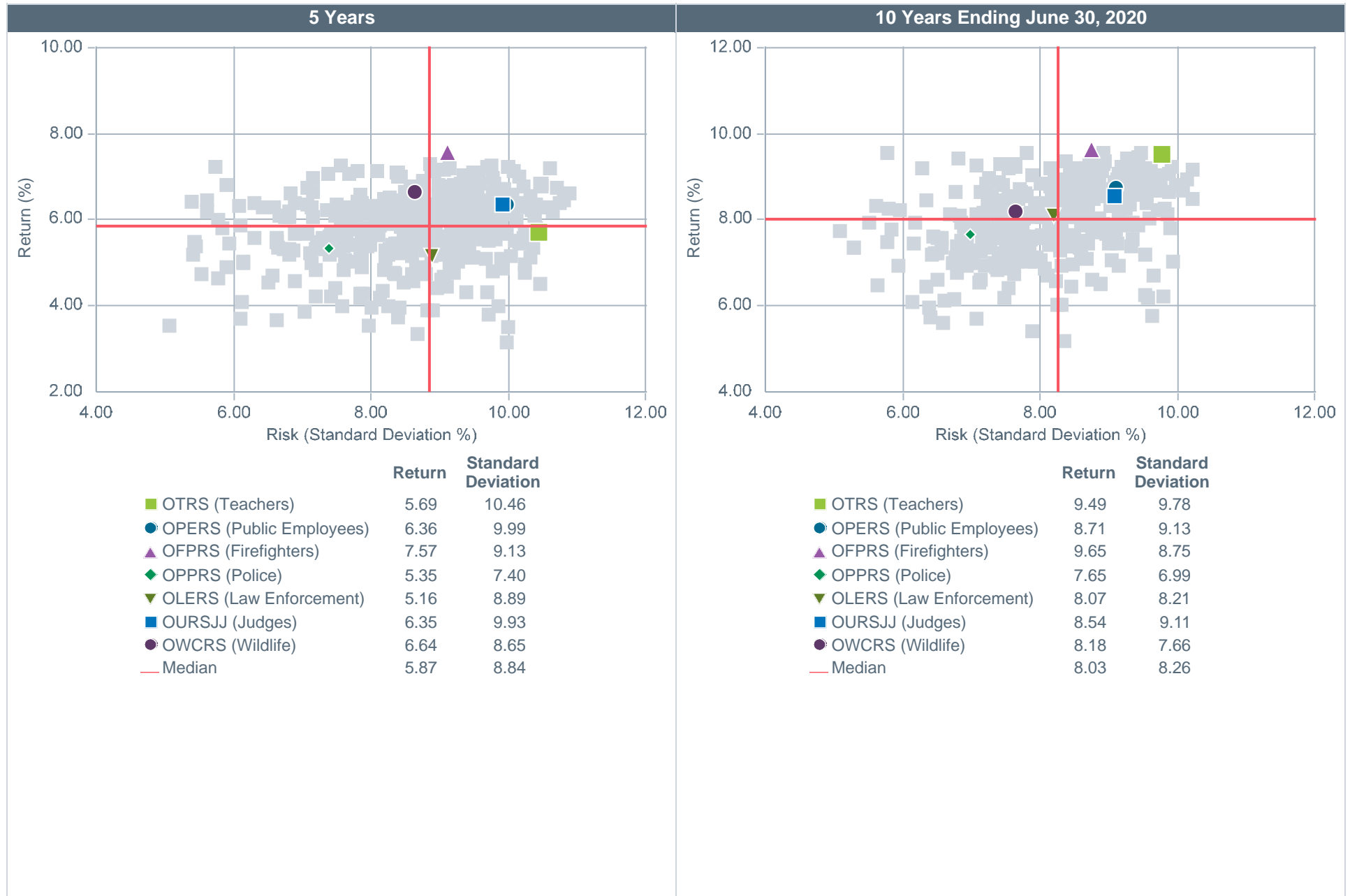
	CYTD	2019	2018	2017	2016	2015	2014	2013
■ OTRS (Teachers)	-4.66 (85)	19.75 (33)	-5.03 (73)	16.16 (32)	11.39 (2)	-2.88 (94)	8.12 (21)	24.05 (2)
● OPERS (Public Employees)	-2.06 (38)	21.34 (12)	-6.51 (93)	17.11 (16)	7.67 (42)	-0.77 (66)	7.37 (34)	16.60 (48)
▲ OFPRS (Firefighters)	-2.07 (39)	20.17 (28)	-2.39 (18)	18.70 (6)	7.33 (53)	2.10 (5)	6.86 (46)	21.11 (7)
◆ OPPRS (Police)	-2.91 (54)	15.77 (83)	-2.45 (19)	13.22 (77)	7.45 (49)	1.02 (20)	5.06 (81)	16.08 (52)
▼ OLERS (Law Enforcement)	-3.55 (66)	17.67 (62)	-4.56 (59)	14.65 (60)	7.24 (56)	-0.44 (60)	6.74 (51)	16.80 (46)
■ OURSJJ (Judges)	-2.42 (44)	21.39 (11)	-6.39 (92)	16.89 (20)	8.05 (34)	-1.07 (73)	6.99 (42)	16.00 (53)
● OWCRS (Wildlife)	-0.08 (12)	19.49 (37)	-3.52 (37)	14.27 (65)	6.59 (70)	0.19 (44)	7.88 (26)	15.52 (59)
5th Percentile	1.72	22.10	-0.14	18.72	9.98	2.06	10.06	21.67
1st Quartile	-1.37	20.27	-2.96	16.59	8.39	0.92	7.93	18.70
Median	-2.80	18.59	-4.15	15.21	7.42	-0.08	6.74	16.28
3rd Quartile	-4.03	16.66	-5.14	13.46	6.27	-1.20	5.45	13.03
95th Percentile	-6.07	12.27	-6.74	6.66	4.12	-3.18	3.05	6.05

Performance shown is gross of fees. Parentheses contain percentile ranks. Oklahoma State Pension Commission fiscal year begins on 07/01.



All Plans

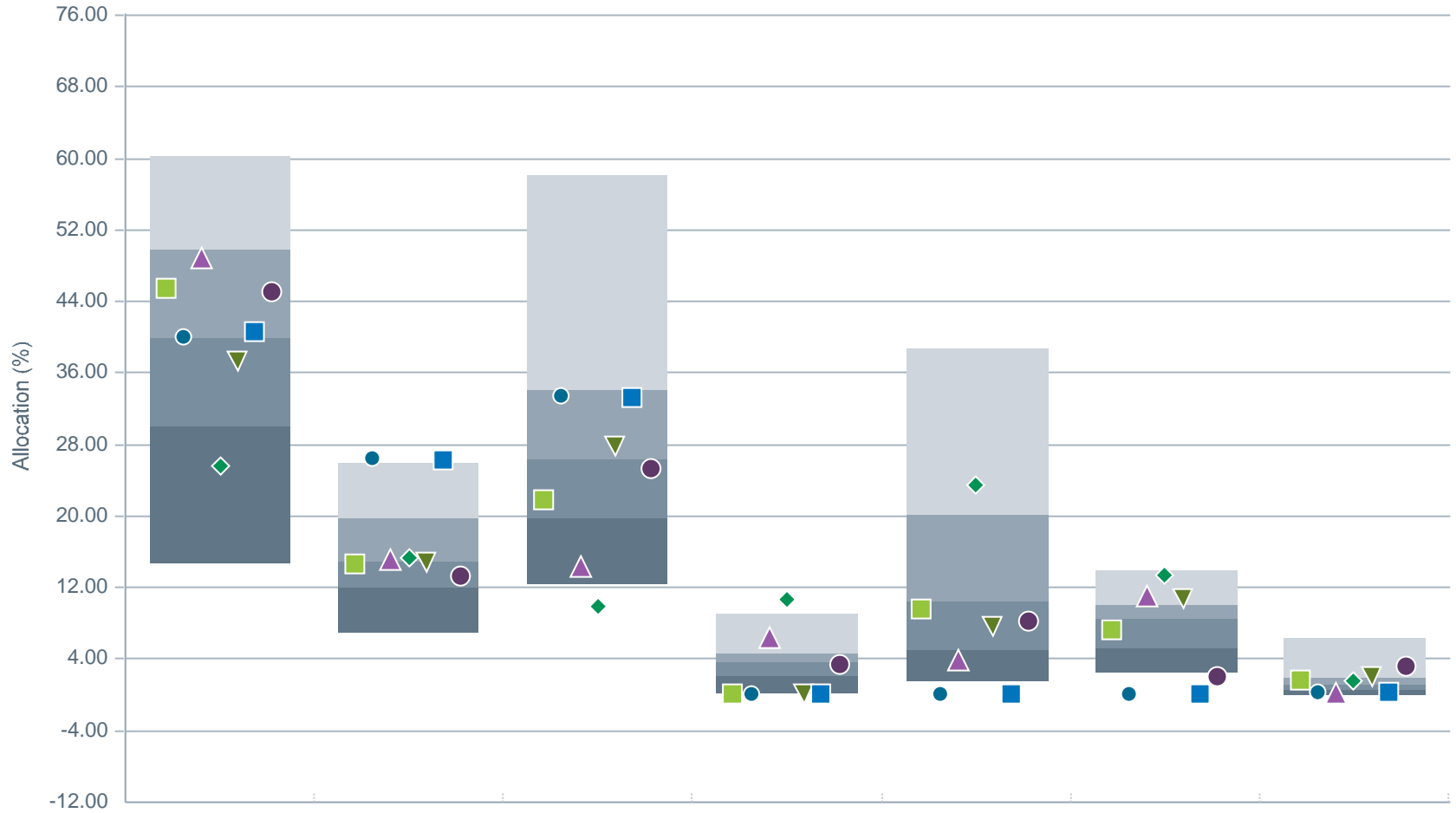
Total Fund Risk & Return vs. All Public Plans-Total Fund



Performance shown is gross of fees. Calculation is based on monthly periodicity.

Oklahoma State Pension Commission
 All Plans Total Fund vs. All Public Plans-Total Fund
 Plan Sponsor TF Asset Allocation

As of June 30, 2020

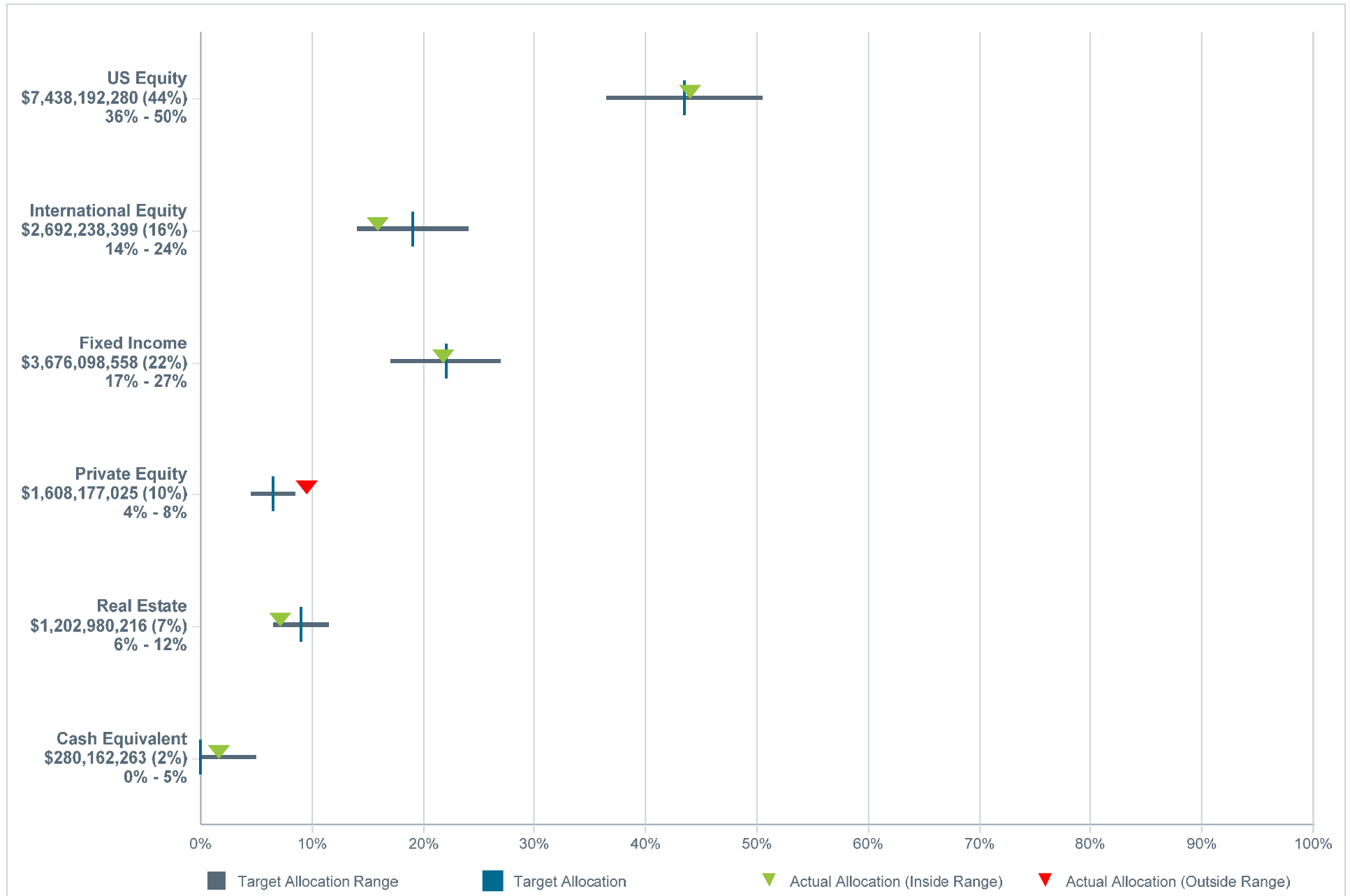


	US Equity	Intl. Equity	US Fixed Income	Intl. Fixed Income	Alternative Inv.	Real Estate	Cash
OTRS (Teachers)	45.45	14.50	21.75	0.00	9.52	7.12	1.66
OPERS (Public Employees)	40.01	26.32	33.33	0.00	0.00	0.10	0.24
OFPRS (Firefighters)	48.80	15.17	14.41	6.41	3.97	11.00	0.24
OPPRS (Police)	25.53	15.36	9.93	10.74	23.56	13.40	1.48
OLERS (Law Enforcement)	37.30	14.70	27.79	0.00	7.53	10.67	2.01
OURSJJ (Judges)	40.45	26.12	33.18	0.00	0.00	0.00	0.24
OWCRS (Wildlife)	45.04	13.29	25.24	3.32	8.06	1.88	3.16
Median	39.95	14.90	26.36	3.74	10.55	8.60	1.12

Parentheses contain percentile ranks.

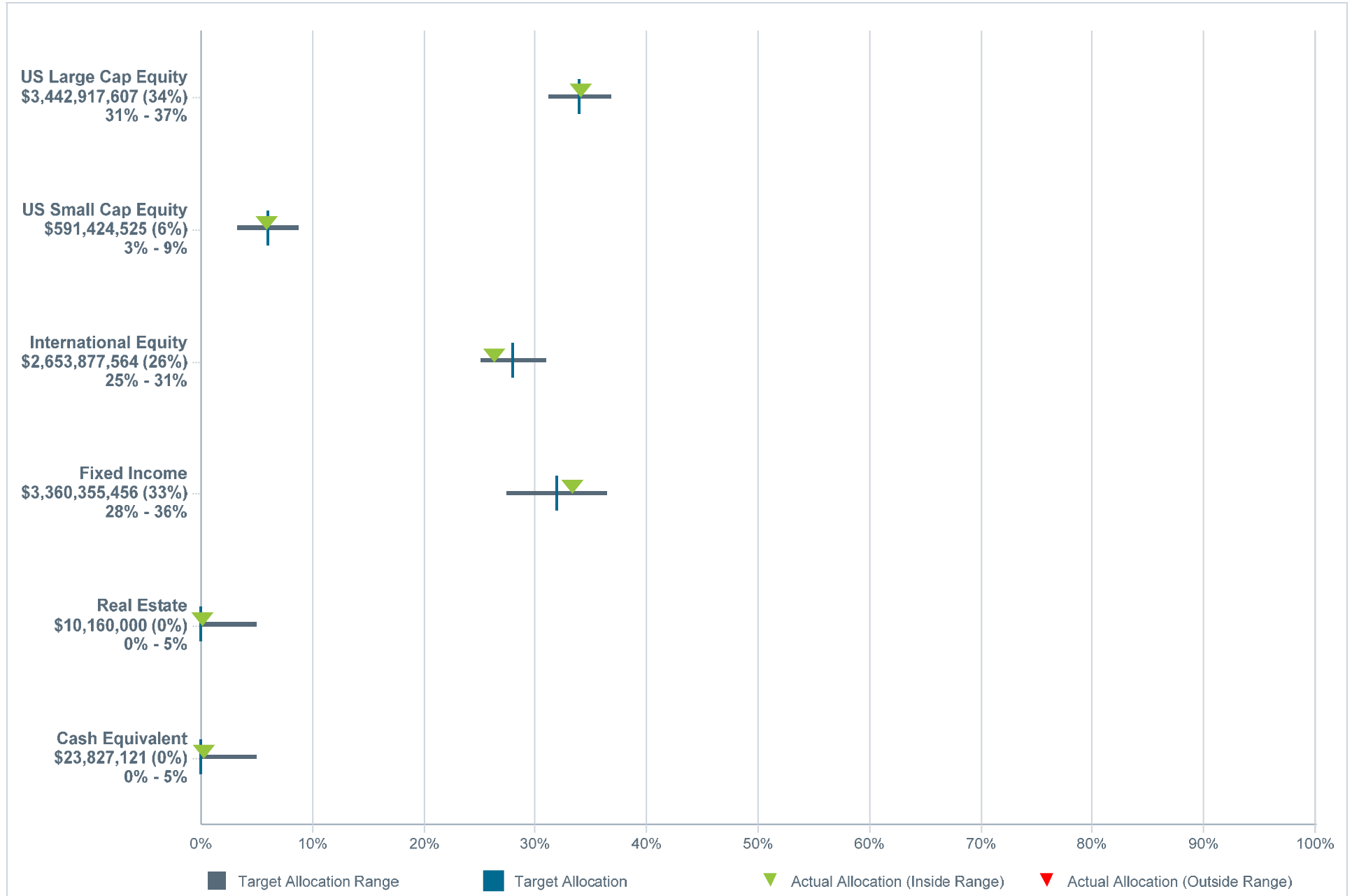
Oklahoma State Pension Commission
 Oklahoma Teachers' Retirement System
 Asset Allocation vs. Target Allocation

As of June 30, 2020



Allocations shown may not sum up to 100% exactly due to rounding. Allocation to Private Equity includes Private Credit.

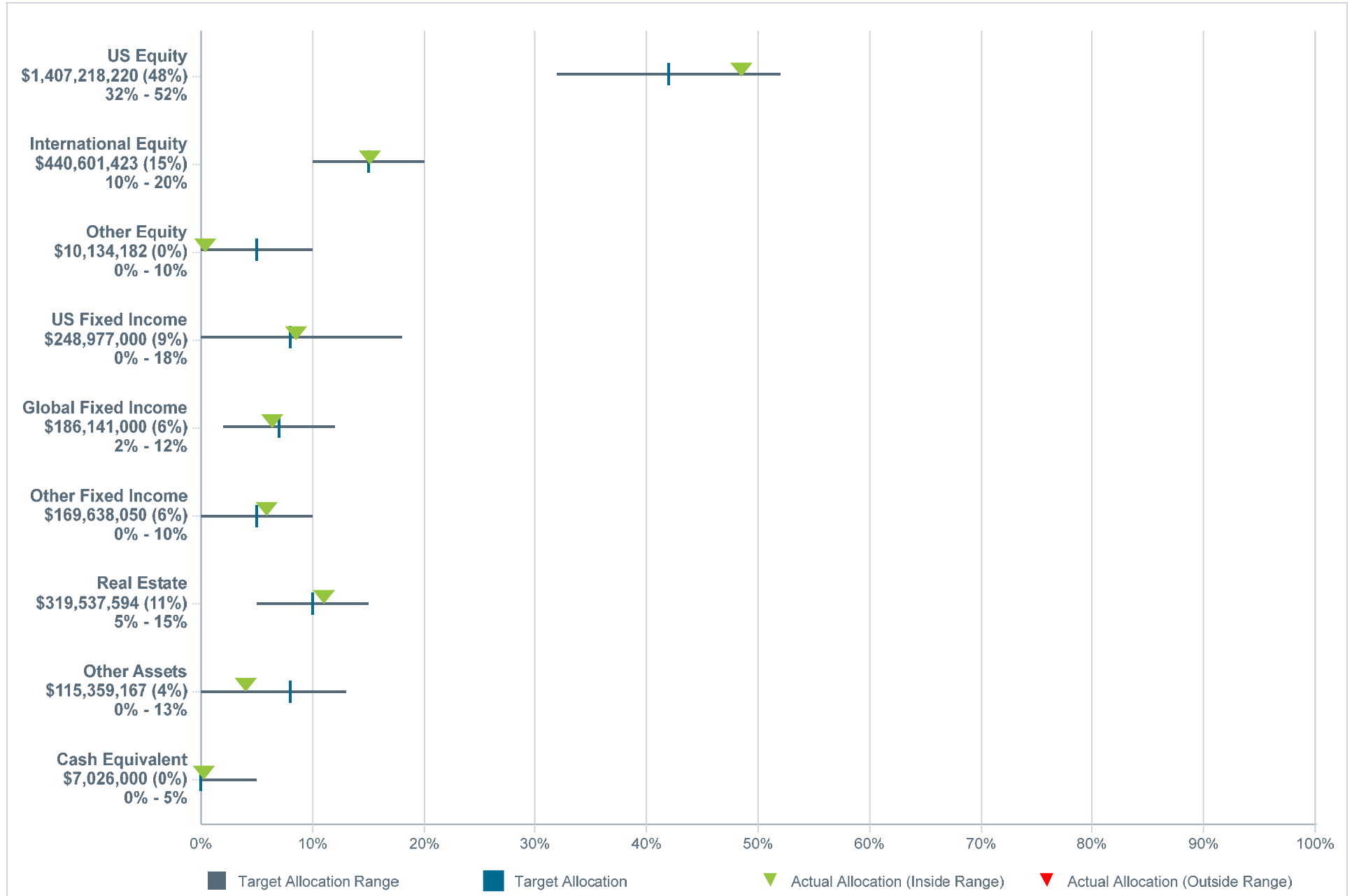




Allocations shown may not sum up to 100% exactly due to rounding.

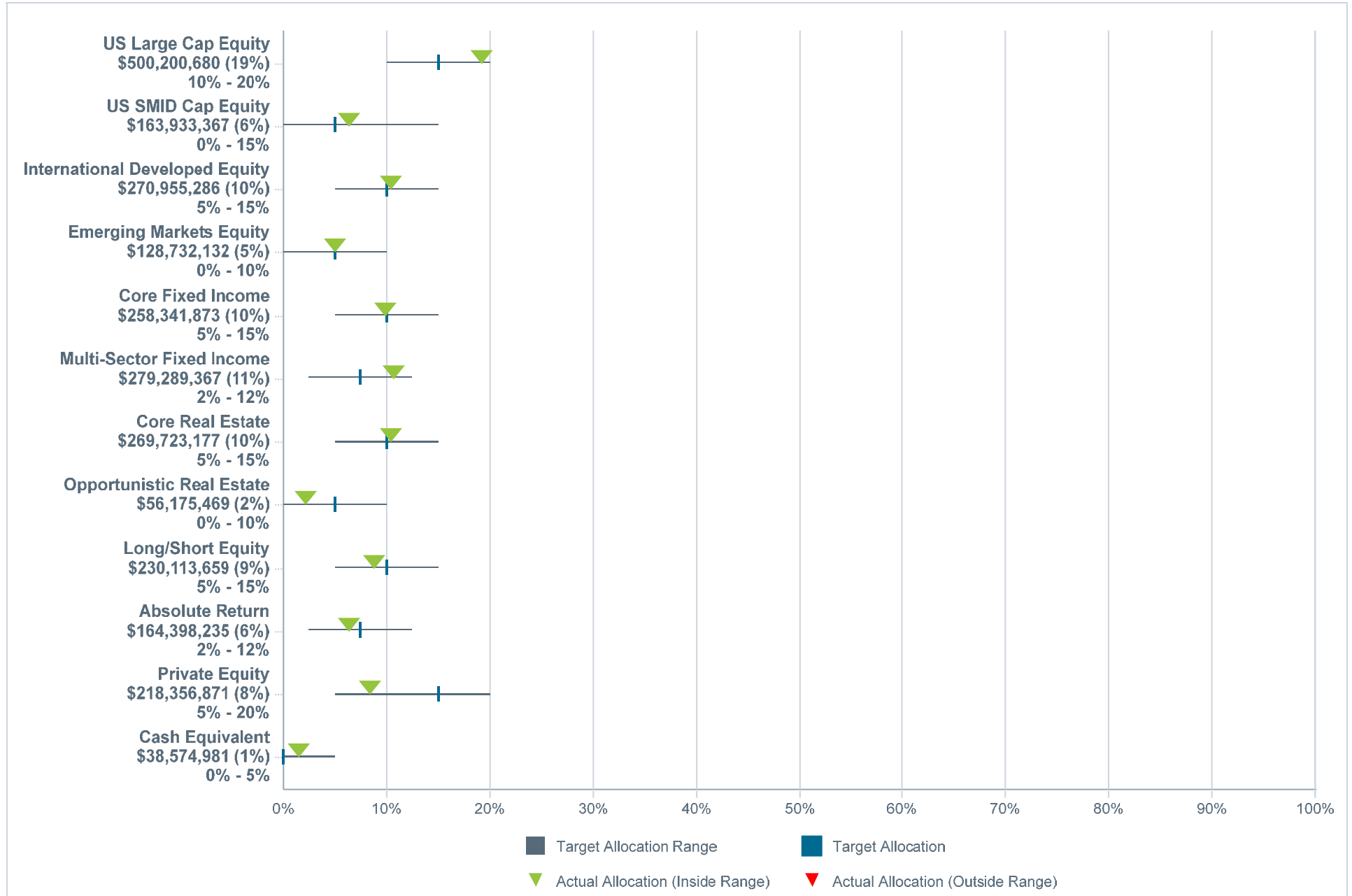
Oklahoma State Pension Commission
 Oklahoma Firefighters Pension & Retirement System
 Asset Allocation vs. Target Allocation

As of June 30, 2020

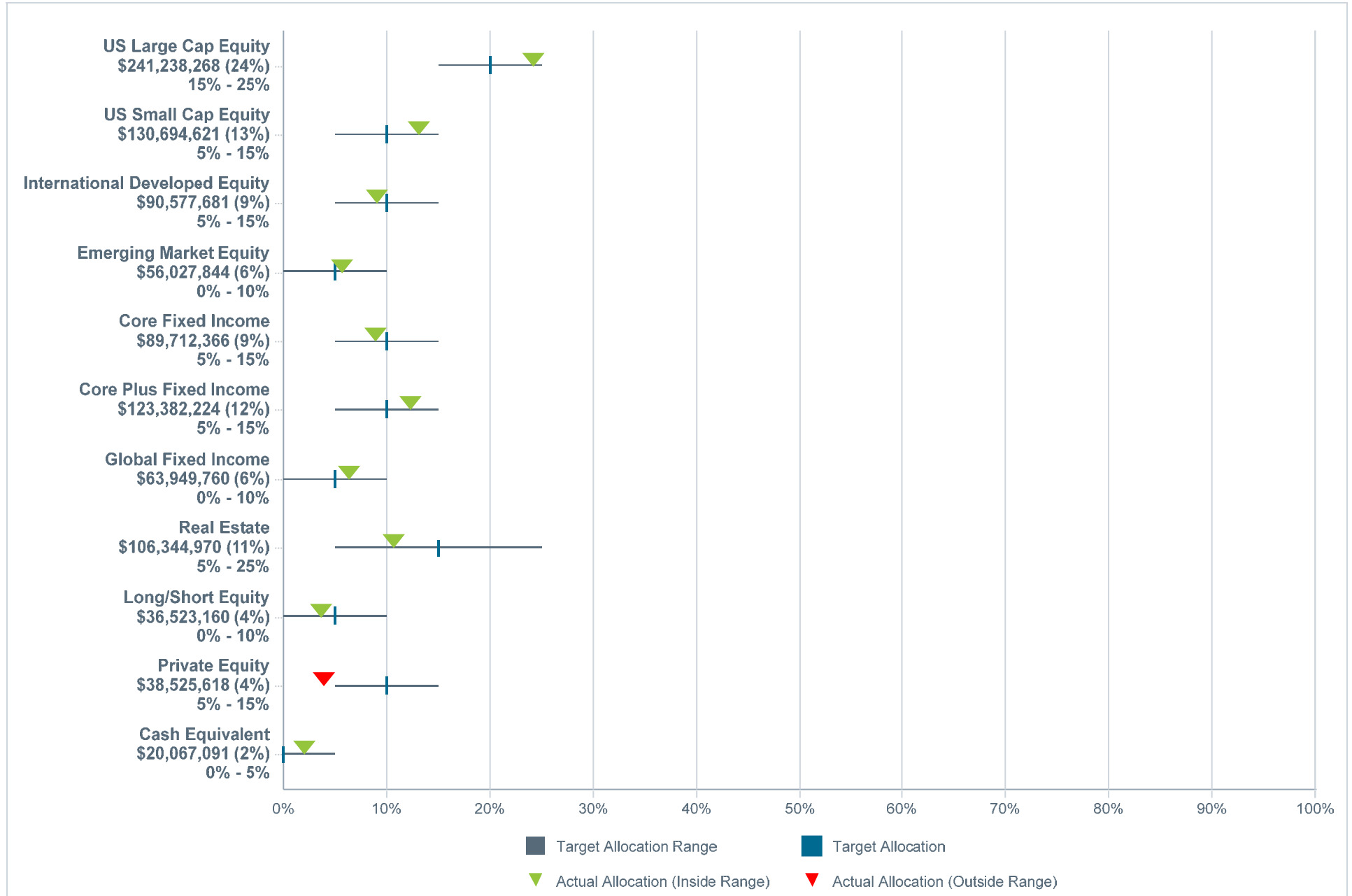


Allocations shown may not sum up to 100% exactly due to rounding. Allocation to Other Equity includes opportunistic equity; Other Fixed Income includes non-core Fixed Income; and Other Assets include Hedge Funds and Private Equity.





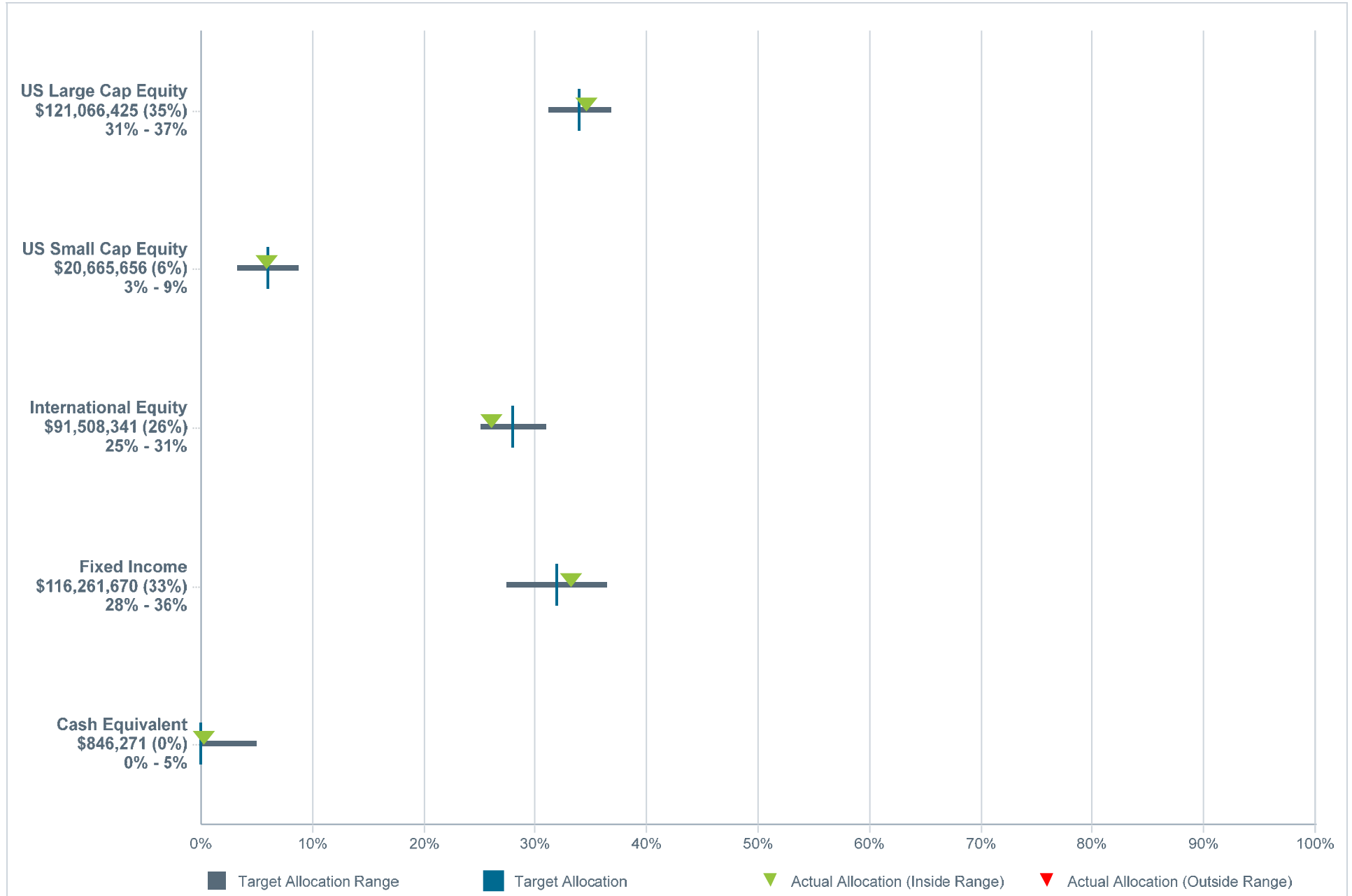
Allocations shown may not sum up to 100% exactly due to rounding. Allocation to Multi-Sector Fixed Income includes Private Credit.



Allocations shown may not sum up to 100% exactly due to rounding.

Oklahoma State Pension Commission
 Oklahoma Uniform Retirement System for Justices & Judges
 Asset Allocation vs. Target Allocation

As of June 30, 2020

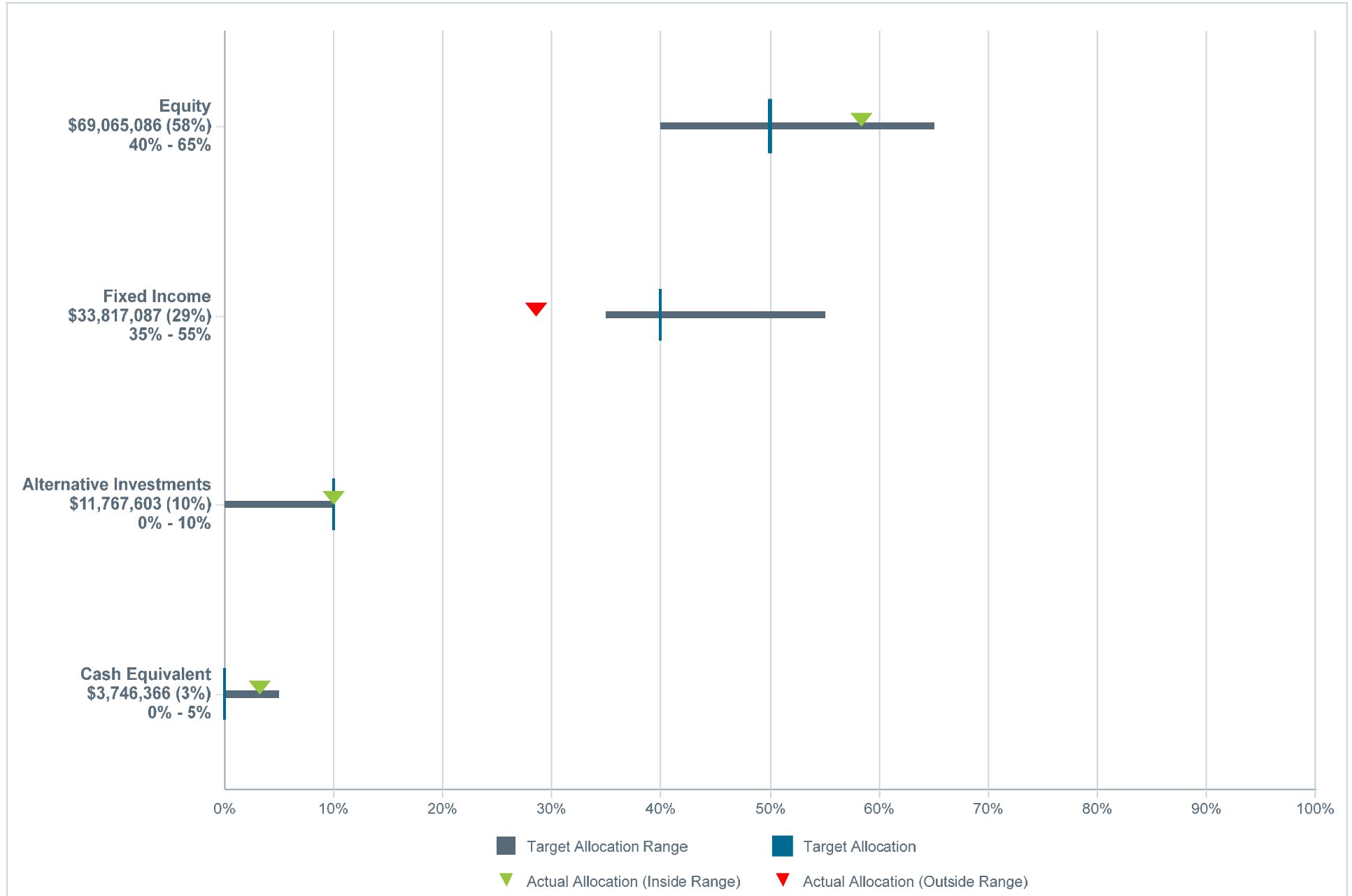


Allocations shown may not sum up to 100% exactly due to rounding.



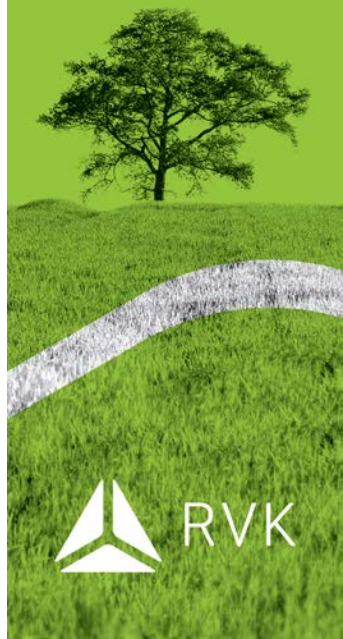
Oklahoma State Pension Commission
 Oklahoma Wildlife Conservation Retirement System
 Asset Allocation vs. Target Allocation

As of June 30, 2020



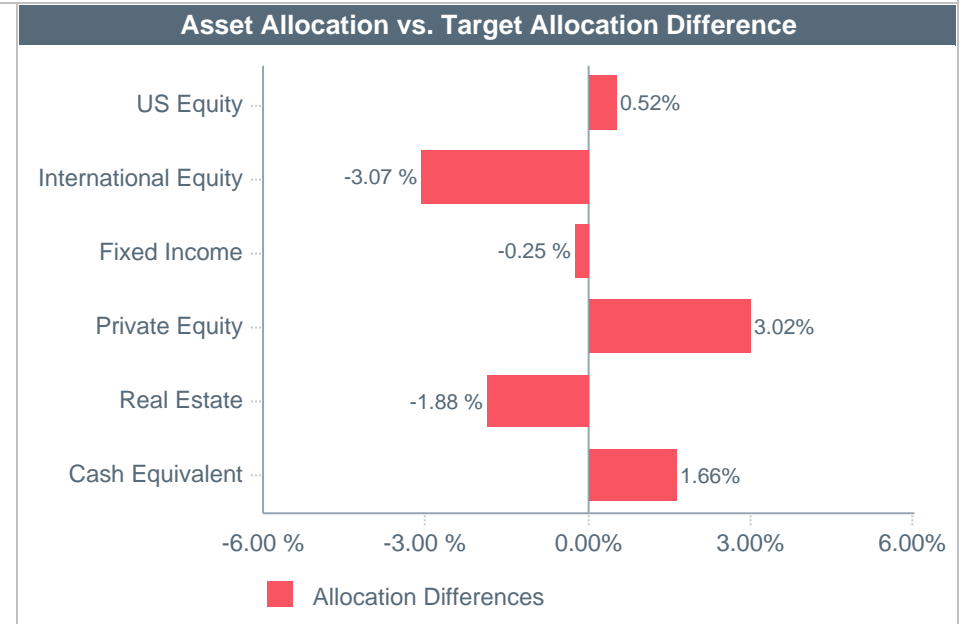
Allocations shown may not sum up to 100% exactly due to rounding.

Oklahoma Teachers' Retirement System (OTRS)



	Performance (%)												
	Trailing							Calendar Year					
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OTRS Total Fund (Net)	12.49	-4.77	0.62	0.62	5.08	5.45	7.45	9.37	19.42	-5.33	15.82	11.28	-2.93
OTRS Policy Index	15.80	-3.18	3.23	3.23	5.94	6.15	7.11	8.91	21.09	-5.12	14.05	10.61	-2.49
Difference	-3.31	-1.59	-2.61	-2.61	-0.86	-0.70	0.34	0.46	-1.67	-0.21	1.77	0.67	-0.44
OTRS Actual Allocation Index	14.94	-1.99	3.74	3.74	6.03	6.16	7.66	9.14	18.94	-4.70	14.35	10.93	-1.95
Difference	-2.45	-2.78	-3.12	-3.12	-0.95	-0.71	-0.21	0.23	0.48	-0.63	1.47	0.35	-0.98
Actuarial Discount Rate (7.5%)	1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference	10.67	-8.45	-6.88	-6.88	-2.42	-2.05	-0.05	1.87	11.92	-12.83	8.32	3.78	-10.43
OTRS Total Fund (Gross)	12.54	-4.66	0.85	0.85	5.38	5.69	7.63	9.49	19.75	-5.03	16.16	11.39	-2.88
OTRS Policy Index	15.80	-3.18	3.23	3.23	5.94	6.15	7.11	8.91	21.09	-5.12	14.05	10.61	-2.49
Difference	-3.26	-1.48	-2.38	-2.38	-0.56	-0.46	0.52	0.58	-1.34	0.09	2.11	0.78	-0.39
OTRS Actual Allocation Index	14.94	-1.99	3.74	3.74	6.03	6.16	7.66	9.14	18.94	-4.70	14.35	10.93	-1.95
Difference	-2.40	-2.67	-2.89	-2.89	-0.65	-0.47	-0.03	0.35	0.81	-0.33	1.81	0.46	-0.93
All Public Plans-Total Fund Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	18.59	-4.15	15.21	7.42	-0.08
Rank	42	85	84	84	60	57	19	7	33	73	32	2	94

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OTRS (Teachers)	16,897,902,887	100.00	100.00
US Equity	7,438,192,280	44.02	43.50
International Equity	2,692,238,399	15.93	19.00
Fixed Income	3,676,098,558	21.75	22.00
Private Equity	1,608,177,025	9.52	6.50
Real Estate	1,202,980,216	7.12	9.00
Cash Equivalent	280,162,263	1.66	0.00



Parentheses contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding. Please see the Addendum for custom index definitions and additional Oklahoma State Pension Commission fiscal year begins on 07/01.

Oklahoma State Pension Commission
Oklahoma Teachers' Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OTRS Total Fund	16,897,902,887	100.00	12.49	-4.77	0.62	0.62	5.08	5.45	7.45	9.37	7.83	01/01/1984
OTRS Policy Index			15.80	-3.18	3.23	3.23	5.94	6.15	7.11	8.91	N/A	
Difference			-3.31	-1.59	-2.61	-2.61	-0.86	-0.70	0.34	0.46	N/A	
OTRS Actual Allocation Index			14.94	-1.99	3.74	3.74	6.03	6.16	7.66	9.14	N/A	
Difference			-2.45	-2.78	-3.12	-3.12	-0.95	-0.71	-0.21	0.23	N/A	
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			10.67	-8.45	-6.88	-6.88	-2.42	-2.05	-0.05	1.87	0.33	
US Equity	7,438,192,280	44.02	22.10	-10.62	-3.30	-3.30	5.56	6.61	9.36	12.02	3.24	04/01/1990
S&P 500 Index (Cap Wtd)			20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	9.87	
Difference			1.56	-7.54	-10.81	-10.81	-5.17	-4.12	-2.77	-1.97	-6.63	
Hotchkis & Wiley Large Cap Value Equity (SA)	110,224	0.00	0.01	-1.54	-21.43	-21.43	-3.56	1.46	5.51	9.74	8.96	01/01/1990
Russell 1000 Val Index			14.29	-16.26	-8.84	-8.84	1.82	4.64	7.11	10.41	9.01	
Difference			-14.28	14.72	-12.59	-12.59	-5.38	-3.18	-1.60	-0.67	-0.05	
Northern Trust Russell 1000 Index (SA)	1,772,829,079	10.49	21.61	-2.99	8.42	8.42	N/A	N/A	N/A	N/A	11.39	11/01/2017
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	9.29	
Difference			-0.21	-0.18	0.94	0.94	N/A	N/A	N/A	N/A	2.10	
SciBeta US High FactorExposure Index (SA)	2,275,236,990	13.46	17.79	-9.57	-0.44	-0.44	N/A	N/A	N/A	N/A	7.11	11/01/2017
S&P 500 Index (Eq Wtd)			21.73	-10.77	-3.25	-3.25	5.43	7.14	9.67	12.64	4.31	
Difference			-3.94	1.20	2.81	2.81	N/A	N/A	N/A	N/A	2.80	
Hotchkis & Wiley Mid Cap Value Equity (SA)	265,587,899	1.57	25.43	-32.52	-31.65	-31.65	-11.98	-5.72	-0.44	6.91	9.41	01/01/1990
Russell Mid Cap Val Index			19.95	-18.09	-11.81	-11.81	-0.54	3.32	6.55	10.29	10.32	
Difference			5.48	-14.43	-19.84	-19.84	-11.44	-9.04	-6.99	-3.38	-0.91	
Northern Trust Russell Mid Cap Index (CF)	899,364,123	5.32	24.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.38	03/01/2020
Russell Mid Cap Index			24.61	-9.13	-2.24	-2.24	5.79	6.76	9.40	12.35	0.32	
Difference			-0.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.06	
Wellington Mid Cap Growth (SA)	580,005,429	3.43	33.60	3.43	13.65	13.65	17.03	12.29	14.02	14.61	9.88	08/01/1998
Russell Mid Cap Grth Index			30.26	4.16	11.91	11.91	14.76	11.60	13.24	15.09	8.71	
Difference			3.34	-0.73	1.74	1.74	2.27	0.69	0.78	-0.48	1.17	
Shapiro Enhanced Small Cap Value Equity (SA)	689,654,028	4.08	22.98	-22.88	-18.37	-18.37	-2.81	2.66	6.48	10.09	8.39	04/01/1998
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	6.35	
Difference			4.07	0.62	-0.89	-0.89	1.54	1.40	2.50	2.27	2.04	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Teachers' Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Frontier Small Cap Value Equity (SA)	167,829,675	0.99	23.66	-25.20	-20.72	-20.72	-4.47	1.65	4.97	N/A	4.31	05/01/2013
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	4.26	
Difference			4.75	-1.70	-3.24	-3.24	-0.12	0.39	0.99	N/A	0.05	
Neumeier Poma Small Cap Value Equity (SA)	224,718,972	1.33	16.92	-15.21	-9.27	-9.27	2.02	6.14	9.80	N/A	9.92	04/01/2013
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	4.19	
Difference			-1.99	8.29	8.21	8.21	6.37	4.88	5.82	N/A	5.73	
Geneva US Small Cap Growth Equity (SA)	234,271,189	1.39	30.00	4.36	9.29	9.29	13.73	12.96	13.91	N/A	13.59	05/01/2013
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	10.45	
Difference			-0.58	7.42	5.81	5.81	5.87	6.10	3.88	N/A	3.14	
Wasatch Small Cap Core Growth (SA)	328,584,546	1.94	24.97	-2.31	5.90	5.90	7.11	6.84	8.15	N/A	11.52	12/01/2011
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	11.88	
Difference			-5.61	0.75	2.42	2.42	-0.75	-0.02	-1.88	N/A	-0.36	
International Equity	2,692,238,399	15.93	18.41	-10.96	-4.72	-4.72	0.63	2.21	4.20	6.06	5.67	09/01/2001
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	5.42	
Difference			2.29	0.04	0.08	0.08	-0.50	-0.05	0.49	1.09	0.25	
Causeway International Opportunities (SA)	459,572,956	2.72	18.82	-17.02	-9.08	-9.08	-1.41	0.35	2.81	5.58	6.88	05/01/2003
MSCI EAFE Index (USD) (Net)			14.88	-11.34	-5.13	-5.13	0.81	2.05	3.93	5.73	6.57	
Difference			3.94	-5.68	-3.95	-3.95	-2.22	-1.70	-1.12	-0.15	0.31	
Allianz Best Styles AC Intl Equity (SA)	973,182,198	5.76	13.22	-13.89	-8.18	-8.18	-0.52	N/A	N/A	N/A	5.00	06/01/2016
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	5.14	
Difference			-2.90	-2.89	-3.38	-3.38	-1.65	N/A	N/A	N/A	-0.14	
Wellington Intl Quality Growth (SA)	543,243,661	3.21	18.73	-2.24	5.87	5.87	8.25	N/A	N/A	N/A	10.83	06/01/2016
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	5.14	
Difference			2.61	8.76	10.67	10.67	7.12	N/A	N/A	N/A	5.69	
Advisory Research Intl Small Cap Equity (SA)	818,257	0.00	2.48	0.73	0.06	0.06	-1.09	1.99	4.59	N/A	6.79	12/01/2011
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.75	
Difference			-13.64	11.73	4.86	4.86	-2.22	-0.27	0.88	N/A	2.04	
Epoch Intl Small Cap Equity (SA)	402,326	0.00	0.84	-0.28	-0.50	-0.50	-0.20	1.91	4.54	N/A	6.27	12/01/2011
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.75	
Difference			-15.28	10.72	4.30	4.30	-1.33	-0.35	0.83	N/A	1.52	
Wellington International Small Cap Equity (CF)	232,638,774	1.38	19.19	-16.63	-8.62	-8.62	-4.82	-0.47	3.14	N/A	6.24	12/01/2011
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.75	
Difference			3.07	-5.63	-3.82	-3.82	-5.95	-2.73	-0.57	N/A	1.49	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Teachers' Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Wasatch Small Cap Core Growth (SA)	241,326,469	1.43	34.11	3.04	11.79	11.79	16.46	13.05	13.94	N/A	16.78	12/01/2011
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.75	
Difference			17.99	14.04	16.59	16.59	15.33	10.79	10.23	N/A	12.03	
SSGA Emerging Market Small Cap (CF)	241,040,944	1.43	24.04	-14.60	-10.94	-10.94	-3.27	N/A	N/A	N/A	0.47	08/01/2016
MSCI Emg Mkts Sm Cap Index (USD) (Net)			27.14	-12.74	-8.82	-8.82	-2.95	-1.38	0.96	1.78	0.65	
Difference			-3.10	-1.86	-2.12	-2.12	-0.32	N/A	N/A	N/A	-0.18	
Fixed Income	3,676,098,558	21.75	6.08	7.05	10.37	10.37	6.54	5.75	5.57	6.14	6.79	07/01/2000
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.14	
Difference			3.18	0.91	1.63	1.63	1.22	1.45	1.61	2.32	1.65	
Loomis Sayles Multisector Full Discretion (SA)	955,104,213	5.65	11.13	6.04	8.84	8.84	5.41	4.78	4.75	5.55	6.15	07/01/1999
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.11	
Difference			8.23	-0.10	0.10	0.10	0.09	0.48	0.79	1.73	1.04	
Mackay Shields Core+ Extended Discretion (SA)	926,433,591	5.48	8.03	2.84	6.47	6.47	4.44	3.89	3.73	4.78	5.28	11/01/2004
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.38	
Difference			5.13	-3.30	-2.27	-2.27	-0.88	-0.41	-0.23	0.96	0.90	
Lord Abnett Core Plus Full Discretion (SA)	910,468,486	5.39	6.65	1.65	4.18	4.18	3.99	3.80	3.93	4.48	5.23	11/01/2004
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.38	
Difference			3.75	-4.49	-4.56	-4.56	-1.33	-0.50	-0.03	0.66	0.85	
Hoisington Active Duration Long Bonds (SA)	884,092,268	5.23	3.76	30.88	36.84	36.84	15.86	11.32	10.40	9.45	9.17	11/01/2004
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.38	
Difference			0.86	24.74	28.10	28.10	10.54	7.02	6.44	5.63	4.79	
Real Estate	1,202,980,216	7.12	-2.26	-1.56	-1.58	-1.58	4.73	6.98	8.31	N/A	7.87	04/01/2011
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	9.15	
Difference			-1.27	-1.27	-4.27	-4.27	-0.71	0.21	0.05	N/A	-1.28	
L&B Core Income Partners LP	92,027,546	0.54	-12.25	-4.96	-12.48	-12.48	-0.73	4.03	6.20	N/A	5.71	04/01/2011
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	9.03	
Difference			-10.50	-3.95	-13.81	-13.81	-5.45	-2.32	-1.89	N/A	-3.32	
Heitman America Real Estate (CF)	320,352,146	1.90	-1.85	-2.80	-1.06	-1.06	3.73	6.56	8.29	N/A	8.51	05/01/2011
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	9.03	
Difference			-0.10	-1.79	-2.39	-2.39	-0.99	0.21	0.20	N/A	-0.52	
AEW Core Property Trust (CF)	328,043,955	1.94	-1.02	-0.07	2.80	2.80	5.48	7.52	8.47	N/A	8.31	07/01/2011
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	8.77	
Difference			0.73	0.94	1.47	1.47	0.76	1.17	0.38	N/A	-0.46	

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Oklahoma State Pension Commission
Oklahoma Teachers' Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
L&B Gloden Driller (SA)	74,735,022	0.44	-4.14	-4.13	-1.78	-1.78	11.09	7.67	N/A	N/A	5.99	07/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.49	
Difference			-2.39	-3.12	-3.11	-3.11	6.37	1.32	N/A	N/A	-1.50	
GreenOak US II LP	31,634,414	0.19	-5.79	-16.38	-16.76	-16.76	-1.90	1.24	N/A	N/A	1.15	10/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			-4.04	-15.37	-18.09	-18.09	-6.62	-5.11	N/A	N/A	-6.12	
GreenOak US III LP	22,565,423	0.13	-9.23	-2.22	-9.54	-9.54	N/A	N/A	N/A	N/A	-18.87	05/01/2018
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	3.82	
Difference			-7.48	-1.21	-10.87	-10.87	N/A	N/A	N/A	N/A	-22.69	
Lyrical-OTRS Realty Partner IV LP	66,539,641	0.39	2.48	2.48	7.31	7.31	15.62	6.79	N/A	N/A	5.97	11/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			4.23	3.49	5.98	5.98	10.90	0.44	N/A	N/A	-1.30	
Dune Real Estate III LP	52,985,110	0.31	-0.25	-1.07	-4.69	-4.69	7.29	9.64	N/A	N/A	9.28	11/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			1.50	-0.06	-6.02	-6.02	2.57	3.29	N/A	N/A	2.01	
Landmark Real Estate VII LP	13,377,154	0.08	-2.37	-2.37	-2.95	-2.95	1.61	9.72	N/A	N/A	13.49	12/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			-0.62	-1.36	-4.28	-4.28	-3.11	3.37	N/A	N/A	6.22	
American Strategic Value Realty (CF)	72,135,357	0.43	1.56	3.92	7.62	7.62	8.32	9.98	N/A	N/A	9.60	12/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			3.31	4.93	6.29	6.29	3.60	3.63	N/A	N/A	2.33	
Starwood Opportunity X LP	20,507,499	0.12	-3.68	-3.68	0.59	0.59	9.29	N/A	N/A	N/A	12.74	12/01/2015
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	5.94	
Difference			-1.93	-2.67	-0.74	-0.74	4.57	N/A	N/A	N/A	6.80	
Starwood Opportunity XI LP	20,008,953	0.12	2.29	2.29	12.50	12.50	N/A	N/A	N/A	N/A	28.41	07/01/2018
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	3.37	
Difference			4.04	3.30	11.17	11.17	N/A	N/A	N/A	N/A	25.04	
FCP Realty IV LP	12,682,208	0.08	0.25	5.35	-6.87	-6.87	N/A	N/A	N/A	N/A	-24.08	12/01/2018
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	2.77	
Difference			2.00	6.36	-8.20	-8.20	N/A	N/A	N/A	N/A	-26.85	
Harbert European Real Estate V LP	15,272,678	0.09	2.77	6.77	11.02	11.02	N/A	N/A	N/A	N/A	-13.12	12/01/2018
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	2.77	
Difference			4.52	7.78	9.69	9.69	N/A	N/A	N/A	N/A	-15.89	

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Oklahoma State Pension Commission
Oklahoma Teachers' Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Artemis Real Estate III LP	10,514,674	0.06	-2.74	3.76	3.91	3.91	N/A	N/A	N/A	N/A	-14.70	02/01/2019
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	2.21	
Difference			-0.99	4.77	2.58	2.58	N/A	N/A	N/A	N/A	-16.91	
Angelo Gordon Value X LP	16,124,791	0.10	-6.56	-1.73	-22.22	-22.22	N/A	N/A	N/A	N/A	-20.70	06/01/2019
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	1.68	
Difference			-4.81	-0.72	-23.55	-23.55	N/A	N/A	N/A	N/A	-22.38	
Dune Real Estate IV LP	12,492,937	0.07	-2.65	-3.47	N/A	N/A	N/A	N/A	N/A	N/A	-24.14	08/01/2019
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	1.33	
Difference			-0.90	-2.46	N/A	N/A	N/A	N/A	N/A	N/A	-25.47	
Invesco Strategic Opportunity (CF)	13,680,708	0.08	101.55	101.57	N/A	N/A	N/A	N/A	N/A	N/A	101.57	09/01/2019
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	1.33	
Difference			103.30	102.58	N/A	N/A	N/A	N/A	N/A	N/A	100.24	
Harvey Parkway Building (SA)	7,300,000	0.04	-44.36	-44.36	-44.36	-44.36	-151.47	N/A	N/A	N/A	-152.40	06/01/2017
Private Equity	1,608,177,025	9.52	-3.35	-2.18	6.28	6.28	12.54	12.43	14.31	N/A	13.44	12/01/2010
R 2000 Index+4%			26.65	-11.25	-2.89	-2.89	6.09	8.46	11.46	14.92	13.26	
Difference			-30.00	9.07	9.17	9.17	6.45	3.97	2.85	N/A	0.18	
OTRS/Legacy Private Equity LP	11,707,422	0.07	-5.06	-5.06	-5.51	-5.51	-4.46	0.94	3.65	4.61	3.62	10/01/2008
OTRS/Franklin Park Private Equity LP	1,279,420,663	7.57	-0.37	1.26	11.23	11.23	15.72	14.81	15.98	N/A	5.20	06/01/2011
PIMCO COF II LP	89,256,991	0.53	-15.05	-11.30	-8.11	-8.11	3.16	N/A	N/A	N/A	5.23	09/01/2016
PIMCO Bravo LP	594,455	0.00	-51.39	-61.40	-70.56	-70.56	-30.28	-19.60	-9.09	N/A	-1.98	03/01/2011
PIMCO Bravo II LP	53,467,606	0.32	-21.51	-18.28	-16.47	-16.47	-2.70	2.13	6.91	N/A	6.58	03/01/2013
PIMCO Bravo III LP	173,729,888	1.03	-10.55	-15.48	-10.29	-10.29	4.86	N/A	N/A	N/A	3.85	03/01/2017

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Oklahoma State Pension Commission
Oklahoma Teachers' Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OTRS Total Fund	16,897,902,887	100.00	12.54	-4.66	0.85	0.85	5.38	5.69	7.63	9.49	9.68	01/01/1984
OTRS Policy Index			15.80	-3.18	3.23	3.23	5.94	6.15	7.11	8.91	N/A	
Difference			-3.26	-1.48	-2.38	-2.38	-0.56	-0.46	0.52	0.58	N/A	
OTRS Actual Allocation Index			14.94	-1.99	3.74	3.74	6.03	6.16	7.66	9.14	N/A	
Difference			-2.40	-2.67	-2.89	-2.89	-0.65	-0.47	-0.03	0.35	N/A	
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			10.72	-8.34	-6.65	-6.65	-2.12	-1.81	0.13	1.99	2.18	
All Public Plans-Total Fund Median			12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	8.68	
Rank			42	85	84	84	60	57	19	7	1	
US Equity	7,438,192,280	44.02	22.16	-10.53	-3.07	-3.07	5.89	6.86	9.55	12.16	10.29	04/01/1990
S&P 500 Index (Cap Wtd)			20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	9.87	
Difference			1.62	-7.45	-10.58	-10.58	-4.84	-3.87	-2.58	-1.83	0.42	
All Public Plans-US Equity Segment Median			21.87	-4.86	4.26	4.26	8.72	8.91	10.68	13.15	N/A	
Rank			39	94	94	94	89	87	81	84	N/A	
Hotchkis & Wiley Large Cap Value Equity (SA)	110,224	0.00	0.01	-1.54	-1.08	-1.08	4.32	6.37	9.14	12.36	10.17	01/01/1990
Russell 1000 Val Index			14.29	-16.26	-8.84	-8.84	1.82	4.64	7.11	10.41	9.01	
Difference			-14.28	14.72	7.76	7.76	2.50	1.73	2.03	1.95	1.16	
IM U.S. Large Cap Value Equity (SA+CF) Median			16.98	-14.65	-6.61	-6.61	3.16	5.32	7.80	10.96	10.01	
Rank			100	6	23	23	36	35	29	23	42	
Northern Trust Russell 1000 Index (SA)	1,772,829,079	10.49	21.61	-2.99	8.43	8.43	N/A	N/A	N/A	N/A	11.39	11/01/2017
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	9.29	
Difference			-0.21	-0.18	0.95	0.95	N/A	N/A	N/A	N/A	2.10	
IM U.S. Large Cap Equity (SA+CF) Median			20.55	-4.29	5.69	5.69	9.75	9.65	11.65	13.73	8.14	
Rank			41	41	34	34	N/A	N/A	N/A	N/A	29	
SciBeta US High Factor Exposure Index (SA)	2,275,236,990	13.46	17.82	-9.54	-0.39	-0.39	N/A	N/A	N/A	N/A	7.17	11/01/2017
S&P 500 Index (Eq Wtd)			21.73	-10.77	-3.25	-3.25	5.43	7.14	9.67	12.64	4.31	
Difference			-3.91	1.23	2.86	2.86	N/A	N/A	N/A	N/A	2.86	
IM U.S. Large Cap Equity (SA+CF) Median			20.55	-4.29	5.69	5.69	9.75	9.65	11.65	13.73	8.14	
Rank			69	67	66	66	N/A	N/A	N/A	N/A	55	
Hotchkis & Wiley Mid Cap Value Equity (SA)	265,587,899	1.57	25.51	-32.43	-31.50	-31.50	-11.60	-5.41	-0.21	7.08	9.82	01/01/1990
Russell Mid Cap Val Index			19.95	-18.09	-11.81	-11.81	-0.54	3.32	6.55	10.29	10.32	
Difference			5.56	-14.34	-19.69	-19.69	-11.06	-8.73	-6.76	-3.21	-0.50	
IM U.S. Mid Cap Value Equity (SA+CF) Median			19.98	-17.57	-10.36	-10.36	0.42	3.84	7.06	10.63	N/A	
Rank			7	100	100	100	100	100	100	100	N/A	

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Oklahoma State Pension Commission
Oklahoma Teachers' Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Northern Trust Russell Mid Cap Index (CF)	899,364,123	5.32	24.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.38	03/01/2020
Russell Mid Cap Index			24.61	-9.13	-2.24	-2.24	5.79	6.76	9.40	12.35	0.32	
Difference			-0.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.06	
IM U.S. Mid Cap Equity (SA+CF) Median			23.94	-9.35	-2.24	-2.24	4.98	6.25	8.93	12.33	-0.26	
Rank			40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	49	
Wellington Mid Cap Growth (SA)	580,005,429	3.43	33.00	3.03	13.36	13.36	17.12	12.36	14.08	14.65	10.27	08/01/1998
Russell Mid Cap Grth Index			30.26	4.16	11.91	11.91	14.76	11.60	13.24	15.09	8.71	
Difference			2.74	-1.13	1.45	1.45	2.36	0.76	0.84	-0.44	1.56	
IM U.S. Mid Cap Growth Equity (SA+CF) Median			30.39	4.71	11.90	11.90	15.17	11.61	13.69	15.42	10.12	
Rank			32	60	38	38	34	45	44	64	45	
Shapiro Enhanced Small Cap Value Equity (SA)	689,654,028	4.08	23.16	-22.64	-17.86	-17.86	-2.26	3.08	6.79	10.32	8.47	04/01/1998
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	6.35	
Difference			4.25	0.86	-0.38	-0.38	2.09	1.82	2.81	2.50	2.12	
IM U.S. Small Cap Value Equity (SA+CF) Median			21.18	-21.45	-15.08	-15.08	-2.50	1.92	5.30	9.51	8.44	
Rank			35	60	70	70	45	31	22	30	50	
Frontier Small Cap Value Equity (SA)	167,829,675	0.99	23.93	-24.85	-20.04	-20.04	-3.66	2.30	5.46	N/A	4.78	05/01/2013
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	4.26	
Difference			5.02	-1.35	-2.56	-2.56	0.69	1.04	1.48	N/A	0.52	
IM U.S. Small Cap Value Equity (SA+CF) Median			21.18	-21.45	-15.08	-15.08	-2.50	1.92	5.30	9.51	5.64	
Rank			28	79	83	83	61	41	46	N/A	70	
Neumeier Poma Small Cap Value Equity (SA)	224,718,972	1.33	17.12	-14.93	-8.70	-8.70	2.63	6.59	10.13	N/A	10.25	04/01/2013
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	4.19	
Difference			-1.79	8.57	8.78	8.78	6.98	5.33	6.15	N/A	6.06	
IM U.S. Small Cap Value Equity (SA+CF) Median			21.18	-21.45	-15.08	-15.08	-2.50	1.92	5.30	9.51	5.52	
Rank			84	16	18	18	13	8	4	N/A	5	
Geneva US Small Cap Growth Equity (SA)	234,271,189	1.39	30.21	4.70	10.03	10.03	14.52	13.54	14.33	N/A	13.99	05/01/2013
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	10.45	
Difference			-0.37	7.76	6.55	6.55	6.66	6.68	4.30	N/A	3.54	
IM U.S. Small Cap Growth Equity (SA+CF) Median			32.78	1.16	5.99	5.99	12.27	10.20	12.31	15.04	12.83	
Rank			64	43	39	39	41	23	26	N/A	34	
Wasatch Small Cap Core Growth (SA)	328,584,546	1.94	25.18	-1.93	6.70	6.70	7.93	7.47	8.61	N/A	11.90	12/01/2011
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	11.88	
Difference			-5.40	1.13	3.22	3.22	0.07	0.61	-1.42	N/A	0.02	
IM U.S. Small Cap Growth Equity (SA+CF) Median			32.78	1.16	5.99	5.99	12.27	10.20	12.31	15.04	13.98	
Rank			91	61	48	48	72	71	90	N/A	80	

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Oklahoma State Pension Commission
Oklahoma Teachers' Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date	
International Equity	2,692,238,399	15.93	18.52	-10.73	-4.27	-4.27	1.11	2.58	4.47	6.25	5.77	09/01/2001	
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	5.42		
Difference			2.40	0.27	0.53	0.53	-0.02	0.32	0.76	1.28	0.35		
All Public Plans-Intl. Equity Segment Median			17.76	-10.04	-3.05	-3.05	2.08	3.17	4.87	6.52	N/A		
Rank			33	57	64	64	78	77	77	61	N/A		
Causeway International Opportunities (SA)	459,572,956	2.72	18.92	-16.88	-8.86	-8.86	-1.10	0.59	2.98	5.70	6.96	05/01/2003	
MSCI EAFE Index (USD) (Net)			14.88	-11.34	-5.13	-5.13	0.81	2.05	3.93	5.73	6.57		
Difference			4.04	-5.54	-3.73	-3.73	-1.91	-1.46	-0.95	-0.03	0.39		
IM EAFE Value (SA+CF) Median			14.84	-16.61	-9.51	-9.51	-2.14	0.45	3.01	5.93	7.39		
Rank			13	55	48	48	40	45	51	57	67		
Allianz Best Styles AC Intl Equity (SA)	973,182,198	5.76	13.31	-13.64	-7.79	-7.79	-0.20	N/A	N/A	N/A	5.30	06/01/2016	
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	5.14		
Difference			-2.81	-2.64	-2.99	-2.99	-1.33	N/A	N/A	N/A	0.16		
IM International Large Cap Equity (SA+CF) Median			17.01	-9.10	-2.05	-2.05	2.17	3.20	4.94	7.12	5.47		
Rank			87	74	75	75	68	N/A	N/A	N/A	52		
Wellington Intl Quality Growth (SA)	543,243,661	3.21	18.89	-1.96	6.46	6.46	8.88	N/A	N/A	N/A	11.40	06/01/2016	
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	5.14		
Difference			2.77	9.04	11.26	11.26	7.75	N/A	N/A	N/A	6.26		
IM ACWI Ex US Growth (SA+CF) Median			20.11	-2.45	6.44	6.44	6.63	6.24	7.47	8.81	9.20		
Rank			66	44	50	50	18	N/A	N/A	N/A	17		
Advisory Research Intl Small Cap Equity (SA)	818,257	0.00	2.48	0.73	0.06	0.06	-0.92	2.22	4.76	N/A	6.93	12/01/2011	
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.75		
Difference			-13.64	11.73	4.86	4.86	-2.05	-0.04	1.05	N/A	2.18		
IM International Small Cap Core Equity (SA+CF) Median			21.28	-10.92	-2.17	-2.17	1.40	4.36	7.03	9.52	8.92		
Rank			100	11	35	35	74	81	98	N/A	100		
Epoch Intl Small Cap Equity (SA)	402,326	0.00	0.84	-0.28	-0.27	-0.27	0.30	2.33	4.85	N/A	6.53	12/01/2011	
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.75		
Difference			-15.28	10.72	4.53	4.53	-0.83	0.07	1.14	N/A	1.78		
IM International Small Cap Equity (SA+CF) Median			21.41	-12.08	-2.11	-2.11	1.30	3.88	6.64	9.32	8.79		
Rank			100	13	38	38	56	72	80	N/A	92		
Wellington International Small Cap Equity (CF)	232,638,774	1.38	19.34	-16.41	-8.14	-8.14	-4.24	-0.01	3.48	N/A	6.53	12/01/2011	
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.75		
Difference			3.22	-5.41	-3.34	-3.34	-5.37	-2.27	-0.23	N/A	1.78		
IM International Small Cap Equity (SA+CF) Median			21.41	-12.08	-2.11	-2.11	1.30	3.88	6.64	9.32	8.79		
Rank			70	82	81	81	87	91	90	N/A	92		

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Oklahoma State Pension Commission
Oklahoma Teachers' Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Wasatch Small Cap Core Growth (SA)	241,326,469	1.43	34.35	3.23	12.40	12.40	17.23	13.65	14.37	N/A	17.14	12/01/2011
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.75	
Difference			18.23	14.23	17.20	17.20	16.10	11.39	10.66	N/A	12.39	
IM International Small Cap Growth Equity (SA+CF) Median			26.46	-3.18	5.87	5.87	5.16	6.50	7.29	10.13	9.18	
Rank			13	16	19	19	5	6	1	N/A	1	
SSGA Emerging Market Small Cap (CF)	241,040,944	1.43	24.04	-14.39	-10.42	-10.42	-2.72	N/A	N/A	N/A	1.00	08/01/2016
MSCI Emg Mkts Sm Cap Index (USD) (Net)			27.14	-12.74	-8.82	-8.82	-2.95	-1.38	0.96	1.78	0.65	
Difference			-3.10	-1.65	-1.60	-1.60	0.23	N/A	N/A	N/A	0.35	
IM Emerging Markets Equity (SA+CF) Median			19.49	-10.13	-3.56	-3.56	1.28	2.90	3.59	4.77	5.44	
Rank			28	76	77	77	83	N/A	N/A	N/A	88	
Fixed Income	3,676,098,558	21.75	6.13	7.15	10.59	10.59	6.75	5.91	5.68	6.22	6.89	07/01/2000
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.14	
Difference			3.23	1.01	1.85	1.85	1.43	1.61	1.72	2.40	1.75	
Loomis Sayles Multisector Full Discretion (SA)	955,104,213	5.65	11.21	6.18	9.11	9.11	5.63	4.93	4.86	5.63	6.32	07/01/1999
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.11	
Difference			8.31	0.04	0.37	0.37	0.31	0.63	0.90	1.81	1.21	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			5.90	5.29	8.22	8.22	5.50	4.80	4.56	4.90	5.93	
Rank			3	26	27	27	44	40	29	17	26	
Mackay Shields Core+ Extended Discretion (SA)	926,433,591	5.48	8.11	2.96	6.72	6.72	4.67	4.06	3.85	4.86	5.34	11/01/2004
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.38	
Difference			5.21	-3.18	-2.02	-2.02	-0.65	-0.24	-0.11	1.04	0.96	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			5.90	5.29	8.22	8.22	5.50	4.80	4.56	4.90	5.24	
Rank			18	81	74	74	82	87	90	53	43	
Lord Abbett Core Plus Full Discretion (SA)	910,468,486	5.39	6.70	1.75	4.37	4.37	4.16	3.93	4.02	4.55	5.28	11/01/2004
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.38	
Difference			3.80	-4.39	-4.37	-4.37	-1.16	-0.37	0.06	0.73	0.90	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			5.90	5.29	8.22	8.22	5.50	4.80	4.56	4.90	5.24	
Rank			36	86	89	89	88	90	87	73	50	
Hoisington Active Duration Long Bonds (SA)	884,092,268	5.23	-1.58	24.17	29.89	29.89	13.93	10.23	9.63	8.92	8.70	11/01/2004
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.38	
Difference			-4.48	18.03	21.15	21.15	8.61	5.93	5.67	5.10	4.32	
IM U.S. Long Duration (SA+CF) Median			7.93	11.87	18.62	18.62	10.42	9.40	8.53	8.41	7.89	
Rank			100	1	1	1	1	5	4	21	10	

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Oklahoma State Pension Commission
Oklahoma Teachers' Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Estate	1,202,980,216	7.12	-2.25	-1.48	-1.43	-1.43	4.99	7.22	8.48	N/A	8.00	04/01/2011
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	9.15	
Difference			-1.26	-1.19	-4.12	-4.12	-0.45	0.45	0.22	N/A	-1.15	
L&B Core Income Partners LP	92,027,546	0.54	-12.25	-4.96	-12.48	-12.48	-0.65	4.13	6.27	N/A	5.77	04/01/2011
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	9.03	
Difference			-10.50	-3.95	-13.81	-13.81	-5.37	-2.22	-1.82	N/A	-3.26	
Heitman America Real Estate (CF)	320,352,146	1.90	-1.85	-2.63	-0.70	-0.70	4.41	7.20	8.75	N/A	8.86	05/01/2011
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	9.03	
Difference			-0.10	-1.62	-2.03	-2.03	-0.31	0.85	0.66	N/A	-0.17	
AEW Core Property Trust (CF)	328,043,955	1.94	-1.02	-0.07	2.80	2.80	5.48	7.52	8.47	N/A	8.31	07/01/2011
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	8.77	
Difference			0.73	0.94	1.47	1.47	0.76	1.17	0.38	N/A	-0.46	
L&B Gloden Driller (SA)	74,735,022	0.44	-4.14	-4.13	-1.78	-1.78	11.09	7.67	N/A	N/A	5.99	07/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.49	
Difference			-2.39	-3.12	-3.11	-3.11	6.37	1.32	N/A	N/A	-1.50	
GreenOak US II LP	31,634,414	0.19	-5.79	-16.38	-16.76	-16.76	-1.90	1.24	N/A	N/A	1.15	10/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			-4.04	-15.37	-18.09	-18.09	-6.62	-5.11	N/A	N/A	-6.12	
GreenOak US III LP	22,565,423	0.13	-9.23	-2.22	-9.54	-9.54	N/A	N/A	N/A	N/A	-18.87	05/01/2018
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	3.82	
Difference			-7.48	-1.21	-10.87	-10.87	N/A	N/A	N/A	N/A	-22.69	
Lyrical-OTRS Realty Partner IV LP	66,539,641	0.39	2.48	2.48	7.31	7.31	15.62	6.79	N/A	N/A	5.97	11/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			4.23	3.49	5.98	5.98	10.90	0.44	N/A	N/A	-1.30	
Dune Real Estate III LP	52,985,110	0.31	-0.25	-1.07	-4.69	-4.69	7.29	9.64	N/A	N/A	9.28	11/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			1.50	-0.06	-6.02	-6.02	2.57	3.29	N/A	N/A	2.01	
Landmark Real Estate VII LP	13,377,154	0.08	-2.37	-2.37	-2.95	-2.95	1.61	9.72	N/A	N/A	13.49	12/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			-0.62	-1.36	-4.28	-4.28	-3.11	3.37	N/A	N/A	6.22	
American Strategic Value Realty (CF)	72,135,357	0.43	1.83	4.50	8.86	8.86	9.56	11.05	N/A	N/A	10.55	12/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			3.58	5.51	7.53	7.53	4.84	4.70	N/A	N/A	3.28	

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Oklahoma Teachers' Retirement System
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As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Starwood Opportunity X LP	20,507,499	0.12	-3.68	-3.68	0.59	0.59	9.29	N/A	N/A	N/A	12.74	12/01/2015
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	5.94	
Difference			-1.93	-2.67	-0.74	-0.74	4.57	N/A	N/A	N/A	6.80	
Starwood Opportunity XI LP	20,008,953	0.12	2.29	2.29	12.50	12.50	N/A	N/A	N/A	N/A	28.41	07/01/2018
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	3.37	
Difference			4.04	3.30	11.17	11.17	N/A	N/A	N/A	N/A	25.04	
FCP Realty IV LP	12,682,208	0.08	0.25	5.35	-6.87	-6.87	N/A	N/A	N/A	N/A	-24.08	12/01/2018
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	2.77	
Difference			2.00	6.36	-8.20	-8.20	N/A	N/A	N/A	N/A	-26.85	
Harbert European Real Estate V LP	15,272,678	0.09	2.77	6.77	11.02	11.02	N/A	N/A	N/A	N/A	-13.12	12/01/2018
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	2.77	
Difference			4.52	7.78	9.69	9.69	N/A	N/A	N/A	N/A	-15.89	
Artemis Real Estate III LP	10,514,674	0.06	-2.74	3.76	3.91	3.91	N/A	N/A	N/A	N/A	-14.70	02/01/2019
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	2.21	
Difference			-0.99	4.77	2.58	2.58	N/A	N/A	N/A	N/A	-16.91	
Angelo Gordon Value X LP	16,124,791	0.10	-6.56	-1.73	-22.22	-22.22	N/A	N/A	N/A	N/A	-20.70	06/01/2019
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	1.68	
Difference			-4.81	-0.72	-23.55	-23.55	N/A	N/A	N/A	N/A	-22.38	
Dune Real Estate IV LP	12,492,937	0.07	-2.65	-3.47	N/A	N/A	N/A	N/A	N/A	N/A	-24.14	08/01/2019
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	1.33	
Difference			-0.90	-2.46	N/A	N/A	N/A	N/A	N/A	N/A	-25.47	
Invesco Strategic Opportunity (CF)	13,680,708	0.08	101.55	101.57	N/A	N/A	N/A	N/A	N/A	N/A	101.57	09/01/2019
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	1.33	
Difference			103.30	102.58	N/A	N/A	N/A	N/A	N/A	N/A	100.24	
Harvey Parkway Building (SA)	7,300,000	0.04	-44.36	-44.36	-44.36	-44.36	-16.79	N/A	N/A	N/A	-16.38	06/01/2017

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Teachers' Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

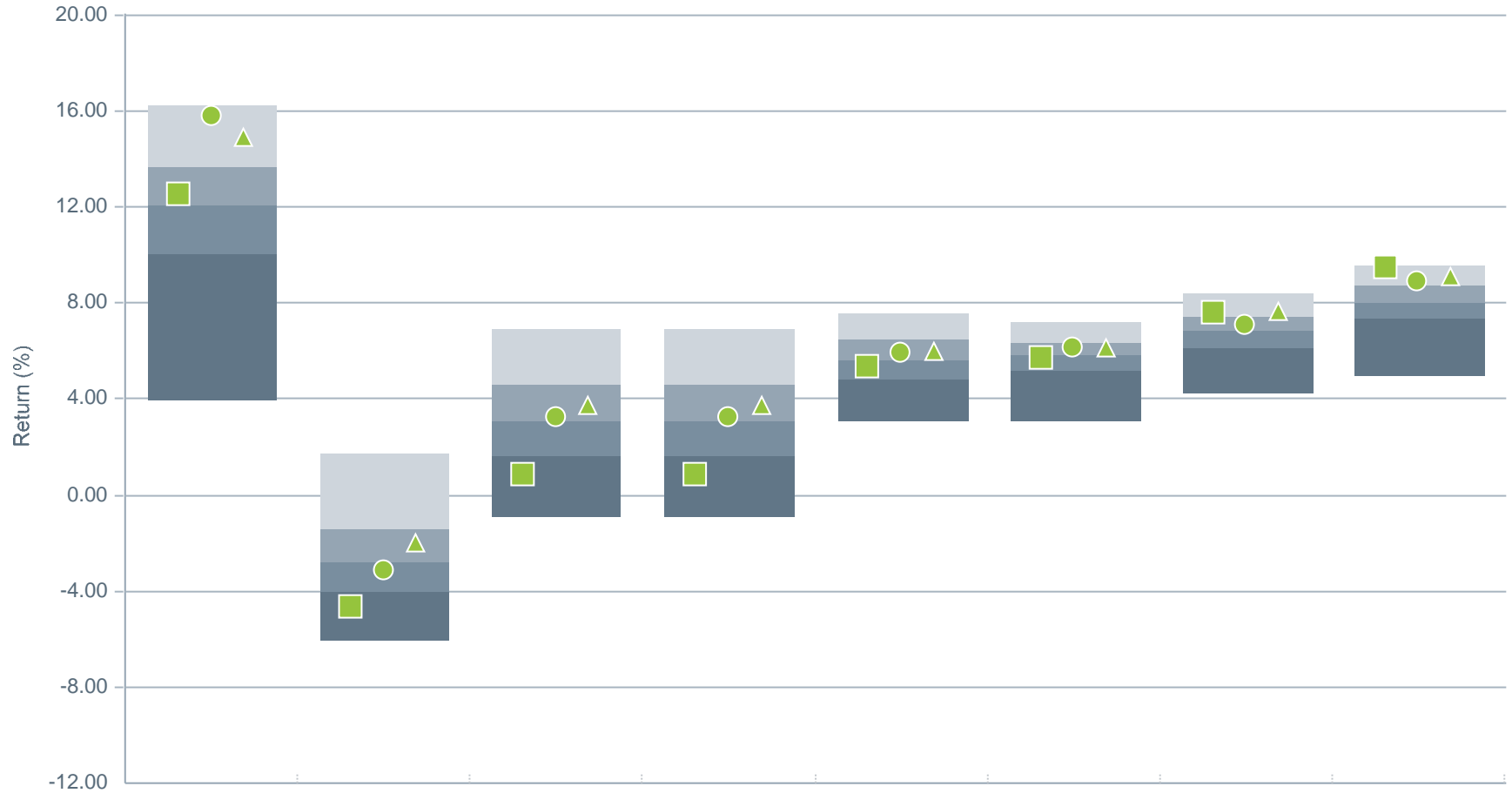
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Private Equity	1,608,177,025	9.52	-3.35	-2.18	6.28	6.28	12.54	12.43	14.31	N/A	13.44	12/01/2010
R 2000 Index+4%			26.65	-11.25	-2.89	-2.89	6.09	8.46	11.46	14.92	13.26	
Difference			-30.00	9.07	9.17	9.17	6.45	3.97	2.85	N/A	0.18	
OTRS/Legacy Private Equity LP	11,707,422	0.07	-5.06	-5.06	-5.51	-5.51	-4.46	0.94	3.65	4.61	3.62	10/01/2008
OTRS/Franklin Park Private Equity LP	1,279,420,663	7.57	-0.37	1.26	11.23	11.23	15.72	14.81	15.98	N/A	5.20	06/01/2011
PIMCO COF II LP	89,256,991	0.53	-15.05	-11.30	-8.11	-8.11	3.16	N/A	N/A	N/A	5.23	09/01/2016
PIMCO Bravo LP	594,455	0.00	-51.39	-61.40	-70.56	-70.56	-30.28	-19.60	-9.09	N/A	-1.98	03/01/2011
PIMCO Bravo II LP	53,467,606	0.32	-21.51	-18.28	-16.47	-16.47	-2.70	2.13	6.91	N/A	6.58	03/01/2013
PIMCO Bravo III LP	173,729,888	1.03	10.55	4.46	10.87	10.87	12.53	N/A	N/A	N/A	10.66	03/01/2017

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 Oklahoma Teachers' Retirement System vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

As of June 30, 2020



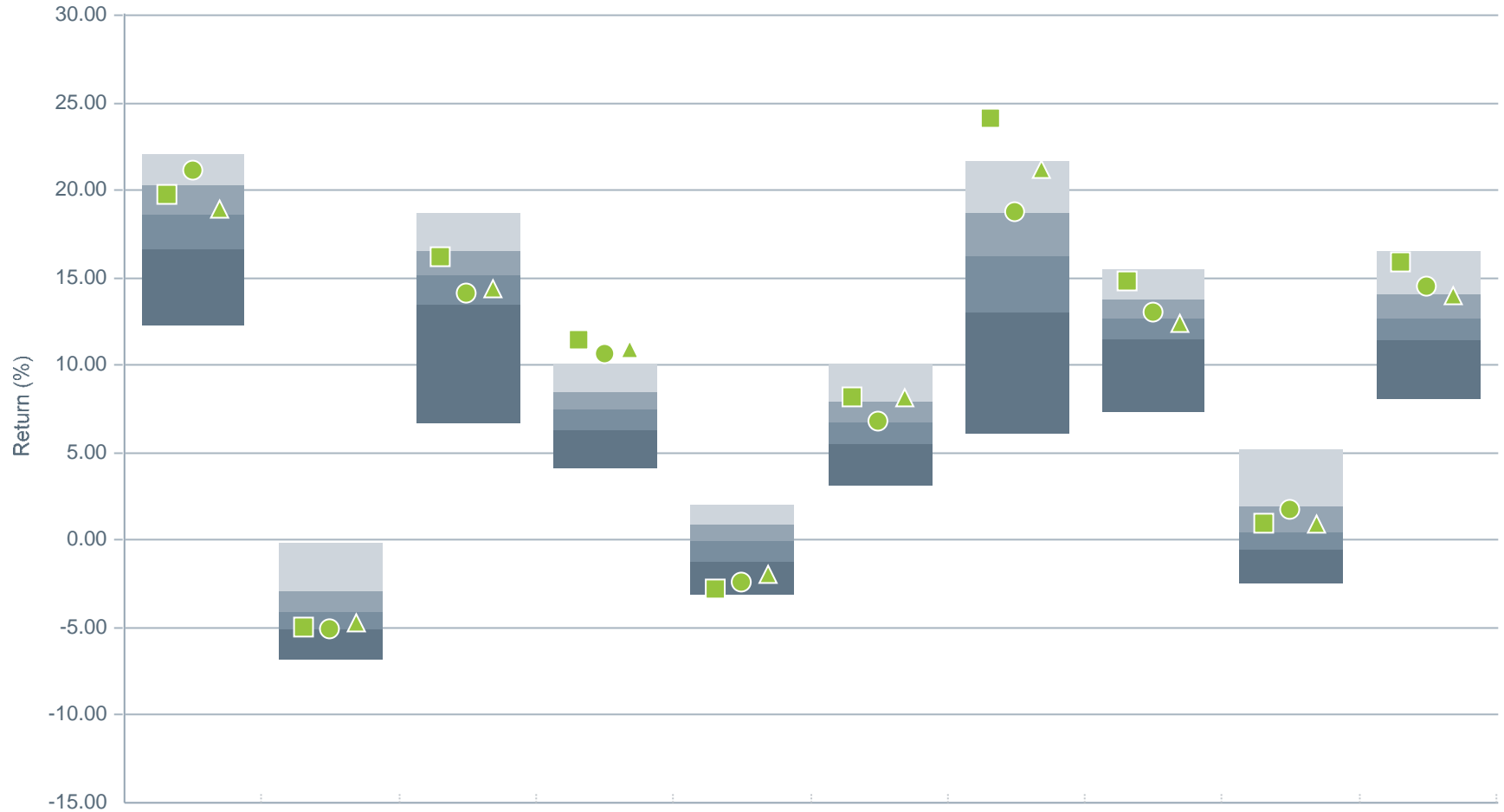
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OTRS Total Fund	12.54 (42)	-4.66 (85)	0.85 (84)	0.85 (84)	5.38 (60)	5.69 (57)	7.63 (19)	9.49 (7)
● OTRS Policy Index	15.80 (7)	-3.18 (59)	3.23 (48)	3.23 (48)	5.94 (41)	6.15 (38)	7.11 (39)	8.91 (19)
▲ OTRS Allocation Index	14.94 (11)	-1.99 (37)	3.74 (41)	3.74 (41)	6.03 (39)	6.16 (37)	7.66 (18)	9.14 (14)
5th Percentile	16.24	1.72	6.92	6.92	7.58	7.27	8.39	9.57
1st Quartile	13.69	-1.37	4.60	4.60	6.52	6.39	7.45	8.75
Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03
3rd Quartile	10.05	-4.03	1.63	1.63	4.84	5.22	6.14	7.36
95th Percentile	3.97	-6.07	-0.88	-0.88	3.12	3.11	4.27	4.96

Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.
 Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 Oklahoma Teachers' Retirement System vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

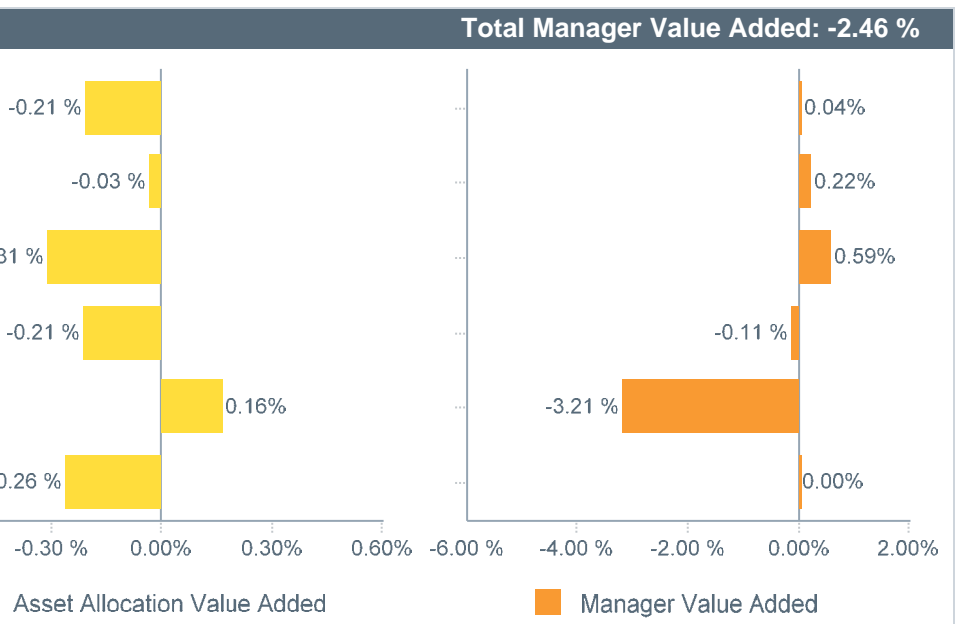
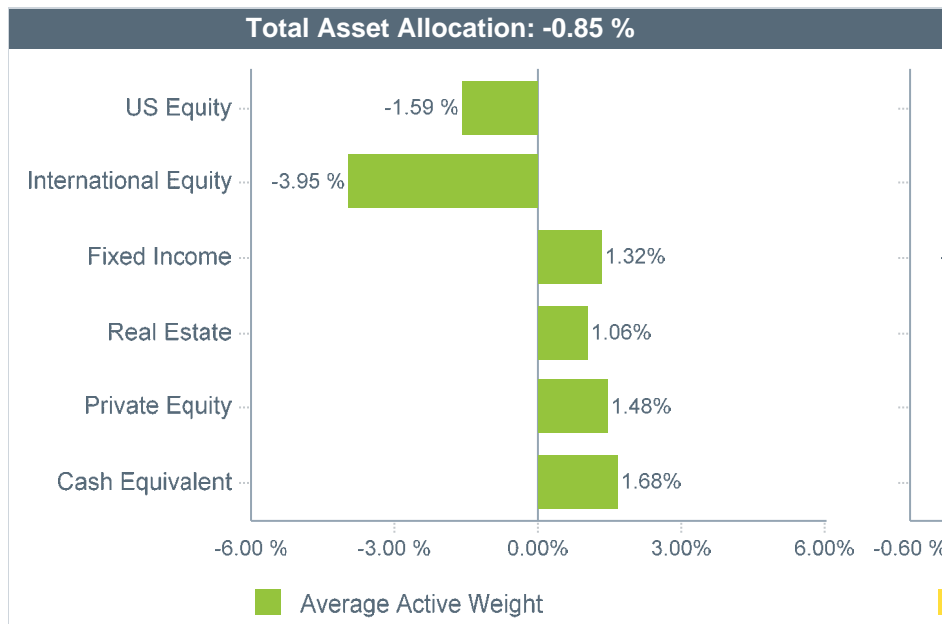
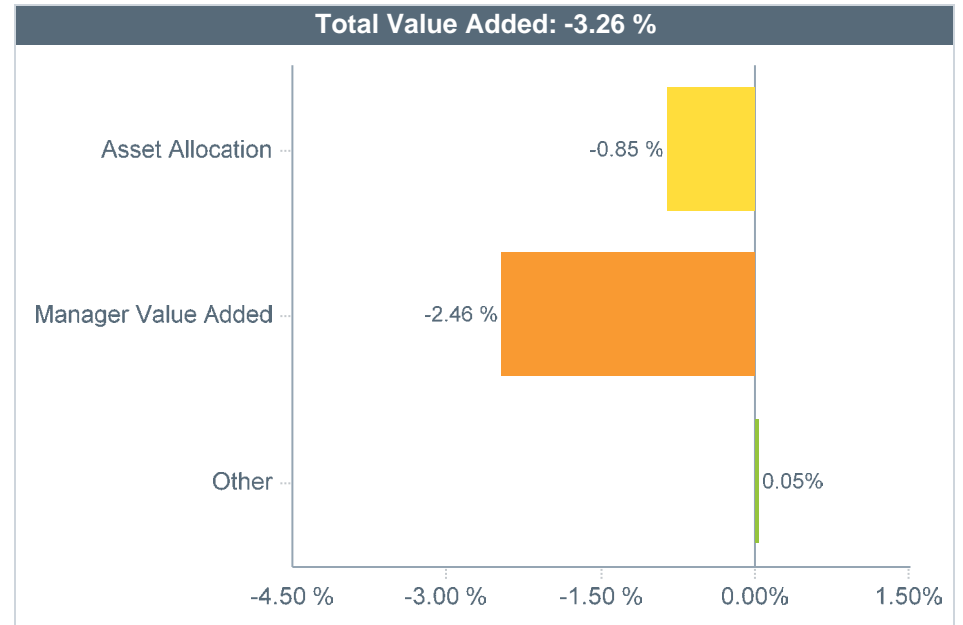
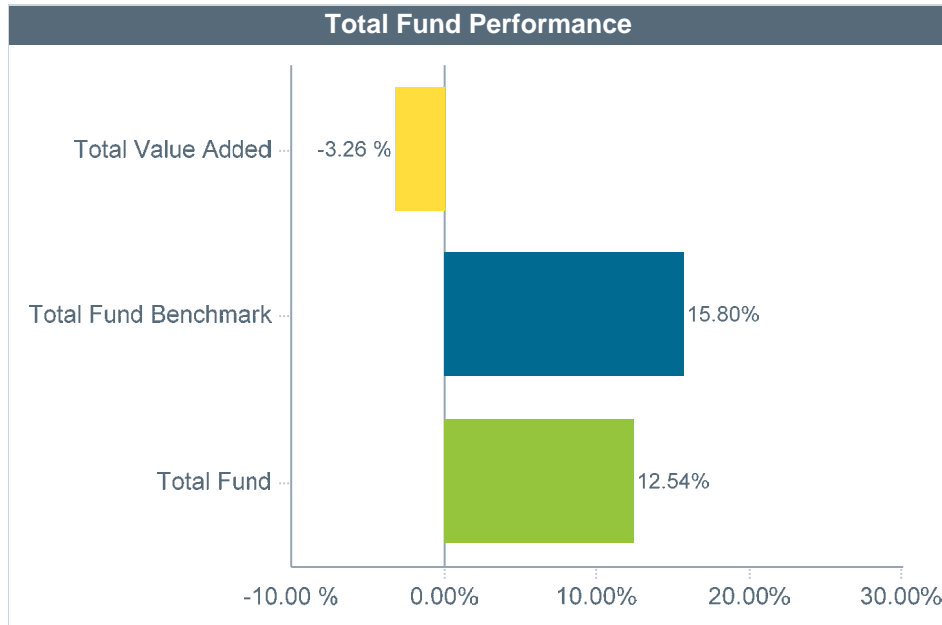
As of June 30, 2020



	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OTRS Total Fund	19.75 (33)	-5.03 (73)	16.16 (32)	11.39 (2)	-2.88 (94)	8.12 (21)	24.05 (2)	14.74 (11)	0.89 (42)	15.88 (9)
● OTRS Policy Index	21.09 (15)	-5.12 (75)	14.05 (68)	10.61 (4)	-2.49 (91)	6.73 (51)	18.69 (26)	12.95 (44)	1.73 (28)	14.44 (19)
▲ OTRS Allocation Index	18.94 (45)	-4.70 (63)	14.35 (64)	10.93 (3)	-1.95 (85)	8.15 (20)	21.24 (7)	12.44 (56)	0.88 (42)	13.99 (27)
5th Percentile	22.10	-0.14	18.72	9.98	2.06	10.06	21.67	15.42	5.20	16.52
1st Quartile	20.27	-2.96	16.59	8.39	0.92	7.93	18.70	13.82	1.93	14.05
Median	18.59	-4.15	15.21	7.42	-0.08	6.74	16.28	12.73	0.48	12.68
3rd Quartile	16.66	-5.14	13.46	6.27	-1.20	5.45	13.03	11.49	-0.57	11.44
95th Percentile	12.27	-6.74	6.66	4.12	-3.18	3.05	6.05	7.32	-2.40	8.02

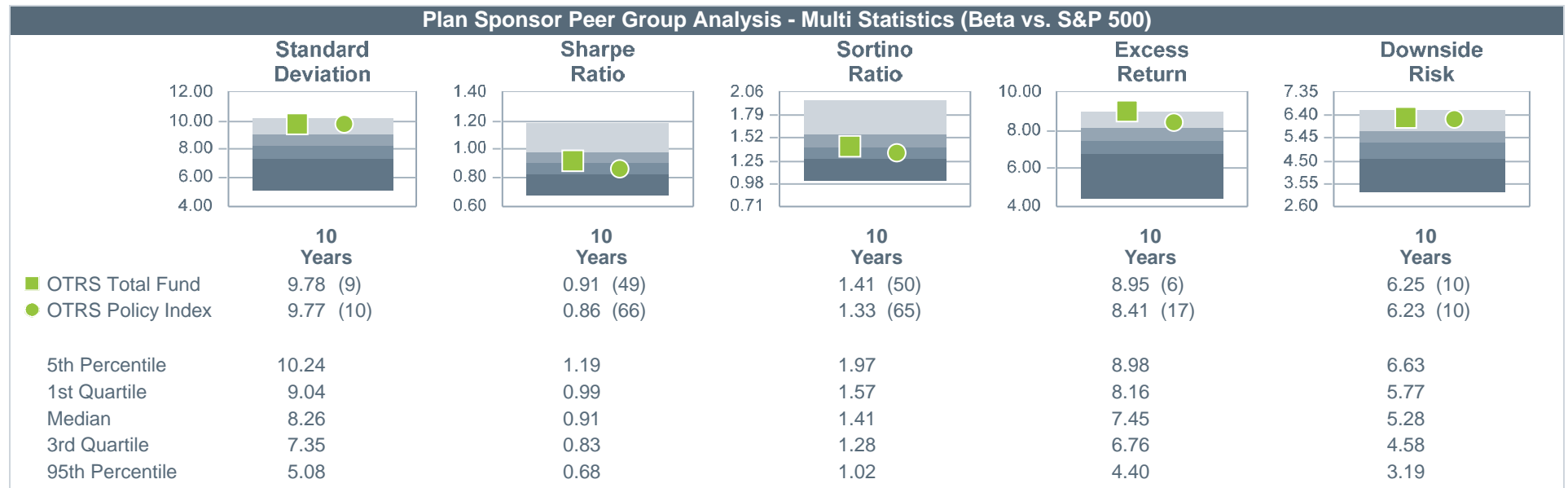
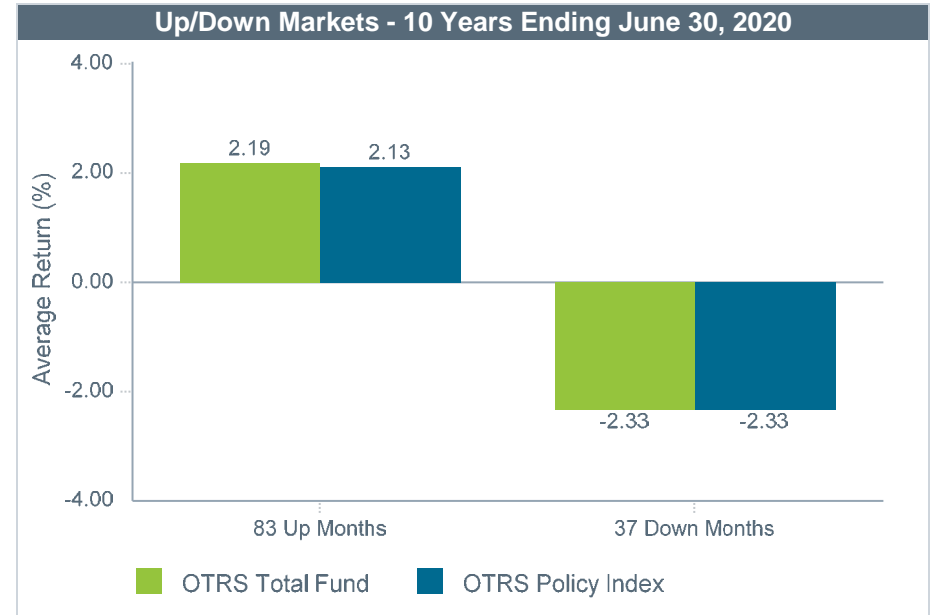
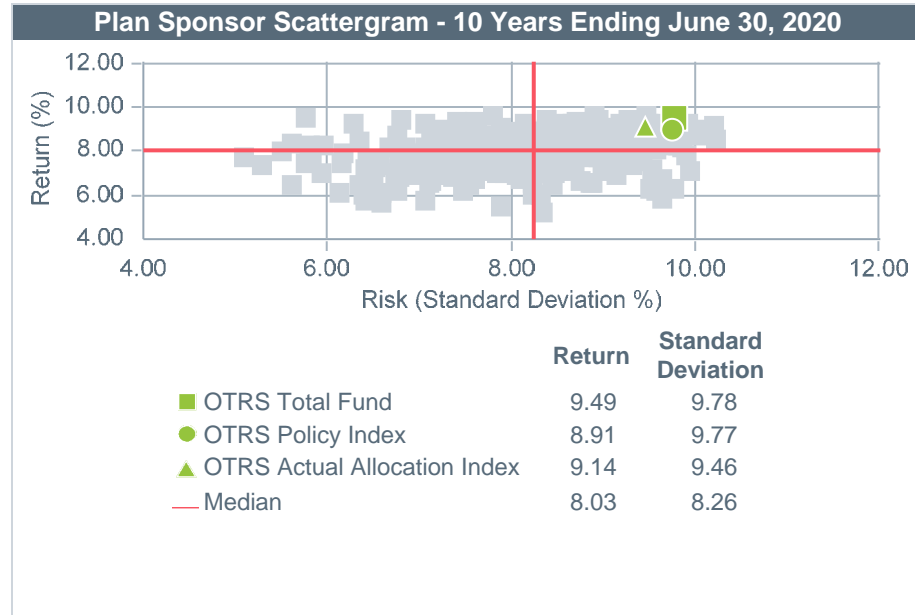
Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



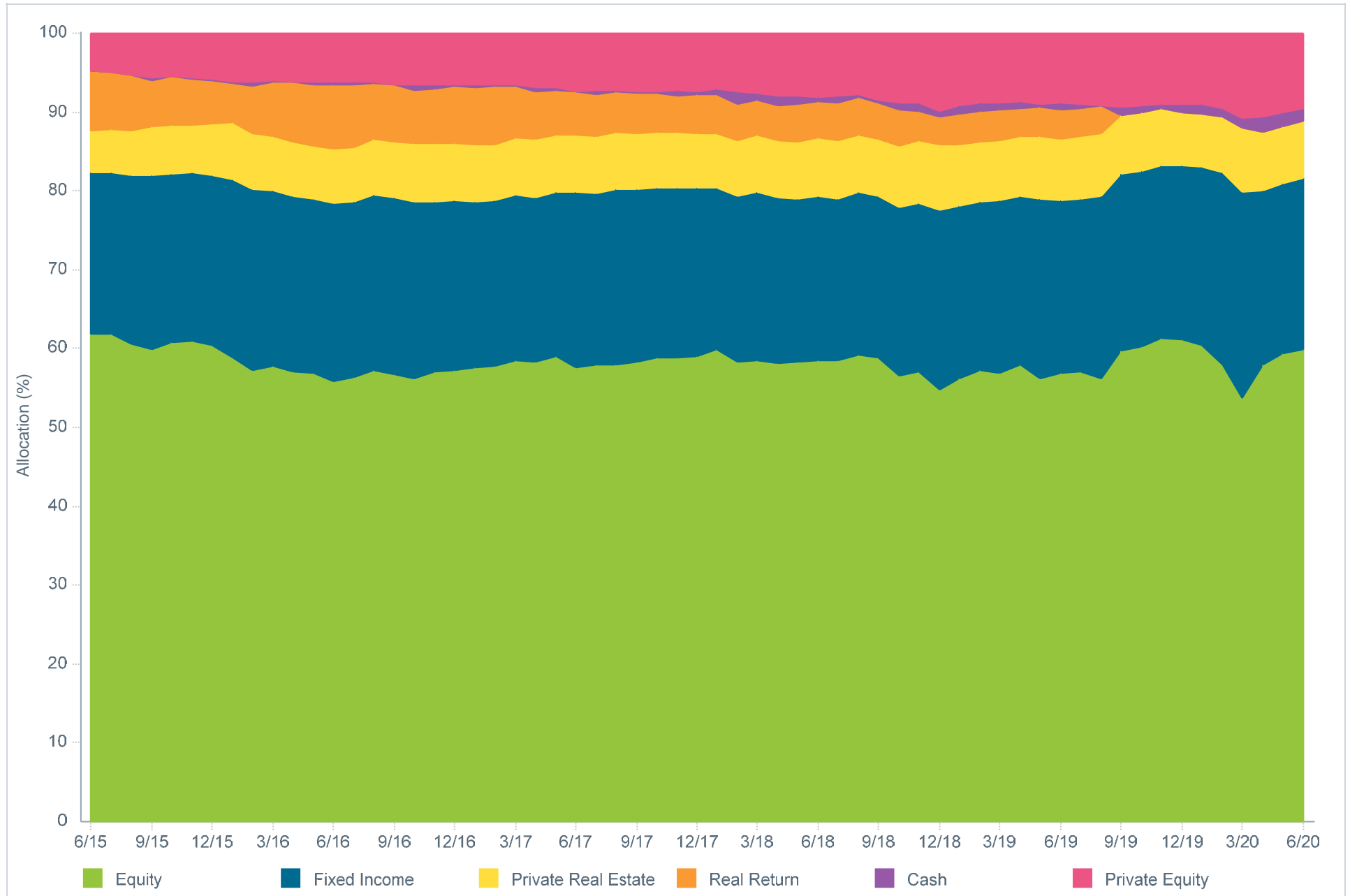


Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation. Allocation to Private Equity includes Private Credit.

Total Fund Risk & Return, Up/Down Markets, and Multi Statistics



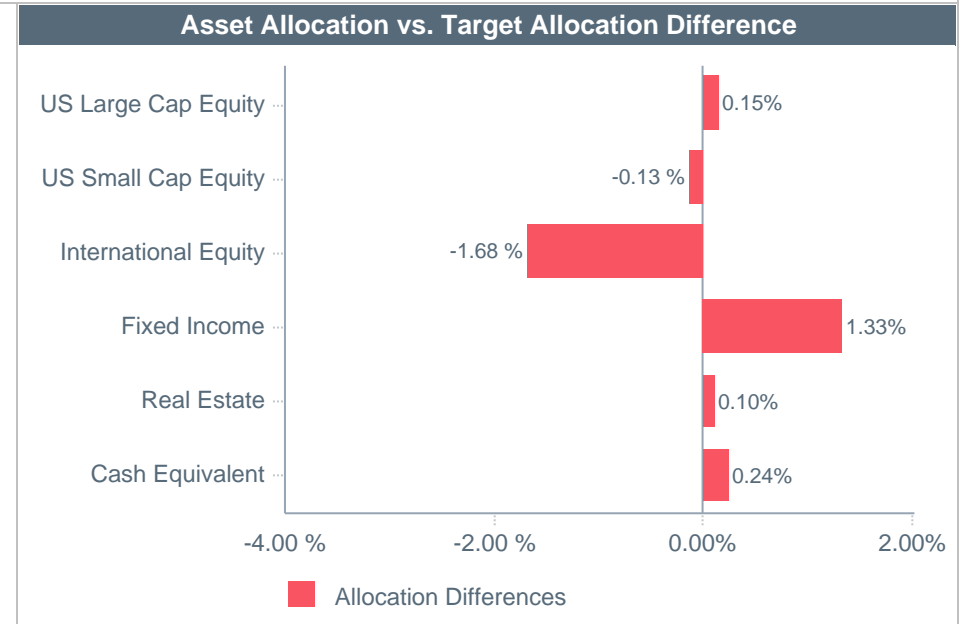
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



Oklahoma Public Employees Retirement System (OPERS)

	Performance (%)												
	Trailing							Calendar Year					
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OPERS Total Fund (Net)	14.05	-2.09	4.58	4.58	6.25	6.27	7.43	8.64	21.18	-6.60	16.98	7.64	-0.77
OPERS Policy Index	14.18	-2.06	4.72	4.72	6.50	6.55	7.46	8.57	21.46	-6.09	16.86	8.12	-0.89
Difference	-0.13	-0.03	-0.14	-0.14	-0.25	-0.28	-0.03	0.07	-0.28	-0.51	0.12	-0.48	0.12
OPERS Actual Allocation Index	13.37	-2.56	4.07	4.07	5.98	6.23	7.24	8.28	20.87	-6.49	16.51	8.09	-0.94
Difference	0.68	0.47	0.51	0.51	0.27	0.04	0.19	0.36	0.31	-0.11	0.47	-0.45	0.17
Actuarial Discount Rate (7.0%)	1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Difference	12.34	-5.53	-2.42	-2.42	-0.75	-0.73	0.43	1.64	14.18	-13.60	9.98	0.64	-7.77
OPERS Total Fund (Gross)	14.07	-2.06	4.71	4.71	6.36	6.36	7.49	8.71	21.34	-6.51	17.11	7.67	-0.77
OPERS Policy Index	14.18	-2.06	4.72	4.72	6.50	6.55	7.46	8.57	21.46	-6.09	16.86	8.12	-0.89
Difference	-0.11	0.00	-0.01	-0.01	-0.14	-0.19	0.03	0.14	-0.12	-0.42	0.25	-0.45	0.12
OPERS Actual Allocation Index	13.37	-2.56	4.07	4.07	5.98	6.23	7.24	8.28	20.87	-6.49	16.51	8.09	-0.94
Difference	0.70	0.50	0.64	0.64	0.38	0.13	0.25	0.43	0.47	-0.02	0.60	-0.42	0.17
All Public Plans-Total Fund Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	18.59	-4.15	15.21	7.42	-0.08
Rank	20	38	24	24	29	27	23	26	12	93	16	42	66

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OPERS (Public Employees)	10,082,562,274	100.00	100.00
US Large Cap Equity	3,442,917,607	34.15	34.00
US Small Cap Equity	591,424,525	5.87	6.00
International Equity	2,653,877,564	26.32	28.00
Fixed Income	3,360,355,456	33.33	32.00
Real Estate	10,160,000	0.10	0.00
Cash Equivalent	23,827,121	0.24	0.00



Parentheses contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding. Please see the Addendum for custom index definitions and additional Oklahoma State Pension Commission fiscal year begins on 07/01.

Oklahoma State Pension Commission
Oklahoma Public Employees Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OPERS Total Fund	10,082,562,274	100.00	14.05	-2.09	4.58	4.58	6.25	6.27	7.43	8.64	7.24	06/01/1985
OPERS Policy Index			14.18	-2.06	4.72	4.72	6.50	6.55	7.46	8.57	9.04	
Difference			-0.13	-0.03	-0.14	-0.14	-0.25	-0.28	-0.03	0.07	-1.80	
OPERS Actual Allocation Index			13.37	-2.56	4.07	4.07	5.98	6.23	7.24	8.28	8.61	
Difference			0.68	0.47	0.51	0.51	0.27	0.04	0.19	0.36	-1.37	
Actuarial Discount Rate (7.0%)			1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			12.34	-5.53	-2.42	-2.42	-0.75	-0.73	0.43	1.64	0.24	
US Equity	4,034,342,132	40.01	23.00	-4.52	4.36	4.36	8.86	8.97	11.01	13.35	4.27	09/01/1988
OPERS US Equity Custom Index			22.27	-4.08	5.68	5.68	9.58	9.73	11.46	13.57	10.41	
Difference			0.73	-0.44	-1.32	-1.32	-0.72	-0.76	-0.45	-0.22	-6.14	
AJO Large Cap Absolute Value Equity (SA)	266,924,286	2.65	15.83	-17.73	-12.55	-12.55	-0.04	1.94	5.72	9.78	7.25	10/01/2003
Russell 1000 Val Index			14.29	-16.26	-8.84	-8.84	1.82	4.64	7.11	10.41	7.50	
Difference			1.54	-1.47	-3.71	-3.71	-1.86	-2.70	-1.39	-0.63	-0.25	
Mellon EB DV Large Cap Stock Index (SA)	577,003,342	5.72	22.35	-3.46	5.08	5.08	7.77	8.03	10.30	13.23	8.09	06/01/2004
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	8.92	
Difference			0.53	-0.65	-2.40	-2.40	-2.87	-2.44	-1.73	-0.74	-0.83	
Blackrock Russell 1000 Index (SA)	1,699,762,780	16.86	21.83	-2.77	7.54	7.54	10.66	10.49	12.05	13.85	9.84	01/01/2003
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	9.89	
Difference			0.01	0.04	0.06	0.06	0.02	0.02	0.02	-0.12	-0.05	
State Street Large Cap Enhanced Index (SA)	566,058,520	5.61	20.63	-4.86	5.63	5.63	9.56	9.83	11.86	14.06	8.70	09/01/2004
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	9.15	
Difference			-1.19	-2.05	-1.85	-1.85	-1.08	-0.64	-0.17	0.09	-0.45	
Westfield Large Cap Growth Equity (CF)	333,168,680	3.30	26.96	8.69	21.38	21.38	17.88	N/A	N/A	N/A	19.34	01/01/2017
Russell 1000 Grth Index			27.84	9.81	23.28	23.28	18.99	15.89	16.62	17.23	20.50	
Difference			-0.88	-1.12	-1.90	-1.90	-1.11	N/A	N/A	N/A	-1.16	
BHMS Small Cap Value Equity (SA)	190,749,635	1.89	28.41	-14.65	-6.87	-6.87	0.02	3.43	6.44	10.65	8.48	12/01/2004
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	5.00	
Difference			9.50	8.85	10.61	10.61	4.37	2.17	2.46	2.83	3.48	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Public Employees Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
UBS US Small Cap Growth Equity (SA)	231,593,721	2.30	41.75	9.33	10.05	10.05	14.59	9.15	12.37	15.82	10.89	06/01/2003
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	9.86	
Difference			11.17	12.39	6.57	6.57	6.73	2.29	2.34	2.90	1.03	
DePrince Race & Zollo Micro Cap Value (SA)	169,081,170	1.68	21.66	-22.88	-18.03	-18.03	-1.64	2.08	4.86	N/A	6.61	01/01/2011
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	5.60	
Difference			2.75	0.62	-0.55	-0.55	2.71	0.82	0.88	N/A	1.01	
International Equity	2,653,877,564	26.32	16.77	-10.30	-3.31	-3.31	1.81	2.94	4.26	5.62	3.22	04/01/1994
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	N/A	
Difference			0.65	0.70	1.49	1.49	0.68	0.68	0.55	0.65	N/A	
Blackrock ACWI Ex US Index (CF)	1,385,479,591	13.74	16.24	-10.85	-4.59	-4.59	1.40	2.51	3.95	5.22	4.21	10/01/2009
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	3.84	
Difference			0.12	0.15	0.21	0.21	0.27	0.25	0.24	0.25	0.37	
Baile Gifford International Growth Equity (CF)	400,410,942	3.97	26.40	1.77	13.45	13.45	7.58	7.54	N/A	N/A	6.80	09/01/2013
MSCI ACW Ex US Grth Index (USD) (Net)			19.11	-2.62	5.80	5.80	6.07	5.61	6.32	7.04	6.15	
Difference			7.29	4.39	7.65	7.65	1.51	1.93	N/A	N/A	0.65	
Blackrock ACWI Ex US Growth (CF)	335,223,352	3.32	17.58	-5.81	1.38	1.38	4.67	4.77	5.59	6.55	5.67	10/01/2009
MSCI ACW Ex US Grth Index (USD) (Net)			19.11	-2.62	5.80	5.80	6.07	5.61	6.32	7.04	6.04	
Difference			-1.53	-3.19	-4.42	-4.42	-1.40	-0.84	-0.73	-0.49	-0.37	
Mondrian ACWI ex US Equity (SA)	532,763,679	5.28	11.16	-18.70	-12.56	-12.56	-2.41	-0.04	2.11	4.33	5.68	08/01/2001
MSCI ACW Ex US Val Index (USD) (Net)			12.76	-19.43	-15.26	-15.26	-3.95	-1.25	0.94	2.79	4.41	
Difference			-1.60	0.73	2.70	2.70	1.54	1.21	1.17	1.54	1.27	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Public Employees Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income	3,360,355,456	33.33	3.45	8.60	11.64	11.64	6.61	5.19	4.77	4.78	3.82	04/01/1989
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	6.29	
Difference			0.55	2.46	2.90	2.90	1.29	0.89	0.81	0.96	-2.47	
Blackrock Constrained Core Fixed Income (SA)	1,611,160,281	15.98	4.11	6.70	9.49	9.49	5.65	4.61	4.26	4.16	5.33	06/01/2000
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.22	
Difference			1.21	0.56	0.75	0.75	0.33	0.31	0.30	0.34	0.11	
MetWest Core Plus Fixed Income (SA)	1,014,732,455	10.06	4.15	6.97	9.68	9.68	6.01	4.69	4.36	4.68	5.89	09/01/2001
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.68	
Difference			1.25	0.83	0.94	0.94	0.69	0.39	0.40	0.86	1.21	
Hoisington Long Duration Fixed Income (SA)	382,220,740	3.79	-1.55	23.63	29.11	29.11	13.55	10.12	9.67	8.82	6.02	10/01/1991
Bloomberg US Trsy Lng Trm Bond Index			0.25	21.20	25.40	25.40	12.04	9.26	8.40	7.74	8.17	
Difference			-1.80	2.43	3.71	3.71	1.51	0.86	1.27	1.08	-2.15	
Blackrock TIPS (SA)	352,241,980	3.49	4.42	6.12	8.42	8.42	5.19	3.92	3.20	3.64	3.84	03/01/2010
Bloomberg US Trsy US TIPS Index			4.24	6.01	8.28	8.28	5.05	3.75	3.05	3.52	3.79	
Difference			0.18	0.11	0.14	0.14	0.14	0.17	0.15	0.12	0.05	
Real Estate	10,160,000	0.10	-11.60	-10.16	-6.33	-6.33	-4.47	-0.87	N/A	N/A	-0.73	07/01/2014
NCREIF ODCE Index (EWA) (Net)			-1.47	-0.77	1.70	1.70	5.09	6.72	8.34	9.95	7.85	
Difference			-10.13	-9.39	-8.03	-8.03	-9.56	-7.59	N/A	N/A	-8.58	
Grand Centre (CF)	10,160,000	0.10	-11.60	-10.16	-6.33	-6.33	-4.47	N/A	N/A	N/A	-0.95	12/01/2015
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	5.94	
Difference			-9.85	-9.15	-7.66	-7.66	-9.19	N/A	N/A	N/A	-6.89	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Public Employees Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OPERS Total Fund	10,082,562,274	100.00	14.07	-2.06	4.71	4.71	6.36	6.36	7.49	8.71	8.96	06/01/1985
OPERS Policy Index			14.18	-2.06	4.72	4.72	6.50	6.55	7.46	8.57	9.04	
Difference			-0.11	0.00	-0.01	-0.01	-0.14	-0.19	0.03	0.14	-0.08	
OPERS Actual Allocation Index			13.37	-2.56	4.07	4.07	5.98	6.23	7.24	8.28	8.61	
Difference			0.70	0.50	0.64	0.64	0.38	0.13	0.25	0.43	0.35	
Actuarial Discount Rate (7.0%)			1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			12.36	-5.50	-2.29	-2.29	-0.64	-0.64	0.49	1.71	1.96	
All Public Plans-Total Fund Median			12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	8.60	
Rank			20	38	24	24	29	27	23	26	21	
US Equity	4,034,342,132	40.01	23.01	-4.50	4.55	4.55	8.98	9.09	11.12	13.45	9.98	09/01/1988
OPERS US Equity Custom Index			22.27	-4.08	5.68	5.68	9.58	9.73	11.46	13.57	10.41	
Difference			0.74	-0.42	-1.13	-1.13	-0.60	-0.64	-0.34	-0.12	-0.43	
All Public Plans-US Equity Segment Median			21.87	-4.86	4.26	4.26	8.72	8.91	10.68	13.15	N/A	
Rank			29	40	42	42	44	42	36	38	N/A	
AJO Large Cap Absolute Value Equity (SA)	266,924,286	2.65	15.83	-17.73	-12.55	-12.55	-0.03	2.03	5.81	9.86	7.30	10/01/2003
Russell 1000 Val Index			14.29	-16.26	-8.84	-8.84	1.82	4.64	7.11	10.41	7.50	
Difference			1.54	-1.47	-3.71	-3.71	-1.85	-2.61	-1.30	-0.55	-0.20	
IM U.S. Large Cap Value Equity (SA+CF) Median			16.98	-14.65	-6.61	-6.61	3.16	5.32	7.80	10.96	8.45	
Rank			61	78	90	90	82	93	88	82	87	
Mellon EB DV Large Cap Stock Index (SA)	577,003,342	5.72	22.35	-3.46	5.08	5.08	7.79	8.04	10.32	13.25	8.12	06/01/2004
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	8.92	
Difference			0.53	-0.65	-2.40	-2.40	-2.85	-2.43	-1.71	-0.72	-0.80	
IM U.S. Large Cap Core Equity (SA+CF) Median			20.19	-4.29	5.29	5.29	9.71	9.73	11.73	13.83	9.20	
Rank			21	42	53	53	71	76	79	70	89	
Blackrock Russell 1000 Index (SA)	1,699,762,780	16.86	21.83	-2.77	7.55	7.55	10.66	10.49	12.05	13.86	9.85	01/01/2003
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	9.89	
Difference			0.01	0.04	0.07	0.07	0.02	0.02	0.02	-0.11	-0.04	
IM U.S. Large Cap Core Equity (SA+CF) Median			20.19	-4.29	5.29	5.29	9.71	9.73	11.73	13.83	10.07	
Rank			27	33	29	29	36	35	42	49	60	
State Street Large Cap Enhanced Index (SA)	566,058,520	5.61	20.64	-4.85	5.65	5.65	9.59	9.86	11.89	14.09	8.76	09/01/2004
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	9.15	
Difference			-1.18	-2.04	-1.83	-1.83	-1.05	-0.61	-0.14	0.12	-0.39	
IM U.S. Large Cap Core Equity (SA+CF) Median			20.19	-4.29	5.29	5.29	9.71	9.73	11.73	13.83	9.43	
Rank			42	55	47	47	51	49	46	38	80	

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Oklahoma State Pension Commission
Oklahoma Public Employees Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Westfield Large Cap Growth Equity (CF)	333,168,680	3.30	26.98	8.75	21.46	21.46	18.14	N/A	N/A	N/A	19.57	01/01/2017
Russell 1000 Grth Index			27.84	9.81	23.28	23.28	18.99	15.89	16.62	17.23	20.50	
Difference			-0.86	-1.06	-1.82	-1.82	-0.85	N/A	N/A	N/A	-0.93	
IM U.S. Large Cap Growth Equity (SA+CF) Median			26.58	8.79	19.56	19.56	17.42	14.27	15.77	16.61	19.23	
Rank			45	51	39	39	43	N/A	N/A	N/A	47	
BHMS Small Cap Value Equity (SA)	190,749,635	1.89	28.58	-14.41	-6.36	-6.36	0.56	3.93	6.94	11.16	8.95	12/01/2004
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	5.00	
Difference			9.67	9.09	11.12	11.12	4.91	2.67	2.96	3.34	3.95	
IM U.S. Small Cap Value Equity (SA+CF) Median			21.18	-21.45	-15.08	-15.08	-2.50	1.92	5.30	9.51	7.22	
Rank			10	14	13	13	20	23	20	15	14	
UBS US Small Cap Growth Equity (SA)	231,593,721	2.30	41.81	9.42	11.47	11.47	15.20	9.76	12.98	16.36	11.26	06/01/2003
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	9.86	
Difference			11.23	12.48	7.99	7.99	7.34	2.90	2.95	3.44	1.40	
IM U.S. Small Cap Growth Equity (SA+CF) Median			32.78	1.16	5.99	5.99	12.27	10.20	12.31	15.04	12.16	
Rank			16	27	35	35	38	53	40	26	69	
DePrince Race & Zollo Micro Cap Value (SA)	169,081,170	1.68	21.80	-22.72	-16.82	-16.82	-0.93	2.76	5.49	N/A	7.22	01/01/2011
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	5.60	
Difference			2.89	0.78	0.66	0.66	3.42	1.50	1.51	N/A	1.62	
IM U.S. Small Cap Value Equity (SA+CF) Median			21.18	-21.45	-15.08	-15.08	-2.50	1.92	5.30	9.51	7.17	
Rank			44	61	62	62	31	36	46	N/A	48	
International Equity	2,653,877,564	26.32	16.79	-10.25	-3.22	-3.22	1.93	3.08	4.40	5.77	5.46	04/01/1994
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	N/A	
Difference			0.67	0.75	1.58	1.58	0.80	0.82	0.69	0.80	N/A	
All Public Plans-Intl. Equity Segment Median			17.76	-10.04	-3.05	-3.05	2.08	3.17	4.87	6.52	N/A	
Rank			67	54	52	52	59	57	79	78	N/A	
Blackrock ACWI Ex US Index (CF)	1,385,479,591	13.74	16.24	-10.85	-4.59	-4.59	1.41	2.54	3.98	5.26	4.24	10/01/2009
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	3.84	
Difference			0.12	0.15	0.21	0.21	0.28	0.28	0.27	0.29	0.40	
IM ACWI Ex US Core (SA+CF) Median			17.29	-8.49	-0.88	-0.88	2.26	3.16	4.64	6.34	5.80	
Rank			65	67	72	72	67	67	78	97	92	
Baillie Gifford International Growth Equity (CF)	400,410,942	3.97	26.47	1.86	13.66	13.66	7.93	7.85	N/A	N/A	7.06	09/01/2013
MSCI ACW Ex US Grth Index (USD) (Net)			19.11	-2.62	5.80	5.80	6.07	5.61	6.32	7.04	6.15	
Difference			7.36	4.48	7.86	7.86	1.86	2.24	N/A	N/A	0.91	
IM ACWI Ex US Growth (SA+CF) Median			20.11	-2.45	6.44	6.44	6.63	6.24	7.47	8.81	7.11	
Rank			8	20	13	13	35	29	N/A	N/A	54	

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Oklahoma State Pension Commission
Oklahoma Public Employees Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Blackrock ACWI Ex US Growth (CF)	335,223,352	3.32	17.58	-5.81	1.40	1.40	4.71	4.82	5.64	6.59	5.71	10/01/2009
MSCI ACW Ex US Grth Index (USD) (Net)			19.11	-2.62	5.80	5.80	6.07	5.61	6.32	7.04	6.04	
Difference			-1.53	-3.19	-4.40	-4.40	-1.36	-0.79	-0.68	-0.45	-0.33	
IM ACWI Ex US Growth (SA+CF) Median			20.11	-2.45	6.44	6.44	6.63	6.24	7.47	8.81	7.72	
Rank			85	74	76	76	74	69	83	92	95	
Mondrian ACWI ex US Equity (SA)	532,763,679	5.28	11.27	-18.55	-12.31	-12.31	-2.07	0.31	2.45	4.68	5.95	08/01/2001
MSCI ACW Ex US Val Index (USD) (Net)			12.76	-19.43	-15.26	-15.26	-3.95	-1.25	0.94	2.79	4.41	
Difference			-1.49	0.88	2.95	2.95	1.88	1.56	1.51	1.89	1.54	
IM ACWI Ex US Value (SA+CF) Median			16.19	-14.86	-8.60	-8.60	-0.76	1.20	3.46	5.94	5.82	
Rank			91	74	78	78	68	69	75	71	47	
Fixed Income	3,360,355,456	33.33	3.48	8.64	11.75	11.75	6.70	5.28	4.86	4.85	7.07	04/01/1989
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	6.29	
Difference			0.58	2.50	3.01	3.01	1.38	0.98	0.90	1.03	0.78	
Blackrock Constrained Core Fixed Income (SA)	1,611,160,281	15.98	4.15	6.75	9.57	9.57	5.73	4.70	4.35	4.25	5.40	06/01/2000
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.22	
Difference			1.25	0.61	0.83	0.83	0.41	0.40	0.39	0.43	0.18	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			4.42	6.24	8.93	8.93	5.57	4.70	4.41	4.34	5.60	
Rank			56	31	27	27	40	51	52	57	76	
MetWest Core Plus Fixed Income (SA)	1,014,732,455	10.06	4.16	6.99	9.78	9.78	6.07	4.76	4.47	4.79	5.97	09/01/2001
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.68	
Difference			1.26	0.85	1.04	1.04	0.75	0.46	0.51	0.97	1.29	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			5.90	5.29	8.22	8.22	5.50	4.80	4.56	4.90	5.59	
Rank			87	11	14	14	14	54	58	58	23	
Hoisington Long Duration Fixed Income (SA)	382,220,740	3.79	-1.52	23.71	29.28	29.28	13.71	10.27	9.83	8.97	9.12	10/01/1991
Bloomberg US Trsy Lng Trm Bond Index			0.25	21.20	25.40	25.40	12.04	9.26	8.40	7.74	8.17	
Difference			-1.77	2.51	3.88	3.88	1.67	1.01	1.43	1.23	0.95	
IM U.S. Long Duration (SA+CF) Median			7.93	11.87	18.62	18.62	10.42	9.40	8.53	8.41	N/A	
Rank			100	1	1	1	1	4	3	15	N/A	
Blackrock TIPS (SA)	352,241,980	3.49	4.42	6.12	8.43	8.43	5.21	3.94	3.21	3.66	3.85	03/01/2010
Bloomberg US Trsy US TIPS Index			4.24	6.01	8.28	8.28	5.05	3.75	3.05	3.52	3.79	
Difference			0.18	0.11	0.15	0.15	0.16	0.19	0.16	0.14	0.06	
IM U.S. TIPS (SA+CF) Median			4.28	5.90	8.22	8.22	5.06	3.75	3.05	3.53	3.80	
Rank			30	23	21	21	20	23	22	29	32	

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Public Employees Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

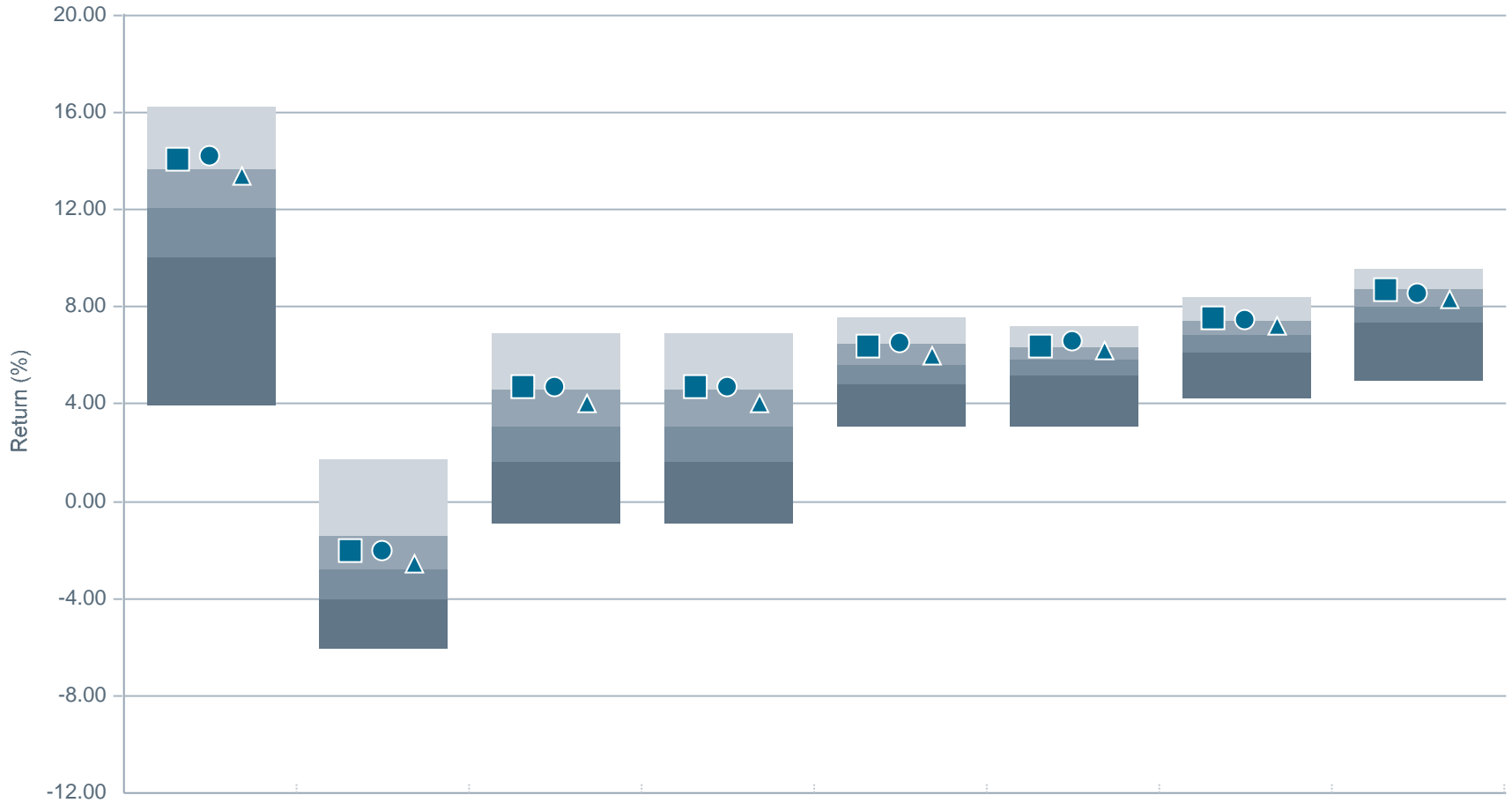
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Estate	10,160,000	0.10	-11.60	-10.16	-6.33	-6.33	-4.47	-0.87	N/A	N/A	-0.73	07/01/2014
NCREIF ODCE Index (EWA) (Net)			-1.47	-0.77	1.70	1.70	5.09	6.72	8.34	9.95	7.85	
Difference			-10.13	-9.39	-8.03	-8.03	-9.56	-7.59	N/A	N/A	-8.58	
Grand Centre (CF)	10,160,000	0.10	-11.60	-10.16	-6.33	-6.33	-4.47	N/A	N/A	N/A	-0.95	12/01/2015
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	5.94	
Difference			-9.85	-9.15	-7.66	-7.66	-9.19	N/A	N/A	N/A	-6.89	

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 Oklahoma Public Employees Retirement System vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

As of June 30, 2020



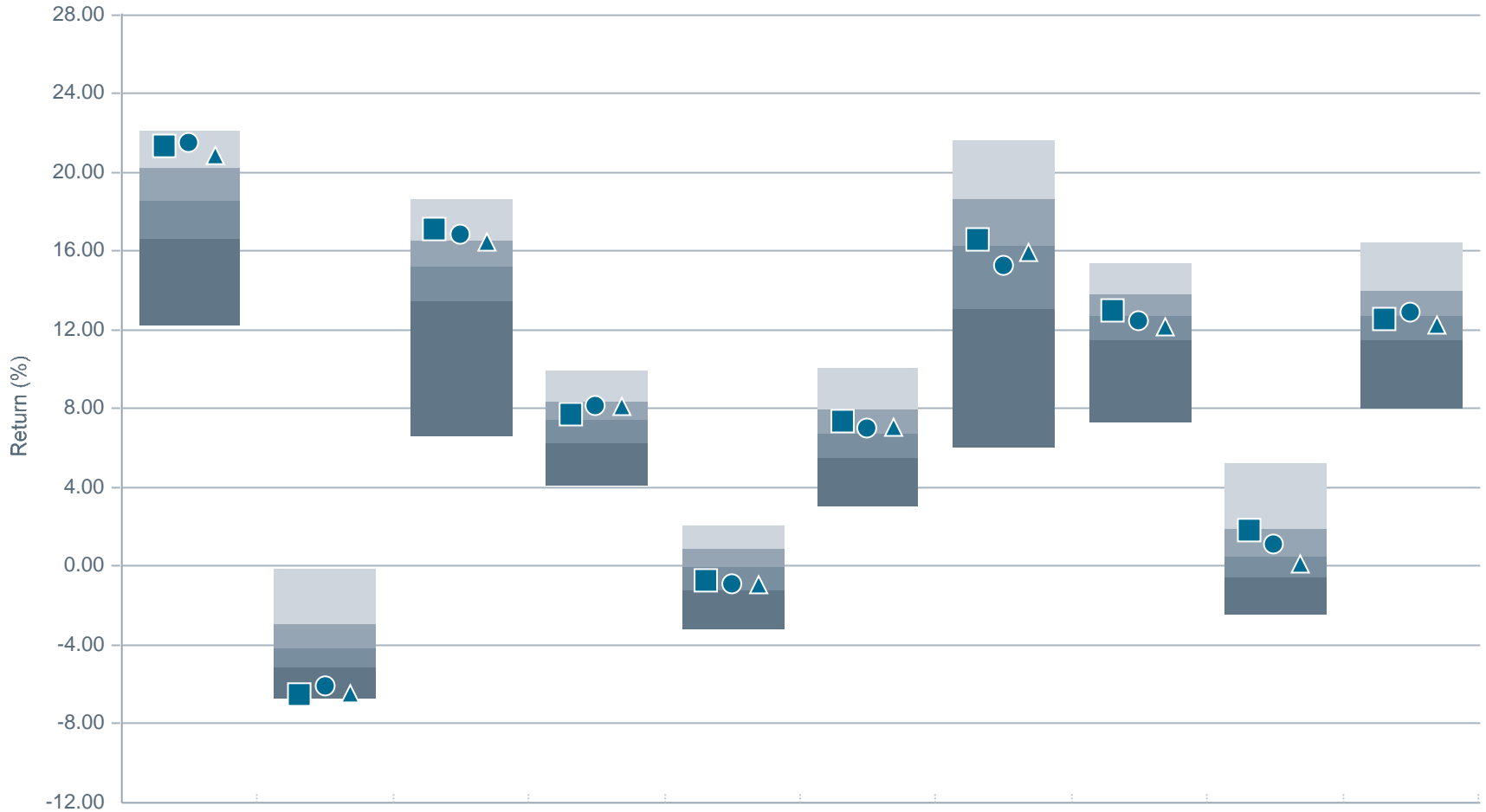
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OPERS Total Fund	14.07 (20)	-2.06 (38)	4.71 (24)	4.71 (24)	6.36 (29)	6.36 (27)	7.49 (23)	8.71 (26)
● OPERS Policy Index	14.18 (19)	-2.06 (38)	4.72 (23)	4.72 (23)	6.50 (26)	6.55 (21)	7.46 (25)	8.57 (32)
▲ OPERS Allocation Index	13.37 (30)	-2.56 (47)	4.07 (35)	4.07 (35)	5.98 (40)	6.23 (34)	7.24 (33)	8.28 (41)
5th Percentile	16.24	1.72	6.92	6.92	7.58	7.27	8.39	9.57
1st Quartile	13.69	-1.37	4.60	4.60	6.52	6.39	7.45	8.75
Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03
3rd Quartile	10.05	-4.03	1.63	1.63	4.84	5.22	6.14	7.36
95th Percentile	3.97	-6.07	-0.88	-0.88	3.12	3.11	4.27	4.96

Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.
 Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 Oklahoma Public Employees Retirement System vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

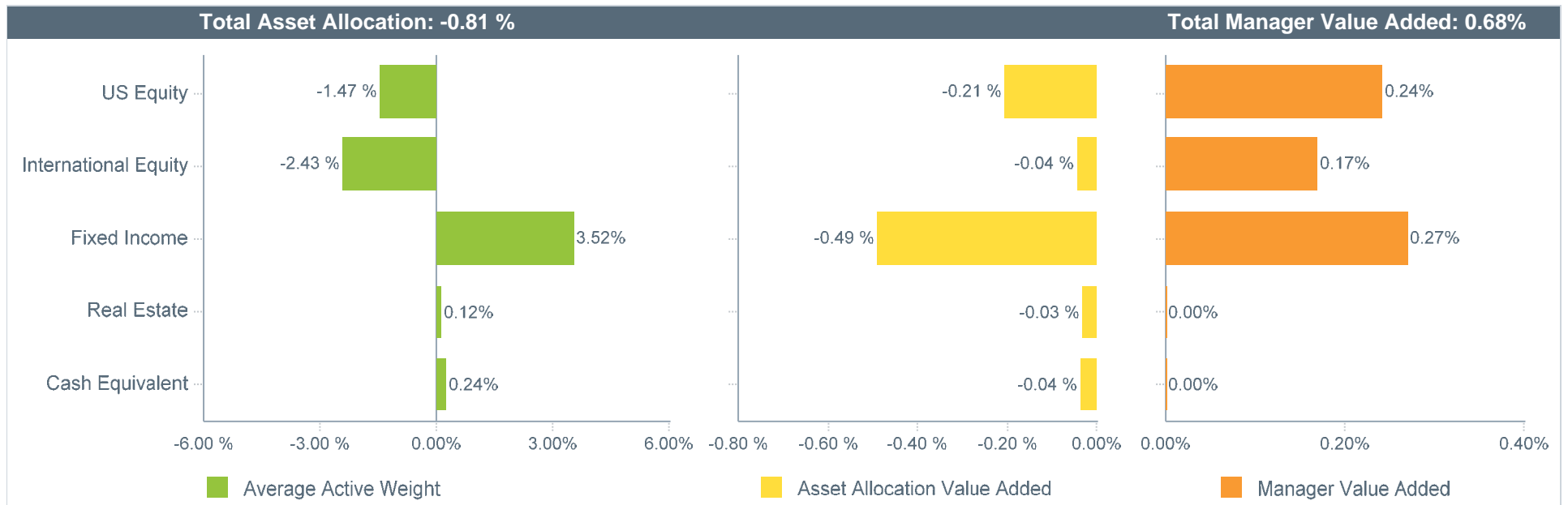
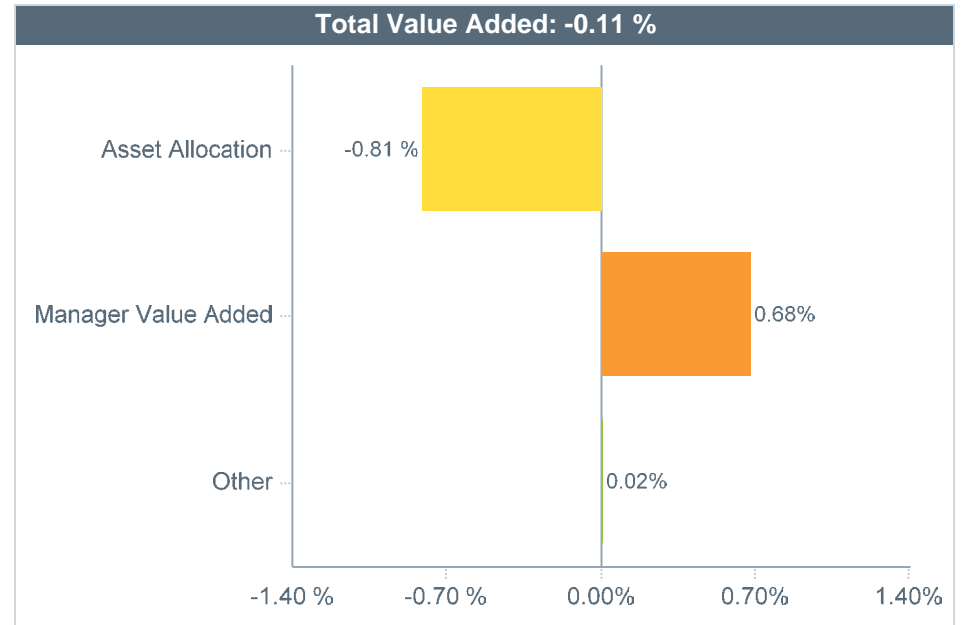
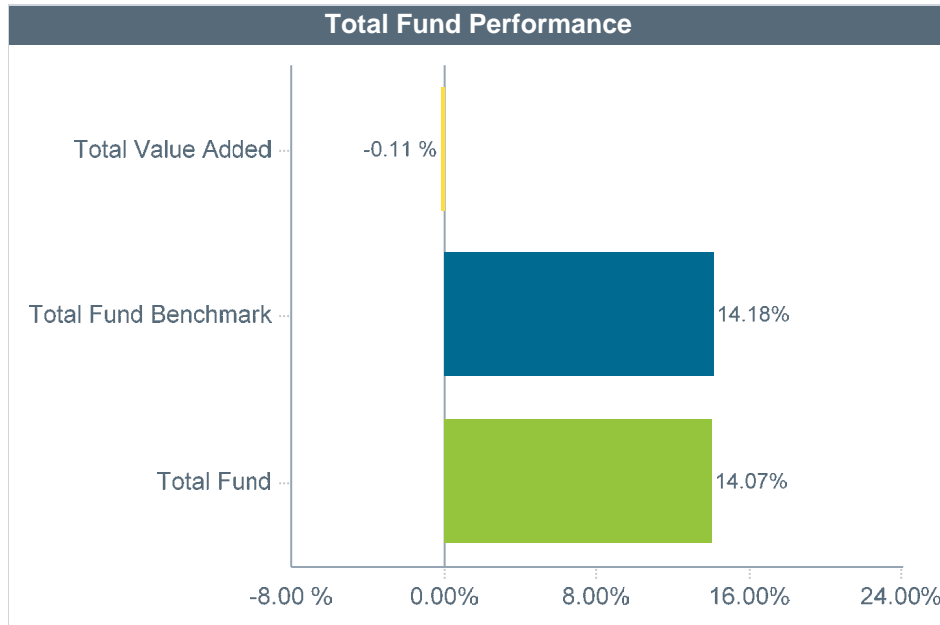
As of June 30, 2020



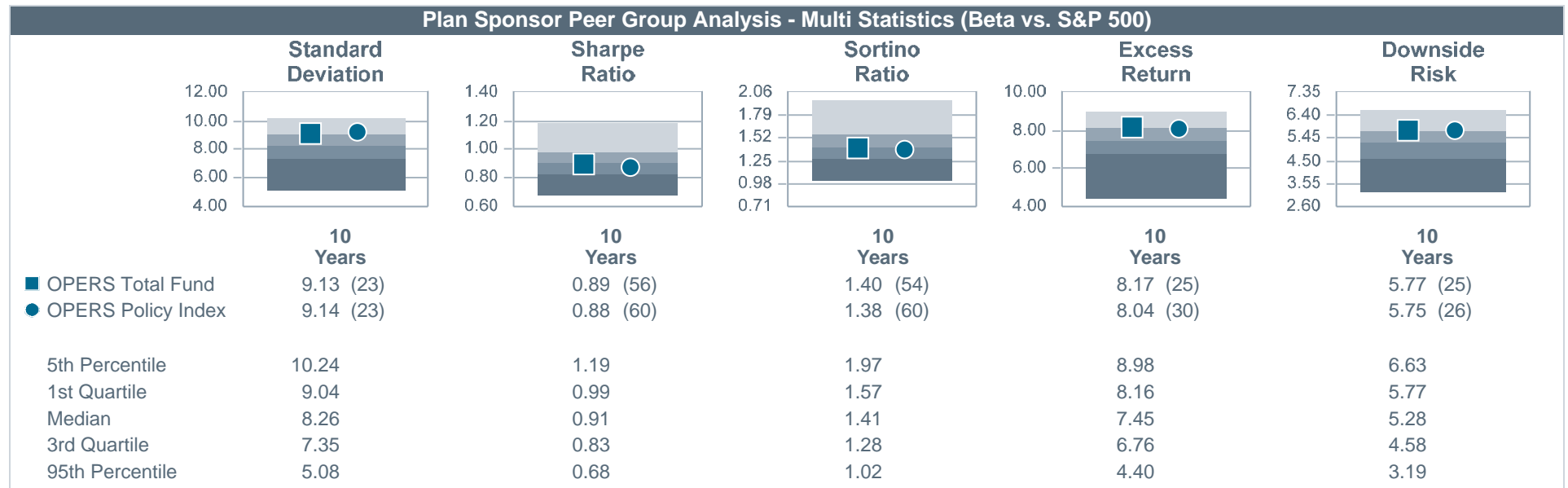
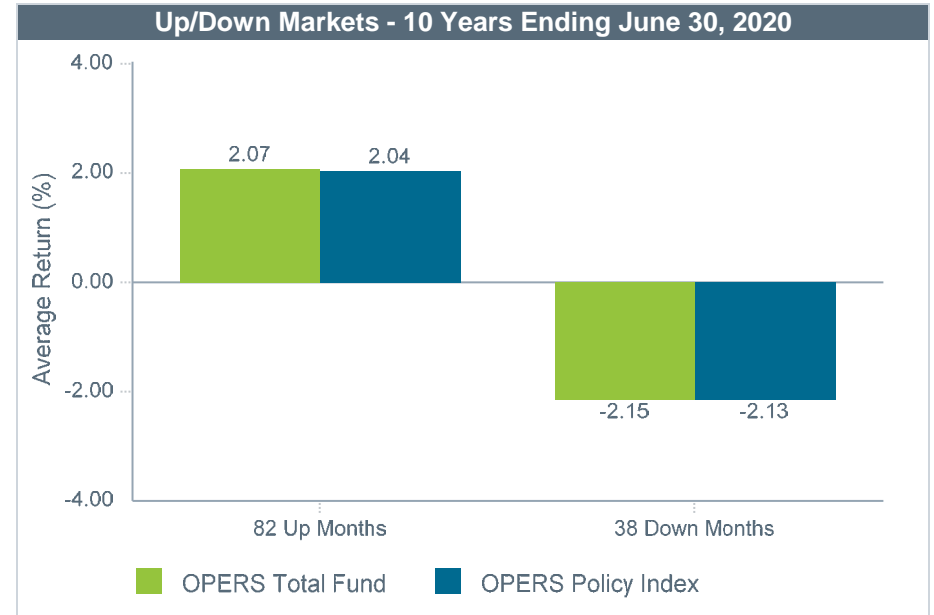
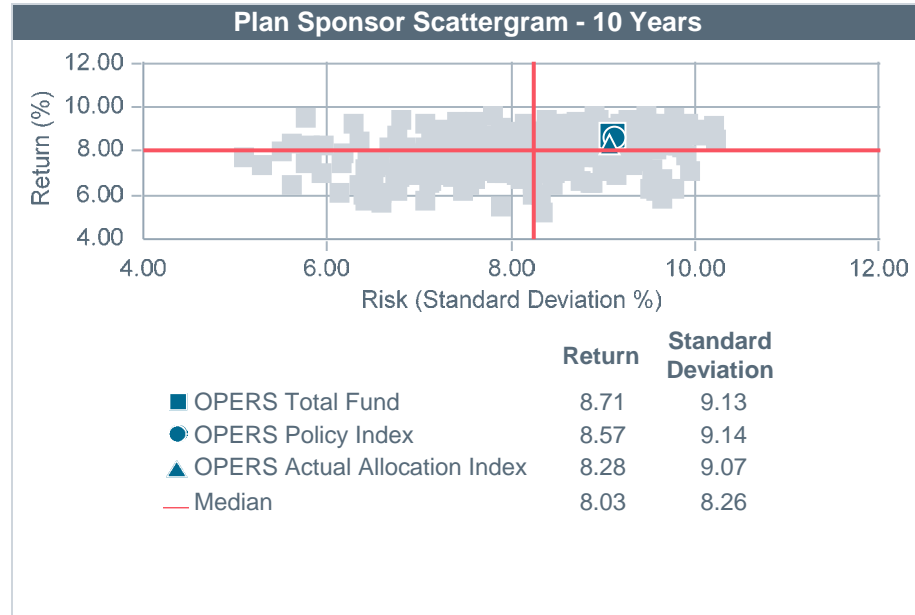
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OPERS Total Fund	21.34 (12)	-6.51 (93)	17.11 (16)	7.67 (42)	-0.77 (66)	7.37 (34)	16.60 (48)	12.94 (44)	1.79 (27)	12.52 (56)
● OPERS Policy Index	21.46 (10)	-6.09 (90)	16.86 (20)	8.12 (32)	-0.89 (70)	7.00 (42)	15.27 (62)	12.47 (55)	1.11 (38)	12.89 (45)
▲ OPERS Allocation Index	20.87 (17)	-6.49 (93)	16.51 (27)	8.09 (33)	-0.94 (71)	7.05 (41)	15.94 (54)	12.21 (61)	0.13 (60)	12.29 (61)
5th Percentile	22.10	-0.14	18.72	9.98	2.06	10.06	21.67	15.42	5.20	16.52
1st Quartile	20.27	-2.96	16.59	8.39	0.92	7.93	18.70	13.82	1.93	14.05
Median	18.59	-4.15	15.21	7.42	-0.08	6.74	16.28	12.73	0.48	12.68
3rd Quartile	16.66	-5.14	13.46	6.27	-1.20	5.45	13.03	11.49	-0.57	11.44
95th Percentile	12.27	-6.74	6.66	4.12	-3.18	3.05	6.05	7.32	-2.40	8.02

Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.

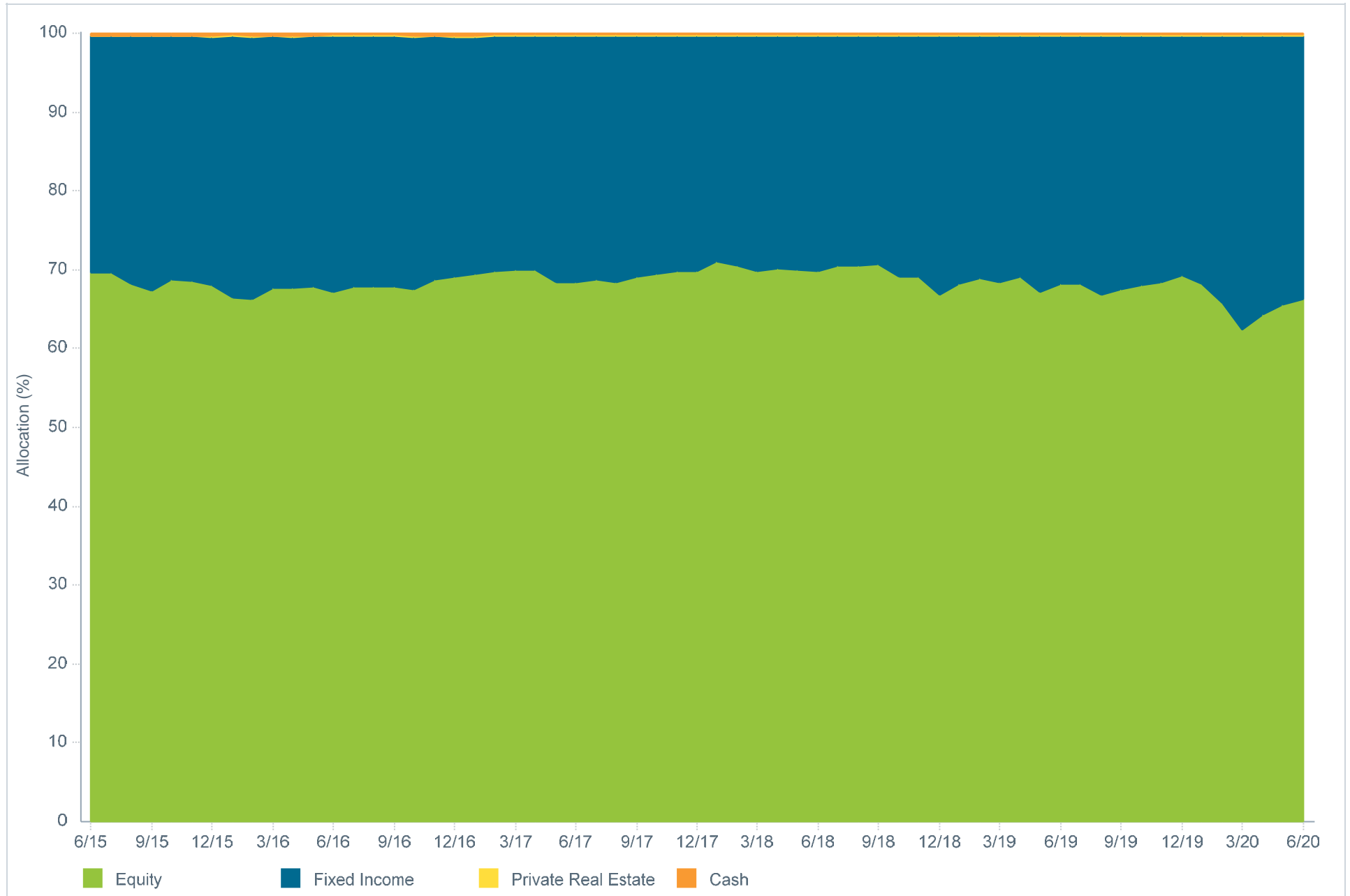




Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation.



Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



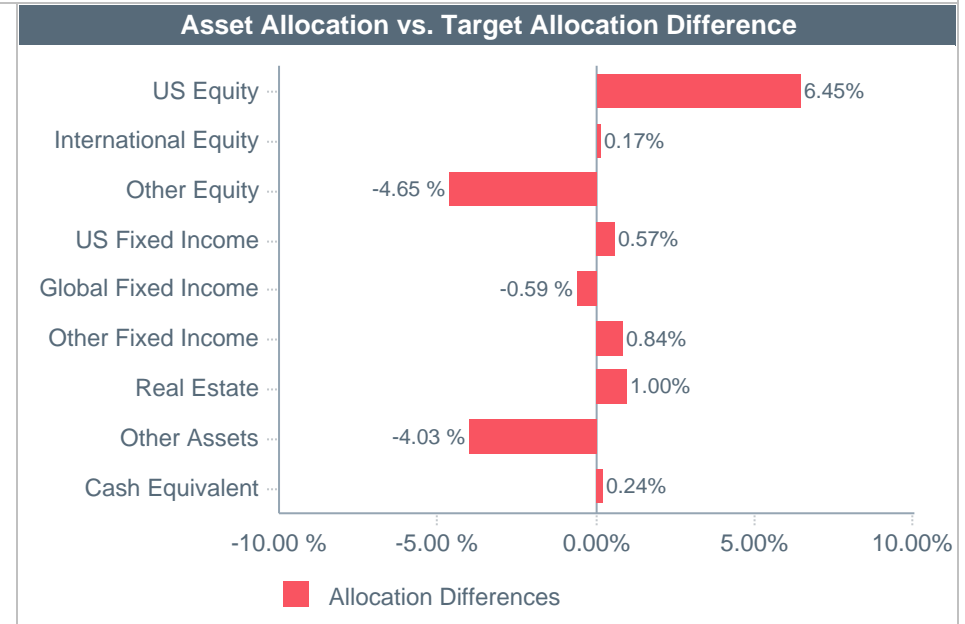
Oklahoma Firefighters Pension & Retirement System (OFPRS)

Oklahoma State Pension Commission
 Oklahoma Firefighters Pension & Retirement System
 Total Fund Summary

As of June 30, 2020

	Performance (%)												
	Trailing							Calendar Year					
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OFPRS Total Fund (Net)	12.52	-2.07	3.46	3.46	7.62	7.57	8.72	9.64	20.17	-2.39	18.70	7.32	2.10
OFPRS Policy Index	12.98	-3.11	3.92	3.92	6.92	7.41	8.48	9.83	21.76	-3.80	16.41	8.76	1.60
Difference	-0.46	1.04	-0.46	-0.46	0.70	0.16	0.24	-0.19	-1.59	1.41	2.29	-1.44	0.50
OFPRS Actual Allocation Index	12.92	-1.97	4.62	4.62	6.98	7.03	8.07	9.44	20.30	-3.93	15.64	9.45	0.56
Difference	-0.40	-0.10	-1.16	-1.16	0.64	0.54	0.65	0.20	-0.13	1.54	3.06	-2.13	1.54
Actuarial Discount Rate (7.5%)	1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference	10.70	-5.75	-4.04	-4.04	0.12	0.07	1.22	2.14	12.67	-9.89	11.20	-0.18	-5.40
OFPRS Total Fund (Gross)	12.52	-2.07	3.46	3.46	7.62	7.57	8.73	9.65	20.17	-2.39	18.70	7.33	2.10
OFPRS Policy Index	12.98	-3.11	3.92	3.92	6.92	7.41	8.48	9.83	21.76	-3.80	16.41	8.76	1.60
Difference	-0.46	1.04	-0.46	-0.46	0.70	0.16	0.25	-0.18	-1.59	1.41	2.29	-1.43	0.50
OFPRS Actual Allocation Index	12.92	-1.97	4.62	4.62	6.98	7.03	8.07	9.44	20.30	-3.93	15.64	9.45	0.56
Difference	-0.40	-0.10	-1.16	-1.16	0.64	0.54	0.66	0.21	-0.13	1.54	3.06	-2.12	1.54
All Public Plans-Total Fund Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	18.59	-4.15	15.21	7.42	-0.08
Rank	43	39	45	45	5	3	2	4	28	18	6	53	5

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OFPRS (Firefighters)	2,904,632,636	100.00	100.00
US Equity	1,407,218,220	48.45	42.00
International Equity	440,601,423	15.17	15.00
Other Equity	10,134,182	0.35	5.00
US Fixed Income	248,977,000	8.57	8.00
Global Fixed Income	186,141,000	6.41	7.00
Other Fixed Income	169,638,050	5.84	5.00
Real Estate	319,537,594	11.00	10.00
Other Assets	115,359,167	3.97	8.00
Cash Equivalent	7,026,000	0.24	0.00



Parentheses contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding. Please see the Addendum for custom index definitions and additional Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OFPRS Total Fund	2,904,632,636	100.00	12.52	-2.07	3.46	3.46	7.62	7.57	8.72	9.64	6.22	01/01/1984
OFPRS Policy Index			12.98	-3.11	3.92	3.92	6.92	7.41	8.48	9.83	N/A	
Difference			-0.46	1.04	-0.46	-0.46	0.70	0.16	0.24	-0.19	N/A	
OFPRS Actual Allocation Index			12.92	-1.97	4.62	4.62	6.98	7.03	8.07	9.44	N/A	
Difference			-0.40	-0.10	-1.16	-1.16	0.64	0.54	0.65	0.20	N/A	
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			10.70	-5.75	-4.04	-4.04	0.12	0.07	1.22	2.14	-1.28	
US Equity & Other Equity	1,417,352,402	48.80	23.25	-2.82	4.89	4.89	10.32	9.81	11.79	13.20	6.75	07/01/2000
Russell 3000 Index			22.03	-3.48	6.53	6.53	10.04	10.03	11.68	13.72	6.15	
Difference			1.22	0.66	-1.64	-1.64	0.28	-0.22	0.11	-0.52	0.60	
US Large Cap Equity	1,010,345,435	34.78	21.57	-3.31	6.36	6.36	10.01	9.81	11.85	13.57	6.32	07/01/2000
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	6.10	
Difference			-0.25	-0.50	-1.12	-1.12	-0.63	-0.66	-0.18	-0.40	0.22	
AJO Large Cap Equity (SA)	81,495,274	2.81	15.81	-17.69	-12.61	-12.61	0.03	2.08	5.81	9.89	7.88	07/01/2002
Russell 1000 Val Index			14.29	-16.26	-8.84	-8.84	1.82	4.64	7.11	10.41	7.02	
Difference			1.52	-1.43	-3.77	-3.77	-1.79	-2.56	-1.30	-0.52	0.86	
SSgA Equity Index (SA)	225,163,000	7.75	20.53	-3.11	7.46	7.46	10.70	10.73	12.13	14.00	7.58	10/01/1996
S&P 500 Index (Cap Wtd)			20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	8.58	
Difference			-0.01	-0.03	-0.05	-0.05	-0.03	0.00	0.00	0.01	-1.00	
SSgA Eq Wtd S&P Index (SA)	197,170,000	6.79	21.37	-11.71	-3.87	-3.87	5.24	7.01	9.57	12.56	9.46	11/01/2001
S&P 500 Index (Eq Wtd)			21.73	-10.77	-3.25	-3.25	5.43	7.14	9.67	12.64	9.46	
Difference			-0.36	-0.94	-0.62	-0.62	-0.19	-0.13	-0.10	-0.08	0.00	
Intech US Large Cap Core Equity (SA)	218,408,907	7.52	21.15	-2.42	7.90	7.90	10.27	10.30	12.26	14.09	8.60	01/01/2002
S&P 500 Index (Cap Wtd)			20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	7.67	
Difference			0.61	0.66	0.39	0.39	-0.46	-0.43	0.13	0.10	0.93	
Fred Alger Capital Appreciation (SA)	193,410,687	6.66	27.92	13.66	25.29	25.29	20.36	15.72	17.77	17.23	17.23	07/01/2010
Russell 1000 Grth Index			27.84	9.81	23.28	23.28	18.99	15.89	16.62	17.23	17.23	
Difference			0.08	3.85	2.01	2.01	1.37	-0.17	1.15	0.00	0.00	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Beutel Goodman American Equity (CF)	94,697,567	3.26	16.14	-7.43	4.15	4.15	7.09	N/A	N/A	N/A	10.64	04/26/2016
Russell 1000 Val Index			14.29	-16.26	-8.84	-8.84	1.82	4.64	7.11	10.41	5.89	
Difference			1.85	8.83	12.99	12.99	5.27	N/A	N/A	N/A	4.75	
US Small Cap Equity	396,872,785	13.66	32.79	0.74	3.81	3.81	13.33	10.94	12.53	14.23	8.05	07/01/2000
Russell 2000 Index			25.42	-12.98	-6.63	-6.63	2.01	4.29	7.17	10.50	6.69	
Difference			7.37	13.72	10.44	10.44	11.32	6.65	5.36	3.73	1.36	
Delaware SMID Cap Focus Growth Equity (SA)	116,508,000	4.01	42.14	14.22	17.17	17.17	20.72	15.78	16.31	N/A	14.48	04/01/2011
Russell 2500 Grth Index			32.87	2.02	9.21	9.21	12.10	9.57	12.06	14.45	11.22	
Difference			9.27	12.20	7.96	7.96	8.62	6.21	4.25	N/A	3.26	
Earnest Partner Small Cap Value Equity (SA)	89,574,183	3.08	23.95	-10.30	-3.99	-3.99	5.08	7.14	10.07	11.99	7.90	08/01/2005
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	4.61	
Difference			5.04	13.20	13.49	13.49	9.43	5.88	6.09	4.17	3.29	
River Road Small Cap Value Equity (SA)	77,380,615	2.66	20.25	-18.90	-12.58	-12.58	2.01	6.67	7.58	10.41	5.85	04/01/2007
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	3.57	
Difference			1.34	4.60	4.90	4.90	6.36	5.41	3.60	2.59	2.28	
Lord Abbett Small Cap Growth Equity (SA)	113,409,988	3.90	41.24	17.65	12.43	12.43	24.46	12.36	14.69	N/A	13.55	04/01/2011
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	9.60	
Difference			10.66	20.71	8.95	8.95	16.60	5.50	4.66	N/A	3.95	
Other Equity												
Tortoise Direct Opportunities (CF)	10,134,182	0.35	-48.34	-47.56	-48.79	-48.79	-22.06	N/A	N/A	N/A	-14.27	09/01/2016
Alerian MLP Index			50.18	-35.71	-41.43	-41.43	-16.79	-12.85	-9.69	-1.41	-13.13	
Difference			-98.52	-11.85	-7.36	-7.36	-5.27	N/A	N/A	N/A	-1.14	

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Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity	440,601,423	15.17	17.16	1.33	7.86	7.86	8.48	7.89	7.66	7.24	6.57	09/01/2003
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	6.29	
Difference			1.04	12.33	12.66	12.66	7.35	5.63	3.95	2.27	0.28	
Chautauqua International Growth Equity (SA)	150,826,000	5.19	7.37	6.27	9.39	9.39	8.64	7.96	8.82	N/A	8.83	08/01/2012
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.76	
Difference			-8.75	17.27	14.19	14.19	7.51	5.70	5.11	N/A	4.07	
Emerging Markets Equity	98,394,000	3.39	17.76	-11.12	-6.00	-6.00	-0.70	0.44	1.34	N/A	3.51	08/01/2012
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	2.96	
Difference			-0.32	-1.34	-2.61	-2.61	-2.60	-2.42	-1.88	N/A	0.55	
WCM Berkeley Street EM Equity (CF)	191,351,206	6.59	25.88	5.04	15.34	15.34	14.43	12.89	12.53	N/A	12.80	08/01/2012
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	2.96	
Difference			7.80	14.82	18.73	18.73	12.53	10.03	9.31	N/A	9.84	
RBC GAM Emerging Markets Equity (CF)	49,175,000	1.69	17.03	-10.11	-6.10	-6.10	N/A	N/A	N/A	N/A	-1.11	01/01/2019
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	4.51	
Difference			-1.05	-0.33	-2.71	-2.71	N/A	N/A	N/A	N/A	-5.62	
Wellington Emerging Markets (CF)	49,219,000	1.69	18.51	-12.11	-5.98	-5.98	N/A	N/A	N/A	N/A	-1.02	01/01/2019
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	4.51	
Difference			0.43	-2.33	-2.59	-2.59	N/A	N/A	N/A	N/A	-5.53	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income	604,756,050	20.82	2.19	-0.86	1.41	1.41	2.15	2.86	2.89	3.75	4.98	07/01/2000
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.14	
Difference			-0.71	-7.00	-7.33	-7.33	-3.17	-1.44	-1.07	-0.07	-0.16	
US Fixed Income	248,977,000	8.57	4.77	5.62	8.30	8.30	5.05	4.34	3.98	3.62	3.18	03/01/2009
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.49	
Difference			1.87	-0.52	-0.44	-0.44	-0.27	0.04	0.02	-0.20	-1.31	
Orleans Core Fixed Income (CF)	101,600,000	3.50	5.26	4.96	8.02	8.02	5.30	4.47	N/A	N/A	3.86	07/01/2014
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	3.89	
Difference			2.36	-1.18	-0.72	-0.72	-0.02	0.17	N/A	N/A	-0.03	
Garcia Hamilton Core Fixed Income (CF)	147,377,000	5.07	4.87	6.33	8.85	8.85	5.35	4.69	N/A	N/A	4.36	07/01/2014
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	3.89	
Difference			1.97	0.19	0.11	0.11	0.03	0.39	N/A	N/A	0.47	
Global Fixed Income	186,141,000	6.41	10.07	-2.24	0.03	0.03	1.34	2.91	2.50	3.92	3.45	03/01/2009
FTSE Wrld Gov't Bond Index			2.04	4.08	4.60	4.60	3.98	3.70	2.21	2.37	2.89	
Difference			8.03	-6.32	-4.57	-4.57	-2.64	-0.79	0.29	1.55	0.56	
Brandywine Global Fixed Income (CF)	186,141,000	6.41	10.07	-2.24	0.03	0.03	1.34	2.91	2.50	4.71	4.59	08/01/2009
FTSE Wrld Gov't Bond Index			2.04	4.08	4.60	4.60	3.98	3.70	2.21	2.37	2.28	
Difference			8.03	-6.32	-4.57	-4.57	-2.64	-0.79	0.29	2.34	2.31	
Other Fixed Income												
Garrison Middle Market Funding (SA)	3,092,128	0.11	-5.94	-5.28	-19.09	-19.09	-4.72	-2.83	-0.14	N/A	-0.14	07/01/2013
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	3.96	
Difference			-8.84	-11.42	-27.83	-27.83	-10.04	-7.13	-4.10	N/A	-4.10	
Medley Opportunity II (SA)	12,552,660	0.43	-9.03	-9.03	-19.09	-19.09	-12.34	-5.60	-3.15	N/A	-3.15	07/01/2013
CS Lvg'd Loan Index			9.71	-4.76	-2.27	-2.27	2.13	2.94	3.27	4.34	3.27	
Difference			-18.74	-4.27	-16.82	-16.82	-14.47	-8.54	-6.42	N/A	-6.42	
PIMCO Corporate Opp II (CF)	31,711,805	1.09	-15.14	-11.41	-8.27	-8.27	3.31	N/A	N/A	N/A	5.48	12/01/2016
Bloomberg US HY Loans Index			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
PIMCO Bravo III (CF)	49,488,457	1.70	-11.27	-10.49	-5.06	-5.06	N/A	N/A	N/A	N/A	5.18	12/01/2017

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Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
PIMCO Private Income (CF)	72,793,000	2.51	-5.85	-4.31	-1.42	-1.42	N/A	N/A	N/A	N/A	-1.22	05/01/2019
Bloomberg US HY Loans Index			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Real Estate	319,537,594	11.00	-0.99	0.70	2.91	2.91	6.21	7.81	9.13	9.06	7.95	03/01/2009
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.14	
Difference			0.00	0.99	0.22	0.22	0.77	1.04	0.87	-0.64	0.81	
JP Morgan Strategic Property	110,998,000	3.82	-2.02	-0.49	2.25	2.25	5.12	6.85	8.77	10.62	7.66	04/01/2005
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.93	
Difference			-1.03	-0.20	-0.44	-0.44	-0.32	0.08	0.51	0.92	-0.27	
JP Morgan Special Situation Property (CF)	72,525,000	2.50	-0.81	0.59	4.79	4.79	7.89	9.55	N/A	N/A	10.98	11/01/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.64	
Difference			0.18	0.88	2.10	2.10	2.45	2.78	N/A	N/A	3.34	
Portfolio Advisors Real Estate III LP	2,902,490	0.10	-0.33	-0.69	-9.88	-9.88	-2.67	2.67	7.46	5.82	-0.69	07/01/2008
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	5.95	
Difference			0.66	-0.40	-12.57	-12.57	-8.11	-4.10	-0.80	-3.88	-6.64	
Portfolio Advisors Real Estate IV LP	1,630,934	0.06	-0.10	-5.26	-4.58	-4.58	4.54	7.04	9.79	N/A	7.03	07/01/2011
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	8.95	
Difference			0.89	-4.97	-7.27	-7.27	-0.90	0.27	1.53	N/A	-1.92	
Angelo Gordon Net Lease III LP	23,275,950	0.80	-0.23	1.96	5.63	5.63	7.17	6.65	N/A	N/A	4.48	03/01/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	8.08	
Difference			0.76	2.25	2.94	2.94	1.73	-0.12	N/A	N/A	-3.60	
Mesirow	27,411,726	0.94	1.22	10.17	12.43	12.43	11.53	10.77	N/A	N/A	8.27	04/01/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.95	
Difference			2.21	10.46	9.74	9.74	6.09	4.00	N/A	N/A	0.32	
Dune Real Estate III LP	24,644,210	0.85	-0.25	-1.05	-4.87	-4.87	7.22	9.35	N/A	N/A	9.38	05/01/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.95	
Difference			0.74	-0.76	-7.56	-7.56	1.78	2.58	N/A	N/A	1.43	
Portfolio Advisors Real Estate	5,875,893	0.20	-0.51	-3.46	-5.38	-5.38	-0.09	2.88	N/A	N/A	6.27	06/01/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.95	
Difference			0.48	-3.17	-8.07	-8.07	-5.53	-3.89	N/A	N/A	-1.68	

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Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Landmark Real Estate VII LP	9,555,000	0.33	-1.86	-2.29	-2.90	-2.90	1.61	10.20	N/A	N/A	13.30	09/01/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.78	
Difference			-0.87	-2.00	-5.59	-5.59	-3.83	3.43	N/A	N/A	5.52	
Hall Capital III LP	11,240,642	0.39	0.16	3.51	5.31	5.31	5.75	4.48	N/A	N/A	1.06	11/01/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.64	
Difference			1.15	3.80	2.62	2.62	0.31	-2.29	N/A	N/A	-6.58	
Portfolio Advisors Real Estate VI LP	16,548,081	0.57	-0.39	0.64	8.08	8.08	11.97	N/A	N/A	N/A	10.17	01/01/2017
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	5.63	
Difference			0.60	0.93	5.39	5.39	6.53	N/A	N/A	N/A	4.54	
Hall Capital Real Estate LP	2,597,668	0.09	1.47	2.99	6.50	6.50	N/A	N/A	N/A	N/A	3.76	09/01/2018
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	4.58	
Difference			2.46	3.28	3.81	3.81	N/A	N/A	N/A	N/A	-0.82	
Dune Real Estate IV LP	10,332,000	0.36	-2.75	-3.69	N/A	N/A	N/A	N/A	N/A	N/A	-10.89	08/01/2019
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	2.69	
Difference			-1.76	-3.40	N/A	N/A	N/A	N/A	N/A	N/A	-13.58	
Hedge Fund	10,415,000	0.36	-9.21	-9.86	-11.35	-11.35	-2.04	-0.36	0.51	2.18	2.48	01/01/2006
HFRI FOF: Cnsvt Index			5.66	-1.94	-0.39	-0.39	1.93	1.49	2.39	2.57	2.01	
Difference			-14.87	-7.92	-10.96	-10.96	-3.97	-1.85	-1.88	-0.39	0.47	
Glouston Capital Partners Permal (CF)	10,415,000	0.36	-9.21	-9.86	-11.26	-11.26	-2.00	-0.61	N/A	N/A	-0.60	06/01/2015
HFRI FOF Comp Index			7.89	-1.59	0.48	0.48	2.25	1.49	2.70	2.79	1.26	
Difference			-17.10	-8.27	-11.74	-11.74	-4.25	-2.10	N/A	N/A	-1.86	

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Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Private Equity	104,944,167	3.61	-5.19	-2.04	3.17	3.17	10.82	9.84	N/A	N/A	13.60	03/01/2014
Ardian	8,848,067	0.30	-10.15	-9.41	-6.19	-6.19	5.85	6.96	N/A	N/A	9.75	04/01/2014
Ardian AESF VI LP	24,263,018	0.84	-2.49	2.76	12.33	12.33	11.60	N/A	N/A	N/A	9.11	02/01/2017
Argonaut Private Equity IV LP	5,845,081	0.20	4.17	4.17	13.47	13.47	N/A	N/A	N/A	N/A	5.37	08/01/2018
Capital Dynamics Global Secondaries IV	27,047,000	0.93	-9.09	-3.73	-0.67	-0.67	9.87	7.55	N/A	N/A	9.05	12/01/2014
Pomona Captial VIII LP	3,100,000	0.11	-17.56	-17.55	-19.41	-19.41	2.76	7.28	N/A	N/A	10.66	03/01/2014
Pomona Capital IX LP	19,969,000	0.69	-4.87	-4.86	1.37	1.37	N/A	N/A	N/A	N/A	33.21	02/01/2018

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Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OFPRS Total Fund	2,904,632,636	100.00	12.52	-2.07	3.46	3.46	7.62	7.57	8.73	9.65	8.41	01/01/1985
OFPRS Policy Index			12.98	-3.11	3.92	3.92	6.92	7.41	8.48	9.83	N/A	
Difference			-0.46	1.04	-0.46	-0.46	0.70	0.16	0.25	-0.18	N/A	
OFPRS Actual Allocation Index			12.92	-1.97	4.62	4.62	6.98	7.03	8.07	9.44	N/A	
Difference			-0.40	-0.10	-1.16	-1.16	0.64	0.54	0.66	0.21	N/A	
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			10.70	-5.75	-4.04	-4.04	0.12	0.07	1.23	2.15	0.91	
All Public Plans-Total Fund Median			12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	8.69	
Rank			43	39	45	45	5	3	2	4	79	
US Equity & Other Equity	1,417,352,402	48.80	23.25	-2.82	4.90	4.90	10.33	9.82	11.80	13.21	6.82	10/01/2000
Russell 3000 Index			22.03	-3.48	6.53	6.53	10.04	10.03	11.68	13.72	6.19	
Difference			1.22	0.66	-1.63	-1.63	0.29	-0.21	0.12	-0.51	0.63	
US Large Cap Equity	1,010,345,435	34.78	21.57	-3.31	6.38	6.38	10.05	9.84	11.87	13.59	6.38	10/01/2000
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	6.14	
Difference			-0.25	-0.50	-1.10	-1.10	-0.59	-0.63	-0.16	-0.38	0.24	
AJO Large Cap Equity (SA)	81,495,274	2.81	15.81	-17.69	-12.61	-12.61	0.03	2.08	5.81	9.89	7.92	08/01/2002
Russell 1000 Val Index			14.29	-16.26	-8.84	-8.84	1.82	4.64	7.11	10.41	7.64	
Difference			1.52	-1.43	-3.77	-3.77	-1.79	-2.56	-1.30	-0.52	0.28	
IM U.S. Large Cap Value Equity (SA+CF) Median			16.98	-14.65	-6.61	-6.61	3.16	5.32	7.80	10.96	8.52	
Rank			61	78	91	91	82	92	88	82	76	
SSgA Equity Index (SA)	225,163,000	7.75	20.53	-3.11	7.49	7.49	10.74	10.77	12.16	14.03	7.59	10/01/1996
S&P 500 Index (Cap Wtd)			20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	8.58	
Difference			-0.01	-0.03	-0.02	-0.02	0.01	0.04	0.03	0.04	-0.99	
IM U.S. Large Cap Core Equity (SA+CF) Median			20.19	-4.29	5.29	5.29	9.71	9.73	11.73	13.83	9.26	
Rank			46	39	31	31	33	28	39	41	97	
SSgA Eq Wtd S&P Index (SA)	197,170,000	6.79	21.37	-11.71	-3.85	-3.85	5.27	7.04	9.60	12.59	9.48	11/01/2001
S&P 500 Index (Eq Wtd)			21.73	-10.77	-3.25	-3.25	5.43	7.14	9.67	12.64	9.46	
Difference			-0.36	-0.94	-0.60	-0.60	-0.16	-0.10	-0.07	-0.05	0.02	
IM U.S. Large Cap Core Equity (SA+CF) Median			20.19	-4.29	5.29	5.29	9.71	9.73	11.73	13.83	8.69	
Rank			31	94	95	95	89	87	82	77	14	
Intech US Large Cap Core Equity (SA)	218,408,907	7.52	21.15	-2.42	7.90	7.90	10.27	10.30	12.26	14.09	8.60	01/01/2002
S&P 500 Index (Cap Wtd)			20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	7.67	
Difference			0.61	0.66	0.39	0.39	-0.46	-0.43	0.13	0.10	0.93	
IM U.S. Large Cap Core Equity (SA+CF) Median			20.19	-4.29	5.29	5.29	9.71	9.73	11.73	13.83	8.27	
Rank			34	29	27	27	41	41	36	38	24	

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Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fred Alger Capital Appreciation (SA)	193,410,687	6.66	27.92	13.66	25.29	25.29	20.36	15.72	17.77	17.23	17.23	07/01/2010
Russell 1000 Grth Index			27.84	9.81	23.28	23.28	18.99	15.89	16.62	17.23	17.23	
Difference			0.08	3.85	2.01	2.01	1.37	-0.17	1.15	0.00	0.00	
IM U.S. Large Cap Growth Equity (SA+CF) Median			26.58	8.79	19.56	19.56	17.42	14.27	15.77	16.61	16.57	
Rank			37	18	17	17	26	31	18	31	30	
Beutel Goodman American Equity (CF)	94,697,567	3.26	16.14	-7.43	4.15	4.15	7.09	N/A	N/A	N/A	10.64	04/26/2016
Russell 1000 Val Index			14.29	-16.26	-8.84	-8.84	1.82	4.64	7.11	10.41	5.89	
Difference			1.85	8.83	12.99	12.99	5.27	N/A	N/A	N/A	4.75	
IM U.S. Large Cap Value Equity (SA+CF) Median			16.98	-14.65	-6.61	-6.61	3.16	5.32	7.80	10.96	6.73	
Rank			57	14	13	13	19	N/A	N/A	N/A	15	
US Small Cap Equity	396,872,785	13.66	32.79	0.74	3.81	3.81	13.33	10.95	12.54	14.23	8.18	10/01/2000
Russell 2000 Index			25.42	-12.98	-6.63	-6.63	2.01	4.29	7.17	10.50	6.71	
Difference			7.37	13.72	10.44	10.44	11.32	6.66	5.37	3.73	1.47	
Delaware SMID Cap Focus Growth Equity (SA)	116,508,000	4.01	42.14	14.22	17.17	17.17	20.72	15.78	16.31	N/A	14.48	04/01/2011
Russell 2500 Grth Index			32.87	2.02	9.21	9.21	12.10	9.57	12.06	14.45	11.22	
Difference			9.27	12.20	7.96	7.96	8.62	6.21	4.25	N/A	3.26	
IM U.S. SMID Cap Growth Equity (SA+CF) Median			33.51	7.12	12.70	12.70	14.31	11.44	12.76	15.35	12.08	
Rank			10	24	28	28	12	7	6	N/A	14	
Earnest Partner Small Cap Value Equity (SA)	89,574,183	3.08	23.95	-10.30	-3.99	-3.99	5.08	7.14	10.07	11.99	N/A	07/31/2005
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	4.97	
Difference			5.04	13.20	13.49	13.49	9.43	5.88	6.09	4.17	N/A	
IM U.S. Small Cap Value Equity (SA+CF) Median			21.18	-21.45	-15.08	-15.08	-2.50	1.92	5.30	9.51	7.08	
Rank			28	7	8	8	7	6	4	8	N/A	
River Road Small Cap Value Equity (SA)	77,380,615	2.66	20.25	-18.90	-12.58	-12.58	2.01	6.67	7.58	10.41	5.85	04/01/2007
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	3.57	
Difference			1.34	4.60	4.90	4.90	6.36	5.41	3.60	2.59	2.28	
IM U.S. Small Cap Value Equity (SA+CF) Median			21.18	-21.45	-15.08	-15.08	-2.50	1.92	5.30	9.51	5.86	
Rank			56	34	32	32	15	7	16	29	51	
Lord Abbett Small Cap Growth Equity (SA)	113,409,988	3.90	41.24	17.65	12.43	12.43	24.46	12.36	14.69	N/A	13.55	04/01/2011
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	9.60	
Difference			10.66	20.71	8.95	8.95	16.60	5.50	4.66	N/A	3.95	
IM U.S. Small Cap Growth Equity (SA+CF) Median			32.78	1.16	5.99	5.99	12.27	10.20	12.31	15.04	11.65	
Rank			19	10	32	32	9	28	19	N/A	23	

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Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

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Other Equity												
Tortoise Direct Opportunities (CF)	10,134,182	0.35	-48.34	-47.56	-48.79	-48.79	-22.06	N/A	N/A	N/A	-14.27	09/30/2016
Alerian MLP Index			50.18	-35.71	-41.43	-41.43	-16.79	-12.85	-9.69	-1.41	-13.13	
Difference			-98.52	-11.85	-7.36	-7.36	-5.27	N/A	N/A	N/A	-1.14	
International Equity												
MSCI ACW Ex US Index (USD) (Net)	440,601,423	15.17	17.16	1.33	7.86	7.86	8.48	7.89	7.68	7.25	N/A	07/01/2003
Difference			1.04	12.33	12.66	12.66	7.35	5.63	3.97	2.28	N/A	
All Public Plans-Intl. Equity Segment Median			17.76	-10.04	-3.05	-3.05	2.08	3.17	4.87	6.52	7.89	
Rank			59	2	5	5	1	1	2	21	N/A	
Chautauqua International Growth Equity (SA)												
MSCI ACW Ex US Index (USD) (Net)	150,826,000	5.19	7.37	6.27	9.39	9.39	8.64	7.96	8.82	N/A	8.83	08/01/2012
Difference			-8.75	17.27	14.19	14.19	7.51	5.70	5.11	N/A	4.07	
IM International Large Cap Growth Equity (SA+CF) Median			19.95	-3.20	4.55	4.55	6.36	5.44	6.91	8.49	8.03	
Rank			100	5	23	23	25	27	22	N/A	32	
Emerging Markets Equity												
MSCI Emg Mkts Index (USD) (Net)	98,394,000	3.39	17.76	-11.12	-6.00	-6.00	-0.70	0.44	1.39	N/A	3.58	08/01/2012
Difference			-0.32	-1.34	-2.61	-2.61	-2.60	-2.42	-1.83	N/A	0.62	
WCM Berkeley Street EM Equity (CF)												
MSCI Emg Mkts Index (USD) (Net)	191,351,206	6.59	25.88	5.04	15.34	15.34	14.43	12.89	12.53	N/A	12.80	08/01/2012
Difference			7.80	14.82	18.73	18.73	12.53	10.03	9.31	N/A	9.84	
IM Emerging Markets Equity (SA+CF) Median			19.49	-10.13	-3.56	-3.56	1.28	2.90	3.59	4.77	4.15	
Rank			22	6	6	6	2	1	1	N/A	1	
RBC GAM Emerging Markets Equity (CF)												
MSCI Emg Mkts Index (USD) (Net)	49,175,000	1.69	17.03	-10.11	-6.10	-6.10	N/A	N/A	N/A	N/A	-1.11	01/31/2019
Difference			-1.05	-0.33	-2.71	-2.71	N/A	N/A	N/A	N/A	-5.62	
IM Emerging Markets Equity (SA+CF) Median			19.49	-10.13	-3.56	-3.56	1.28	2.90	3.59	4.77	5.07	
Rank			75	50	63	63	N/A	N/A	N/A	N/A	78	
Wellington Emerging Markets (CF)												
MSCI Emg Mkts Index (USD) (Net)	49,219,000	1.69	18.51	-12.11	-5.98	-5.98	N/A	N/A	N/A	N/A	-1.08	02/01/2019
Difference			0.43	-2.33	-2.59	-2.59	N/A	N/A	N/A	N/A	0.17	
IM Emerging Markets Equity (SA+CF) Median			19.49	-10.13	-3.56	-3.56	1.28	2.90	3.59	4.77	-0.10	
Rank			61	65	62	62	N/A	N/A	N/A	N/A	55	

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Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income	604,756,050	20.82	2.19	-0.86	1.41	1.41	2.15	2.87	2.90	3.76	4.89	10/01/2000
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.05	
Difference			-0.71	-7.00	-7.33	-7.33	-3.17	-1.43	-1.06	-0.06	-0.16	
US Fixed Income	248,977,000	8.57	4.77	5.62	8.30	8.30	5.05	4.35	3.99	3.63	3.45	03/01/2012
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	3.42	
Difference			1.87	-0.52	-0.44	-0.44	-0.27	0.05	0.03	-0.19	0.03	
Orleans Core Fixed Income (CF)	101,600,000	3.50	5.26	4.96	8.02	8.02	5.30	4.47	N/A	N/A	3.86	07/07/2014
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	3.89	
Difference			2.36	-1.18	-0.72	-0.72	-0.02	0.17	N/A	N/A	-0.03	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			4.42	6.24	8.93	8.93	5.57	4.70	4.41	4.34	4.26	
Rank			23	87	83	83	86	71	N/A	N/A	92	
Garcia Hamilton Core Fixed Income (CF)	147,377,000	5.07	4.87	6.33	8.85	8.85	5.35	4.69	N/A	N/A	4.36	07/07/2014
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	3.89	
Difference			1.97	0.19	0.11	0.11	0.03	0.39	N/A	N/A	0.47	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			4.42	6.24	8.93	8.93	5.57	4.70	4.41	4.34	4.26	
Rank			34	46	58	58	80	52	N/A	N/A	41	
Global Fixed Income	186,141,000	6.41	10.07	-2.24	0.03	0.03	1.34	2.91	2.50	3.92	2.99	04/01/2012
FTSE Wrld Gov't Bond Index			2.04	4.08	4.60	4.60	3.98	3.70	2.21	2.37	1.42	
Difference			8.03	-6.32	-4.57	-4.57	-2.64	-0.79	0.29	1.55	1.57	
Brandywine Global Fixed Income (CF)	186,141,000	6.41	10.07	-2.24	0.03	0.03	1.34	2.91	2.50	4.71	4.59	08/31/2009
FTSE Wrld Gov't Bond Index			2.04	4.08	4.60	4.60	3.98	3.70	2.21	2.37	2.28	
Difference			8.03	-6.32	-4.57	-4.57	-2.64	-0.79	0.29	2.34	2.31	
IM Global Fixed Income (SA+CF) Median			7.93	0.16	2.66	2.66	3.70	4.17	3.66	4.13	4.45	
Rank			27	64	69	69	85	81	82	36	46	

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Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Other Fixed Income												
Garrison Middle Market Funding (SA)	3,092,128	0.11	-5.94	-5.28	-19.09	-19.09	-4.72	-2.83	-0.14	N/A	-0.14	07/09/2013
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	3.96	
Difference			-8.84	-11.42	-27.83	-27.83	-10.04	-7.13	-4.10	N/A	-4.10	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			5.90	5.29	8.22	8.22	5.50	4.80	4.56	4.90	4.56	
Rank			100	99	100	100	100	100	100	N/A	100	
Medley Opportunity II (SA)	12,552,660	0.43	-9.03	-9.03	-19.09	-19.09	-12.34	-5.60	-3.15	N/A	-3.15	07/18/2013
CS Lvg'd Loan Index			9.71	-4.76	-2.27	-2.27	2.13	2.94	3.27	4.34	3.27	
Difference			-18.74	-4.27	-16.82	-16.82	-14.47	-8.54	-6.42	N/A	-6.42	
PIMCO Corporate Opp II (CF)	31,711,805	1.09	-15.14	-11.41	-8.27	-8.27	3.31	N/A	N/A	N/A	5.48	12/31/2016
Bloomberg US HY Loans Index			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
PIMCO Bravo III (CF)	49,488,457	1.70	-11.27	-10.49	-5.06	-5.06	N/A	N/A	N/A	N/A	5.18	12/01/2017
PIMCO Private Income (CF)	72,793,000	2.51	-5.85	-4.31	-1.42	-1.42	N/A	N/A	N/A	N/A	-1.22	05/31/2019
Bloomberg US HY Loans Index			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Real Estate												
Real Estate	319,537,594	11.00	-0.99	0.70	2.91	2.91	6.21	7.81	9.13	9.06	9.30	03/01/2012
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	8.89	
Difference			0.00	0.99	0.22	0.22	0.77	1.04	0.87	-0.64	0.41	
JP Morgan Strategic Property	110,998,000	3.82	-2.02	-0.49	2.25	2.25	5.13	6.86	8.77	10.62	7.66	04/01/2005
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.93	
Difference			-1.03	-0.20	-0.44	-0.44	-0.31	0.09	0.51	0.92	-0.27	
JP Morgan Special Situation Property (CF)	72,525,000	2.50	-0.81	0.59	4.79	4.79	7.89	9.55	N/A	N/A	10.98	11/05/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.64	
Difference			0.18	0.88	2.10	2.10	2.45	2.78	N/A	N/A	3.34	
Portfolio Advisors Real Estate III LP	2,902,490	0.10	-0.33	-0.69	-9.88	-9.88	-2.67	2.67	7.46	5.82	-0.69	07/01/2008
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	5.95	
Difference			0.66	-0.40	-12.57	-12.57	-8.11	-4.10	-0.80	-3.88	-6.64	
Portfolio Advisors Real Estate IV LP	1,630,934	0.06	-0.10	-5.26	-4.58	-4.58	4.54	7.04	9.79	N/A	7.03	07/01/2011
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	8.95	
Difference			0.89	-4.97	-7.27	-7.27	-0.90	0.27	1.53	N/A	-1.92	

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Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Angelo Gordon Net Lease III LP	23,275,950	0.80	-0.23	1.96	5.63	5.63	7.17	6.65	N/A	N/A	4.48	03/31/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	8.08	
Difference			0.76	2.25	2.94	2.94	1.73	-0.12	N/A	N/A	-3.60	
Mesirow	27,411,726	0.94	1.22	10.17	12.43	12.43	11.53	10.77	N/A	N/A	8.27	04/01/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.95	
Difference			2.21	10.46	9.74	9.74	6.09	4.00	N/A	N/A	0.32	
Dune Real Estate III LP	24,644,210	0.85	-0.25	-1.05	-4.87	-4.87	7.22	9.35	N/A	N/A	9.38	05/08/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.95	
Difference			0.74	-0.76	-7.56	-7.56	1.78	2.58	N/A	N/A	1.43	
Portfolio Advisors Real Estate	5,875,893	0.20	-0.51	-3.46	-5.38	-5.38	-0.09	2.88	N/A	N/A	6.27	06/30/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.95	
Difference			0.48	-3.17	-8.07	-8.07	-5.53	-3.89	N/A	N/A	-1.68	
Landmark Real Estate VII LP	9,555,000	0.33	-1.86	-2.29	-2.90	-2.90	1.61	10.20	N/A	N/A	13.30	09/12/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.78	
Difference			-0.87	-2.00	-5.59	-5.59	-3.83	3.43	N/A	N/A	5.52	
Hall Capital III LP	11,240,642	0.39	0.16	3.51	5.31	5.31	5.75	4.48	N/A	N/A	1.06	11/21/2014
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	7.64	
Difference			1.15	3.80	2.62	2.62	0.31	-2.29	N/A	N/A	-6.58	
Portfolio Advisors Real Estate VI LP	16,548,081	0.57	-0.39	0.64	8.08	8.08	11.97	N/A	N/A	N/A	10.43	02/01/2017
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	5.63	
Difference			0.60	0.93	5.39	5.39	6.53	N/A	N/A	N/A	4.80	
Hall Capital Real Estate LP	2,597,668	0.09	1.47	2.99	6.50	6.50	N/A	N/A	N/A	N/A	3.76	09/15/2018
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	4.58	
Difference			2.46	3.28	3.81	3.81	N/A	N/A	N/A	N/A	-0.82	
Dune Real Estate IV LP	10,332,000	0.36	-2.75	-3.69	N/A	N/A	N/A	N/A	N/A	N/A	-10.89	08/31/2019
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	2.69	
Difference			-1.76	-3.40	N/A	N/A	N/A	N/A	N/A	N/A	-13.58	

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Oklahoma State Pension Commission
Oklahoma Firefighters Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

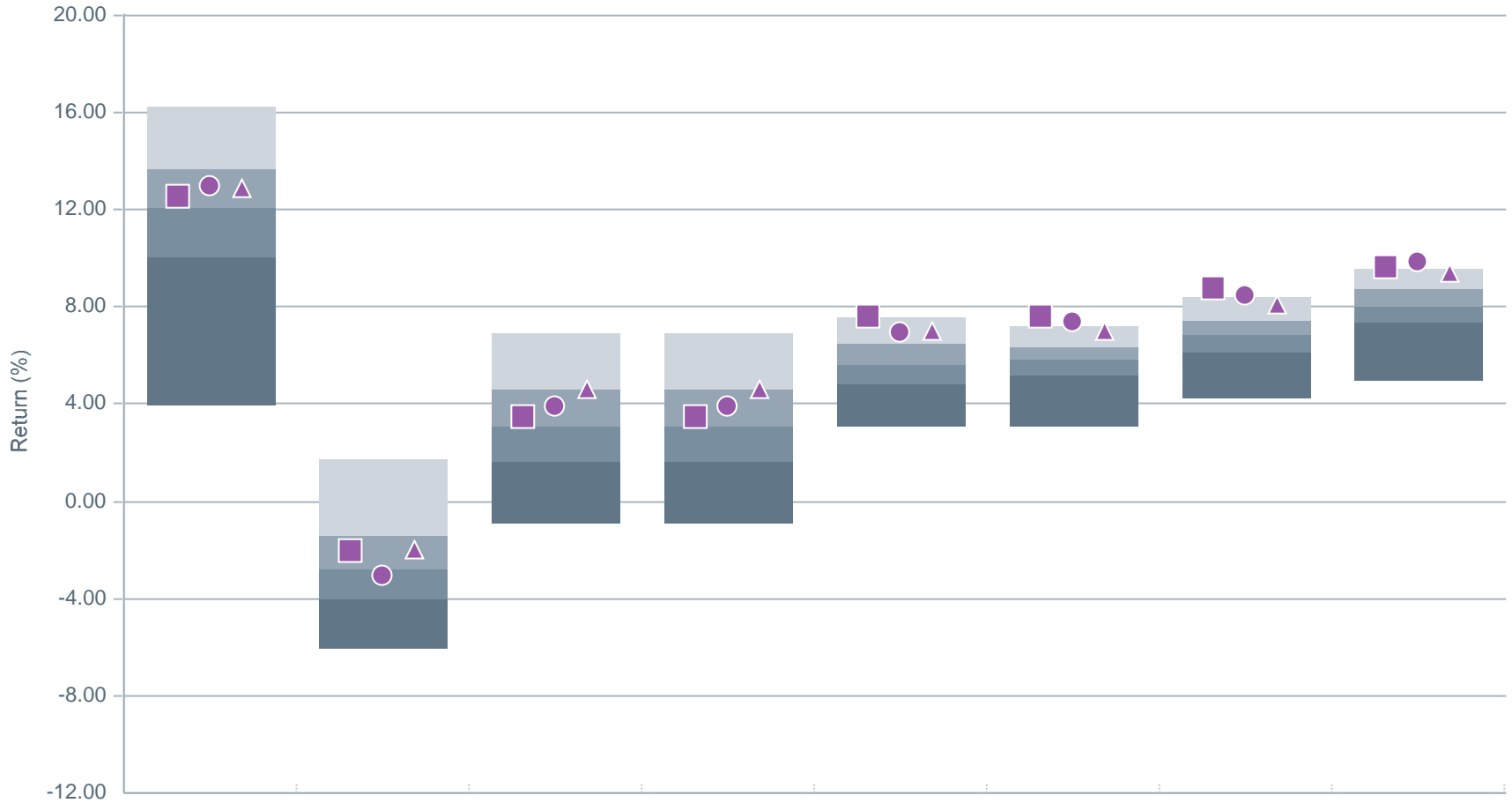
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Hedge Fund	10,415,000	0.36	-9.21	-9.86	-11.35	-11.35	-2.04	-0.36	0.51	2.18	2.48	01/01/2006
HFRI FOF: Cnsvt Index			5.66	-1.94	-0.39	-0.39	1.93	1.49	2.39	2.57	2.01	
Difference			-14.87	-7.92	-10.96	-10.96	-3.97	-1.85	-1.88	-0.39	0.47	
Glouston Capital Partners Permal (CF)	10,415,000	0.36	-9.21	-9.86	-11.26	-11.26	-2.00	-0.61	N/A	N/A	-0.60	06/30/2015
HFRI FOF Comp Index			7.89	-1.59	0.48	0.48	2.25	1.49	2.70	2.79	1.26	
Difference			-17.10	-8.27	-11.74	-11.74	-4.25	-2.10	N/A	N/A	-1.86	
Private Equity	104,944,167	3.61	-5.19	-2.04	3.17	3.17	10.82	9.84	N/A	N/A	13.79	04/01/2014
Ardian	8,848,067	0.30	-10.15	-9.41	-6.19	-6.19	5.85	6.96	N/A	N/A	9.75	04/01/2014
Ardian AESF VI LP	24,263,018	0.84	-2.49	2.76	12.33	12.33	11.60	N/A	N/A	N/A	9.35	03/01/2017
Argonaut Private Equity IV LP	5,845,081	0.20	4.17	4.17	13.47	13.47	N/A	N/A	N/A	N/A	5.37	08/15/2018
Capital Dynamics Global Secondaries IV	27,047,000	0.93	-9.09	-3.73	-0.67	-0.67	9.87	7.55	N/A	N/A	9.05	12/30/2014
Pomona Captial VIII LP	3,100,000	0.11	-17.56	-17.55	-19.41	-19.41	2.76	7.28	N/A	N/A	10.66	03/25/2014
Pomona Capital IX LP	19,969,000	0.69	-4.87	-4.86	1.37	1.37	N/A	N/A	N/A	N/A	33.21	02/28/2018

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Oklahoma State Pension Commission
 Oklahoma Firefighters Pension & Retirement System vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

As of June 30, 2020



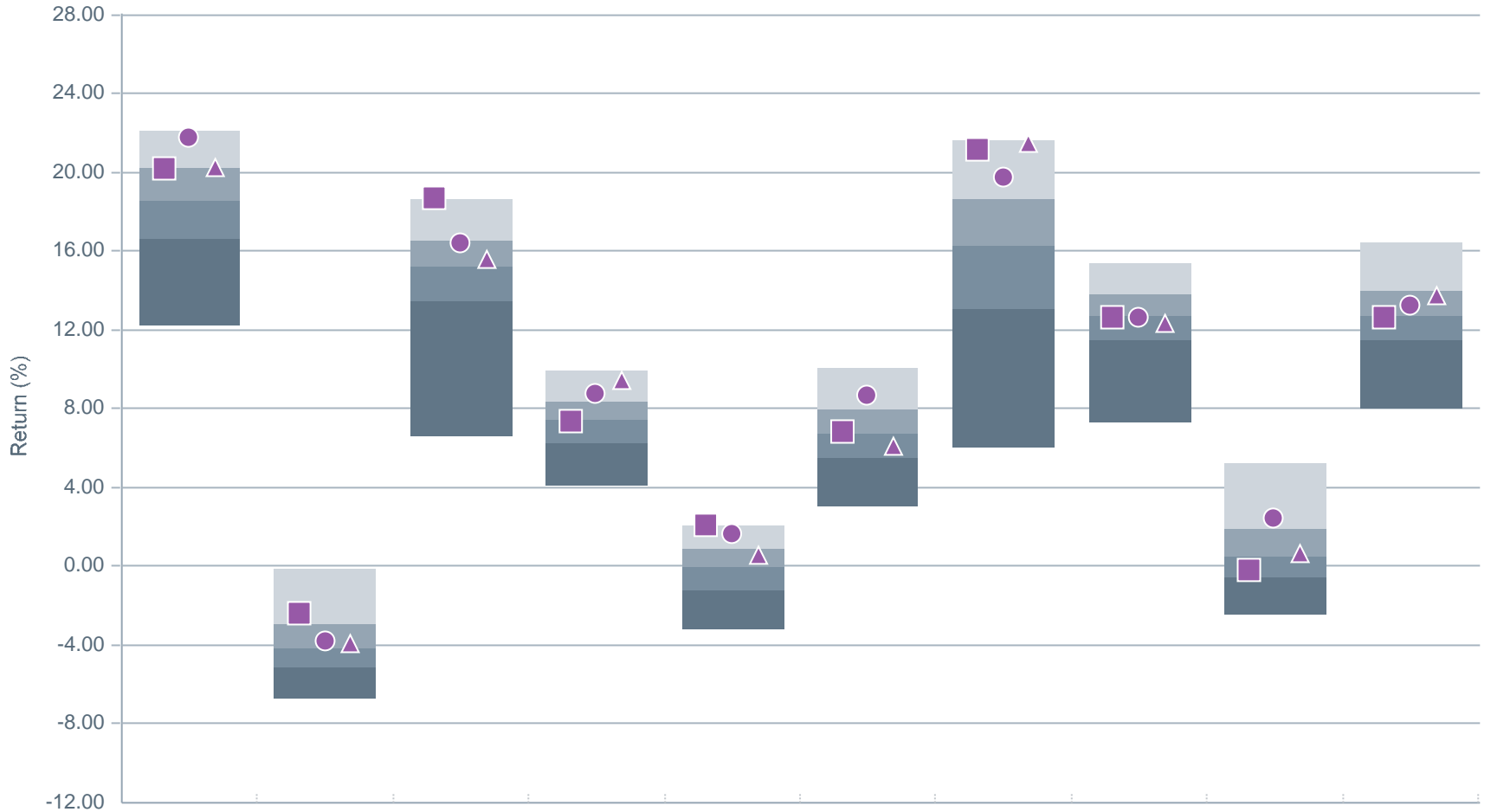
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OFPRS Total Fund	12.52 (43)	-2.07 (39)	3.46 (45)	3.46 (45)	7.62 (5)	7.57 (3)	8.73 (2)	9.65 (4)
● OFPRS Policy Index	12.98 (35)	-3.11 (58)	3.92 (37)	3.92 (37)	6.92 (15)	7.41 (4)	8.48 (4)	9.83 (3)
▲ OFPRS Allocation Index	12.92 (37)	-1.97 (37)	4.62 (25)	4.62 (25)	6.98 (14)	7.03 (10)	8.07 (9)	9.44 (7)
5th Percentile	16.24	1.72	6.92	6.92	7.58	7.27	8.39	9.57
1st Quartile	13.69	-1.37	4.60	4.60	6.52	6.39	7.45	8.75
Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03
3rd Quartile	10.05	-4.03	1.63	1.63	4.84	5.22	6.14	7.36
95th Percentile	3.97	-6.07	-0.88	-0.88	3.12	3.11	4.27	4.96

Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.
 Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 Oklahoma Firefighters Pension & Retirement System vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

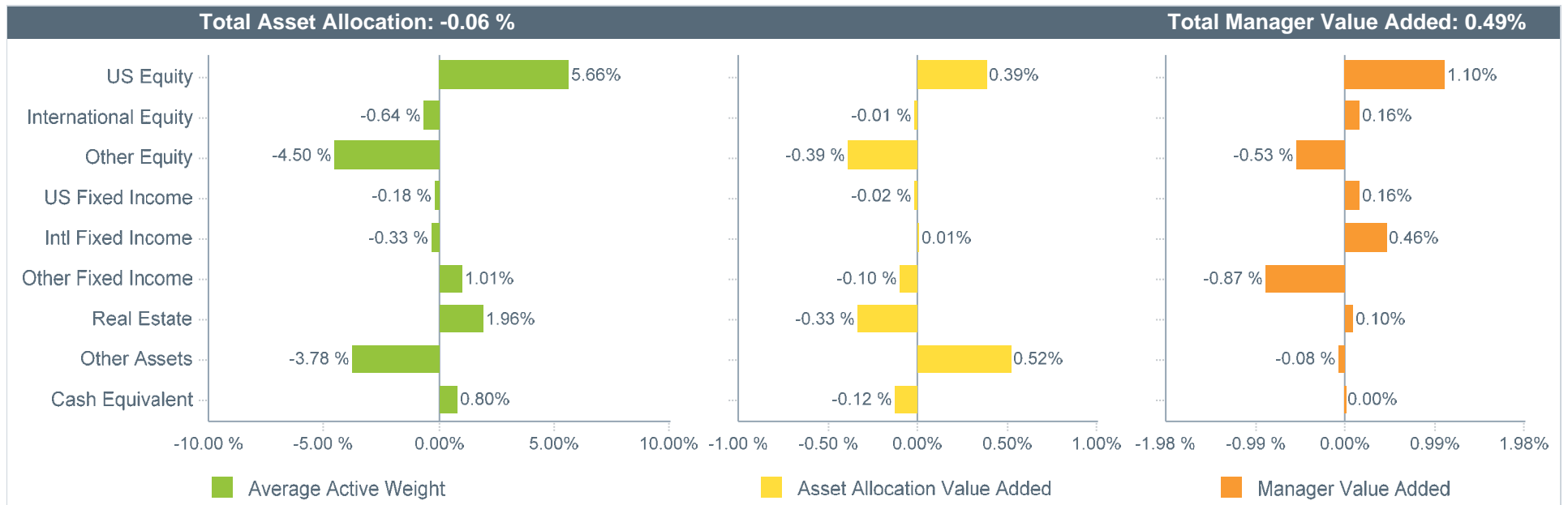
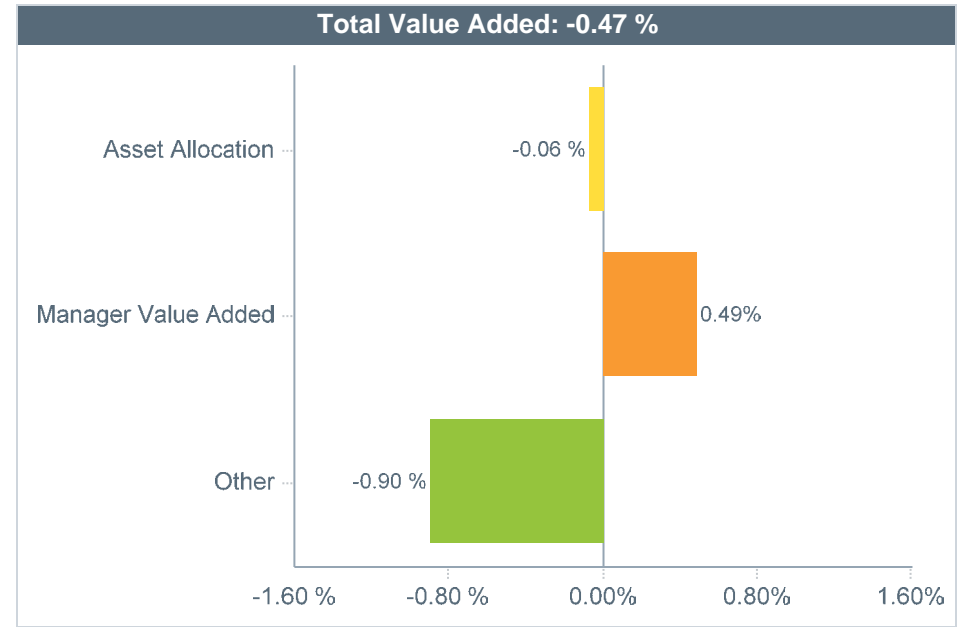
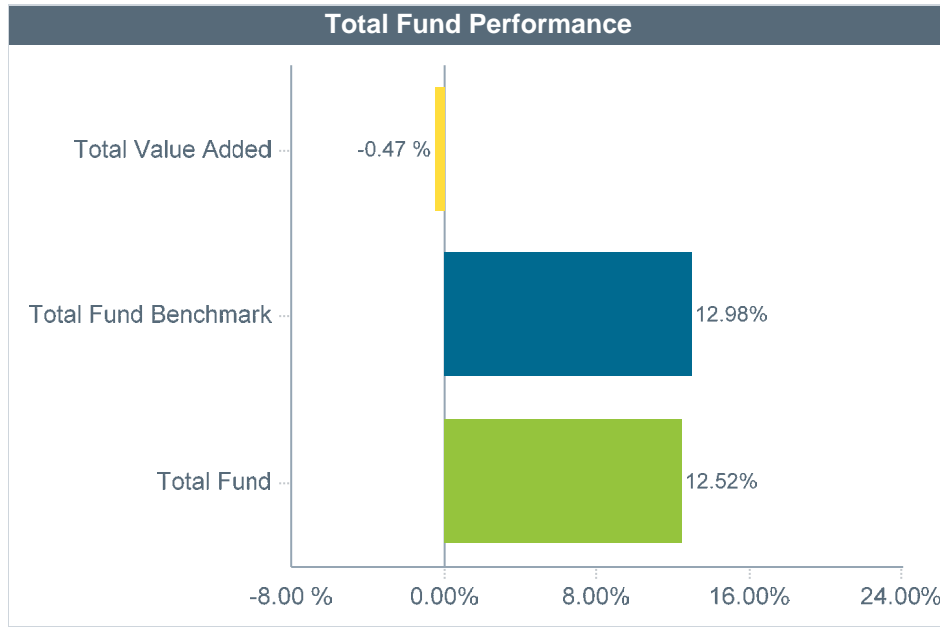
As of June 30, 2020



	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OFPRS Total Fund	20.17 (28)	-2.39 (18)	18.70 (6)	7.33 (53)	2.10 (5)	6.86 (46)	21.11 (7)	12.58 (53)	-0.22 (69)	12.62 (53)
● OFPRS Policy Index	21.76 (9)	-3.80 (44)	16.41 (29)	8.76 (17)	1.60 (11)	8.64 (14)	19.76 (15)	12.63 (52)	2.41 (22)	13.24 (38)
▲ OFPRS Allocation Index	20.30 (25)	-3.93 (46)	15.64 (42)	9.45 (10)	0.56 (34)	6.12 (64)	21.48 (7)	12.32 (59)	0.67 (48)	13.74 (31)
5th Percentile	22.10	-0.14	18.72	9.98	2.06	10.06	21.67	15.42	5.20	16.52
1st Quartile	20.27	-2.96	16.59	8.39	0.92	7.93	18.70	13.82	1.93	14.05
Median	18.59	-4.15	15.21	7.42	-0.08	6.74	16.28	12.73	0.48	12.68
3rd Quartile	16.66	-5.14	13.46	6.27	-1.20	5.45	13.03	11.49	-0.57	11.44
95th Percentile	12.27	-6.74	6.66	4.12	-3.18	3.05	6.05	7.32	-2.40	8.02

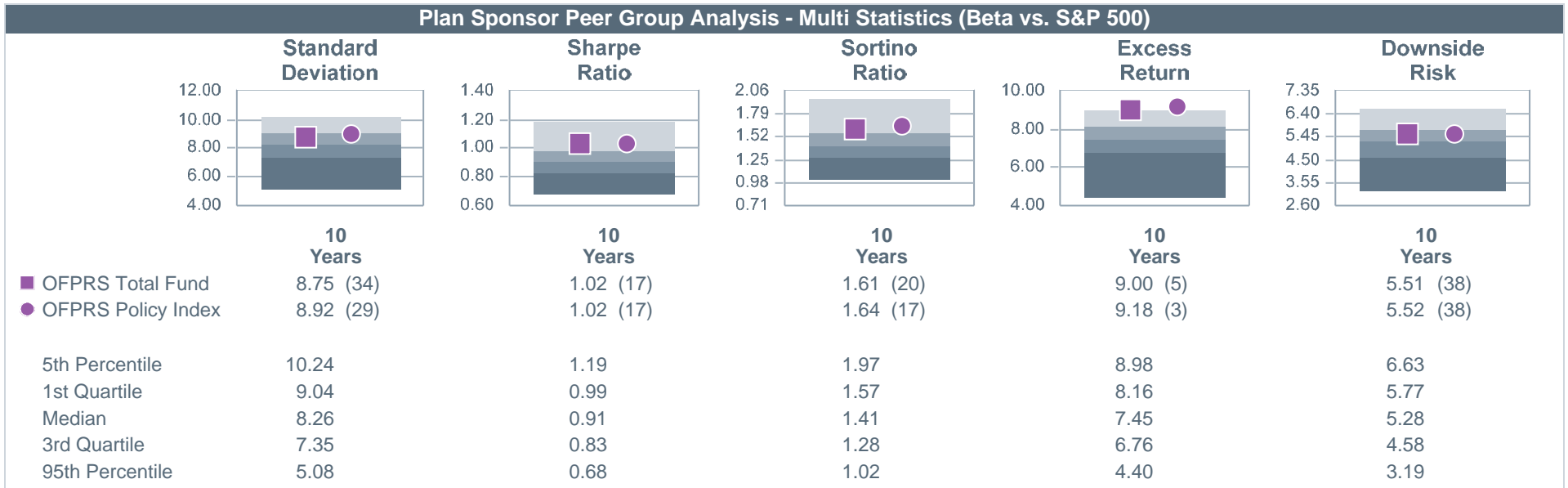
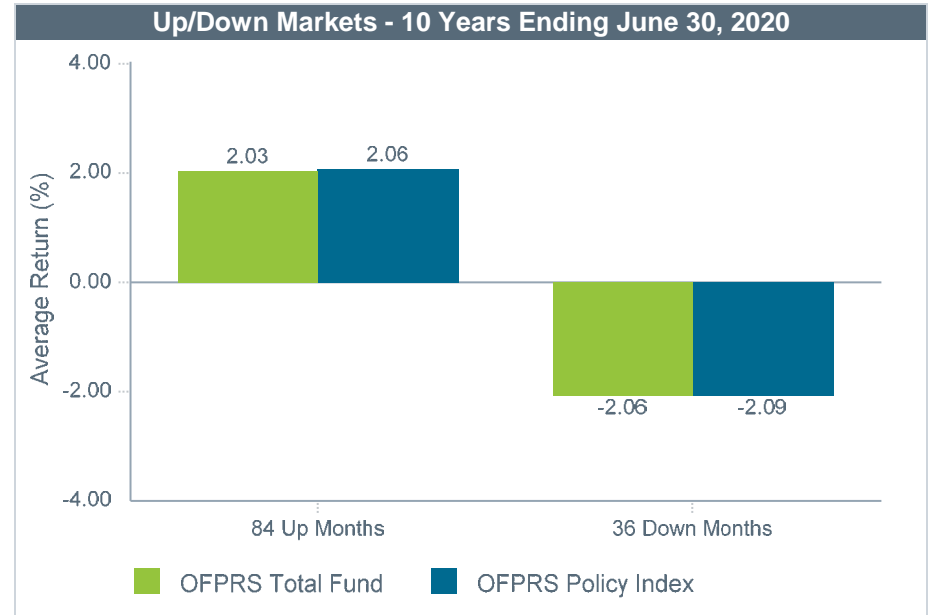
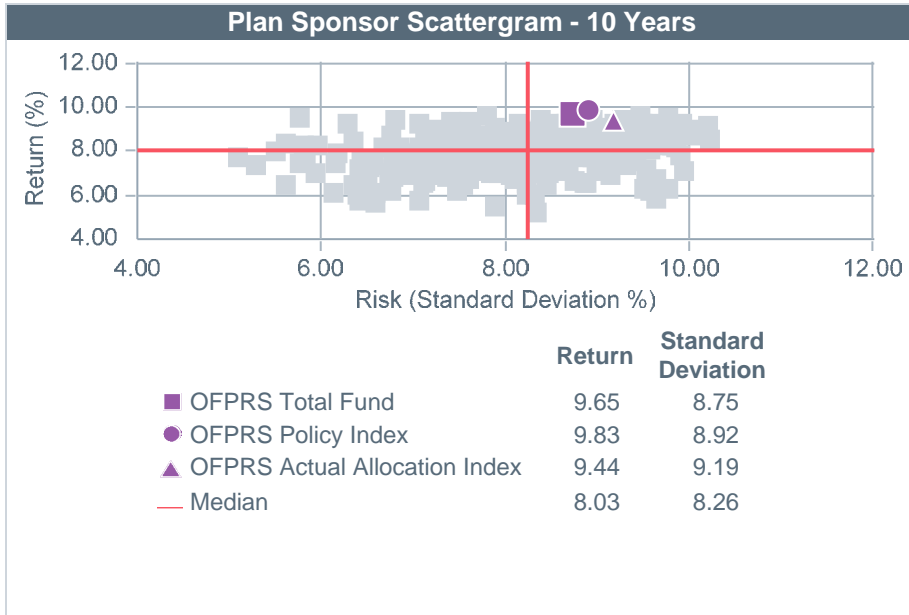
Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



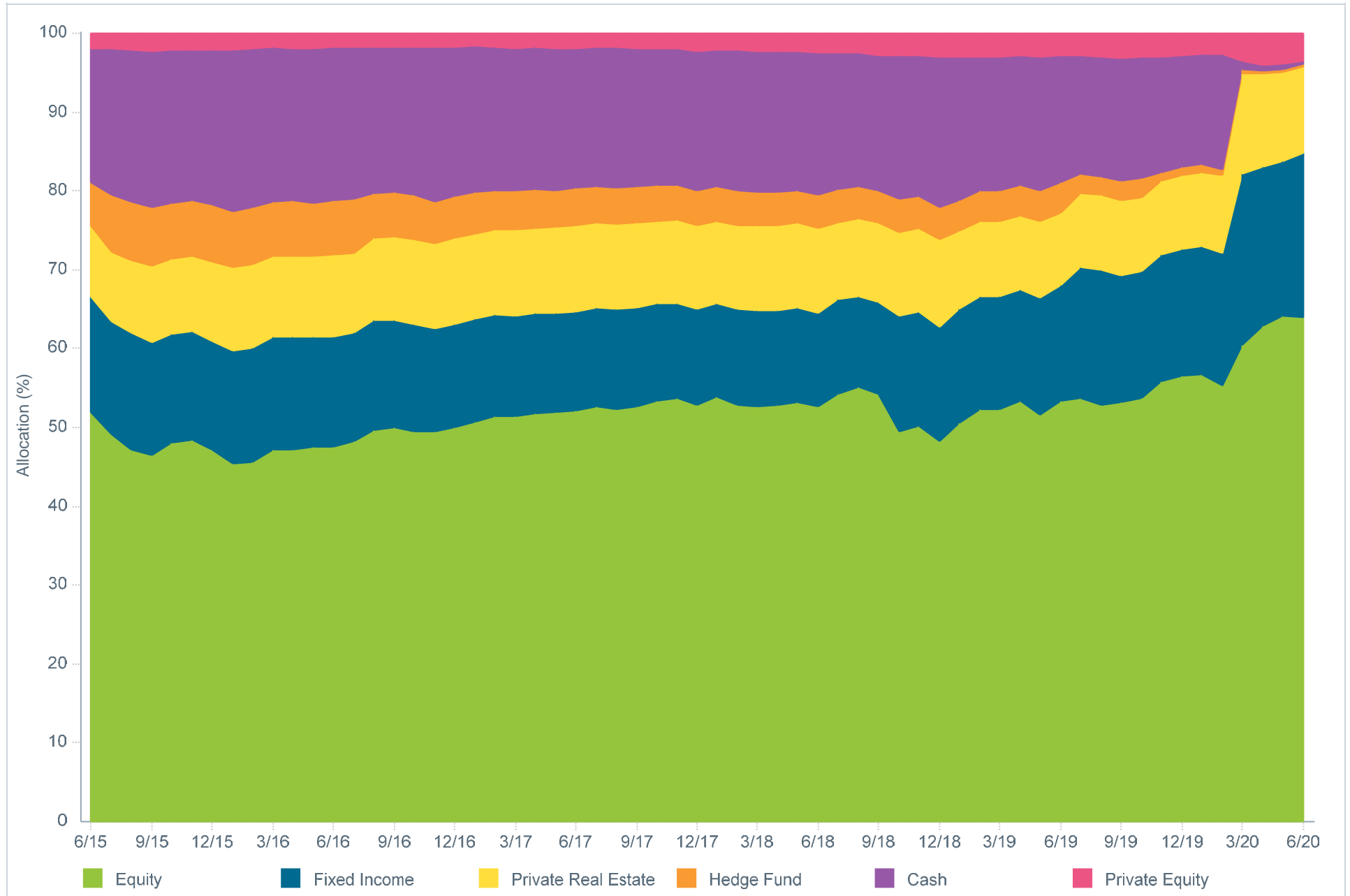


Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation. Allocation to Other Equity includes opportunistic equity; Other Fixed Income includes non-core Fixed Income; and Other Assets include Hedge Funds and Private Equity.

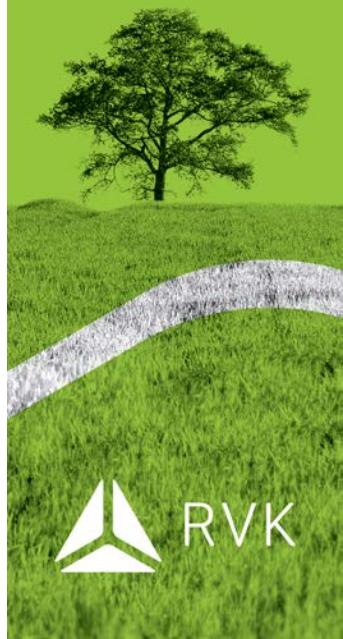




Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.

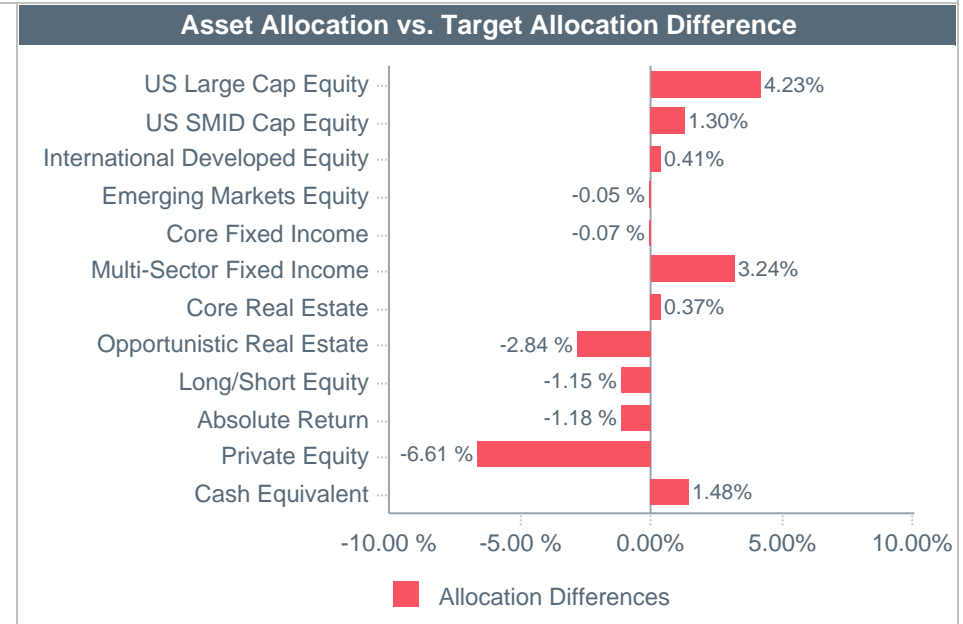


Oklahoma Police Pension & Retirement System (OPPRS)



	Performance (%)												
	Trailing							Calendar Year					
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OPPRS Total Fund (Net)	9.14	-3.01	2.23	2.23	4.93	5.01	6.16	7.37	15.37	-2.78	12.88	7.05	0.66
OPPRS Policy Index	12.02	-2.24	3.68	3.68	5.68	5.49	6.35	8.13	18.62	-5.34	15.45	7.07	-1.93
Difference	-2.88	-0.77	-1.45	-1.45	-0.75	-0.48	-0.19	-0.76	-3.25	2.56	-2.57	-0.02	2.59
OPPRS Actual Allocation Index	12.02	-1.16	3.70	3.70	5.45	5.18	6.18	7.92	15.02	-3.70	13.78	6.66	-0.35
Difference	-2.88	-1.85	-1.47	-1.47	-0.52	-0.17	-0.02	-0.55	0.35	0.92	-0.90	0.39	1.01
Actuarial Discount Rate (7.5%)	1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference	7.32	-6.69	-5.27	-5.27	-2.57	-2.49	-1.34	-0.13	7.87	-10.28	5.38	-0.45	-6.84
OPPRS Total Fund (Gross)	9.15	-2.91	2.50	2.50	5.27	5.35	6.49	7.65	15.77	-2.45	13.22	7.45	1.02
OPPRS Policy Index	12.02	-2.24	3.68	3.68	5.68	5.49	6.35	8.13	18.62	-5.34	15.45	7.07	-1.93
Difference	-2.87	-0.67	-1.18	-1.18	-0.41	-0.14	0.14	-0.48	-2.85	2.89	-2.23	0.38	2.95
OPPRS Actual Allocation Index	12.02	-1.16	3.70	3.70	5.45	5.18	6.18	7.92	15.02	-3.70	13.78	6.66	-0.35
Difference	-2.87	-1.75	-1.20	-1.20	-0.18	0.17	0.31	-0.27	0.75	1.25	-0.56	0.79	1.37
All Public Plans-Total Fund Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	18.59	-4.15	15.21	7.42	-0.08
Rank	82	54	59	59	63	72	64	64	83	19	77	49	20

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OPPRS (Police)	2,601,598,897	100.00	100.00
US Large Cap Equity	500,200,680	19.23	15.00
US SMID Cap Equity	163,933,367	6.30	5.00
International Developed Equity	270,955,286	10.41	10.00
Emerging Markets Equity	128,732,132	4.95	5.00
Core Fixed Income	258,341,873	9.93	10.00
Multi-Sector Fixed Income	279,289,367	10.74	7.50
Core Real Estate	269,723,177	10.37	10.00
Opportunistic Real Estate	56,175,469	2.16	5.00
Long/Short Equity	230,113,659	8.85	10.00
Absolute Return	164,398,235	6.32	7.50
Private Equity	218,356,871	8.39	15.00
Cash Equivalent	38,574,981	1.48	0.00



Parentheses contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding. Please see the Addendum for custom index definitions and additional Oklahoma State Pension Commission fiscal year begins on 07/01.

Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OPPRS Total Fund	2,601,598,897	100.00	9.14	-3.01	2.23	2.23	4.93	5.01	6.16	7.37	6.26	07/01/1985
OPPRS Policy Index			12.02	-2.24	3.68	3.68	5.68	5.49	6.35	8.13	N/A	
Difference			-2.88	-0.77	-1.45	-1.45	-0.75	-0.48	-0.19	-0.76	N/A	
OPPRS Actual Allocation Index			12.02	-1.16	3.70	3.70	5.45	5.18	6.18	7.92	N/A	
Difference			-2.88	-1.85	-1.47	-1.47	-0.52	-0.17	-0.02	-0.55	N/A	
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			7.32	-6.69	-5.27	-5.27	-2.57	-2.49	-1.34	-0.13	-1.24	
US Equity	664,134,046	25.53	24.57	-4.62	4.72	4.72	8.61	9.20	10.68	13.09	6.79	01/01/2000
S&P 500 Index (Cap Wtd)			20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	5.74	
Difference			4.03	-1.54	-2.79	-2.79	-2.12	-1.53	-1.45	-0.90	1.05	
Northern Trust Russell 1000 Index (SA)	500,200,680	19.23	21.81	-2.83	7.46	7.46	10.60	10.47	12.02	13.96	7.02	07/01/1998
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	6.92	
Difference			-0.01	-0.02	-0.02	-0.02	-0.04	0.00	-0.01	-0.01	0.10	
Boston Partners SMID Cap Value Equity (SA)	74,054,700	2.85	21.98	-25.68	-17.89	-17.89	-5.35	0.17	4.04	8.21	7.79	06/01/1997
Russell 2500 Val Index			20.60	-21.18	-15.50	-15.50	-2.60	1.85	4.74	8.81	8.11	
Difference			1.38	-4.50	-2.39	-2.39	-2.75	-1.68	-0.70	-0.60	-0.32	
Silvercrest Small Cap Growth Equity (SA)	89,878,666	3.45	43.31	4.06	9.79	9.79	11.25	10.96	N/A	N/A	5.75	01/01/2014
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	7.50	
Difference			12.73	7.12	6.31	6.31	3.39	4.10	N/A	N/A	-1.75	
International Equity	399,687,419	15.36	12.86	-12.35	-5.38	-5.38	0.27	2.18	3.47	4.46	4.62	06/01/2004
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	5.26	
Difference			-3.26	-1.35	-0.58	-0.58	-0.86	-0.08	-0.24	-0.51	-0.64	
Mondrian International Value Equity (SA)	122,216,792	4.70	8.81	-19.87	-13.29	-13.29	-2.45	0.01	2.74	4.85	4.60	04/01/2004
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	5.01	
Difference			-7.31	-8.87	-8.49	-8.49	-3.58	-2.25	-0.97	-0.12	-0.41	
Barings Focused EAFE Plus Equity (SA)	148,738,494	5.72	14.77	-7.51	-0.68	-0.68	2.73	4.32	5.06	N/A	4.32	02/01/2012
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.17	
Difference			-1.35	3.49	4.12	4.12	1.60	2.06	1.35	N/A	0.15	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
AB EM Strategic Core Equity (CF)	86,539,514	3.33	15.13	-8.93	-3.47	-3.47	-0.59	N/A	N/A	N/A	2.85	10/01/2016
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	5.00	
Difference			-2.95	0.85	-0.08	-0.08	-2.49	N/A	N/A	N/A	-2.15	
Wasatch EM Small Cap (SA)	42,192,619	1.62	32.78	3.07	16.64	16.64	7.69	4.58	3.97	N/A	4.67	08/01/2012
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	2.96	
Difference			14.70	12.85	20.03	20.03	5.79	1.72	0.75	N/A	1.71	
Fixed Income	537,631,241	20.67	6.64	2.77	4.78	4.78	4.10	4.04	3.77	4.54	5.52	01/01/2000
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.21	
Difference			3.74	-3.37	-3.96	-3.96	-1.22	-0.26	-0.19	0.72	0.31	
Agincourt Core Fixed Income (SA)	258,341,873	9.93	4.51	7.06	9.78	9.78	5.89	4.77	4.37	4.31	4.08	07/01/1998
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.02	
Difference			1.61	0.92	1.04	1.04	0.57	0.47	0.41	0.49	-0.94	
Loomis Sayles Global World Bond (SA)	85,484,891	3.29	6.84	3.84	4.82	4.82	4.23	4.23	2.68	3.45	3.45	05/01/2008
FTSE Wrld Gov't Bond Index			2.04	4.08	4.60	4.60	3.98	3.70	2.21	2.37	2.43	
Difference			4.80	-0.24	0.22	0.22	0.25	0.53	0.47	1.08	1.02	
Oaktree Global Credit (SA)	133,698,451	5.14	10.81	-6.17	-4.74	-4.74	0.48	2.50	3.35	5.17	5.30	01/01/1998
Oaktree Global Credit Custom Index			10.60	-4.49	-1.42	-1.42	0.66	1.51	1.96	2.43	N/A	
Difference			0.21	-1.68	-3.32	-3.32	-0.18	0.99	1.39	2.74	N/A	
Private Credit	60,106,025	2.31	0.45	2.49	6.55	6.55	9.15	N/A	N/A	N/A	8.16	09/01/2016
Apollo Accord III LP	12,695,126	0.49	1.24	4.66	N/A	N/A	N/A	N/A	N/A	N/A	4.66	10/01/2019
Apollo Accord IIIB LP	5,000,000	0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	06/01/2020
LBC Credit Partners IV LP	25,748,347	0.99	0.53	1.61	5.14	5.14	8.13	N/A	N/A	N/A	7.24	09/01/2016
Newstone Capital Partners III LP	16,662,552	0.64	0.19	1.79	6.50	6.50	10.08	N/A	N/A	N/A	10.20	01/01/2017

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Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Core Real Estate	269,723,177	10.37	-2.77	-1.11	1.06	1.06	4.55	6.56	8.21	N/A	10.04	12/01/2010
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	9.65	
Difference			-1.02	-0.10	-0.27	-0.27	-0.17	0.21	0.12	N/A	0.39	
JP Morgan Strategic Property (CF)	150,762,476	5.79	-2.21	-0.91	1.36	1.36	4.21	5.95	7.90	9.97	5.06	11/01/2007
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.18	
Difference			-0.46	0.10	0.03	0.03	-0.51	-0.40	-0.19	0.19	0.88	
Blackstone Property Partners (CF)	114,040,118	4.38	-4.00	-1.72	0.66	0.66	5.74	8.28	N/A	N/A	7.99	12/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			-2.25	-0.71	-0.67	-0.67	1.02	1.93	N/A	N/A	0.72	
Columbus Square (SA)	4,920,583	0.19	0.94	1.46	3.04	3.04	5.18	8.26	7.77	11.32	10.05	03/01/1995
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.82	
Difference			2.69	2.47	1.71	1.71	0.46	1.91	-0.32	1.54	2.23	
Private Real Estate	56,175,469	2.16	-3.38	-0.47	5.10	5.10	8.30	8.69	10.65	N/A	8.82	08/01/2011
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	8.85	
Difference			-1.63	0.54	3.77	3.77	3.58	2.34	2.56	N/A	-0.03	
Angelo Gordon Realty Value X LP	5,602,430	0.22	-2.21	0.29	-16.89	-16.89	N/A	N/A	N/A	N/A	-15.70	06/01/2019
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	1.68	
Difference			-0.46	1.30	-18.22	-18.22	N/A	N/A	N/A	N/A	-17.38	
Blackstone Real Estate Partners IX LP	4,674,824	0.18	-4.72	-5.28	N/A	N/A	N/A	N/A	N/A	N/A	6.69	09/01/2019
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	1.33	
Difference			-2.97	-4.27	N/A	N/A	N/A	N/A	N/A	N/A	5.36	
Cerberus Real Estate III LP	9,111,520	0.35	0.48	5.33	9.30	9.30	7.03	8.94	9.96	N/A	9.96	07/01/2013
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	8.09	
Difference			2.23	6.34	7.97	7.97	2.31	2.59	1.87	N/A	1.87	
Cerberus Real Estate Partners IV LP	12,098,873	0.47	-6.82	-4.95	2.97	2.97	2.65	N/A	N/A	N/A	-19.93	06/01/2016
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	5.41	
Difference			-5.07	-3.94	1.64	1.64	-2.07	N/A	N/A	N/A	-25.34	
Hall Capital III LP	5,620,322	0.22	0.16	3.51	6.15	6.15	-1.08	4.88	N/A	N/A	1.40	11/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			1.91	4.52	4.82	4.82	-5.80	-1.47	N/A	N/A	-5.87	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Siguler Guff Distressed Real Estate Opp LP	3,970,125	0.15	-2.89	1.52	3.93	3.93	13.65	10.91	15.64	N/A	13.00	08/01/2011
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	8.77	
Difference			-1.14	2.53	2.60	2.60	8.93	4.56	7.55	N/A	4.23	
Siguler Guff Distressed Real Estate Opp II LP	6,632,979	0.25	-2.41	1.17	3.06	3.06	11.85	9.34	N/A	N/A	6.86	12/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			-0.66	2.18	1.73	1.73	7.13	2.99	N/A	N/A	-0.41	
Siguler Guff Distressed Real Estate Opp IIB LP	6,200,739	0.24	-5.57	-3.20	1.78	1.78	N/A	N/A	N/A	N/A	9.86	12/01/2017
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.54	
Difference			-3.82	-2.19	0.45	0.45	N/A	N/A	N/A	N/A	5.32	
TA Associates Realty X	2,263,657	0.09	-9.61	-7.14	6.61	6.61	12.80	10.29	10.84	N/A	10.12	01/01/2013
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	8.38	
Difference			-7.86	-6.13	5.28	5.28	8.08	3.94	2.75	N/A	1.74	
Other Real Assets												
Mount Lucas Peak	22,803,799	0.88	1.19	-14.10	-14.59	-14.59	-8.14	-5.71	-1.16	-2.29	3.06	05/01/2004
Long/Short Equity	230,113,659	8.85	16.15	6.26	11.79	11.79	7.39	5.26	6.54	N/A	6.06	12/01/2010
HFRI FOF: Strategic Index			11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	2.59	
Difference			5.12	8.40	11.27	11.27	5.33	3.82	3.59	N/A	3.47	
Grosvenor Long/Short Equity (CF)	86,059,701	3.31	6.53	-2.53	2.53	2.53	4.34	3.46	5.28	5.71	4.72	09/01/2003
HFRI FOF: Strategic Index			11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	3.56	
Difference			-4.50	-0.39	2.01	2.01	2.28	2.02	2.33	2.63	1.16	
K2 Mauna Kea LLC	144,053,958	5.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.16	06/01/2020
HFRI FOF: Strategic Index			11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	2.85	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.69	
Absolute Return	164,398,235	6.32	2.33	-2.08	-1.01	-1.01	1.41	0.18	1.74	N/A	2.53	12/01/2010
HFRI FOF: Cnsvt Index			5.66	-1.94	-0.39	-0.39	1.93	1.49	2.39	2.57	2.33	
Difference			-3.33	-0.14	-0.62	-0.62	-0.52	-1.31	-0.65	N/A	0.20	
PAAMCO (CF)	86,527,369	3.33	3.79	-4.86	-3.58	-3.58	-0.48	-0.75	1.06	2.39	3.98	10/01/2002
HFRI FOF: Cnsvt Index			5.66	-1.94	-0.39	-0.39	1.93	1.49	2.39	2.57	2.87	
Difference			-1.87	-2.92	-3.19	-3.19	-2.41	-2.24	-1.33	-0.18	1.11	

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Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Wellington Global Total Return (CF)	77,870,866	2.99	0.75	1.21	2.00	2.00	4.48	N/A	N/A	N/A	3.68	12/01/2016
HFRI FOF: Cnsvt Index			5.66	-1.94	-0.39	-0.39	1.93	1.49	2.39	2.57	2.29	
Difference			-4.91	3.15	2.39	2.39	2.55	N/A	N/A	N/A	1.39	
Private Equity	218,356,871	8.39	-5.55	-3.57	2.27	2.27	9.52	7.76	9.86	10.42	8.79	05/01/2007
Cambridge US Prvt Eq Index			0.00	-10.07	-5.51	-5.51	7.26	8.37	10.39	12.06	9.39	
Difference			-5.55	6.50	7.78	7.78	2.26	-0.61	-0.53	-1.64	-0.60	
Accel Europe LP	803,693	0.03	-8.45	-7.43	-12.23	-12.23	-7.19	-5.27	-1.04	7.00	4.40	06/01/2001
Actis EM IV LP	4,163,000	0.16	-16.54	-14.89	-17.59	-17.59	5.82	2.80	3.28	N/A	-0.05	03/01/2012
Apollo EPF III LP	4,502,083	0.17	9.43	8.65	14.35	14.35	N/A	N/A	N/A	N/A	-0.55	01/01/2018
Apollo Investment IX LP	2,780,419	0.11	-4.00	-1.08	-16.01	-16.01	N/A	N/A	N/A	N/A	-45.60	03/01/2019
Apollo Investment VIII LP	5,047,991	0.19	-18.89	-14.66	-6.49	-6.49	3.06	6.38	N/A	N/A	-1.85	02/01/2014
ArcLight Energy Partners VI LP	4,716,316	0.18	-25.60	-28.74	-31.69	-31.69	-3.19	N/A	N/A	N/A	-1.29	08/01/2015
ArcLight Energy Partners VII LP	623,727	0.02	32.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-186.28	02/01/2020
Arsenal Capital Partners III LP	1,821,622	0.07	-6.55	-20.70	-33.22	-33.22	28.56	23.16	16.98	N/A	14.26	04/01/2012
CenterOak Equity I LP	6,582,298	0.25	-0.84	5.24	20.87	20.87	16.30	N/A	N/A	N/A	14.21	01/01/2016
EnCap Energy IX LP	2,080,861	0.08	-36.91	-48.17	-53.49	-53.49	-19.91	-3.99	-0.61	N/A	-2.54	02/01/2013
EnCap Energy X LP	4,332,390	0.17	-35.77	-35.80	-36.17	-36.17	-6.26	-4.11	N/A	N/A	-3.91	04/01/2015
EnCap Energy XI LP	1,777,661	0.07	-26.85	-33.28	-36.53	-36.53	-29.22	N/A	N/A	N/A	-28.56	06/01/2017
Firstmark Capital III LP	9,602,729	0.37	-0.53	32.86	30.34	30.34	24.94	19.26	N/A	N/A	4.16	02/01/2014
Firstmark Capital IV LP	5,623,442	0.22	6.10	4.14	5.02	5.02	-2.94	N/A	N/A	N/A	-2.79	05/01/2017
Firstmark Capital Opportunity I LP	6,186,570	0.24	0.14	3.05	1.85	1.85	16.97	11.33	N/A	N/A	11.49	06/01/2014
FirstMark Capital Opportunity II LP	8,656,278	0.33	0.12	14.24	16.72	16.72	N/A	N/A	N/A	N/A	8.66	01/01/2018
FirstMark Capital Opportunity III LP	750,000	0.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07/01/2020
Firstmark V LP	10,005,754	0.38	2.80	16.23	26.25	26.25	18.51	16.83	15.40	N/A	10.99	08/01/2011

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Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Francisco Partners IV LP	9,698,652	0.37	-3.81	1.98	32.71	32.71	32.29	21.49	N/A	N/A	20.37	04/01/2015
Francisco Partners V LP	5,632,850	0.22	-4.87	0.04	3.32	3.32	N/A	N/A	N/A	N/A	5.08	07/01/2018
Knightsbridge VI LP	5,287,020	0.20	-0.37	-0.37	7.01	7.01	10.03	4.88	8.25	8.16	11.85	02/01/2005
Leonard Green Equity Investors VII LP	7,136,199	0.27	-4.16	0.96	7.95	7.95	4.11	N/A	N/A	N/A	3.89	05/01/2017
Leonard Green Equity Investors VIII LP	-	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07/01/2020
Leonard Green Jade LP	799,773	0.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	05/01/2020
Levine Leichtman IV LP	844,163	0.03	-5.09	-6.38	-22.55	-22.55	-16.26	-4.19	-1.59	6.83	0.88	09/01/2008
Levine Leichtman LP	63,864	0.00	-0.01	-8.12	-14.60	-14.60	38.85	17.88	18.49	14.28	11.10	08/01/2003
Lexington VI LP	1,352,491	0.05	-0.07	-0.07	1.43	1.43	10.33	5.38	7.70	9.29	18.78	02/01/2006
Newstone Capital Partners II LP	861,365	0.03	1.62	27.45	11.50	11.50	14.84	12.06	15.19	N/A	11.64	12/01/2010
North Sky Clean Growth V LP	10,018,863	0.39	3.83	32.48	N/A	N/A	N/A	N/A	N/A	N/A	32.48	09/01/2019
Oaktree European Dislocation LP	212,565	0.01	-5.66	-21.41	-25.15	-25.15	-8.72	-1.49	N/A	N/A	-1.07	11/01/2013
Oaktree Opportunities IX LP	4,304,119	0.17	-22.11	-18.81	-16.57	-16.57	-0.76	-0.19	0.46	N/A	0.40	07/01/2012
Oaktree Opportunities V LP	1,700	0.00	-10.85	-16.87	20.31	20.31	7.30	1.55	3.55	6.39	3.67	07/01/2004
Oaktree Opportunities VI LP	254	0.00	-30.98	-52.26	-34.37	-34.37	N/A	N/A	N/A	N/A	N/A	08/01/2005
Oaktree Opportunities VII A LP	53,819	0.00	-4.77	-17.09	-18.44	-18.44	-5.49	-8.35	-5.01	0.02	1.43	03/01/2007
Oaktree Opportunities VII B LP	16,657	0.00	-0.77	2.52	-3.23	-3.23	4.09	4.67	2.86	7.20	9.92	06/01/2008
Oaktree Opportunities VIII LP	157,623	0.01	-23.92	-18.74	-11.38	-11.38	-0.07	0.00	2.01	5.59	6.07	03/01/2010
Oaktree Opportunities X LP	6,477,645	0.25	-7.85	-8.34	-8.67	-8.67	4.01	15.76	N/A	N/A	15.76	07/01/2015
Oaktree Opportunities Xb LP	2,424,962	0.09	-17.82	-14.85	-25.83	-25.83	N/A	N/A	N/A	N/A	-13.31	04/01/2018
Pequot Firstmark IV LP	9,356,187	0.36	-12.52	-29.64	-20.36	-20.36	-5.09	-1.06	12.54	20.69	18.92	11/01/2005
Siguler Guff Distressed Opportunities III LP	2,163,384	0.08	-5.69	3.62	6.80	6.80	7.53	6.48	6.48	7.19	9.15	09/01/2008

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Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Sun Capital Partners V LP	2,494,815	0.10	-21.16	-18.46	-32.81	-32.81	-25.23	-17.58	-10.50	-4.11	-5.67	05/01/2007
TA XIII LP	1,258,209	0.05	-11.43	-16.12	N/A	N/A	N/A	N/A	N/A	N/A	-16.12	12/01/2019
TCW Mezzanine V LP	357,220	0.01	-13.91	30.23	86.12	86.12	13.53	10.70	10.65	13.11	N/A	01/01/2008
Thompson Street Capital II LP	2,055,418	0.08	-2.67	0.40	21.43	21.43	8.60	8.12	16.20	18.56	14.53	01/01/2007
Thompson Street Capital III LP	3,994,701	0.15	-14.18	-9.86	-9.63	-9.63	-0.24	10.14	14.89	N/A	-42.14	10/01/2011
Thompson Street Capital IV LP	8,540,723	0.33	-0.14	7.87	20.45	20.45	16.59	N/A	N/A	N/A	-240.90	01/01/2016
Thompson Street Capital V LP	4,282,844	0.16	-4.93	-6.50	-6.50	-6.50	N/A	N/A	N/A	N/A	-17.34	08/01/2018
Warburg Pincus Global Growth LP	8,543,316	0.33	-0.69	-5.61	-17.52	-17.52	N/A	N/A	N/A	N/A	-31.83	03/01/2019
Warburg Pincus LP	2,007,115	0.08	-5.19	-6.80	21.16	21.16	13.27	9.66	10.85	10.46	5.67	10/01/2007
Warburg Pincus XII LP	10,473,494	0.40	-4.31	-0.70	16.14	16.14	13.53	N/A	N/A	N/A	-3.86	12/01/2015
Warburg Pincus XI LP	3,781,311	0.15	-16.00	-15.78	-13.34	-13.34	4.25	5.89	8.65	N/A	7.87	10/01/2012
Weathergage Venture Capital II LP	10,121,264	0.39	0.97	0.97	7.36	7.36	15.85	13.99	16.57	N/A	12.22	04/01/2011
Weathergage Venture Capital IV LP	9,307,530	0.36	11.72	11.72	22.43	22.43	10.73	N/A	N/A	N/A	19.57	12/01/2016
Weathergage Venture Capital LP	4,088,665	0.16	-0.30	-0.30	2.73	2.73	8.57	5.46	12.87	12.70	0.73	03/01/2007

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Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OPPRS Total Fund	2,601,598,897	100.00	9.15	-2.91	2.50	2.50	5.27	5.35	6.49	7.65	8.15	07/01/1985
OPPRS Policy Index			12.02	-2.24	3.68	3.68	5.68	5.49	6.35	8.13	N/A	
Difference			-2.87	-0.67	-1.18	-1.18	-0.41	-0.14	0.14	-0.48	N/A	
OPPRS Actual Allocation Index			12.02	-1.16	3.70	3.70	5.45	5.18	6.18	7.92	N/A	
Difference			-2.87	-1.75	-1.20	-1.20	-0.18	0.17	0.31	-0.27	N/A	
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			7.33	-6.59	-5.00	-5.00	-2.23	-2.15	-1.01	0.15	0.65	
All Public Plans-Total Fund Median			12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	8.50	
Rank			82	54	59	59	63	72	64	64	84	
US Equity	664,134,046	25.53	24.53	-4.57	4.82	4.82	8.82	9.43	10.91	13.29	6.96	01/01/2000
S&P 500 Index (Cap Wtd)			20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	5.74	
Difference			3.99	-1.49	-2.69	-2.69	-1.91	-1.30	-1.22	-0.70	1.22	
All Public Plans-US Equity Segment Median			21.87	-4.86	4.26	4.26	8.72	8.91	10.68	13.15	N/A	
Rank			10	42	36	36	49	36	42	44	N/A	
Northern Trust Russell 1000 Index (SA)	500,200,680	19.23	21.81	-2.82	7.48	7.48	10.62	10.48	12.04	13.98	7.04	07/01/1998
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	6.92	
Difference			-0.01	-0.01	0.00	0.00	-0.02	0.01	0.01	0.01	0.12	
IM U.S. Large Cap Core Equity (SA+CF) Median			20.19	-4.29	5.29	5.29	9.71	9.73	11.73	13.83	7.56	
Rank			27	33	32	32	37	36	43	45	67	
Boston Partners SMID Cap Value Equity (SA)	74,054,700	2.85	22.11	-25.23	-17.39	-17.39	-4.74	0.80	4.67	8.76	8.27	06/01/1997
Russell 2500 Val Index			20.60	-21.18	-15.50	-15.50	-2.60	1.85	4.74	8.81	8.11	
Difference			1.51	-4.05	-1.89	-1.89	-2.14	-1.05	-0.07	-0.05	0.16	
IM U.S. SMID Cap Value Equity (SA+CF) Median			21.87	-19.80	-13.05	-13.05	-1.24	2.83	6.27	10.02	9.81	
Rank			47	93	74	74	84	72	79	84	93	
Silvercrest Small Cap Growth Equity (SA)	89,878,666	3.45	43.58	4.50	10.73	10.73	12.21	11.94	N/A	N/A	6.72	01/01/2014
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	7.50	
Difference			13.00	7.56	7.25	7.25	4.35	5.08	N/A	N/A	-0.78	
IM U.S. Small Cap Growth Equity (SA+CF) Median			32.78	1.16	5.99	5.99	12.27	10.20	12.31	15.04	9.98	
Rank			14	44	36	36	51	30	N/A	N/A	82	

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Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity	399,687,419	15.36	12.90	-12.26	-5.13	-5.13	0.52	2.48	3.81	4.82	5.03	06/01/2004
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	5.26	
Difference			-3.22	-1.26	-0.33	-0.33	-0.61	0.22	0.10	-0.15	-0.23	
All Public Plans-Intl. Equity Segment Median			17.76	-10.04	-3.05	-3.05	2.08	3.17	4.87	6.52	6.22	
Rank			96	84	79	79	88	80	95	97	98	
Mondrian International Value Equity (SA)	122,216,792	4.70	8.93	-19.79	-13.19	-13.19	-2.41	0.03	2.76	4.97	4.83	04/01/2004
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	5.01	
Difference			-7.19	-8.79	-8.39	-8.39	-3.54	-2.23	-0.95	0.00	-0.18	
IM ACWI Ex US Value (SA+CF) Median			16.19	-14.86	-8.60	-8.60	-0.76	1.20	3.46	5.94	6.00	
Rank			100	85	88	88	72	78	69	67	73	
Barings Focused EAFE Plus Equity (SA)	148,738,494	5.72	14.77	-7.42	-0.28	-0.28	3.08	4.79	5.57	N/A	4.75	02/01/2012
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.17	
Difference			-1.35	3.58	4.52	4.52	1.95	2.53	1.86	N/A	0.58	
IM All EAFE (SA+CF) Median			16.29	-10.95	-3.80	-3.80	1.36	2.27	4.76	7.04	6.10	
Rank			73	32	33	33	34	23	34	N/A	84	
AB EM Strategic Core Equity (CF)	86,539,514	3.33	15.13	-8.93	-3.47	-3.47	-0.59	N/A	N/A	N/A	2.85	10/01/2016
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	5.00	
Difference			-2.95	0.85	-0.08	-0.08	-2.49	N/A	N/A	N/A	-2.15	
IM Emerging Markets Equity (SA+CF) Median			19.49	-10.13	-3.56	-3.56	1.28	2.90	3.59	4.77	4.75	
Rank			88	40	50	50	71	N/A	N/A	N/A	69	
Wasatch EM Small Cap (SA)	42,192,619	1.62	32.78	3.43	17.88	17.88	9.15	5.95	5.12	N/A	5.69	08/01/2012
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	2.96	
Difference			14.70	13.21	21.27	21.27	7.25	3.09	1.90	N/A	2.73	
IM Emerging Markets Equity (SA+CF) Median			19.49	-10.13	-3.56	-3.56	1.28	2.90	3.59	4.77	4.15	
Rank			6	8	4	4	5	23	32	N/A	30	

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Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

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	Allocation		Performance (%)									
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Fixed Income	537,631,241	20.67	6.62	2.81	4.97	4.97	4.37	4.34	4.05	4.75	5.66	01/01/2000
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.21	
Difference			3.72	-3.33	-3.77	-3.77	-0.95	0.04	0.09	0.93	0.45	
Agincourt Core Fixed Income (SA)	258,341,873	9.93	4.55	7.10	9.88	9.88	6.04	4.94	4.53	4.46	5.45	07/01/1998
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.02	
Difference			1.65	0.96	1.14	1.14	0.72	0.64	0.57	0.64	0.43	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			4.42	6.24	8.93	8.93	5.57	4.70	4.41	4.34	5.39	
Rank			45	17	18	18	14	22	38	37	46	
Oaktree Global Credit (SA)	133,698,451	5.14	10.92	-5.93	-4.20	-4.20	1.00	3.03	3.84	5.52	5.72	01/01/1998
Oaktree Global Credit Custom Index			10.60	-4.49	-1.42	-1.42	0.66	1.51	1.96	2.43	N/A	
Difference			0.32	-1.44	-2.78	-2.78	0.34	1.52	1.88	3.09	N/A	
IM Global Fixed Income (SA+CF) Median			7.93	0.16	2.66	2.66	3.70	4.17	3.66	4.13	5.80	
Rank			20	87	93	93	87	80	45	24	55	
Loomis Sayles Global World Bond (SA)	85,484,891	3.29	6.93	4.01	5.18	5.18	4.58	4.57	2.99	3.67	3.64	05/01/2008
FTSE Wrld Gov't Bond Index			2.04	4.08	4.60	4.60	3.98	3.70	2.21	2.37	2.43	
Difference			4.89	-0.07	0.58	0.58	0.60	0.87	0.78	1.30	1.21	
IM Global Fixed Income (SA+CF) Median			7.93	0.16	2.66	2.66	3.70	4.17	3.66	4.13	4.38	
Rank			63	18	27	27	30	33	63	60	67	
Private Credit	60,106,025	2.31	0.45	2.49	6.55	6.55	9.15	N/A	N/A	N/A	8.16	09/01/2016
Apollo Accord III LP	12,695,126	0.49	1.24	4.66	N/A	N/A	N/A	N/A	N/A	N/A	4.66	10/01/2019
Apollo Accord IIIB LP	5,000,000	0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07/01/2020
LBC Credit Partners IV LP	25,748,347	0.99	0.53	1.61	5.14	5.14	8.13	N/A	N/A	N/A	7.24	09/01/2016
Newstone Capital Partners III LP	16,662,552	0.64	0.19	1.79	6.50	6.50	10.08	N/A	N/A	N/A	10.20	01/01/2017

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Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Core Real Estate	269,723,177	10.37	-2.66	-0.60	1.99	1.99	5.56	7.56	9.29	N/A	10.89	12/01/2010
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	9.65	
Difference			-0.91	0.41	0.66	0.66	0.84	1.21	1.20	N/A	1.24	
JP Morgan Strategic Property (CF)	150,762,476	5.79	-2.02	-0.49	2.25	2.25	5.13	6.86	8.78	10.62	5.55	11/01/2007
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.18	
Difference			-0.27	0.52	0.92	0.92	0.41	0.51	0.69	0.84	1.37	
Blackstone Property Partners (CF)	114,040,118	4.38	-4.00	-1.07	1.64	1.64	7.10	9.43	N/A	N/A	9.02	12/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			-2.25	-0.06	0.31	0.31	2.38	3.08	N/A	N/A	1.75	
Columbus Square (SA)	4,920,583	0.19	0.94	1.46	3.04	3.04	5.18	9.98	11.87	14.53	15.03	03/01/1995
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.82	
Difference			2.69	2.47	1.71	1.71	0.46	3.63	3.78	4.75	7.21	
Private Real Estate	56,175,469	2.16	-3.38	-0.47	5.10	5.10	8.30	8.69	10.65	N/A	8.82	08/01/2011
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	8.85	
Difference			-1.63	0.54	3.77	3.77	3.58	2.34	2.56	N/A	-0.03	
Angelo Gordon Realty Value X LP	5,602,430	0.22	-2.21	0.29	-16.89	-16.89	N/A	N/A	N/A	N/A	-15.70	06/01/2019
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	1.68	
Difference			-0.46	1.30	-18.22	-18.22	N/A	N/A	N/A	N/A	-17.38	
Blackstone Real Estate Partners IX LP	4,674,824	0.18	-4.72	-5.28	N/A	N/A	N/A	N/A	N/A	N/A	6.69	09/01/2019
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	1.33	
Difference			-2.97	-4.27	N/A	N/A	N/A	N/A	N/A	N/A	5.36	
Cerberus Real Estate III LP	9,111,520	0.35	0.48	5.33	9.30	9.30	7.03	8.94	9.96	N/A	9.96	07/01/2013
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	8.09	
Difference			2.23	6.34	7.97	7.97	2.31	2.59	1.87	N/A	1.87	
Cerberus Real Estate Partners IV LP	12,098,873	0.47	-6.82	-4.95	2.97	2.97	2.65	N/A	N/A	N/A	-19.93	06/01/2016
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	5.41	
Difference			-5.07	-3.94	1.64	1.64	-2.07	N/A	N/A	N/A	-25.34	
Hall Capital III LP	5,620,322	0.22	0.16	3.51	6.15	6.15	-1.08	4.88	N/A	N/A	1.40	11/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			1.91	4.52	4.82	4.82	-5.80	-1.47	N/A	N/A	-5.87	
Siguler Guff Distressed Real Estate Opp LP	3,970,125	0.15	-2.89	1.52	3.93	3.93	13.65	10.91	15.64	N/A	13.00	08/01/2011
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	8.77	
Difference			-1.14	2.53	2.60	2.60	8.93	4.56	7.55	N/A	4.23	

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Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Siguler Guff Distressed Real Estate Opp II LP	6,632,979	0.25	-2.41	1.17	3.06	3.06	11.85	9.34	N/A	N/A	6.86	12/01/2014
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	7.27	
Difference			-0.66	2.18	1.73	1.73	7.13	2.99	N/A	N/A	-0.41	
Siguler Guff Distressed Real Estate Opp IIB LP	6,200,739	0.24	-5.57	-3.20	1.78	1.78	N/A	N/A	N/A	N/A	9.86	12/01/2017
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	4.54	
Difference			-3.82	-2.19	0.45	0.45	N/A	N/A	N/A	N/A	5.32	
TA Associates Realty X	2,263,657	0.09	-9.61	-7.14	6.61	6.61	12.80	10.29	10.84	N/A	10.12	01/01/2013
NCREIF ODCE Index (AWA) (Net)			-1.75	-1.01	1.33	1.33	4.72	6.35	8.09	9.78	8.38	
Difference			-7.86	-6.13	5.28	5.28	8.08	3.94	2.75	N/A	1.74	
Other Real Assets												
Mount Lucas Peak	22,803,799	0.88	1.19	-13.89	-13.92	-13.92	-7.32	-4.75	-0.10	-1.39	3.65	05/01/2004
Long/Short Equity	230,113,659	8.85	16.15	6.26	12.04	12.04	7.77	5.63	6.88	N/A	6.39	12/01/2010
HFRI FOF: Strategic Index			11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	2.59	
Difference			5.12	8.40	11.52	11.52	5.71	4.19	3.93	N/A	3.80	
Grosvenor Long/Short Equity (CF)	86,059,701	3.31	6.53	-2.53	2.76	2.76	4.71	3.82	5.62	6.05	4.93	09/01/2003
HFRI FOF: Strategic Index			11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	3.56	
Difference			-4.50	-0.39	2.24	2.24	2.65	2.38	2.67	2.97	1.37	
K2 Mauna Kea LLC	144,053,958	5.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.16	06/01/2020
HFRI FOF: Strategic Index			11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	2.85	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.69	
Absolute Return	164,398,235	6.32	2.33	-1.93	-0.55	-0.55	2.02	0.87	2.38	N/A	3.01	12/01/2010
HFRI FOF: Cnsvt Index			5.66	-1.94	-0.39	-0.39	1.93	1.49	2.39	2.57	2.33	
Difference			-3.33	0.01	-0.16	-0.16	0.09	-0.62	-0.01	N/A	0.68	
PAAMCO (CF)	86,527,369	3.33	3.79	-4.65	-2.93	-2.93	0.34	0.08	1.81	2.92	4.28	10/01/2002
HFRI FOF: Cnsvt Index			5.66	-1.94	-0.39	-0.39	1.93	1.49	2.39	2.57	2.87	
Difference			-1.87	-2.71	-2.54	-2.54	-1.59	-1.41	-0.58	0.35	1.41	
Wellington Global Total Return (CF)	77,870,866	2.99	0.75	1.27	2.18	2.18	4.70	N/A	N/A	N/A	3.89	12/01/2016
HFRI FOF: Cnsvt Index			5.66	-1.94	-0.39	-0.39	1.93	1.49	2.39	2.57	2.29	
Difference			-4.91	3.21	2.57	2.57	2.77	N/A	N/A	N/A	1.60	

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Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Private Equity	218,356,871	8.39	-5.43	-3.44	2.41	2.41	9.57	7.81	9.92	10.56	8.89	05/01/2007
Cambridge US Prvt Eq Index			0.00	-10.07	-5.51	-5.51	7.26	8.37	10.39	12.06	9.39	
Difference			-5.43	6.63	7.92	7.92	2.31	-0.56	-0.47	-1.50	-0.50	
Accel Europe LP	803,693	0.03	-8.45	-7.43	-12.23	-12.23	-7.19	-5.27	-1.04	7.00	4.40	06/01/2001
Actis EM IV LP	4,163,000	0.16	-16.54	-14.89	-17.59	-17.59	5.82	2.80	3.28	N/A	-0.05	03/01/2012
Apollo EPF III LP	4,502,083	0.17	10.50	9.71	15.46	15.46	N/A	N/A	N/A	N/A	-0.17	01/01/2018
Apollo Investment IX LP	2,780,419	0.11	0.24	3.29	-12.31	-12.31	N/A	N/A	N/A	N/A	-43.81	03/01/2019
Apollo Investment VIII LP	5,047,991	0.19	-18.79	-14.56	-6.37	-6.37	3.10	6.41	N/A	N/A	-1.83	02/01/2014
ArcLight Energy Partners VI LP	4,716,316	0.18	-25.60	-28.74	-31.69	-31.69	-3.19	N/A	N/A	N/A	-1.29	08/01/2015
ArcLight Energy Partners VII LP	623,727	0.02	32.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-186.28	02/01/2020
Arsenal Capital Partners III LP	1,821,622	0.07	-6.55	-20.70	-33.22	-33.22	28.56	23.16	16.98	N/A	14.26	04/01/2012
CenterOak Equity I LP	6,582,298	0.25	-0.84	5.24	20.87	20.87	16.30	N/A	N/A	N/A	14.21	01/01/2016
EnCap Energy IX LP	2,080,861	0.08	-36.56	-47.87	-53.22	-53.22	-19.76	-3.88	-0.53	N/A	-2.47	02/01/2013
EnCap Energy X LP	4,332,390	0.17	-35.49	-35.52	-35.89	-35.89	-6.12	-4.02	N/A	N/A	-3.84	04/01/2015
EnCap Energy XI LP	1,777,661	0.07	-25.26	-31.83	-35.15	-35.15	-28.72	N/A	N/A	N/A	-28.06	06/01/2017
Firstmark Capital III LP	9,602,729	0.37	-0.53	32.86	30.34	30.34	24.94	19.26	N/A	N/A	4.16	02/01/2014
Firstmark Capital IV LP	5,623,442	0.22	6.10	4.14	5.02	5.02	-2.94	N/A	N/A	N/A	-2.79	05/01/2017
Firstmark Capital Opportunity I LP	6,186,570	0.24	0.14	3.05	1.85	1.85	16.97	11.33	N/A	N/A	11.49	06/01/2014
FirstMark Capital Opportunity II LP	8,656,278	0.33	0.12	14.24	16.72	16.72	N/A	N/A	N/A	N/A	8.66	01/01/2018
FirstMark Capital Opportunity III LP	750,000	0.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07/01/2020
Firstmark V LP	10,005,754	0.38	2.80	16.23	26.25	26.25	18.51	16.83	15.40	N/A	10.99	08/01/2011
Francisco Partners IV LP	9,698,652	0.37	-3.81	1.98	32.71	32.71	32.29	21.49	N/A	N/A	20.37	04/01/2015
Francisco Partners V LP	5,632,850	0.22	-4.87	0.04	3.32	3.32	N/A	N/A	N/A	N/A	5.08	07/01/2018
Knightsbridge VI LP	5,287,020	0.20	-0.37	-0.37	7.01	7.01	10.03	4.88	8.25	8.16	11.85	02/01/2005
Leonard Green Equity Investors VII LP	7,136,199	0.27	-4.16	0.96	7.95	7.95	4.11	N/A	N/A	N/A	3.89	05/01/2017

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Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Leonard Green Equity Investors VIII LP	-	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07/01/2020
Leonard Green Jade LP	799,773	0.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	06/01/2020
Levine Leichtman IV LP	844,163	0.03	-5.09	-6.38	-22.55	-22.55	-16.26	-4.19	-1.52	7.83	1.68	09/01/2008
Levine Leichtman LP	63,864	0.00	-0.01	-8.12	-14.60	-14.60	38.85	17.88	18.49	14.64	11.31	08/01/2003
Lexington VI LP	1,352,491	0.05	-0.07	-0.07	1.43	1.43	10.33	5.38	7.70	9.29	18.78	02/01/2006
Newstone Capital Partners II LP	861,365	0.03	1.62	27.45	11.50	11.50	14.84	12.06	15.19	N/A	11.64	12/01/2010
North Sky Clean Growth V LP	10,018,863	0.39	3.83	32.48	N/A	N/A	N/A	N/A	N/A	N/A	32.48	09/01/2019
Oaktree European Dislocation LP	212,565	0.01	-5.66	-21.41	-25.15	-25.15	-8.72	-1.49	N/A	N/A	-1.07	11/01/2013
Oaktree Opportunities IX LP	4,304,119	0.17	-22.11	-18.81	-16.57	-16.57	-0.76	-0.19	0.46	N/A	0.40	07/01/2012
Oaktree Opportunities V LP	1,700	0.00	-10.85	-16.87	20.31	20.31	7.30	1.55	3.55	6.39	3.67	07/01/2004
Oaktree Opportunities VI LP	254	0.00	-30.98	-52.26	-34.37	-34.37	N/A	N/A	N/A	N/A	N/A	08/01/2005
Oaktree Opportunities VII A LP	53,819	0.00	-4.77	-17.09	-18.44	-18.44	-5.49	-8.35	-5.01	0.24	1.60	03/01/2007
Oaktree Opportunities VII B LP	16,657	0.00	-0.77	2.52	-3.23	-3.23	4.09	4.67	2.86	7.20	9.92	06/01/2008
Oaktree Opportunities VIII LP	157,623	0.01	-23.92	-18.74	-11.38	-11.38	-0.07	0.00	2.01	5.59	6.07	03/01/2010
Oaktree Opportunities X LP	6,477,645	0.25	-7.85	-8.34	-8.67	-8.67	4.01	15.76	N/A	N/A	15.76	07/01/2015
Oaktree Opportunities Xb LP	2,424,962	0.09	-17.82	-14.85	-25.83	-25.83	N/A	N/A	N/A	N/A	-13.31	04/01/2018
Pequot Firstmark IV LP	9,356,187	0.36	-12.52	-29.64	-20.36	-20.36	-5.09	-1.06	12.54	20.69	18.92	11/01/2005
Siguler Guff Distressed Opportunities III LP	2,163,384	0.08	-5.69	3.62	6.80	6.80	7.53	6.48	6.48	7.19	9.15	09/01/2008
Sun Capital Partners V LP	2,494,815	0.10	-21.16	-18.46	-32.81	-32.81	-25.23	-17.58	-10.50	-4.11	-5.67	05/01/2007
TA XIII LP	1,258,209	0.05	-11.43	-16.12	N/A	N/A	N/A	N/A	N/A	N/A	-16.12	12/01/2019
TCW Mezzanine V LP	357,220	0.01	-13.91	30.23	86.12	86.12	13.53	10.70	10.65	13.11	N/A	01/01/2008
Thompson Street Capital II LP	2,055,418	0.08	-2.67	0.40	21.43	21.43	8.60	8.18	16.37	19.15	14.95	01/01/2007
Thompson Street Capital III LP	3,994,701	0.15	-13.90	-9.56	-9.33	-9.33	-0.13	10.39	15.10	N/A	11.43	10/01/2011
Thompson Street Capital IV LP	8,540,723	0.33	0.16	8.20	20.81	20.81	16.70	N/A	N/A	N/A	-240.99	01/01/2016

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Oklahoma State Pension Commission
Oklahoma Police Pension & Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

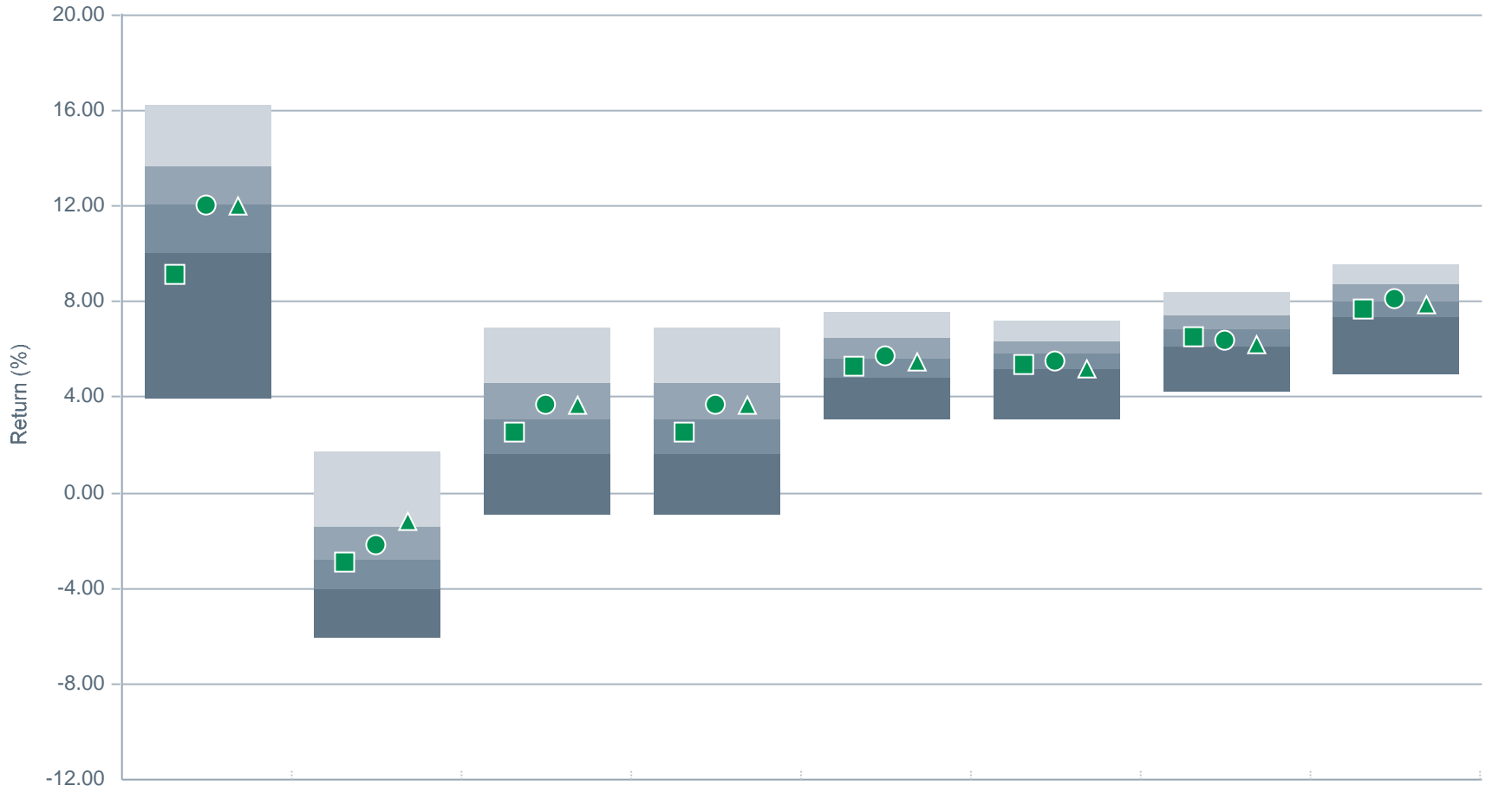
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Thompson Street Capital V LP	4,282,844	0.16	-3.35	-4.95	-4.96	-4.96	N/A	N/A	N/A	N/A	-16.63	08/01/2018
Warburg Pincus Global Growth LP	8,543,316	0.33	-0.69	-5.61	-17.52	-17.52	N/A	N/A	N/A	N/A	-31.83	03/01/2019
Warburg Pincus LP	2,007,115	0.08	-5.19	-6.80	21.16	21.16	13.27	9.66	10.85	10.46	5.67	10/01/2007
Warburg Pincus XII LP	10,473,494	0.40	-4.31	-0.70	16.14	16.14	13.53	N/A	N/A	N/A	3.89	12/01/2015
Warburg Pincus XI LP	3,781,311	0.15	-16.00	-15.78	-13.34	-13.34	4.25	5.89	8.65	N/A	7.87	10/01/2012
Weathergace Venture Capital II LP	10,121,264	0.39	0.97	0.97	7.36	7.36	15.85	13.99	16.57	N/A	12.22	04/01/2011
Weathergace Venture Capital IV LP	9,307,530	0.36	11.72	11.72	22.43	22.43	10.73	N/A	N/A	N/A	19.57	12/01/2016
Weathergace Venture Capital LP	4,088,665	0.16	-0.30	-0.30	2.73	2.73	8.57	5.46	12.87	12.70	0.73	03/01/2007

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Oklahoma State Pension Commission
 Oklahoma Police Pension & Retirement System vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

As of June 30, 2020



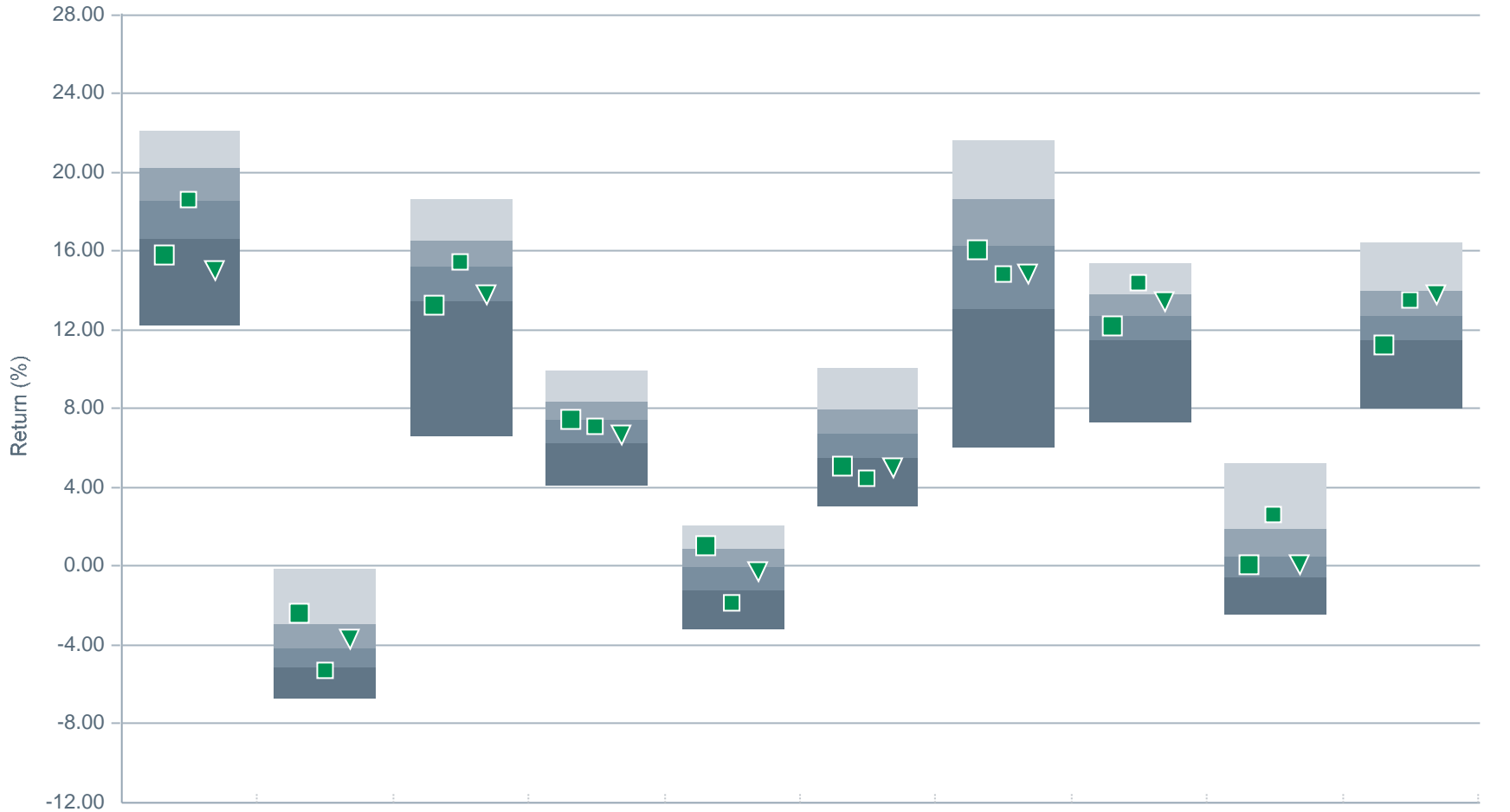
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OPPRS Total Fund	9.15 (82)	-2.91 (54)	2.50 (59)	2.50 (59)	5.27 (63)	5.35 (72)	6.49 (64)	7.65 (64)
● OPPRS Policy Index	12.02 (52)	-2.24 (42)	3.68 (41)	3.68 (41)	5.68 (49)	5.49 (64)	6.35 (70)	8.13 (47)
▲ OPPRS Allocation Index	12.02 (52)	-1.16 (22)	3.70 (41)	3.70 (41)	5.45 (57)	5.18 (76)	6.18 (74)	7.92 (53)
5th Percentile	16.24	1.72	6.92	6.92	7.58	7.27	8.39	9.57
1st Quartile	13.69	-1.37	4.60	4.60	6.52	6.39	7.45	8.75
Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03
3rd Quartile	10.05	-4.03	1.63	1.63	4.84	5.22	6.14	7.36
95th Percentile	3.97	-6.07	-0.88	-0.88	3.12	3.11	4.27	4.96

Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.
 Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 Oklahoma Police Pension & Retirement System vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

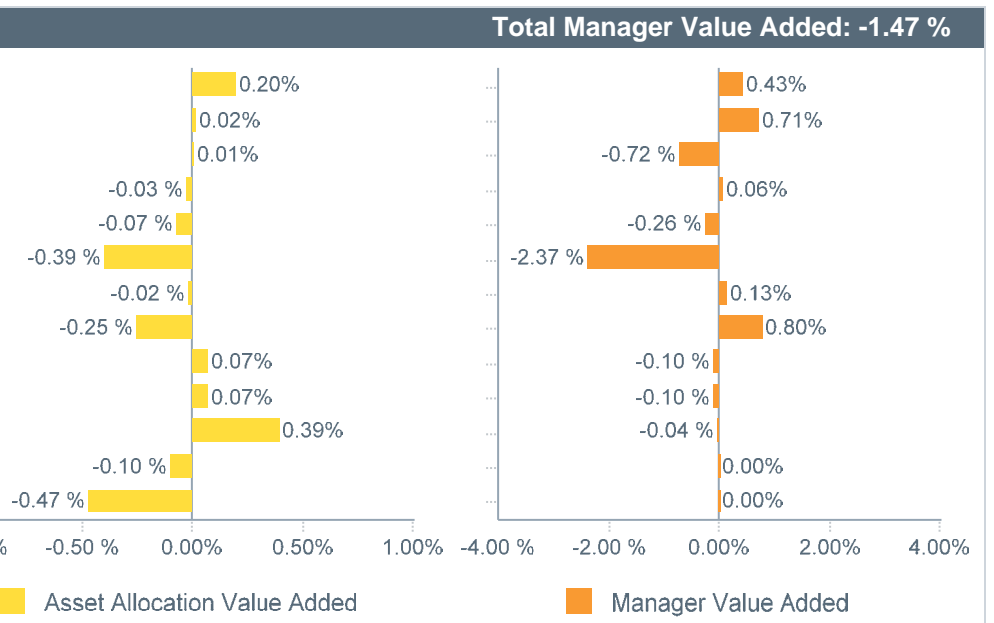
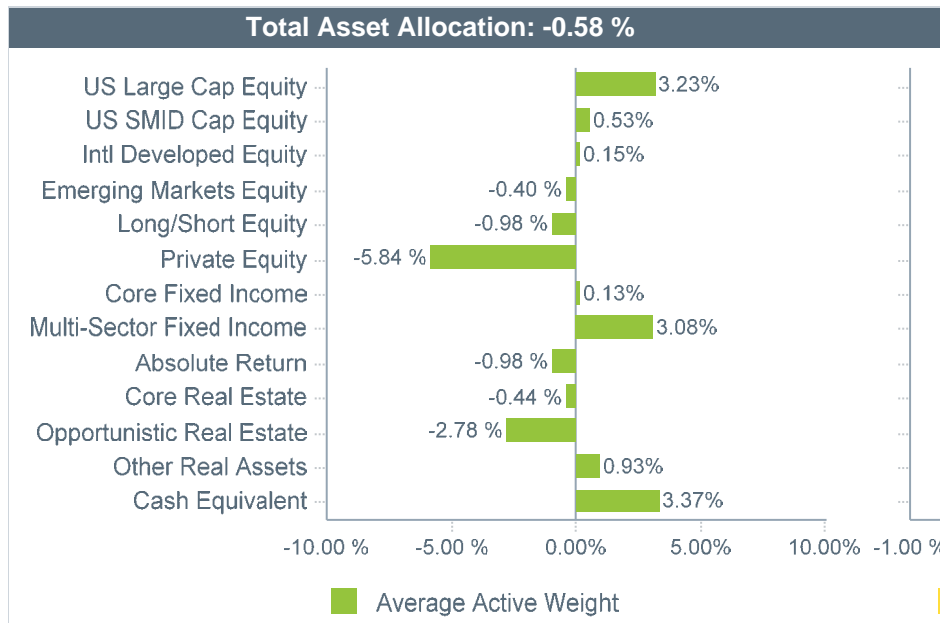
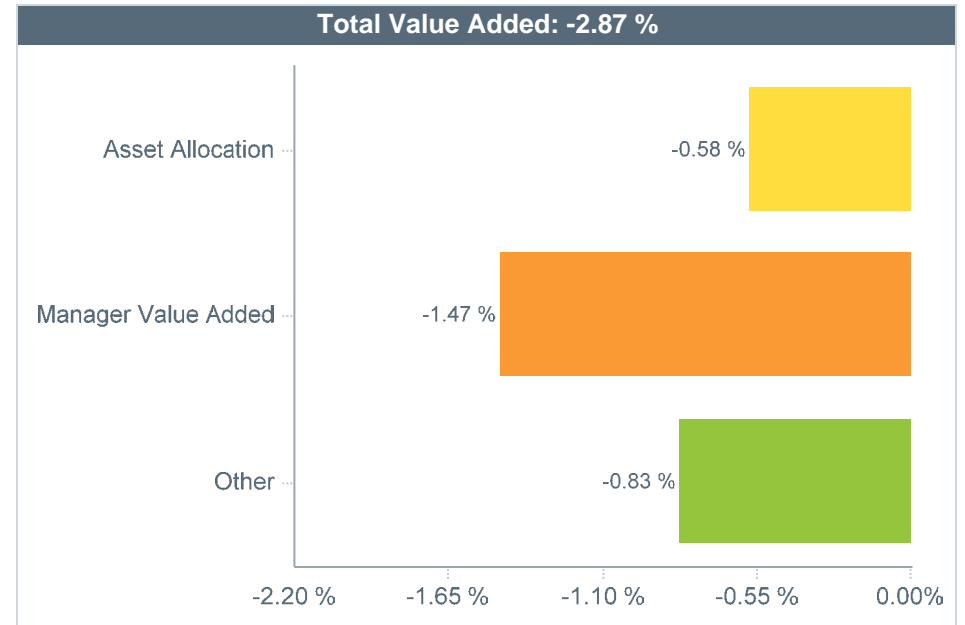
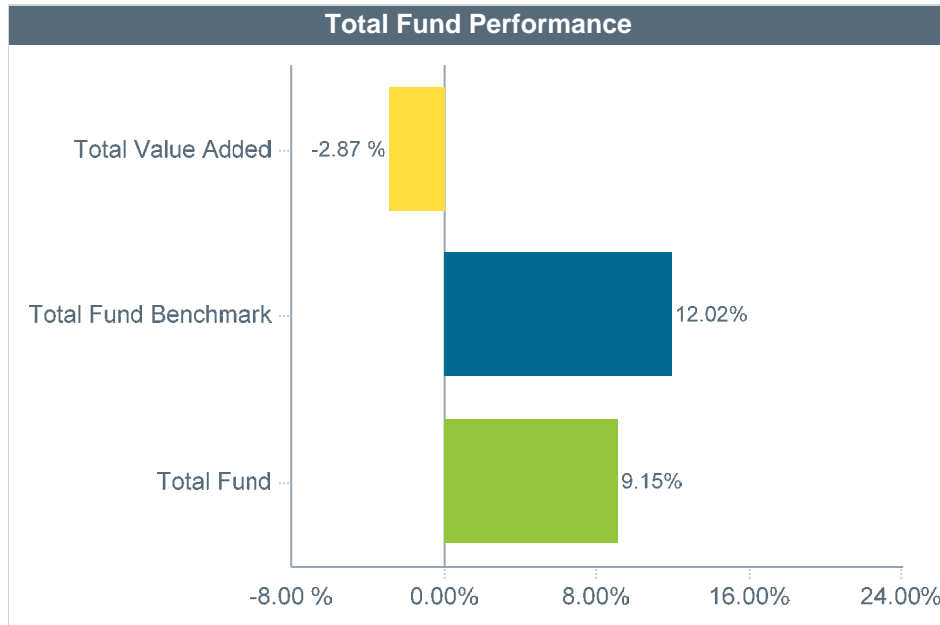
As of June 30, 2020



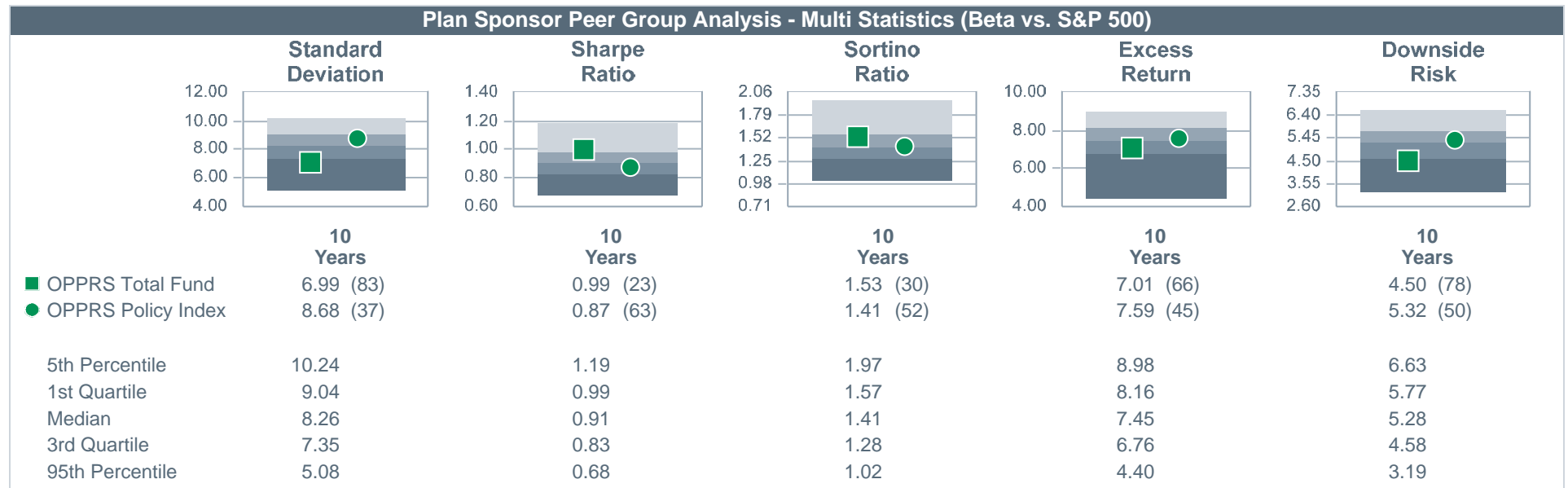
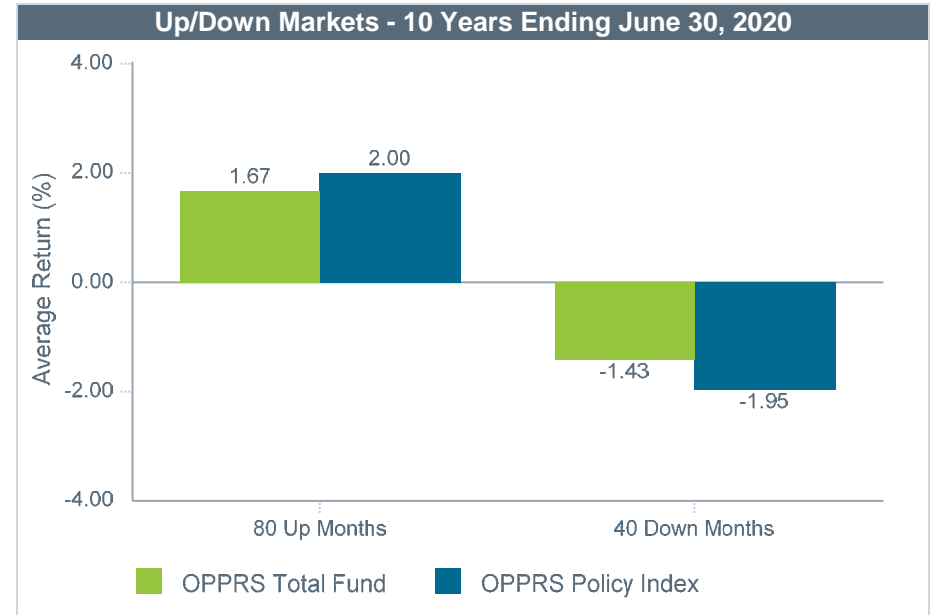
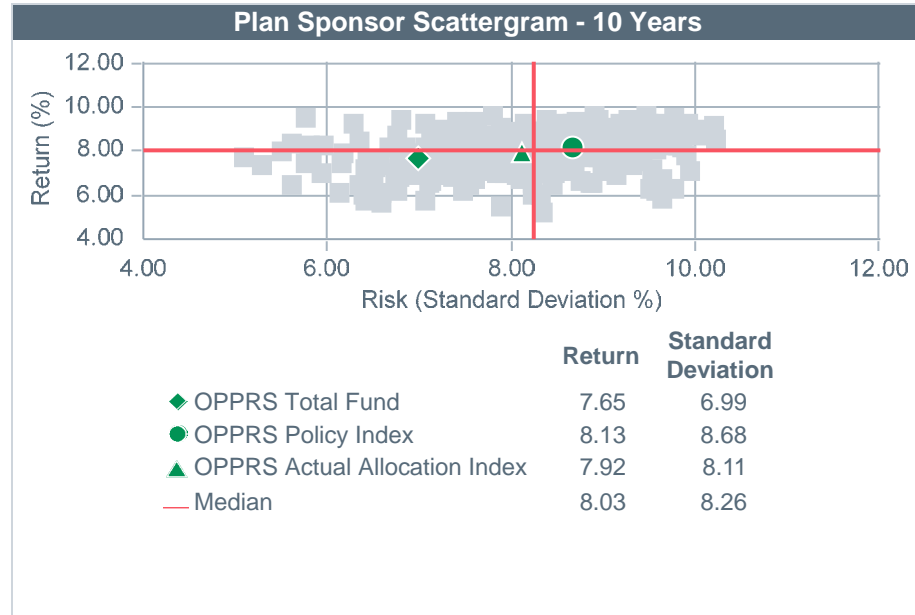
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OPPRS Total Fund	15.77 (83)	-2.45 (19)	13.22 (77)	7.45 (49)	1.02 (20)	5.06 (81)	16.08 (52)	12.14 (63)	0.04 (63)	11.22 (79)
■ OPPRS Policy Index	18.62 (50)	-5.34 (78)	15.45 (45)	7.07 (59)	-1.93 (85)	4.47 (88)	14.82 (65)	14.35 (17)	2.56 (20)	13.53 (34)
▼ OPPRS Allocation Index	15.02 (88)	-3.70 (42)	13.78 (72)	6.66 (68)	-0.35 (58)	4.97 (84)	14.77 (66)	13.44 (32)	0.09 (61)	13.78 (30)
5th Percentile	22.10	-0.14	18.72	9.98	2.06	10.06	21.67	15.42	5.20	16.52
1st Quartile	20.27	-2.96	16.59	8.39	0.92	7.93	18.70	13.82	1.93	14.05
Median	18.59	-4.15	15.21	7.42	-0.08	6.74	16.28	12.73	0.48	12.68
3rd Quartile	16.66	-5.14	13.46	6.27	-1.20	5.45	13.03	11.49	-0.57	11.44
95th Percentile	12.27	-6.74	6.66	4.12	-3.18	3.05	6.05	7.32	-2.40	8.02

Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.

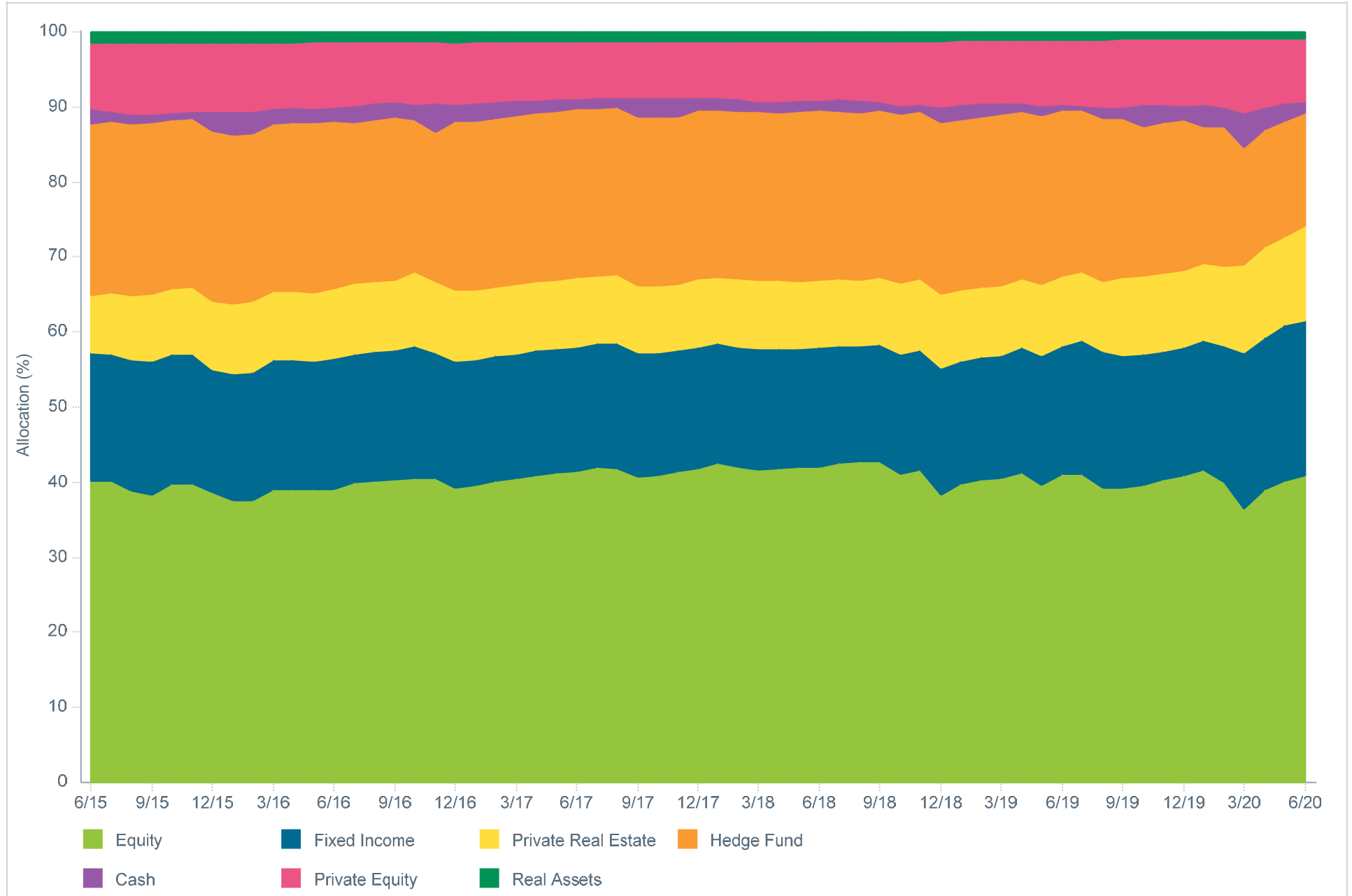




Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation. Allocation to Multi-Sector Fixed Income includes Private Credit.



Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



Allocation to Fixed Income includes Private Credit.

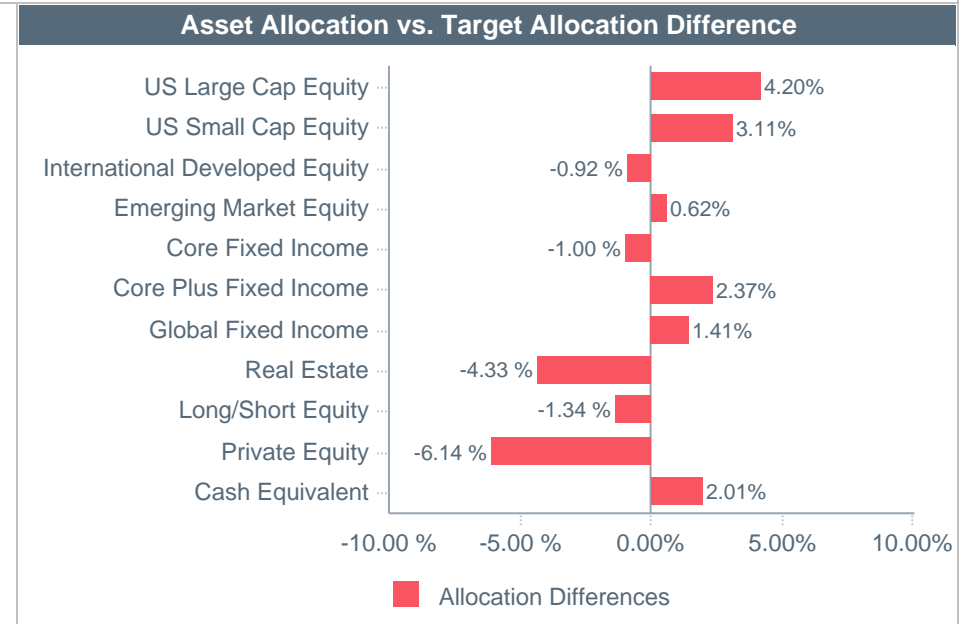
Oklahoma Law Enforcement Retirement System (OLERS)

Oklahoma State Pension Commission
 Oklahoma Law Enforcement Retirement System
 Total Fund Summary

As of June 30, 2020

	Performance (%)												
	Trailing							Calendar Year					
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OLERS Total Fund (Net)	11.29	-3.58	1.79	1.79	4.94	5.00	6.43	7.95	17.48	-4.74	14.53	7.07	-0.56
OLERS Policy Index	12.63	-2.27	4.15	4.15	6.18	6.34	7.39	8.64	19.12	-3.67	13.36	8.64	1.00
Difference	-1.34	-1.31	-2.36	-2.36	-1.24	-1.34	-0.96	-0.69	-1.64	-1.07	1.17	-1.57	-1.56
OLERS Actual Allocation Index	10.92	-1.80	4.35	4.35	6.09	6.25	7.20	8.45	17.33	-3.47	14.63	8.27	0.33
Difference	0.37	-1.78	-2.56	-2.56	-1.15	-1.25	-0.77	-0.50	0.15	-1.27	-0.10	-1.20	-0.89
Actuarial Discount Rate (7.5%)	1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference	9.47	-7.26	-5.71	-5.71	-2.56	-2.50	-1.07	0.45	9.98	-12.24	7.03	-0.43	-8.06
OLERS Total Fund (Gross)	11.29	-3.55	1.91	1.91	5.09	5.16	6.57	8.07	17.67	-4.56	14.65	7.24	-0.44
OLERS Policy Index	12.63	-2.27	4.15	4.15	6.18	6.34	7.39	8.64	19.12	-3.67	13.36	8.64	1.00
Difference	-1.34	-1.28	-2.24	-2.24	-1.09	-1.18	-0.82	-0.57	-1.45	-0.89	1.29	-1.40	-1.44
OLERS Actual Allocation Index	10.92	-1.80	4.35	4.35	6.09	6.25	7.20	8.45	17.33	-3.47	14.63	8.27	0.33
Difference	0.37	-1.75	-2.44	-2.44	-1.00	-1.09	-0.63	-0.38	0.34	-1.09	0.02	-1.03	-0.77
All Public Plans-Total Fund Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	18.59	-4.15	15.21	7.42	-0.08
Rank	62	66	71	71	70	77	62	48	62	59	60	56	60

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OLERS (Law Enforcement)	997,043,603	100.00	100.00
US Large Cap Equity	241,238,268	24.20	20.00
US Small Cap Equity	130,694,621	13.11	10.00
International Developed Equity	90,577,681	9.08	10.00
Emerging Market Equity	56,027,844	5.62	5.00
Core Fixed Income	89,712,366	9.00	10.00
Core Plus Fixed Income	123,382,224	12.37	10.00
Global Fixed Income	63,949,760	6.41	5.00
Real Estate	106,344,970	10.67	15.00
Long/Short Equity	36,523,160	3.66	5.00
Private Equity	38,525,618	3.86	10.00
Cash Equivalent	20,067,091	2.01	0.00



Parentheses contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding. Please see the Addendum for custom index definitions and additional Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Law Enforcement Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OLERS Total Fund	997,043,603	100.00	11.29	-3.58	1.79	1.79	4.94	5.00	6.43	7.95	8.05	10/01/1985
OLERS Policy Index			12.63	-2.27	4.15	4.15	6.18	6.34	7.39	8.64	N/A	
Difference			-1.34	-1.31	-2.36	-2.36	-1.24	-1.34	-0.96	-0.69	N/A	
OLERS Actual Allocation Index			10.92	-1.80	4.35	4.35	6.09	6.25	7.20	8.45	N/A	
Difference			0.37	-1.78	-2.56	-2.56	-1.15	-1.25	-0.77	-0.50	N/A	
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			9.47	-7.26	-5.71	-5.71	-2.56	-2.50	-1.07	0.45	0.55	
US Equity	371,932,889	37.30	23.92	-7.41	1.69	1.69	7.15	7.67	10.26	12.88	8.48	09/01/2003
S&P 500 Index (Cap Wtd)			20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	9.12	
Difference			3.38	-4.33	-5.82	-5.82	-3.58	-3.06	-1.87	-1.11	-0.64	
Hotchkis Wiley Large Cap Value Equity (SA)	51,725,846	5.19	19.57	-22.79	-16.14	-16.14	-1.22	2.98	6.68	10.59	9.31	04/01/1990
Russell 1000 Val Index			14.29	-16.26	-8.84	-8.84	1.82	4.64	7.11	10.41	9.19	
Difference			5.28	-6.53	-7.30	-7.30	-3.04	-1.66	-0.43	0.18	0.12	
NTGI S&P 500 Index (CF)	109,130,708	10.95	20.53	-3.11	7.47	7.47	10.67	10.76	12.15	13.97	10.06	07/01/2008
S&P 500 Index (Cap Wtd)			20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	9.97	
Difference			-0.01	-0.03	-0.04	-0.04	-0.06	0.03	0.02	-0.02	0.09	
Polen Focus Growth (CF)	80,381,713	8.06	27.24	10.85	23.18	23.18	N/A	N/A	N/A	N/A	36.48	12/01/2018
Russell 1000 Grth Index			27.84	9.81	23.28	23.28	18.99	15.89	16.62	17.23	21.94	
Difference			-0.60	1.04	-0.10	-0.10	N/A	N/A	N/A	N/A	14.54	
Kennedy Capital Small Cap Value Equity (SA)	59,237,344	5.94	23.58	-21.02	-14.69	-14.69	-3.30	2.54	5.61	9.45	10.92	06/01/1993
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	8.65	
Difference			4.67	2.48	2.79	2.79	1.05	1.28	1.63	1.63	2.27	
Wellington Small Cap Growth (CF)	71,457,277	7.17	29.35	-4.45	5.11	5.11	8.33	N/A	N/A	N/A	11.12	08/01/2016
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	10.24	
Difference			-1.23	-1.39	1.63	1.63	0.47	N/A	N/A	N/A	0.88	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Law Enforcement Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity	146,605,525	14.70	17.61	-9.52	-1.44	-1.44	2.53	3.29	4.07	4.68	3.35	09/01/2005
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.06	
Difference			1.49	1.48	3.36	3.36	1.40	1.03	0.36	-0.29	-0.71	
Barings Focused EAFE Plus Equity (SA)	49,281,871	4.94	14.77	-7.53	-0.70	-0.70	2.31	3.92	4.73	N/A	4.56	02/01/2012
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.17	
Difference			-1.35	3.47	4.10	4.10	1.18	1.66	1.02	N/A	0.39	
Mondrian International Equity (SA)	41,295,810	4.14	8.77	-20.04	-13.72	-13.72	-2.99	-0.57	2.15	4.38	3.54	01/01/2005
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.29	
Difference			-7.35	-9.04	-8.92	-8.92	-4.12	-2.83	-1.56	-0.59	-0.75	
William Blair Emerging Markets Leaders (CF)	41,559,940	4.17	26.21	-3.90	6.25	6.25	7.42	N/A	N/A	N/A	9.24	09/01/2016
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	5.24	
Difference			8.13	5.88	9.64	9.64	5.52	N/A	N/A	N/A	4.00	
Wasatch:Emg Mkt SC;Inv (WAEMX)	14,467,903	1.45	32.78	3.07	16.64	16.64	7.69	4.58	3.94	N/A	4.72	07/01/2012
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	3.18	
Difference			14.70	12.85	20.03	20.03	5.79	1.72	0.72	N/A	1.54	
Fixed Income	277,044,350	27.79	3.41	3.66	4.16	4.16	3.70	3.60	3.55	4.10	4.80	09/01/2003
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.50	
Difference			0.51	-2.48	-4.58	-4.58	-1.62	-0.70	-0.41	0.28	0.30	
NTGI Aggregate Index (SA)	89,712,366	9.00	2.80	6.18	8.76	8.76	5.35	4.31	3.99	3.84	4.36	04/01/2004
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.31	
Difference			-0.10	0.04	0.02	0.02	0.03	0.01	0.03	0.02	0.05	
TCW Core Plus Fixed Income (SA)	123,382,224	12.37	4.95	6.81	9.64	9.64	6.23	5.12	4.78	5.38	5.75	12/01/1993
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.37	
Difference			2.05	0.67	0.90	0.90	0.91	0.82	0.82	1.56	0.38	
Franklin Templeton Global Bonds (SA)	63,949,760	6.41	1.29	-5.04	-9.06	-9.06	-1.90	0.44	1.00	N/A	0.98	06/01/2013
Bloomberg Gbl Agg Bond Index			3.32	2.98	4.22	4.22	3.79	3.56	2.49	2.81	2.29	
Difference			-2.03	-8.02	-13.28	-13.28	-5.69	-3.12	-1.49	N/A	-1.31	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Law Enforcement Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Long/Short Equity	36,523,160	3.66	6.33	-3.65	-0.35	-0.35	2.40	2.15	4.27	N/A	4.33	12/01/2010
HFRI FOF: Strategic Index			11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	2.59	
Difference			-4.70	-1.51	-0.87	-0.87	0.34	0.71	1.32	N/A	1.74	
Grosvenor (CF)	36,523,160	3.66	6.33	-3.65	-0.35	-0.35	2.40	2.15	4.27	4.91	2.98	01/01/2008
HFRI FOF: Strategic Index			11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	0.93	
Difference			-4.70	-1.51	-0.87	-0.87	0.34	0.71	1.32	1.83	2.05	
Real Estate	106,344,970	10.67	-2.00	-0.85	0.96	0.96	3.17	3.39	4.69	N/A	6.71	12/01/2010
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	9.54	
Difference			-1.01	-0.56	-1.73	-1.73	-2.27	-3.38	-3.57	N/A	-2.83	
JPMCB Strategic Property (CF)	86,356,097	8.66	-2.02	-0.67	1.80	1.80	4.30	5.85	7.75	N/A	8.54	04/01/2012
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	8.65	
Difference			-1.03	-0.38	-0.89	-0.89	-1.14	-0.92	-0.51	N/A	-0.11	
UBS Trumbull Property (SA)	15,063,253	1.51	-2.54	-2.10	-1.61	-1.61	1.34	3.65	5.49	N/A	5.66	12/01/2012
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	8.53	
Difference			-1.55	-1.81	-4.30	-4.30	-4.10	-3.12	-2.77	N/A	-2.87	
Colcord Center (CF)	4,925,620	0.49	0.01	0.04	8.94	8.94	4.65	4.57	4.75	2.92	3.32	05/01/2008
Private Equity	38,525,618	3.86	-4.12	-2.84	4.50	4.50	8.78	6.21	8.98	N/A	9.64	12/01/2010
Cambridge US Prvt Eq Index			0.00	-10.07	-5.51	-5.51	7.26	8.37	10.39	12.06	12.03	
Difference			-4.12	7.23	10.01	10.01	1.52	-2.16	-1.41	N/A	-2.39	
American Private Equity II LP	774,031	0.08	-7.46	-8.68	-3.61	-3.61	0.38	-0.39	1.85	4.71	4.40	02/01/2006
Apollo IX LP	1,817,965	0.18	-3.95	-1.03	-13.15	-13.15	N/A	N/A	N/A	N/A	-21.78	03/01/2019
Apollo VIII LP	6,732,130	0.68	-18.74	-14.69	-6.45	-6.45	3.05	6.64	N/A	N/A	-0.46	02/01/2014
FirstMark Capital Opportunity III LP	300,000	0.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07/01/2020
Knightsbridge VI LP	2,506,407	0.25	26.59	26.59	38.32	38.32	20.07	11.16	13.89	12.82	7.78	12/01/2004
Knightsbridge VII LP	7,378,347	0.74	0.07	0.07	10.07	10.07	13.11	9.01	13.38	11.95	6.25	09/01/2008
Warburg Pincus Global Growth LP	8,543,243	0.86	-0.69	-6.15	-15.47	-15.47	N/A	N/A	N/A	N/A	-30.13	03/01/2019
Warburg Pincus XII LP	10,473,495	1.05	-4.31	-0.65	8.25	8.25	14.70	N/A	N/A	N/A	-3.09	12/01/2015

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Oklahoma State Pension Commission
Oklahoma Law Enforcement Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OLERS Total Fund	997,043,603	100.00	11.29	-3.55	1.91	1.91	5.09	5.16	6.57	8.07	8.50	10/01/1985
OLERS Policy Index			12.63	-2.27	4.15	4.15	6.18	6.34	7.39	8.64	N/A	
Difference			-1.34	-1.28	-2.24	-2.24	-1.09	-1.18	-0.82	-0.57	N/A	
OLERS Actual Allocation Index			10.92	-1.80	4.35	4.35	6.09	6.25	7.20	8.45	N/A	
Difference			0.37	-1.75	-2.44	-2.44	-1.00	-1.09	-0.63	-0.38	N/A	
Actuarial Discount Rate (7.5%)			1.82	3.68	7.50	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			9.47	-7.23	-5.59	-5.59	-2.41	-2.34	-0.93	0.57	1.00	
All Public Plans-Total Fund Median			12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	8.57	
Rank			62	66	71	71	70	77	62	48	59	
US Equity	371,932,889	37.30	23.92	-7.41	1.69	1.69	7.16	7.67	10.26	12.88	8.48	09/01/2003
S&P 500 Index (Cap Wtd)			20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	9.12	
Difference			3.38	-4.33	-5.82	-5.82	-3.57	-3.06	-1.87	-1.11	-0.64	
All Public Plans-US Equity Segment Median			21.87	-4.86	4.26	4.26	8.72	8.91	10.68	13.15	8.69	
Rank			20	82	76	76	82	81	67	67	72	
Hotchkis Wiley Large Cap Value Equity (SA)	51,725,846	5.19	19.57	-22.79	-16.14	-16.14	-1.22	2.98	6.68	10.59	9.73	04/01/1990
Russell 1000 Val Index			14.29	-16.26	-8.84	-8.84	1.82	4.64	7.11	10.41	9.19	
Difference			5.28	-6.53	-7.30	-7.30	-3.04	-1.66	-0.43	0.18	0.54	
IM U.S. Large Cap Value Equity (SA+CF) Median			16.98	-14.65	-6.61	-6.61	3.16	5.32	7.80	10.96	10.21	
Rank			25	98	98	98	92	86	76	62	75	
NTGI S&P 500 Index (CF)	109,130,708	10.95	20.53	-3.11	7.49	7.49	10.69	10.78	12.17	13.98	10.06	07/01/2008
S&P 500 Index (Cap Wtd)			20.54	-3.08	7.51	7.51	10.73	10.73	12.13	13.99	9.97	
Difference			-0.01	-0.03	-0.02	-0.02	-0.04	0.05	0.04	-0.01	0.09	
IM U.S. Large Cap Core Equity (SA+CF) Median			20.19	-4.29	5.29	5.29	9.71	9.73	11.73	13.83	9.89	
Rank			46	39	31	31	36	27	39	45	38	
Polen Focus Growth (CF)	80,381,713	8.06	27.24	10.85	23.18	23.18	N/A	N/A	N/A	N/A	36.48	12/01/2018
Russell 1000 Grth Index			27.84	9.81	23.28	23.28	18.99	15.89	16.62	17.23	21.94	
Difference			-0.60	1.04	-0.10	-0.10	N/A	N/A	N/A	N/A	14.54	
IM U.S. Large Cap Growth Equity (SA+CF) Median			26.58	8.79	19.56	19.56	17.42	14.27	15.77	16.61	19.56	
Rank			43	37	30	30	N/A	N/A	N/A	N/A	2	
Kennedy Capital Small Cap Value Equity (SA)	59,237,344	5.94	23.58	-21.02	-14.69	-14.69	-3.30	2.54	5.61	9.45	11.41	06/01/1993
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	8.65	
Difference			4.67	2.48	2.79	2.79	1.05	1.28	1.63	1.63	2.76	
IM U.S. Small Cap Value Equity (SA+CF) Median			21.18	-21.45	-15.08	-15.08	-2.50	1.92	5.30	9.51	10.95	
Rank			32	49	49	49	56	37	41	52	33	

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Law Enforcement Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Wellington Small Cap Growth (CF)	71,457,277	7.17	29.35	-4.45	5.11	5.11	8.33	N/A	N/A	N/A	11.12	08/01/2016
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	10.24	
Difference			-1.23	-1.39	1.63	1.63	0.47	N/A	N/A	N/A	0.88	
IM U.S. Small Cap Growth Equity (SA+CF) Median			32.78	1.16	5.99	5.99	12.27	10.20	12.31	15.04	13.57	
Rank			69	71	52	52	70	N/A	N/A	N/A	67	
International Equity	146,605,525	14.70	17.61	-9.44	-1.16	-1.16	2.94	3.74	4.51	5.10	3.64	09/01/2005
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.06	
Difference			1.49	1.56	3.64	3.64	1.81	1.48	0.80	0.13	-0.42	
All Public Plans-Intl. Equity Segment Median			17.76	-10.04	-3.05	-3.05	2.08	3.17	4.87	6.52	5.09	
Rank			53	44	34	34	35	35	74	92	99	
Barings Focused EAFE Plus Equity (SA)	49,281,871	4.94	14.87	-7.36	-0.21	-0.21	3.10	4.81	5.58	N/A	5.35	02/01/2012
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.17	
Difference			-1.25	3.64	4.59	4.59	1.97	2.55	1.87	N/A	1.18	
IM All EAFE (SA+CF) Median			16.29	-10.95	-3.80	-3.80	1.36	2.27	4.76	7.04	6.10	
Rank			68	32	33	33	34	23	34	N/A	70	
Mondrian International Equity (SA)	41,295,810	4.14	8.93	-19.76	-13.17	-13.17	-2.41	0.03	2.74	4.95	3.90	01/01/2005
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	4.29	
Difference			-7.19	-8.76	-8.37	-8.37	-3.54	-2.23	-0.97	-0.02	-0.39	
IM All ACWI Ex US (SA+CF) Median			18.04	-8.10	-0.85	-0.85	2.61	3.77	5.26	7.21	5.89	
Rank			100	95	95	95	86	91	86	86	89	
William Blair Emerging Markets Leaders (CF)	41,559,940	4.17	26.21	-3.90	6.25	6.25	7.42	N/A	N/A	N/A	9.24	09/01/2016
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	5.24	
Difference			8.13	5.88	9.64	9.64	5.52	N/A	N/A	N/A	4.00	
IM Emerging Markets Equity (SA+CF) Median			19.49	-10.13	-3.56	-3.56	1.28	2.90	3.59	4.77	5.04	
Rank			21	21	16	16	10	N/A	N/A	N/A	16	
Wasatch:Emg Mkt SC;Inv (WAEMX)	14,467,903	1.45	32.78	3.07	16.64	16.64	7.69	4.58	3.94	N/A	4.72	07/01/2012
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	3.18	
Difference			14.70	12.85	20.03	20.03	5.79	1.72	0.72	N/A	1.54	
IM Emerging Markets Equity (MF) Median			20.27	-9.44	-3.04	-3.04	1.15	2.57	3.03	3.16	3.00	
Rank			5	5	3	3	6	25	33	N/A	26	

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Oklahoma State Pension Commission
Oklahoma Law Enforcement Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income	277,044,350	27.79	3.41	3.69	4.26	4.26	3.80	3.66	3.59	4.13	4.82	09/01/2003
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.50	
Difference			0.51	-2.45	-4.48	-4.48	-1.52	-0.64	-0.37	0.31	0.32	
NTGI Aggregate Index (SA)	89,712,366	9.00	2.81	6.20	8.81	8.81	5.37	4.33	4.01	3.85	4.37	04/01/2004
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.31	
Difference			-0.09	0.06	0.07	0.07	0.05	0.03	0.05	0.03	0.06	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			4.42	6.24	8.93	8.93	5.57	4.70	4.41	4.34	4.78	
Rank			92	55	65	65	77	85	82	89	88	
TCW Core Plus Fixed Income (SA)	123,382,224	12.37	4.95	6.81	9.64	9.64	6.23	5.12	4.78	5.38	6.03	12/01/1993
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.37	
Difference			2.05	0.67	0.90	0.90	0.91	0.82	0.82	1.56	0.66	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			5.90	5.29	8.22	8.22	5.50	4.80	4.56	4.90	6.04	
Rank			74	15	17	17	8	29	33	21	51	
Franklin Templeton Global Bonds (SA)	63,949,760	6.41	1.40	-4.83	-8.64	-8.64	-1.58	0.64	1.14	N/A	1.13	06/01/2013
Bloomberg Gbl Agg Bond Index			3.32	2.98	4.22	4.22	3.79	3.56	2.49	2.81	2.29	
Difference			-1.92	-7.81	-12.86	-12.86	-5.37	-2.92	-1.35	N/A	-1.16	
IM Global Fixed Income (SA+CF) Median			7.93	0.16	2.66	2.66	3.70	4.17	3.66	4.13	3.16	
Rank			97	80	96	96	95	95	94	N/A	91	
Long/Short Equity	36,523,160	3.66	6.33	-3.65	-0.35	-0.35	2.40	2.15	4.27	N/A	4.33	12/01/2010
HFRI FOF: Strategic Index			11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	2.59	
Difference			-4.70	-1.51	-0.87	-0.87	0.34	0.71	1.32	N/A	1.74	
Grosvenor (CF)	36,523,160	3.66	6.33	-3.65	-0.35	-0.35	2.40	2.15	4.27	4.91	2.98	01/01/2008
HFRI FOF: Strategic Index			11.03	-2.14	0.52	0.52	2.06	1.44	2.95	3.08	0.93	
Difference			-4.70	-1.51	-0.87	-0.87	0.34	0.71	1.32	1.83	2.05	

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Oklahoma State Pension Commission
Oklahoma Law Enforcement Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

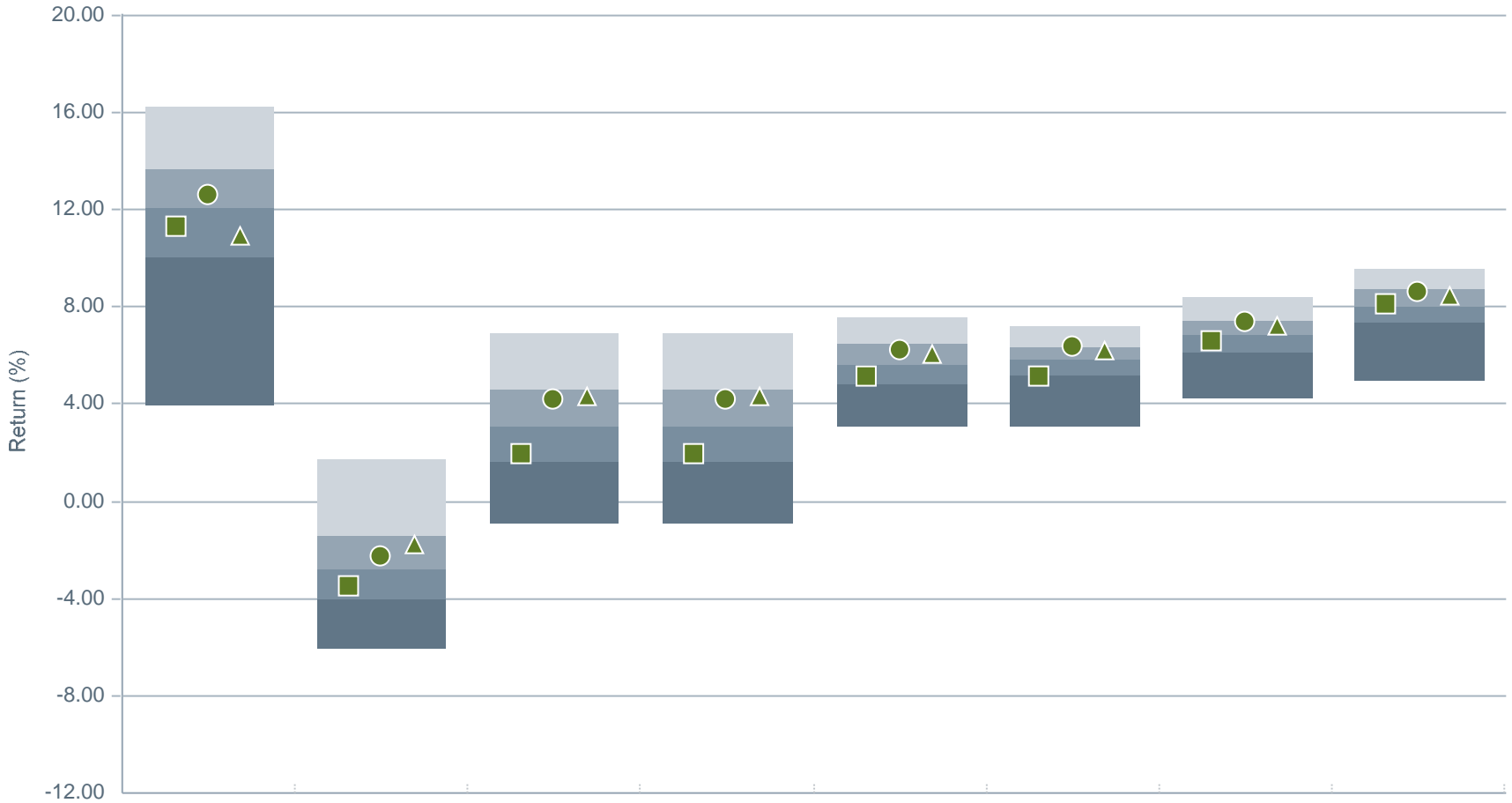
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Estate	106,344,970	10.67	-2.00	-0.69	1.52	1.52	3.79	4.06	5.41	N/A	7.30	12/01/2010
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	9.54	
Difference			-1.01	-0.40	-1.17	-1.17	-1.65	-2.71	-2.85	N/A	-2.24	
JPMCB Strategic Property (CF)	86,356,097	8.66	-2.02	-0.49	2.51	2.51	5.05	6.73	8.64	N/A	9.38	04/01/2012
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	8.65	
Difference			-1.03	-0.20	-0.18	-0.18	-0.39	-0.04	0.38	N/A	0.73	
UBS Trumbull Property (SA)	15,063,253	1.51	-2.38	-1.94	-1.00	-1.00	2.18	4.52	6.47	N/A	6.61	12/01/2012
NCREIF Property Index			-0.99	-0.29	2.69	2.69	5.44	6.77	8.26	9.70	8.53	
Difference			-1.39	-1.65	-3.69	-3.69	-3.26	-2.25	-1.79	N/A	-1.92	
Colcord Center (CF)	4,925,620	0.49	0.01	0.04	8.94	8.94	4.65	4.57	4.75	2.92	3.32	05/01/2008
Private Equity	38,525,618	3.86	-4.12	-2.84	4.50	4.50	8.78	6.21	8.98	N/A	9.64	12/01/2010
Cambridge US Prvt Eq Index			0.00	-10.07	-5.51	-5.51	7.26	8.37	10.39	12.06	12.03	
Difference			-4.12	7.23	10.01	10.01	1.52	-2.16	-1.41	N/A	-2.39	
American Private Equity II LP	774,031	0.08	-7.46	-8.68	-3.61	-3.61	0.38	-0.39	1.85	4.71	4.40	02/01/2006
Apollo IX LP	1,817,965	0.18	-3.95	-1.03	-13.15	-13.15	N/A	N/A	N/A	N/A	-21.78	03/01/2019
Apollo VIII LP	6,732,130	0.68	-18.74	-14.69	-6.45	-6.45	3.05	6.64	N/A	N/A	-0.46	02/01/2014
FirstMark Capital Opportunity III LP	300,000	0.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07/01/2020
Knightsbridge VI LP	2,506,407	0.25	26.59	26.59	38.32	38.32	20.07	11.16	13.89	12.82	7.78	12/01/2004
Knightsbridge VII LP	7,378,347	0.74	0.07	0.07	10.07	10.07	13.11	9.01	13.38	11.95	6.25	09/01/2008
Warburg Pincus Global Growth LP	8,543,243	0.86	-0.69	-6.15	-15.47	-15.47	N/A	N/A	N/A	N/A	-30.13	03/01/2019
Warburg Pincus XII LP	10,473,495	1.05	-4.31	-0.65	8.25	8.25	14.70	N/A	N/A	N/A	-3.09	12/01/2015

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 Oklahoma Law Enforcement Retirement System vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

As of June 30, 2020



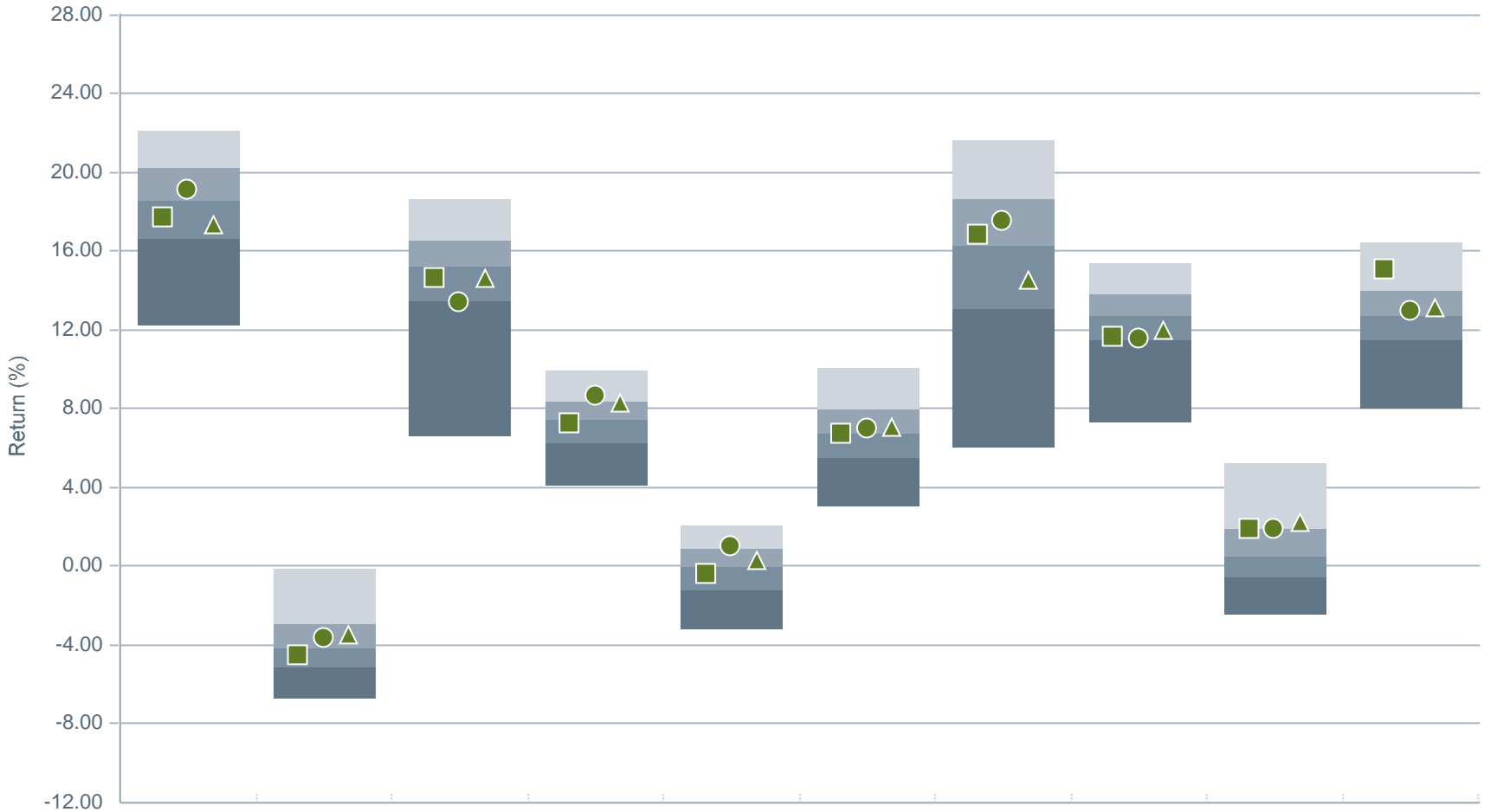
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OLERS Total Fund	11.29 (62)	-3.55 (66)	1.91 (71)	1.91 (71)	5.09 (70)	5.16 (77)	6.57 (62)	8.07 (48)
● OLERS Policy Index	12.63 (41)	-2.27 (42)	4.15 (33)	4.15 (33)	6.18 (34)	6.34 (28)	7.39 (28)	8.64 (28)
▲ OLERS Allocation Index	10.92 (66)	-1.80 (34)	4.35 (30)	4.35 (30)	6.09 (37)	6.25 (34)	7.20 (35)	8.45 (37)
5th Percentile	16.24	1.72	6.92	6.92	7.58	7.27	8.39	9.57
1st Quartile	13.69	-1.37	4.60	4.60	6.52	6.39	7.45	8.75
Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03
3rd Quartile	10.05	-4.03	1.63	1.63	4.84	5.22	6.14	7.36
95th Percentile	3.97	-6.07	-0.88	-0.88	3.12	3.11	4.27	4.96

Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.
 Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 Oklahoma Law Enforcement Retirement System vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

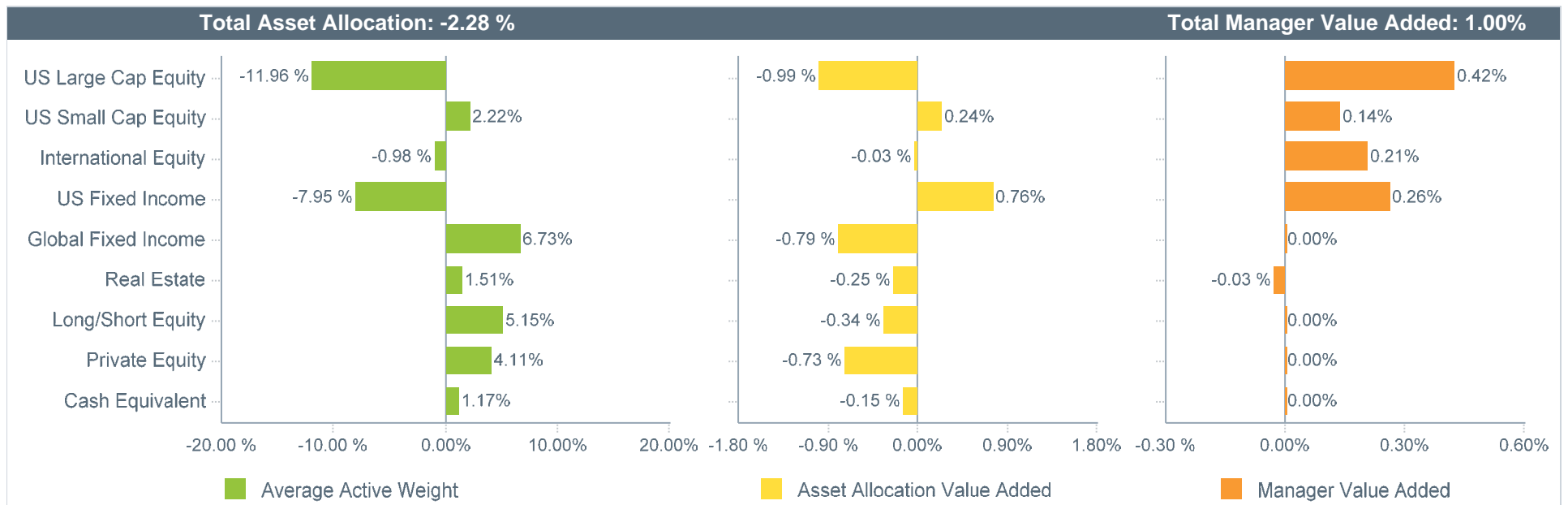
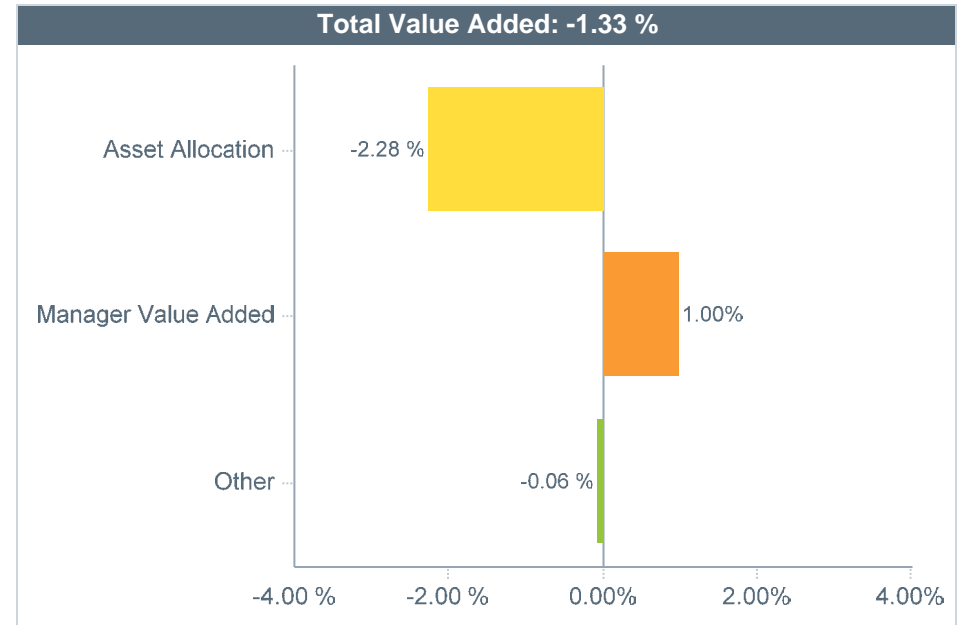
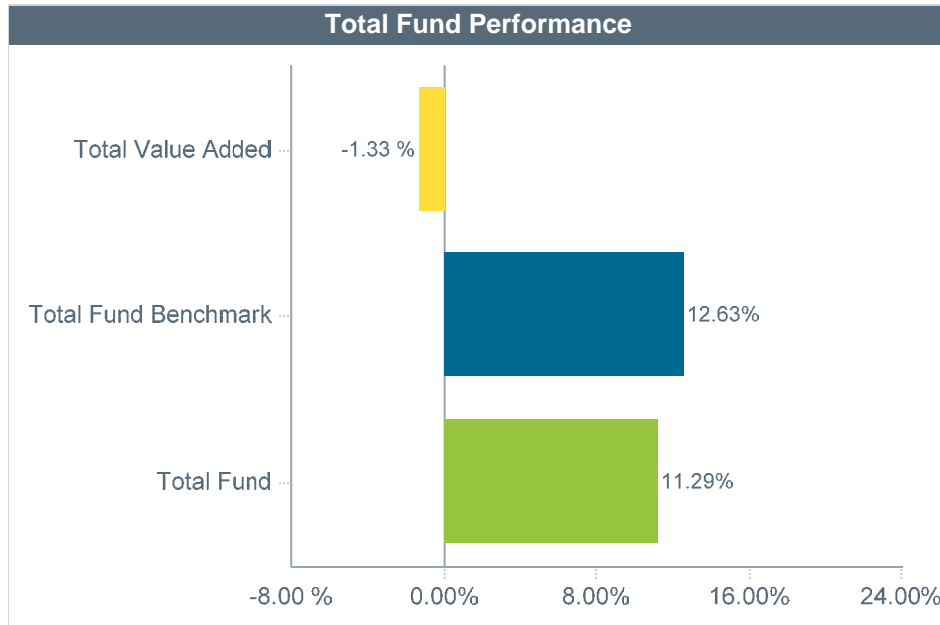
As of June 30, 2020



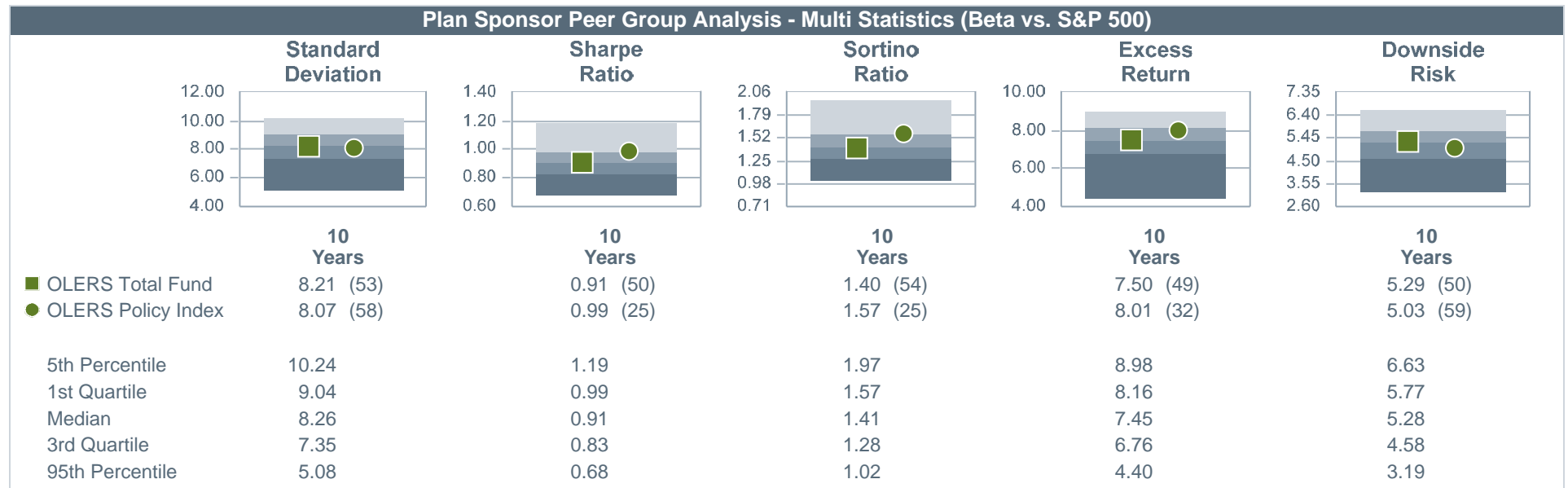
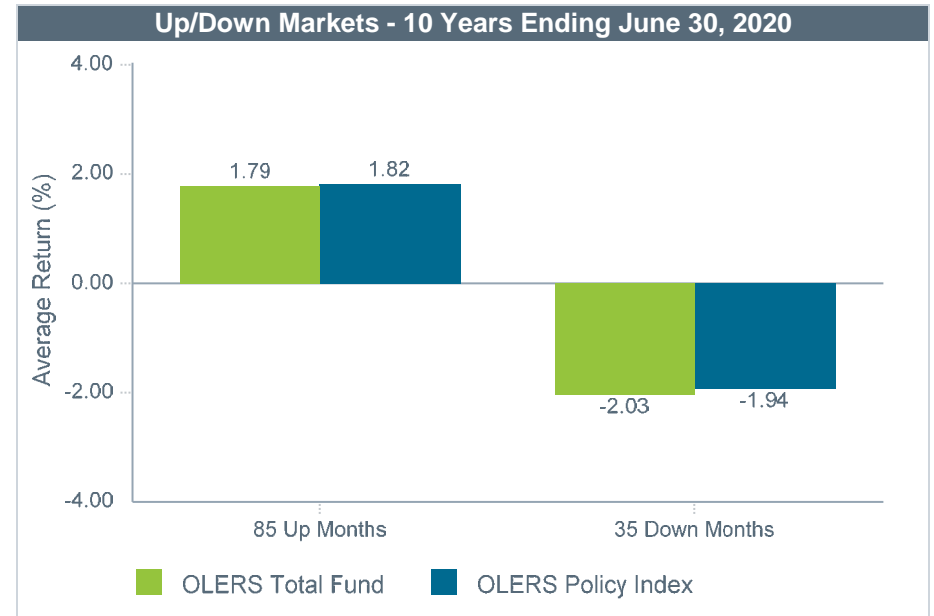
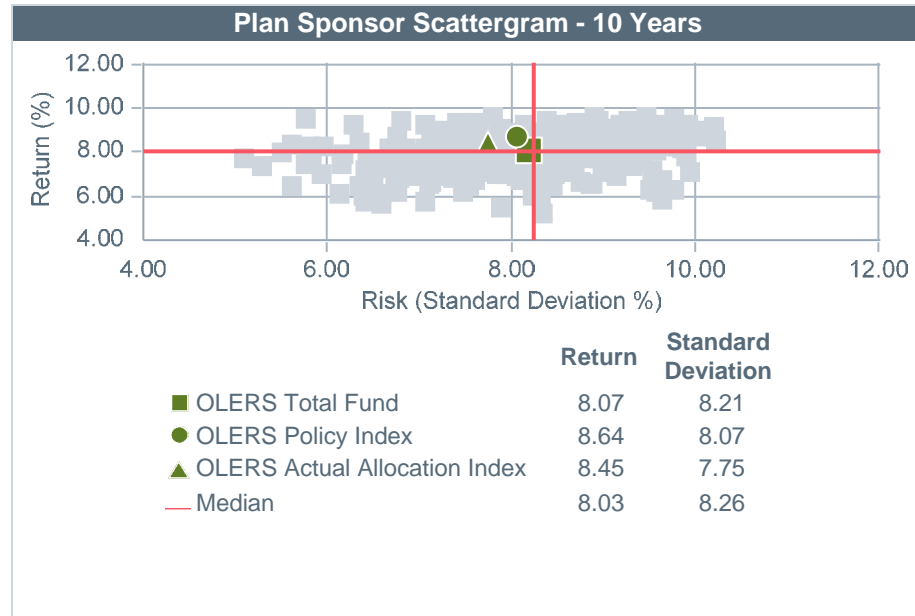
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OLERS Total Fund	17.67 (62)	-4.56 (59)	14.65 (60)	7.24 (56)	-0.44 (60)	6.74 (51)	16.80 (46)	11.63 (73)	1.92 (26)	15.07 (12)
● OLERS Policy Index	19.12 (43)	-3.67 (41)	13.36 (77)	8.64 (20)	1.00 (21)	7.01 (42)	17.53 (37)	11.57 (74)	1.93 (25)	12.99 (42)
▲ OLERS Allocation Index	17.33 (66)	-3.47 (36)	14.63 (61)	8.27 (29)	0.33 (40)	7.07 (41)	14.59 (68)	12.03 (64)	2.22 (23)	13.14 (40)
5th Percentile	22.10	-0.14	18.72	9.98	2.06	10.06	21.67	15.42	5.20	16.52
1st Quartile	20.27	-2.96	16.59	8.39	0.92	7.93	18.70	13.82	1.93	14.05
Median	18.59	-4.15	15.21	7.42	-0.08	6.74	16.28	12.73	0.48	12.68
3rd Quartile	16.66	-5.14	13.46	6.27	-1.20	5.45	13.03	11.49	-0.57	11.44
95th Percentile	12.27	-6.74	6.66	4.12	-3.18	3.05	6.05	7.32	-2.40	8.02

Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.

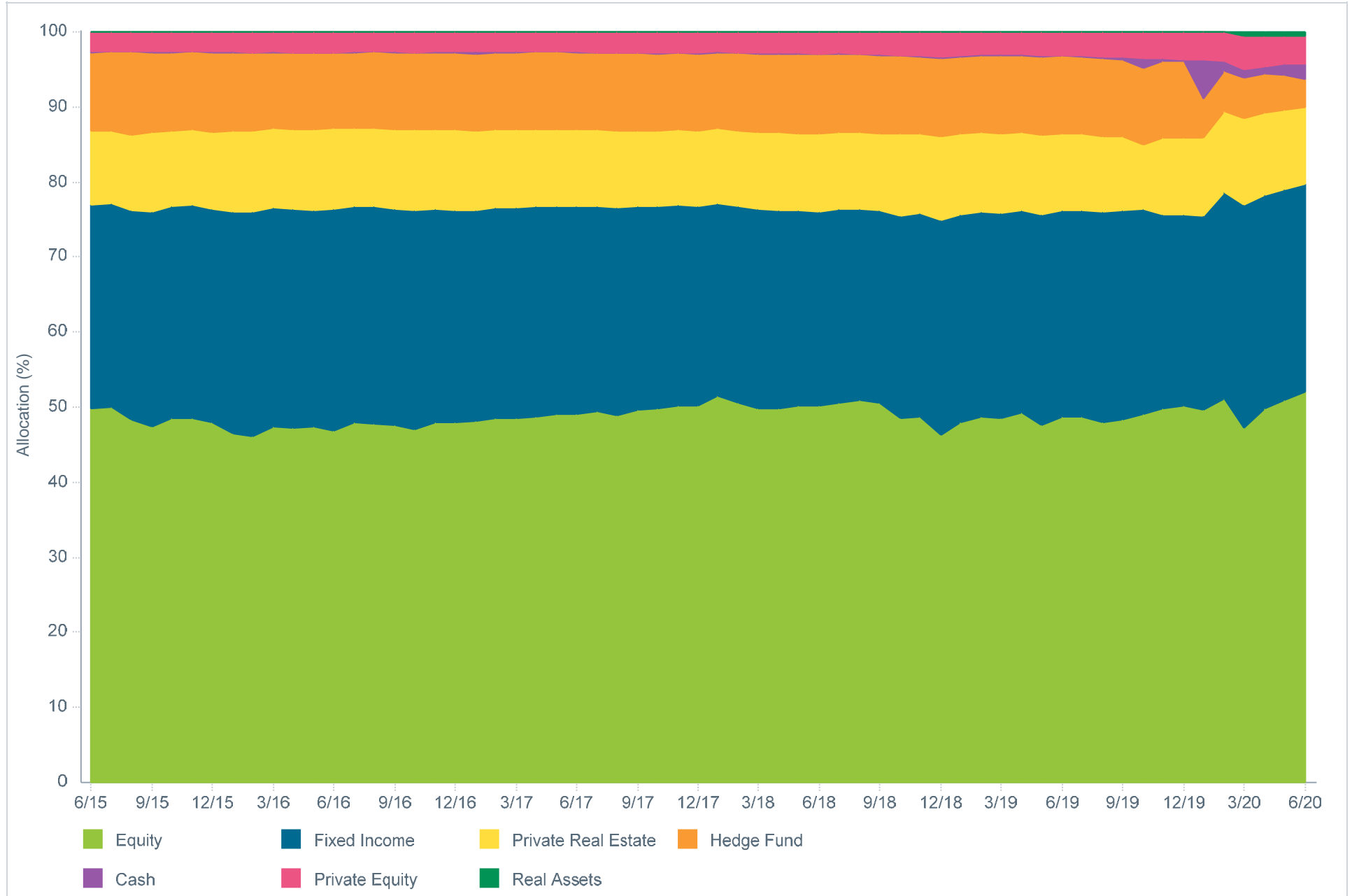




Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation.



Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



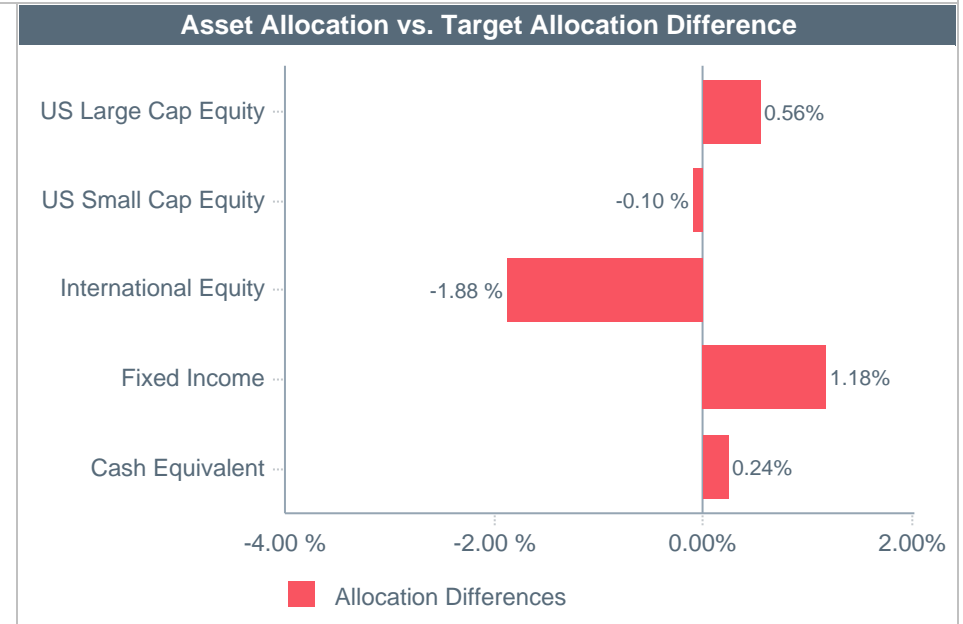
Oklahoma Uniform Retirement System for Justices & Judges (OURSJJ)

Oklahoma State Pension Commission
 Oklahoma Uniform Retirement System for Justices & Judges
 Total Fund Summary

As of June 30, 2020

	Performance (%)												
	Trailing							Calendar Year					
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OURSJJ Total Fund (Net)	13.69	-2.42	4.32	4.32	6.23	6.31	7.34	8.50	21.35	-6.45	16.83	8.05	-1.11
OURSJJ Policy Index	14.18	-2.06	4.76	4.76	6.51	6.55	7.47	8.57	21.51	-6.09	16.86	8.12	-0.89
Difference	-0.49	-0.36	-0.44	-0.44	-0.28	-0.24	-0.13	-0.07	-0.16	-0.36	-0.03	-0.07	-0.22
OURSJJ Actual Allocation Index	13.43	-2.49	4.15	4.15	6.05	6.16	7.17	8.26	21.01	-6.52	16.63	7.90	-1.19
Difference	0.26	0.07	0.17	0.17	0.18	0.15	0.17	0.24	0.34	0.07	0.20	0.15	0.08
Actuarial Discount Rate (7.0%)	1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Difference	11.98	-5.86	-2.68	-2.68	-0.77	-0.69	0.34	1.50	14.35	-13.45	9.83	1.05	-8.11
OURSJJ Total Fund (Gross)	13.69	-2.42	4.34	4.34	6.28	6.35	7.38	8.54	21.39	-6.39	16.89	8.05	-1.07
OURSJJ Policy Index	14.18	-2.06	4.76	4.76	6.51	6.55	7.47	8.57	21.51	-6.09	16.86	8.12	-0.89
Difference	-0.49	-0.36	-0.42	-0.42	-0.23	-0.20	-0.09	-0.03	-0.12	-0.30	0.03	-0.07	-0.18
OURSJJ Actual Allocation Index	13.43	-2.49	4.15	4.15	6.05	6.16	7.17	8.26	21.01	-6.52	16.63	7.90	-1.19
Difference	0.26	0.07	0.19	0.19	0.23	0.19	0.21	0.28	0.38	0.13	0.26	0.15	0.12
All Public Plans-Total Fund Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	18.59	-4.15	15.21	7.42	-0.08
Rank	26	44	30	30	31	27	28	33	11	92	20	34	73

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OURSJJ (Judges)	350,348,363	100.00	100.00
US Large Cap Equity	121,066,425	34.56	34.00
US Small Cap Equity	20,665,656	5.90	6.00
International Equity	91,508,341	26.12	28.00
Fixed Income	116,261,670	33.18	32.00
Cash Equivalent	846,271	0.24	0.00



Parentheses contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding. Please see the Addendum for custom index definitions and additional Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Uniform Retirement System for Justices & Judges
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OURSJJ Total Fund	350,348,363	100.00	13.69	-2.42	4.32	4.32	6.23	6.31	7.34	8.50	8.04	06/01/1985
OURSJJ Policy Index			14.18	-2.06	4.76	4.76	6.51	6.55	7.47	8.57	9.31	
Difference			-0.49	-0.36	-0.44	-0.44	-0.28	-0.24	-0.13	-0.07	-1.27	
OURSJJ Actual Allocation Index			13.43	-2.49	4.15	4.15	6.05	6.16	7.17	8.26	N/A	
Difference			0.26	0.07	0.17	0.17	0.18	0.15	0.17	0.24	N/A	
Actuarial Discount Rate (7.0%)			1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			11.98	-5.86	-2.68	-2.68	-0.77	-0.69	0.34	1.50	1.04	
US Equity	141,732,081	40.45	22.35	-4.96	4.59	4.59	9.06	9.40	11.22	13.40	4.21	10/01/1989
OURSJJ US Equity Custom Index			22.03	-3.48	6.54	6.54	10.04	9.75	N/A	N/A	N/A	
Difference			0.32	-1.48	-1.95	-1.95	-0.98	-0.35	N/A	N/A	N/A	
BlackRock Russell 1000 Index (SA)	121,066,425	34.56	21.84	-3.45	6.75	6.75	10.37	10.31	11.91	13.90	13.27	07/01/2009
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	14.08	
Difference			0.02	-0.64	-0.73	-0.73	-0.27	-0.16	-0.12	-0.07	-0.81	
BlackRock Russell 2000 Index (CF)	20,665,656	5.90	25.43	-13.02	-6.53	-6.53	2.14	4.48	7.38	10.67	11.62	07/01/2009
Russell 2000 Index			25.42	-12.98	-6.63	-6.63	2.01	4.29	7.17	10.50	11.46	
Difference			0.01	-0.04	0.10	0.10	0.13	0.19	0.21	0.17	0.16	
International Equity	91,508,341	26.12	16.25	-10.84	-4.58	-4.58	1.40	2.52	3.95	5.22	2.88	07/01/1994
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	N/A	
Difference			0.13	0.16	0.22	0.22	0.27	0.26	0.24	0.25	N/A	
BlackRock MSCI ACWI Ex US (SA)	91,508,341	26.12	16.25	-10.84	-4.58	-4.58	1.40	2.52	3.95	5.22	4.21	10/01/2009
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	3.84	
Difference			0.13	0.16	0.22	0.22	0.27	0.26	0.24	0.25	0.37	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Uniform Retirement System for Justices & Judges
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income	116,261,670	33.18	3.35	8.73	11.75	11.75	6.64	5.19	4.75	4.77	3.97	10/01/1989
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	6.09	
Difference			0.45	2.59	3.01	3.01	1.32	0.89	0.79	0.95	-2.12	
BlackRock US Fixed Income (SA)	55,397,581	15.81	4.10	6.66	9.43	9.43	5.62	4.57	4.23	4.13	5.38	06/01/2000
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.22	
Difference			1.20	0.52	0.69	0.69	0.30	0.27	0.27	0.31	0.16	
MetWest US Fixed Income (SA)	34,762,712	9.92	4.01	6.91	9.66	9.66	5.97	4.65	4.32	4.63	5.60	09/01/2001
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.68	
Difference			1.11	0.77	0.92	0.92	0.65	0.35	0.36	0.81	0.92	
Hoisington US Long Duration Fixed Income (SA)	14,224,125	4.06	-1.54	23.77	29.31	29.31	13.63	10.17	9.50	8.73	8.50	10/01/1999
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.14	
Difference			-4.44	17.63	20.57	20.57	8.31	5.87	5.54	4.91	3.36	
BlackRock TIPS (SA)	11,877,252	3.39	4.43	6.13	8.44	8.44	5.20	3.92	3.19	3.64	3.84	03/01/2010
Bloomberg US Trsy US TIPS Index			4.24	6.01	8.28	8.28	5.05	3.75	3.05	3.52	3.79	
Difference			0.19	0.12	0.16	0.16	0.15	0.17	0.14	0.12	0.05	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Uniform Retirement System for Justices & Judges
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OURSJJ Total Fund	350,348,363	100.00	13.69	-2.42	4.34	4.34	6.28	6.35	7.38	8.54	8.89	06/01/1985
OURSJJ Policy Index			14.18	-2.06	4.76	4.76	6.51	6.55	7.47	8.57	9.31	
Difference			-0.49	-0.36	-0.42	-0.42	-0.23	-0.20	-0.09	-0.03	-0.42	
OURSJJ Actual Allocation Index			13.43	-2.49	4.15	4.15	6.05	6.16	7.17	8.26	N/A	
Difference			0.26	0.07	0.19	0.19	0.23	0.19	0.21	0.28	N/A	
Actuarial Discount Rate (7.0%)			1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			11.98	-5.86	-2.66	-2.66	-0.72	-0.65	0.38	1.54	1.89	
All Public Plans-Total Fund Median			12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	8.60	
Rank			26	44	30	30	31	27	28	33	27	
US Equity	141,732,081	40.45	22.35	-4.96	4.59	4.59	9.06	9.41	11.23	13.41	9.27	10/01/1989
OURSJJ US Equity Custom Index			22.03	-3.48	6.54	6.54	10.04	9.75	N/A	N/A	N/A	
Difference			0.32	-1.48	-1.95	-1.95	-0.98	-0.34	N/A	N/A	N/A	
All Public Plans-US Equity Segment Median			21.87	-4.86	4.26	4.26	8.72	8.91	10.68	13.15	N/A	
Rank			36	55	40	40	43	37	34	42	N/A	
BlackRock Russell 1000 Index (SA)	121,066,425	34.56	21.84	-3.45	6.75	6.75	10.38	10.31	11.92	13.90	13.28	07/01/2009
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	14.08	
Difference			0.02	-0.64	-0.73	-0.73	-0.26	-0.16	-0.11	-0.07	-0.80	
IM U.S. Large Cap Core Equity (SA+CF) Median			20.19	-4.29	5.29	5.29	9.71	9.73	11.73	13.83	13.87	
Rank			27	42	37	37	40	40	45	48	67	
BlackRock Russell 2000 Index (CF)	20,665,656	5.90	25.43	-13.02	-6.52	-6.52	2.16	4.50	7.41	10.70	11.64	07/01/2009
Russell 2000 Index			25.42	-12.98	-6.63	-6.63	2.01	4.29	7.17	10.50	11.46	
Difference			0.01	-0.04	0.11	0.11	0.15	0.21	0.24	0.20	0.18	
IM U.S. Small Cap Core Equity (SA+CF) Median			24.99	-14.43	-8.44	-8.44	2.21	5.23	8.32	11.83	12.86	
Rank			42	44	39	39	51	63	67	74	74	

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Uniform Retirement System for Justices & Judges
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity	91,508,341	26.12	16.25	-10.84	-4.58	-4.58	1.42	2.55	3.99	5.26	5.23	07/01/1994
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	N/A	
Difference			0.13	0.16	0.22	0.22	0.29	0.29	0.28	0.29	N/A	
All Public Plans-Intl. Equity Segment Median			17.76	-10.04	-3.05	-3.05	2.08	3.17	4.87	6.52	N/A	
Rank			71	61	65	65	74	77	91	91	N/A	
BlackRock MSCI ACWI Ex US (SA)	91,508,341	26.12	16.25	-10.84	-4.58	-4.58	1.42	2.55	3.99	5.26	4.25	10/01/2009
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	3.84	
Difference			0.13	0.16	0.22	0.22	0.29	0.29	0.28	0.29	0.41	
IM All ACWI Ex US (SA+CF) Median			18.04	-8.10	-0.85	-0.85	2.61	3.77	5.26	7.21	6.08	
Rank			67	65	67	67	62	63	71	85	82	
Fixed Income	116,261,670	33.18	3.35	8.75	11.81	11.81	6.72	5.26	4.83	4.86	6.84	10/01/1989
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	6.09	
Difference			0.45	2.61	3.07	3.07	1.40	0.96	0.87	1.04	0.75	
BlackRock US Fixed Income (SA)	55,397,581	15.81	4.10	6.66	9.48	9.48	5.69	4.63	4.30	4.20	5.48	06/01/2000
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.22	
Difference			1.20	0.52	0.74	0.74	0.37	0.33	0.34	0.38	0.26	
IM U.S. Broad Market Fixed Income (SA+CF) Median			5.08	5.84	8.82	8.82	5.57	4.74	4.47	4.57	5.78	
Rank			72	29	28	28	43	62	64	77	79	
MetWest US Fixed Income (SA)	34,762,712	9.92	4.01	6.92	9.74	9.74	6.04	4.72	4.42	4.74	5.66	09/01/2001
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.68	
Difference			1.11	0.78	1.00	1.00	0.72	0.42	0.46	0.92	0.98	
IM U.S. Broad Market Fixed Income (SA+CF) Median			5.08	5.84	8.82	8.82	5.57	4.74	4.47	4.57	5.32	
Rank			73	21	23	23	17	53	55	40	22	
Hoisington US Long Duration Fixed Income (SA)	14,224,125	4.06	-1.54	23.80	29.42	29.42	13.77	10.31	9.65	8.87	9.01	10/01/1999
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.14	
Difference			-4.44	17.66	20.68	20.68	8.45	6.01	5.69	5.05	3.87	
IM U.S. Long Duration (SA+CF) Median			7.93	11.87	18.62	18.62	10.42	9.40	8.53	8.41	8.60	
Rank			100	1	1	1	1	4	4	23	18	

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Uniform Retirement System for Justices & Judges
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

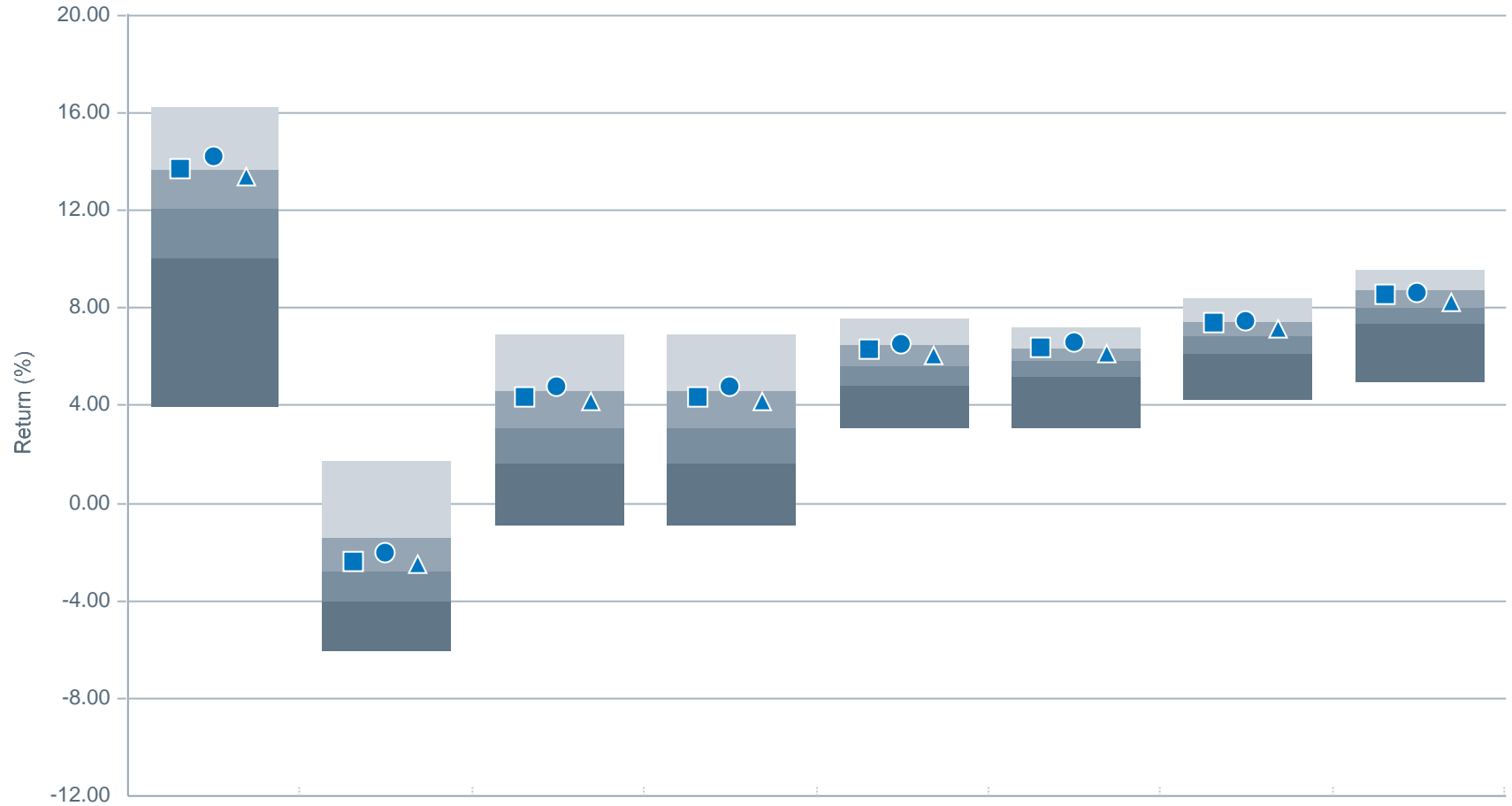
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
BlackRock TIPS (SA)	11,877,252	3.39	4.43	6.13	8.45	8.45	5.21	3.93	3.21	3.66	3.85	03/01/2010
Bloomberg US Trsy US TIPS Index			4.24	6.01	8.28	8.28	5.05	3.75	3.05	3.52	3.79	
Difference			0.19	0.12	0.17	0.17	0.16	0.18	0.16	0.14	0.06	
IM U.S. TIPS (SA+CF) Median			4.28	5.90	8.22	8.22	5.06	3.75	3.05	3.53	3.80	
Rank			30	22	18	18	20	24	22	29	32	

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 Oklahoma Uniform Retirement System for Justices & Judges vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

As of June 30, 2020



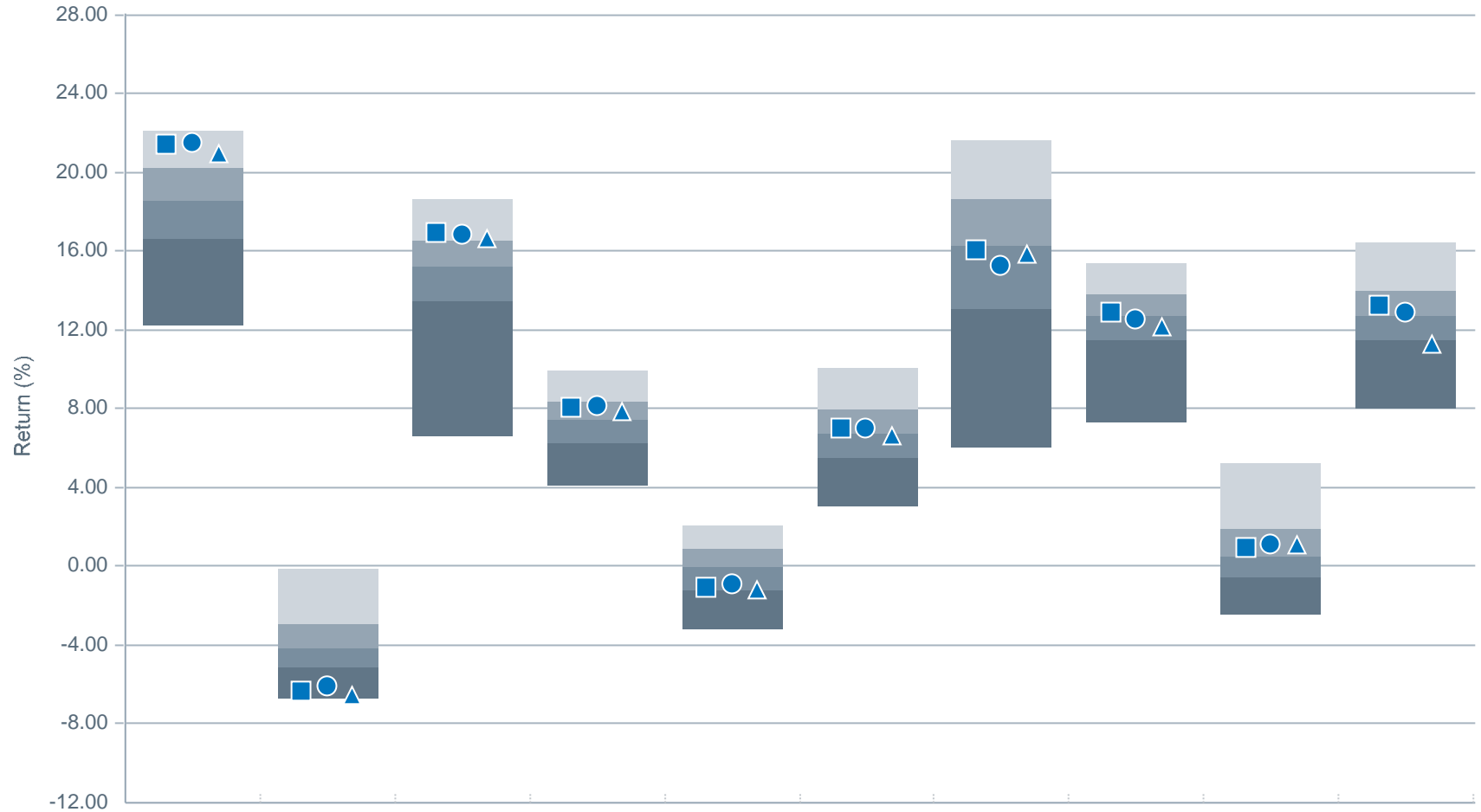
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OURSJJ Total Fund	13.69 (26)	-2.42 (44)	4.34 (30)	4.34 (30)	6.28 (31)	6.35 (27)	7.38 (28)	8.54 (33)
● OURSJJ Policy Index	14.18 (19)	-2.06 (38)	4.76 (23)	4.76 (23)	6.51 (26)	6.55 (20)	7.47 (25)	8.57 (32)
▲ OURSJJ Allocation Index	13.43 (30)	-2.49 (46)	4.15 (33)	4.15 (33)	6.05 (38)	6.16 (37)	7.17 (37)	8.26 (42)
5th Percentile	16.24	1.72	6.92	6.92	7.58	7.27	8.39	9.57
1st Quartile	13.69	-1.37	4.60	4.60	6.52	6.39	7.45	8.75
Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03
3rd Quartile	10.05	-4.03	1.63	1.63	4.84	5.22	6.14	7.36
95th Percentile	3.97	-6.07	-0.88	-0.88	3.12	3.11	4.27	4.96

Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.
 Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 Oklahoma Uniform Retirement System for Justices & Judges vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

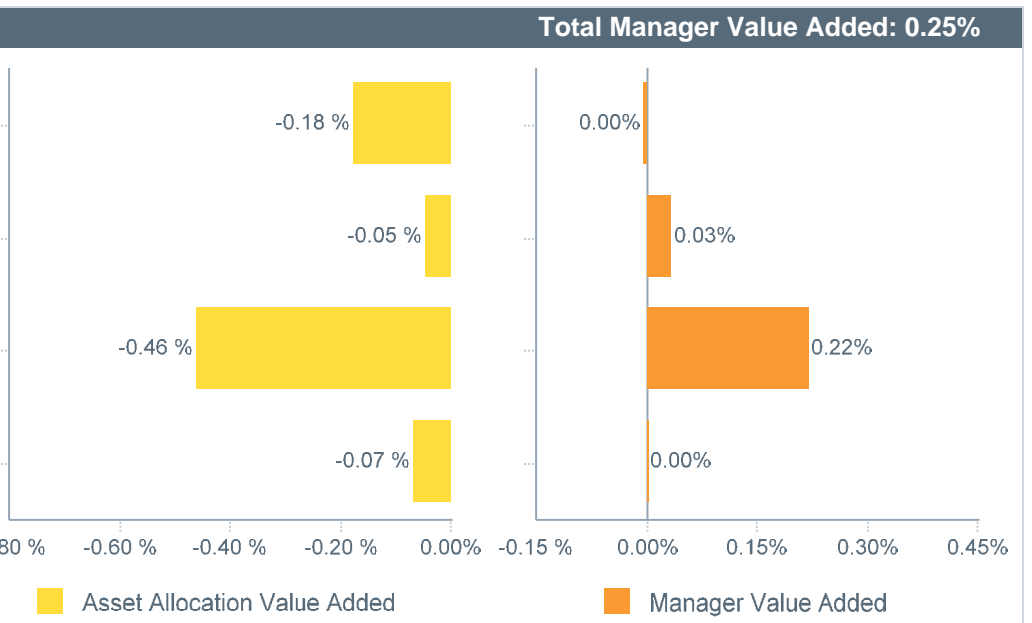
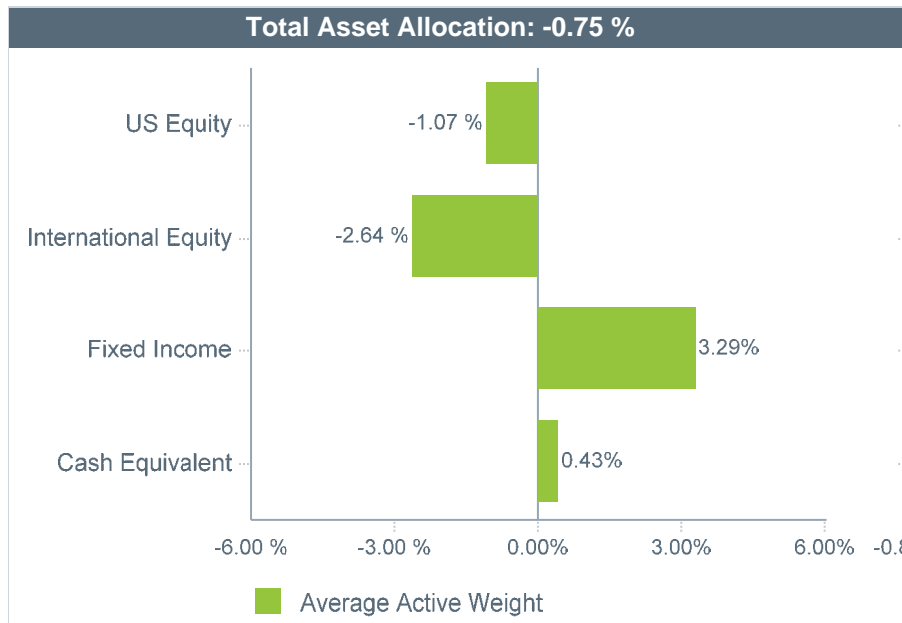
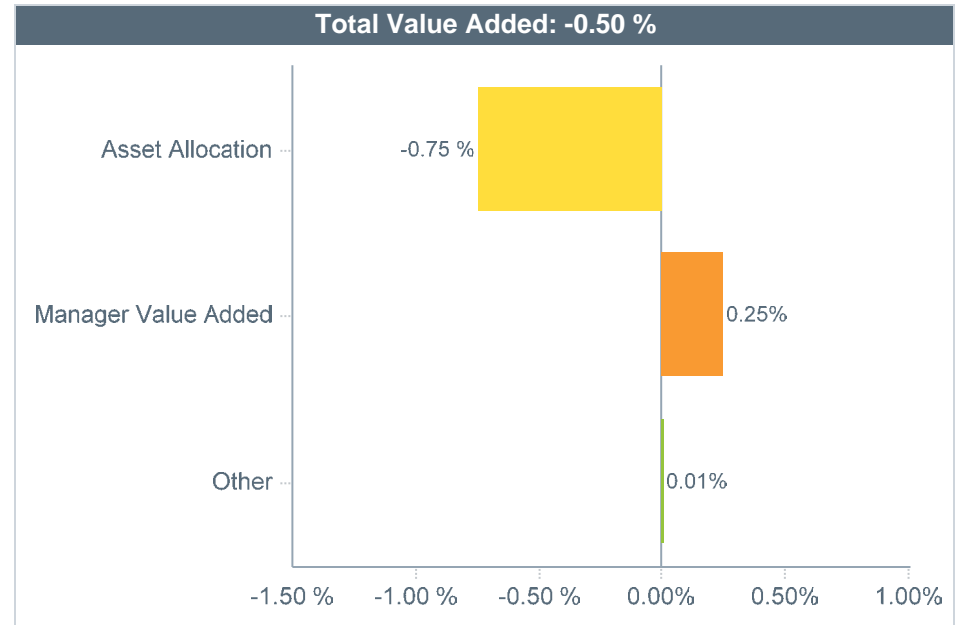
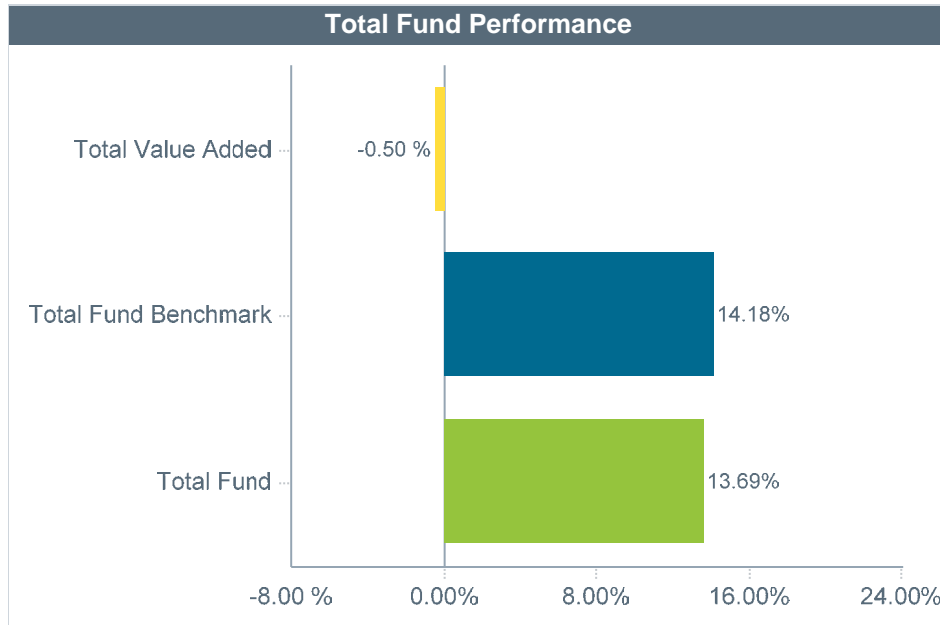
As of June 30, 2020



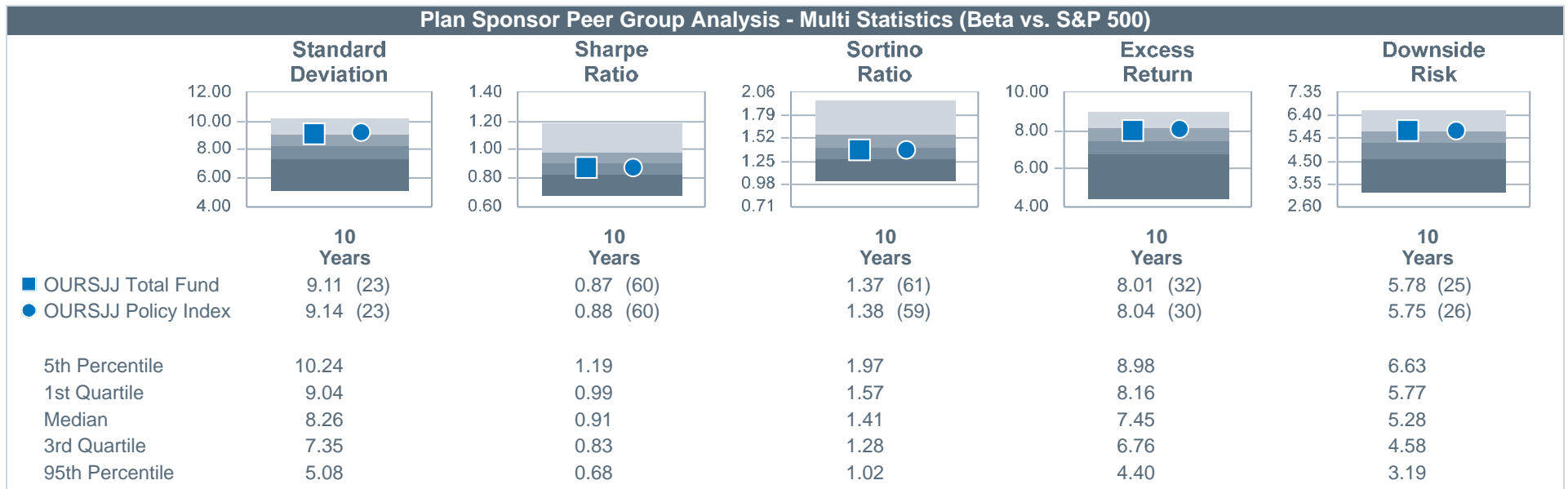
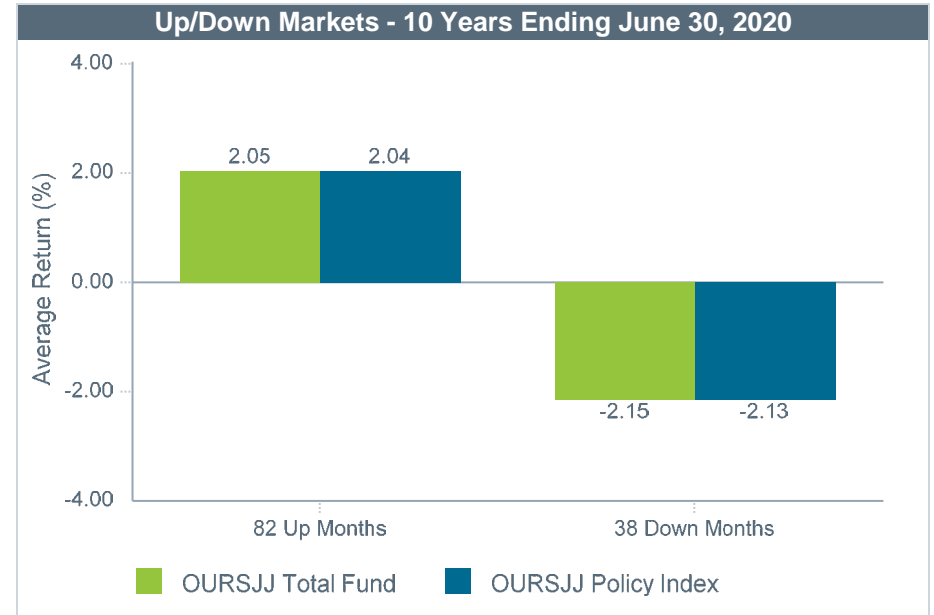
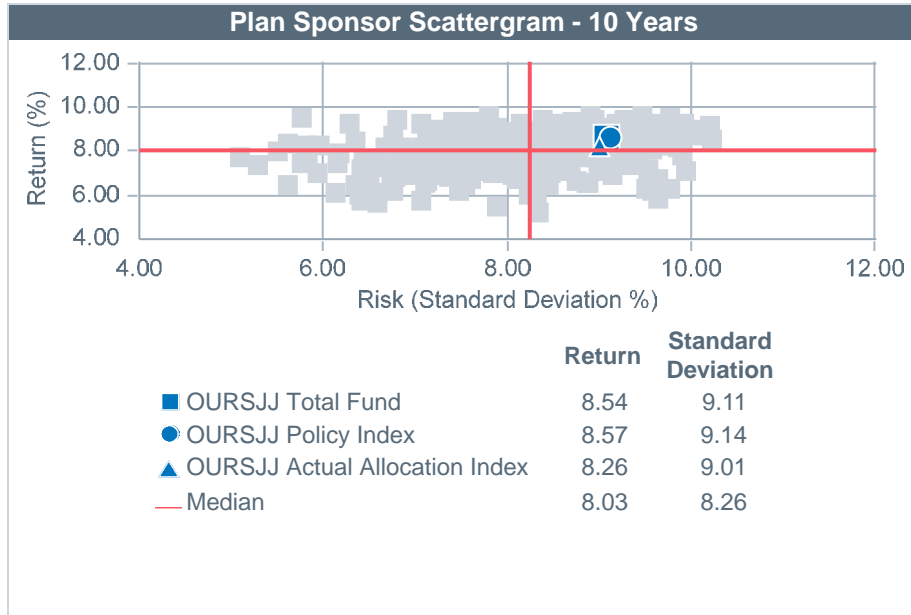
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OursJJ Total Fund	21.39 (11)	-6.39 (92)	16.89 (20)	8.05 (34)	-1.07 (73)	6.99 (42)	16.00 (53)	12.89 (46)	0.89 (42)	13.19 (40)
● OursJJ Policy Index	21.51 (10)	-6.09 (90)	16.86 (20)	8.12 (32)	-0.89 (70)	7.00 (42)	15.27 (62)	12.52 (54)	1.10 (38)	12.86 (45)
▲ OursJJ Allocation Index	21.01 (16)	-6.52 (93)	16.63 (25)	7.90 (37)	-1.19 (75)	6.67 (52)	15.87 (56)	12.14 (63)	1.07 (39)	11.27 (79)
5th Percentile	22.10	-0.14	18.72	9.98	2.06	10.06	21.67	15.42	5.20	16.52
1st Quartile	20.27	-2.96	16.59	8.39	0.92	7.93	18.70	13.82	1.93	14.05
Median	18.59	-4.15	15.21	7.42	-0.08	6.74	16.28	12.73	0.48	12.68
3rd Quartile	16.66	-5.14	13.46	6.27	-1.20	5.45	13.03	11.49	-0.57	11.44
95th Percentile	12.27	-6.74	6.66	4.12	-3.18	3.05	6.05	7.32	-2.40	8.02

Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.

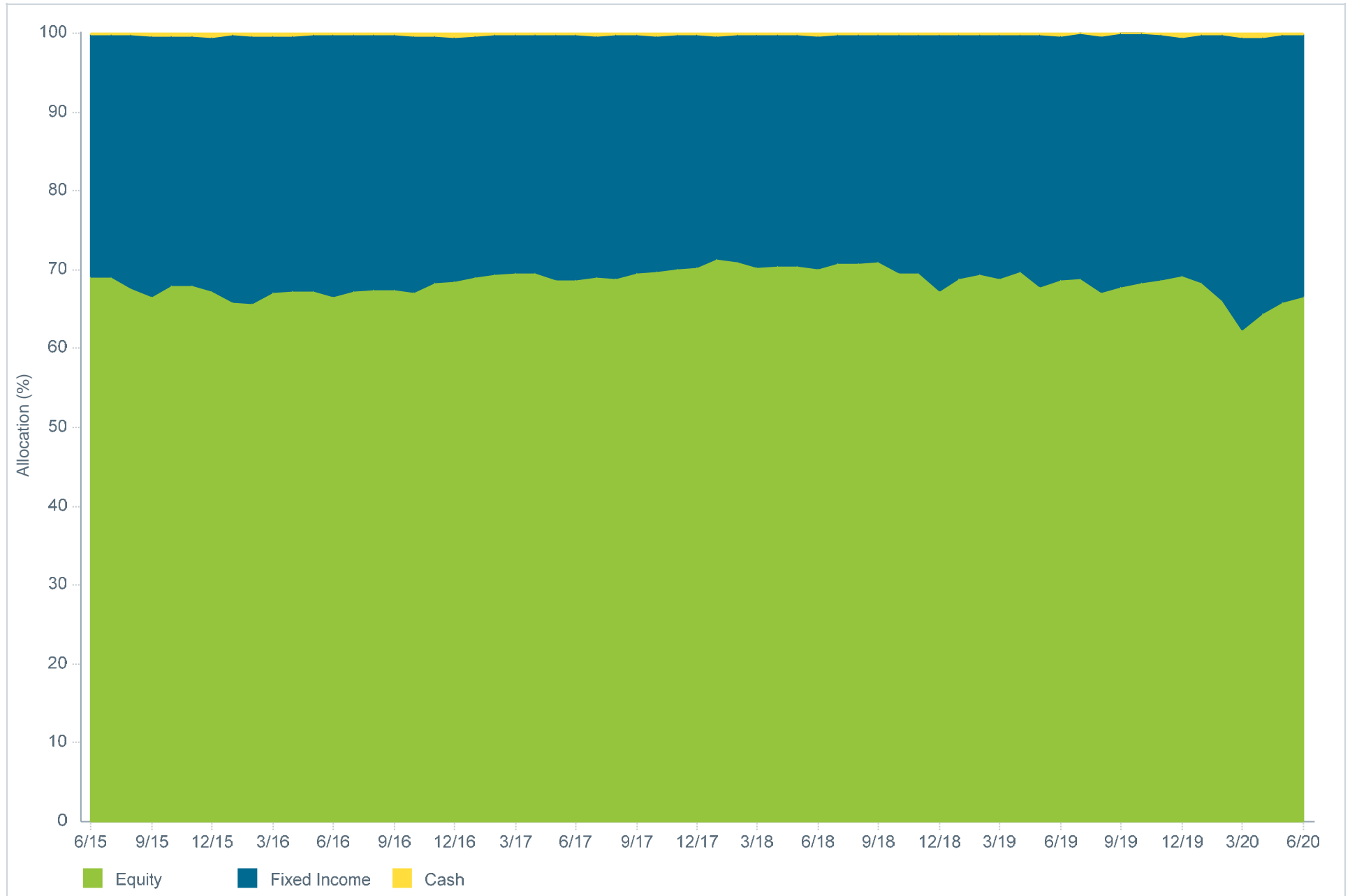




Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation.



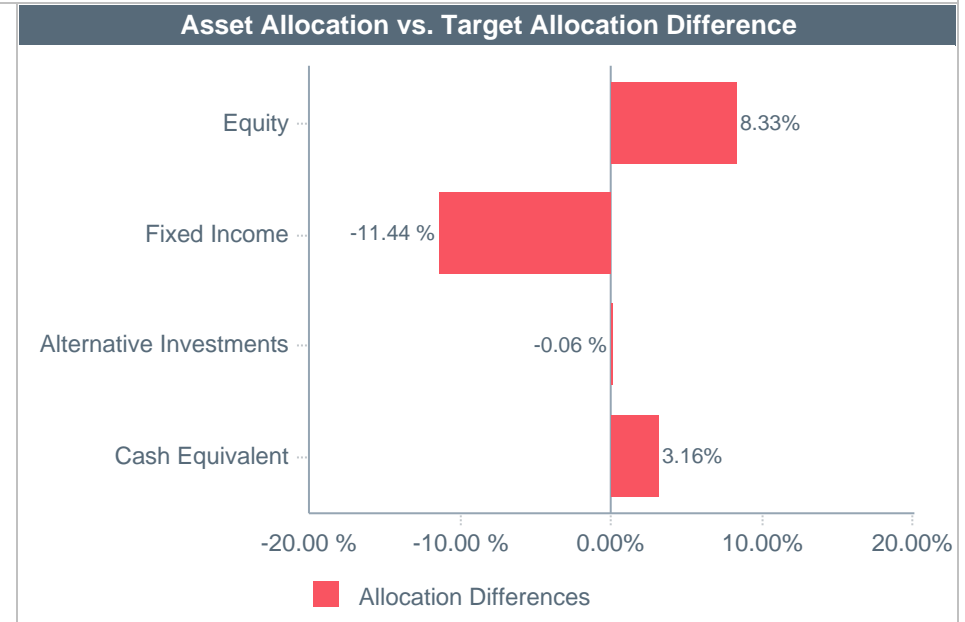
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



Oklahoma Wildlife Conservation Retirement System (OWCRS)

	Performance (%)												
	Trailing							Calendar Year					
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OWCRS Total Fund (Net)	13.16	-0.24	5.58	5.58	6.83	6.35	7.25	7.98	19.24	-3.78	13.98	6.27	-0.05
OWCRS Policy Index	12.37	-2.35	2.80	2.80	4.93	5.26	6.00	7.49	17.53	-4.95	12.96	7.34	-1.27
Difference	0.79	2.11	2.78	2.78	1.90	1.09	1.25	0.49	1.71	1.17	1.02	-1.07	1.22
OWCRS Actual Allocation Index	12.44	-2.81	3.69	3.69	6.49	6.50	7.26	7.99	20.53	-3.71	14.38	8.04	-0.28
Difference	0.72	2.57	1.89	1.89	0.34	-0.15	-0.01	-0.01	-1.29	-0.07	-0.40	-1.77	0.23
Actuarial Discount Rate (7.0%)	1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Difference	11.45	-3.68	-1.42	-1.42	-0.17	-0.65	0.25	0.98	12.24	-10.78	6.98	-0.73	-7.05
OWCRS Total Fund (Gross)	13.22	-0.08	5.88	5.88	7.10	6.64	7.49	8.18	19.49	-3.52	14.27	6.59	0.19
OWCRS Policy Index	12.37	-2.35	2.80	2.80	4.93	5.26	6.00	7.49	17.53	-4.95	12.96	7.34	-1.27
Difference	0.85	2.27	3.08	3.08	2.17	1.38	1.49	0.69	1.96	1.43	1.31	-0.75	1.46
OWCRS Actual Allocation Index	12.44	-2.81	3.69	3.69	6.49	6.50	7.26	7.99	20.53	-3.71	14.38	8.04	-0.28
Difference	0.78	2.73	2.19	2.19	0.61	0.14	0.23	0.19	-1.04	0.19	-0.11	-1.45	0.47
All Public Plans-Total Fund Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	18.59	-4.15	15.21	7.42	-0.08
Rank	31	12	11	11	12	17	23	45	37	37	65	70	44

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OWCRS (Wildlife)	118,396,141	100.00	100.00
Equity	69,065,086	58.33	50.00
Fixed Income	33,817,087	28.56	40.00
Alternative Investments	11,767,603	9.94	10.00
Cash Equivalent	3,746,366	3.16	0.00



Parentes contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding. Please see the Addendum for custom index definitions and additional Oklahoma State Pension Commission fiscal year begins on 07/01.

Oklahoma State Pension Commission
Oklahoma Wildlife Conservation Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OWCRS Total Fund	118,396,141	100.00	13.16	-0.24	5.58	5.58	6.83	6.35	7.25	7.98	7.70	01/01/1988
OWCRS Policy Index			12.37	-2.35	2.80	2.80	4.93	5.26	6.00	7.49	N/A	
Difference			0.79	2.11	2.78	2.78	1.90	1.09	1.25	0.49	N/A	
OWCRS Actual Allocation Index			12.44	-2.81	3.69	3.69	6.49	6.50	7.26	7.99	N/A	
Difference			0.72	2.57	1.89	1.89	0.34	-0.15	-0.01	-0.01	N/A	
Actuarial Discount Rate (7.0%)			1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			11.45	-3.68	-1.42	-1.42	-0.17	-0.65	0.25	0.98	0.70	
US Equity	53,325,696	45.04	21.03	-2.23	6.13	6.13	9.93	9.48	11.62	13.21	8.30	12/01/2005
Russell 3000 Index			22.03	-3.48	6.53	6.53	10.04	10.03	11.68	13.72	8.60	
Difference			-1.00	1.25	-0.40	-0.40	-0.11	-0.55	-0.06	-0.51	-0.30	
iShares:Russ 1000 ETF (IWB)	12,551,868	10.60	21.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03/01/2020
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	5.72	
Difference			-0.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DFA US Small Cap Val;l (DFSVX)	1,637,359	1.38	22.26	-25.39	-20.02	-20.02	-7.25	-2.03	N/A	N/A	-0.48	01/01/2014
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	1.73	
Difference			3.35	-1.89	-2.54	-2.54	-2.90	-3.29	N/A	N/A	-2.21	
Vanguard S-C Id;Inst (VSCIX)	1,680,779	1.42	26.68	-11.44	-5.61	-5.61	3.45	4.76	7.71	11.05	7.08	12/01/2005
Russell 2000 Index			25.42	-12.98	-6.63	-6.63	2.01	4.29	7.17	10.50	6.77	
Difference			1.26	1.54	1.02	1.02	1.44	0.47	0.54	0.55	0.31	
T Rowe Price NH;l (PRJIX)	1,806,796	1.53	37.63	20.67	27.46	27.46	24.41	18.89	N/A	N/A	16.30	01/01/2014
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	7.50	
Difference			7.05	23.73	23.98	23.98	16.55	12.03	N/A	N/A	8.80	
Bank of Oklahoma Managed Equity (SA)	35,648,895	30.11	19.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19.71	04/01/2020
Russell 3000 Index			22.03	-3.48	6.53	6.53	10.04	10.03	11.68	13.72	22.03	
Difference			-2.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.32	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Wildlife Conservation Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity	15,739,389	13.29	18.56	-11.57	-4.52	-4.52	1.13	2.56	4.12	5.51	N/A	09/01/1993
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	N/A	
Difference			2.44	-0.57	0.28	0.28	0.00	0.30	0.41	0.54	N/A	
Vanguard Dev Mkt;Adm (VTMGX)	4,060,044	3.43	17.41	-10.42	-3.89	-3.89	0.53	2.26	4.11	5.98	3.55	09/01/1999
MSCI Wrld Ex US Index (USD) (Net)			15.34	-11.49	-5.42	-5.42	0.84	2.01	3.77	5.43	3.56	
Difference			2.07	1.07	1.53	1.53	-0.31	0.25	0.34	0.55	-0.01	
Dodge & Cox Intl Stock (DODFX)	4,088,103	3.45	17.36	-18.44	-11.28	-11.28	-3.90	-1.26	N/A	N/A	-0.81	03/01/2014
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	1.74	
Difference			1.24	-7.44	-6.48	-6.48	-5.03	-3.52	N/A	N/A	-2.55	
MFS Intl New Discv;R6 (MIDLX)	4,177,808	3.53	19.49	-10.43	-3.01	-3.01	3.48	4.99	N/A	N/A	4.74	03/01/2014
MSCI ACW Ex US Grth Index (USD) (Net)			19.11	-2.62	5.80	5.80	6.07	5.61	6.32	7.04	4.79	
Difference			0.38	-7.81	-8.81	-8.81	-2.59	-0.62	N/A	N/A	-0.05	
Invsc Oppen Dev Mkt;R6 (ODVIX)	3,413,434	2.88	18.27	-8.71	-1.71	-1.71	4.45	4.73	3.82	N/A	3.78	06/01/2013
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	2.23	
Difference			0.19	1.07	1.68	1.68	2.55	1.87	0.60	N/A	1.55	
Fixed Income	33,817,087	28.56	3.39	5.19	7.29	7.29	4.83	3.54	3.07	3.35	3.60	03/01/2006
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.58	
Difference			0.49	-0.95	-1.45	-1.45	-0.49	-0.76	-0.89	-0.47	-0.98	
Bank of Oklahoma Managed Fixed Income (SA)	23,501,362	19.85	2.87	5.22	7.31	7.31	4.82	3.53	3.07	3.34	3.52	12/01/2005
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.60	
Difference			-0.03	-0.92	-1.43	-1.43	-0.50	-0.77	-0.89	-0.48	-1.08	
MetWest:Total Rtn;I (MWTIX)	3,327,837	2.81	4.07	6.36	8.97	8.97	N/A	N/A	N/A	N/A	5.07	08/01/2017
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.32	
Difference			1.17	0.22	0.23	0.23	N/A	N/A	N/A	N/A	-0.25	
PIMCO:Income;Inst (PIMIX)	3,056,012	2.58	6.96	-1.25	1.15	1.15	N/A	N/A	N/A	N/A	2.90	08/01/2017
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.32	
Difference			4.06	-7.39	-7.59	-7.59	N/A	N/A	N/A	N/A	-2.42	
PIMCO:Intl Bd (DH);Inst (PFORX)	3,931,876	3.32	3.82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03/01/2020
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	2.29	
Difference			0.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Oklahoma State Pension Commission
Oklahoma Wildlife Conservation Retirement System
Asset Allocation & Performance - Net of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Alternative Investments	11,767,603	9.94	10.44	-5.29	-0.64	-0.64	2.48	3.08	2.50	N/A	2.42	12/01/2010
OWCRS Alternatives Custom Index			7.89	-1.59	0.48	0.48	2.24	1.40	N/A	N/A	N/A	
Difference			2.55	-3.70	-1.12	-1.12	0.24	1.68	N/A	N/A	N/A	
Vanguard RE Idx;Adm (VGSLX)	2,221,918	1.88	13.44	-13.66	-6.73	-6.73	1.88	4.05	N/A	N/A	4.05	07/01/2015
Vanguard Spl Real Estate Index			13.50	-13.82	-6.82	-6.82	2.32	5.47	6.34	9.79	5.47	
Difference			-0.06	0.16	0.09	0.09	-0.44	-1.42	N/A	N/A	-1.42	
First Eagle:Global;I (SGIIX)	4,875,326	4.12	14.78	-7.53	-2.24	-2.24	N/A	N/A	N/A	N/A	2.53	08/01/2017
MSCI Wrld Index (USD) (Net)			19.36	-5.77	2.84	2.84	6.70	6.90	8.38	9.95	6.03	
Difference			-4.58	-1.76	-5.08	-5.08	N/A	N/A	N/A	N/A	-3.50	
Calamos:Mkt Neut Inc;I (CMNIX)	4,670,359	3.94	5.08	1.02	3.23	3.23	N/A	N/A	N/A	N/A	3.70	08/01/2017
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.32	
Difference			2.18	-5.12	-5.51	-5.51	N/A	N/A	N/A	N/A	-1.62	

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Oklahoma State Pension Commission
Oklahoma Wildlife Conservation Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OWCRS Total Fund	118,396,141	100.00	13.22	-0.08	5.88	5.88	7.10	6.64	7.49	8.18	8.21	01/01/1988
OWCRS Policy Index			12.37	-2.35	2.80	2.80	4.93	5.26	6.00	7.49	N/A	
Difference			0.85	2.27	3.08	3.08	2.17	1.38	1.49	0.69	N/A	
OWCRS Actual Allocation Index			12.44	-2.81	3.69	3.69	6.49	6.50	7.26	7.99	N/A	
Difference			0.78	2.73	2.19	2.19	0.61	0.14	0.23	0.19	N/A	
Actuarial Discount Rate (7.0%)			1.71	3.44	7.00	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			11.51	-3.52	-1.12	-1.12	0.10	-0.36	0.49	1.18	1.21	
All Public Plans-Total Fund Median			12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03	8.32	
Rank			31	12	11	11	12	17	23	45	59	
US Equity	53,325,696	45.04	21.05	-2.06	6.44	6.44	10.21	9.76	11.86	13.41	8.44	12/01/2005
Russell 3000 Index			22.03	-3.48	6.53	6.53	10.04	10.03	11.68	13.72	8.60	
Difference			-0.98	1.42	-0.09	-0.09	0.17	-0.27	0.18	-0.31	-0.16	
All Public Plans-US Equity Segment Median			21.87	-4.86	4.26	4.26	8.72	8.91	10.68	13.15	7.93	
Rank			68	11	26	26	24	31	18	42	20	
iShares:Russ 1000 ETF (IWB)	12,551,868	10.60	21.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03/01/2020
Russell 1000 Index			21.82	-2.81	7.48	7.48	10.64	10.47	12.03	13.97	5.72	
Difference			-0.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IM U.S. Large Cap Equity (MF) Median			20.36	-3.07	6.59	6.59	9.75	9.44	11.11	12.78	5.57	
Rank			41	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DFA US Small Cap Val;I (DFSVX)	1,637,359	1.38	22.41	-25.18	-19.59	-19.59	-6.77	-1.53	N/A	N/A	0.03	01/01/2014
Russell 2000 Val Index			18.91	-23.50	-17.48	-17.48	-4.35	1.26	3.98	7.82	1.73	
Difference			3.50	-1.68	-2.11	-2.11	-2.42	-2.79	N/A	N/A	-1.70	
IM U.S. Small Cap Value Equity (SA+CF) Median			21.18	-21.45	-15.08	-15.08	-2.50	1.92	5.30	9.51	2.83	
Rank			38	81	81	81	93	96	N/A	N/A	93	
Vanguard S-C Id;Inst (VSCIX)	1,680,779	1.42	26.69	-11.40	-5.55	-5.55	3.48	4.80	7.74	11.07	7.09	12/01/2005
Russell 2000 Index			25.42	-12.98	-6.63	-6.63	2.01	4.29	7.17	10.50	6.77	
Difference			1.27	1.58	1.08	1.08	1.47	0.51	0.57	0.57	0.32	
IM U.S. Small Cap Core Equity (SA+CF) Median			24.99	-14.43	-8.44	-8.44	2.21	5.23	8.32	11.83	7.78	
Rank			32	35	36	36	35	59	64	63	65	

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Wildlife Conservation Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
T Rowe Price NH;I (PRJIX)	1,806,796	1.53	37.84	21.06	28.28	28.28	25.23	19.64	N/A	N/A	16.87	01/01/2014
Russell 2000 Grth Index			30.58	-3.06	3.48	3.48	7.86	6.86	10.03	12.92	7.50	
Difference			7.26	24.12	24.80	24.80	17.37	12.78	N/A	N/A	9.37	
IM U.S. Small Cap Growth Equity (MF) Median			30.85	0.00	4.23	4.23	9.31	8.45	10.32	13.17	8.07	
Rank			19	3	3	3	4	1	N/A	N/A	1	
Bank of Oklahoma Managed Equity (SA)	35,648,895	30.11	19.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19.71	04/01/2020
Russell 3000 Index			22.03	-3.48	6.53	6.53	10.04	10.03	11.68	13.72	22.03	
Difference			-2.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.32	
International Equity	15,739,389	13.29	18.70	-11.33	-3.93	-3.93	1.85	3.34	4.72	5.93	N/A	09/01/1993
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	N/A	
Difference			2.58	-0.33	0.87	0.87	0.72	1.08	1.01	0.96	N/A	
All Public Plans-Intl. Equity Segment Median			17.76	-10.04	-3.05	-3.05	2.08	3.17	4.87	6.52	N/A	
Rank			32	66	61	61	62	48	65	75	N/A	
Vanguard Dev Mkt;Adm (VTMGX)	4,060,044	3.43	17.43	-10.39	-3.82	-3.82	0.61	2.32	4.19	6.07	3.72	09/01/1999
MSCI Wrld Ex US Index (USD) (Net)			15.34	-11.49	-5.42	-5.42	0.84	2.01	3.77	5.43	3.56	
Difference			2.09	1.10	1.60	1.60	-0.23	0.31	0.42	0.64	0.16	
IM All ACWI Ex US (MF) Median			18.55	-6.58	0.46	0.46	2.52	2.87	4.46	5.99	4.41	
Rank			66	64	65	65	71	60	56	48	67	
Dodge & Cox Intl Stock (DODFX)	4,088,103	3.45	17.53	-18.19	-10.73	-10.73	-3.28	-0.62	N/A	N/A	-0.18	03/01/2014
MSCI ACW Ex US Index (USD) (Net)			16.12	-11.00	-4.80	-4.80	1.13	2.26	3.71	4.97	1.74	
Difference			1.41	-7.19	-5.93	-5.93	-4.41	-2.88	N/A	N/A	-1.92	
IM ACWI Ex US Core (MF) Median			17.60	-10.37	-3.08	-3.08	1.13	2.12	3.77	5.44	1.69	
Rank			52	97	95	95	97	95	N/A	N/A	89	
MFS Intl New Discv;R6 (MIDLX)	4,177,808	3.53	19.75	-9.98	-2.01	-2.01	4.57	6.10	N/A	N/A	5.84	03/01/2014
MSCI ACW Ex US Grth Index (USD) (Net)			19.11	-2.62	5.80	5.80	6.07	5.61	6.32	7.04	4.79	
Difference			0.64	-7.36	-7.81	-7.81	-1.50	0.49	N/A	N/A	1.05	
IM ACWI Ex US Growth (MF) Median			21.06	-2.58	5.55	5.55	6.30	5.33	6.35	7.29	4.43	
Rank			66	100	98	98	69	43	N/A	N/A	24	

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Oklahoma State Pension Commission
Oklahoma Wildlife Conservation Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Invsc Oppen Dev Mkt;R6 (ODVIX)	3,413,434	2.88	18.51	-8.33	-0.87	-0.87	5.34	5.61	4.44	N/A	4.39	06/01/2013
MSCI Emg Mkts Index (USD) (Net)			18.08	-9.78	-3.39	-3.39	1.90	2.86	3.22	3.27	2.23	
Difference			0.43	1.45	2.52	2.52	3.44	2.75	1.22	N/A	2.16	
IM Emerging Markets Equity (MF) Median			20.27	-9.44	-3.04	-3.04	1.15	2.57	3.03	3.16	1.96	
Rank			71	41	37	37	17	16	26	N/A	16	
Fixed Income	33,817,087	28.56	3.43	5.23	7.44	7.44	4.98	3.72	3.26	3.51	3.74	03/01/2006
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.58	
Difference			0.53	-0.91	-1.30	-1.30	-0.34	-0.58	-0.70	-0.31	-0.84	
Bank of Oklahoma Managed Fixed Income (SA)	23,501,362	19.85	2.87	5.22	7.40	7.40	4.95	3.70	3.24	3.51	3.67	12/01/2005
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	4.60	
Difference			-0.03	-0.92	-1.34	-1.34	-0.37	-0.60	-0.72	-0.31	-0.93	
IM U.S. Broad Market Fixed Income (SA+CF) Median			5.08	5.84	8.82	8.82	5.57	4.74	4.47	4.57	5.24	
Rank			94	67	78	78	86	96	98	98	99	
MetWest:Total Rtn;I (MWTIX)	3,327,837	2.81	4.18	6.59	9.44	9.44	N/A	N/A	N/A	N/A	5.48	08/01/2017
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.32	
Difference			1.28	0.45	0.70	0.70	N/A	N/A	N/A	N/A	0.16	
IM U.S. Broad Market Core+ Fixed Income (MF) Median			5.84	4.87	7.71	7.71	5.08	4.39	4.18	4.43	4.98	
Rank			81	9	7	7	N/A	N/A	N/A	N/A	22	
PIMCO:Income;Inst (PIMIX)	3,056,012	2.58	7.09	-0.99	1.65	1.65	N/A	N/A	N/A	N/A	3.40	08/01/2017
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.32	
Difference			4.19	-7.13	-7.09	-7.09	N/A	N/A	N/A	N/A	-1.92	
IM Multi-Sector General Bond (MF) Median			7.67	-0.59	2.17	2.17	3.07	3.53	3.56	4.56	2.93	
Rank			59	58	58	58	N/A	N/A	N/A	N/A	35	
PIMCO:Intl Bd (DH);Inst (PFORX)	3,931,876	3.32	3.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03/01/2020
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	2.29	
Difference			1.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IM International Fixed Income (MF) Median			4.16	-0.99	-0.79	-0.79	1.20	1.60	1.13	2.34	-0.71	
Rank			60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
Oklahoma Wildlife Conservation Retirement System
Asset Allocation & Performance - Gross of Fees

As of June 30, 2020

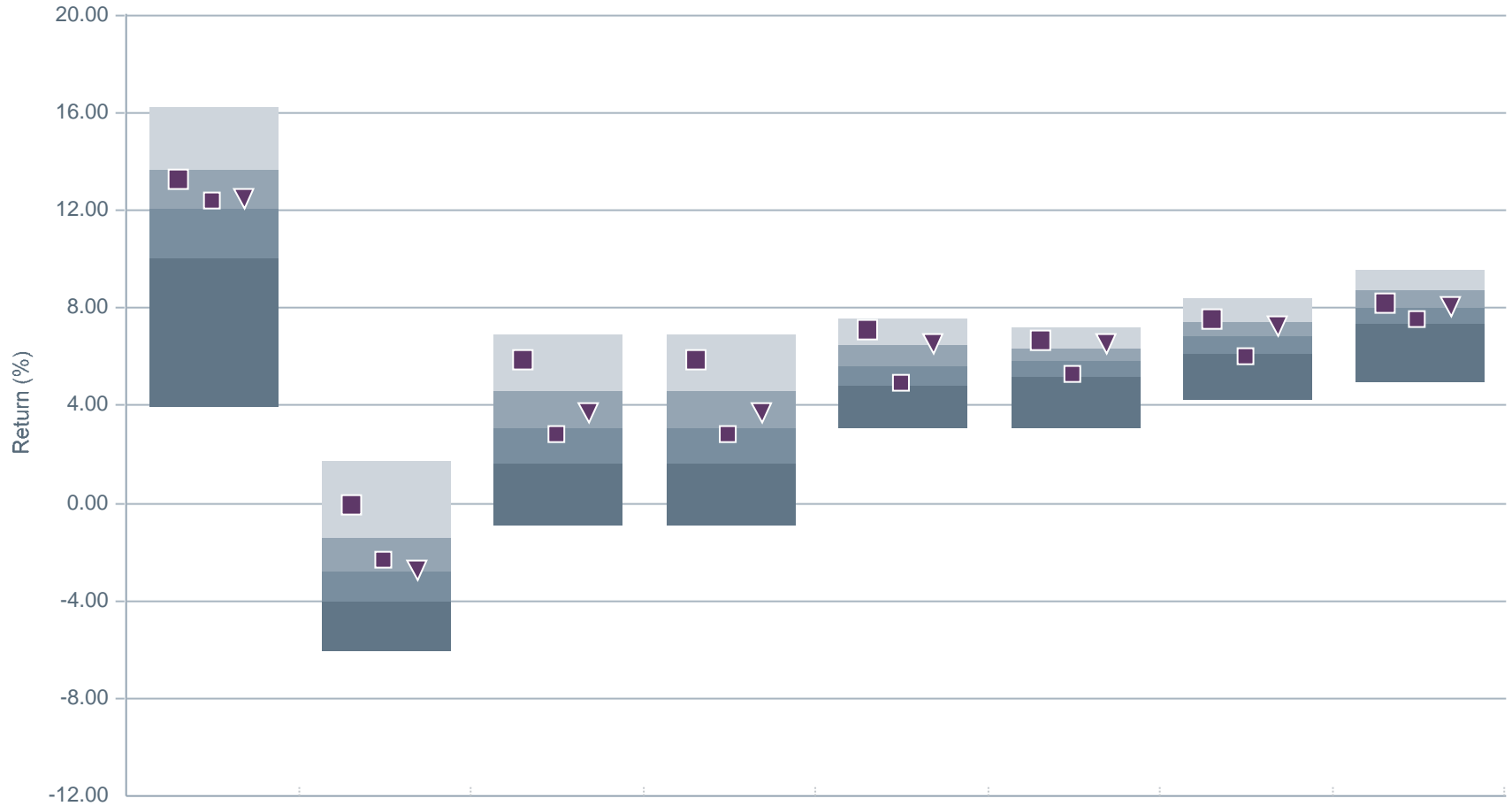
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Alternative Investments	11,767,603	9.94	10.64	-4.95	0.07	0.07	3.25	3.90	3.08	N/A	2.85	12/01/2010
OWCRS Alternatives Custom Index			7.89	-1.59	0.48	0.48	2.24	1.40	N/A	N/A	N/A	
Difference			2.75	-3.36	-0.41	-0.41	1.01	2.50	N/A	N/A	N/A	
Vanguard RE Idx;Adm (VGSLX)	2,221,918	1.88	13.47	-13.61	-6.62	-6.62	2.00	4.18	N/A	N/A	4.18	07/01/2015
Vanguard Spl Real Estate Index			13.50	-13.82	-6.82	-6.82	2.32	5.47	6.34	9.79	5.47	
Difference			-0.03	0.21	0.20	0.20	-0.32	-1.29	N/A	N/A	-1.29	
IM Real Estate Sector (MF) Median			11.87	-14.35	-8.09	-8.09	1.88	4.63	5.65	8.98	4.63	
Rank			24	34	31	31	48	62	N/A	N/A	62	
First Eagle:Global;I (SGIIX)	4,875,326	4.12	15.01	-7.15	-1.48	-1.48	N/A	N/A	N/A	N/A	3.28	08/01/2017
MSCI Wrld Index (USD) (Net)			19.36	-5.77	2.84	2.84	6.70	6.90	8.38	9.95	6.03	
Difference			-4.35	-1.38	-4.32	-4.32	N/A	N/A	N/A	N/A	-2.75	
Calamos:Mkt Neut Inc;I (CMNIX)	4,670,359	3.94	5.34	1.47	4.03	4.03	N/A	N/A	N/A	N/A	4.47	08/01/2017
Bloomberg US Agg Bond Index			2.90	6.14	8.74	8.74	5.32	4.30	3.96	3.82	5.32	
Difference			2.44	-4.67	-4.71	-4.71	N/A	N/A	N/A	N/A	-0.85	

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 Oklahoma Wildlife Conservation Retirement System vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

As of June 30, 2020



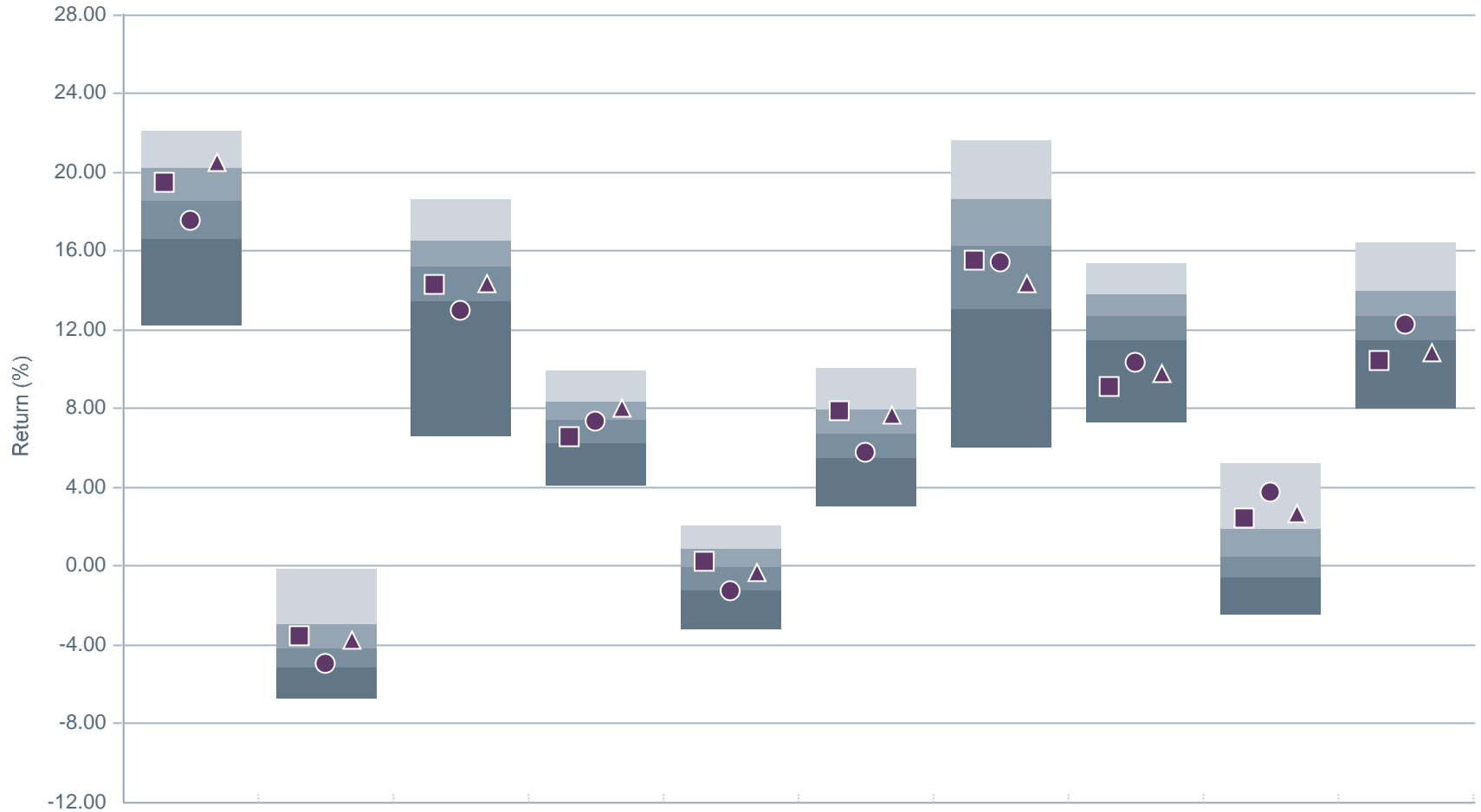
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OWCERS Total Fund	13.22 (31)	-0.08 (12)	5.88 (11)	5.88 (11)	7.10 (12)	6.64 (17)	7.49 (23)	8.18 (45)
■ OWCERS Policy Index	12.37 (46)	-2.35 (43)	2.80 (55)	2.80 (55)	4.93 (74)	5.26 (74)	6.00 (80)	7.49 (71)
▼ OWCERS Allocation Index	12.44 (44)	-2.81 (51)	3.69 (41)	3.69 (41)	6.49 (26)	6.50 (22)	7.26 (32)	7.99 (52)
5th Percentile	16.24	1.72	6.92	6.92	7.58	7.27	8.39	9.57
1st Quartile	13.69	-1.37	4.60	4.60	6.52	6.39	7.45	8.75
Median	12.13	-2.80	3.06	3.06	5.66	5.87	6.85	8.03
3rd Quartile	10.05	-4.03	1.63	1.63	4.84	5.22	6.14	7.36
95th Percentile	3.97	-6.07	-0.88	-0.88	3.12	3.11	4.27	4.96

Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.
 Oklahoma State Pension Commission fiscal year begins on 07/01.



Oklahoma State Pension Commission
 Oklahoma Wildlife Conservation Retirement System vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

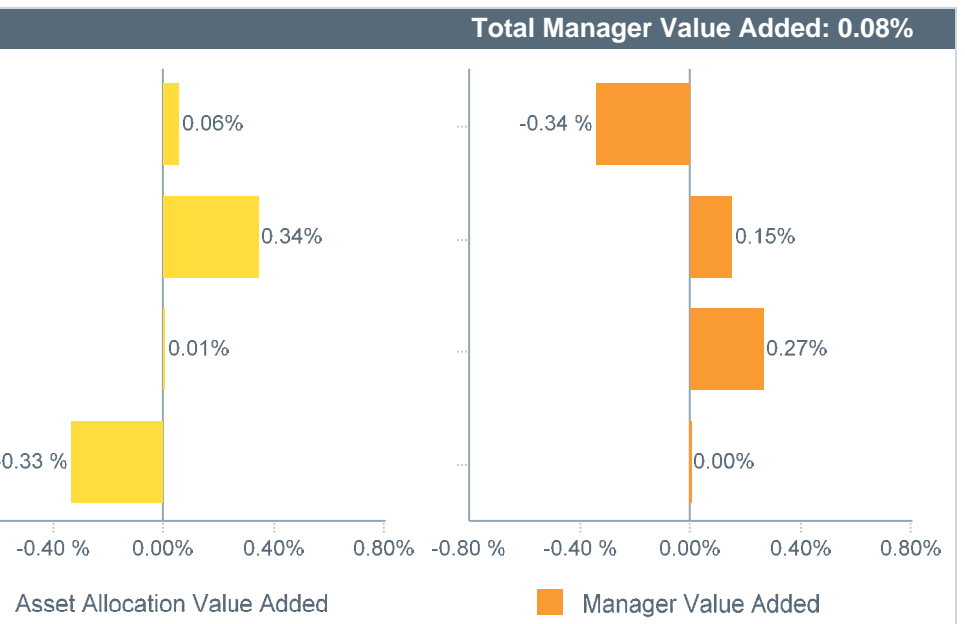
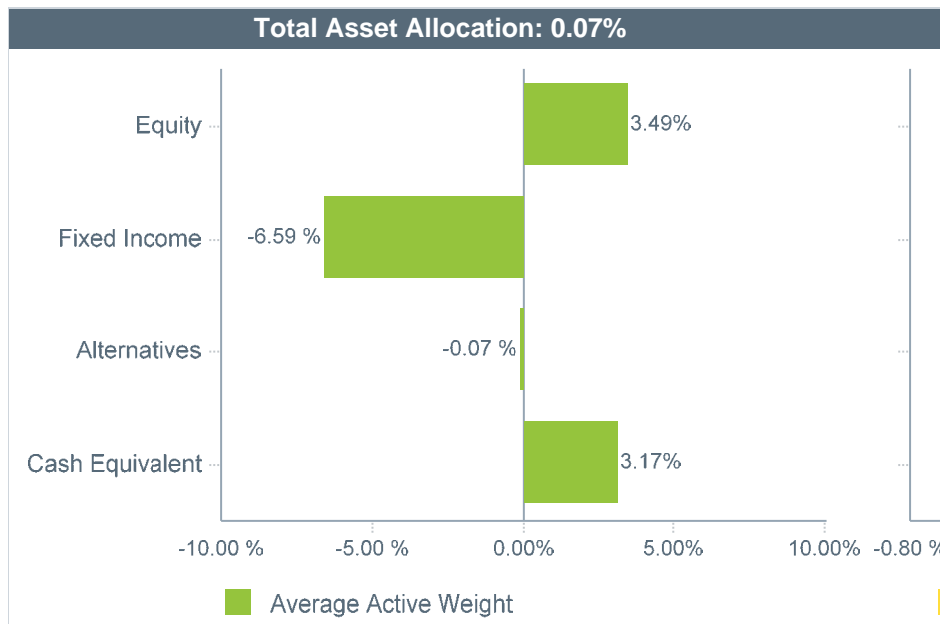
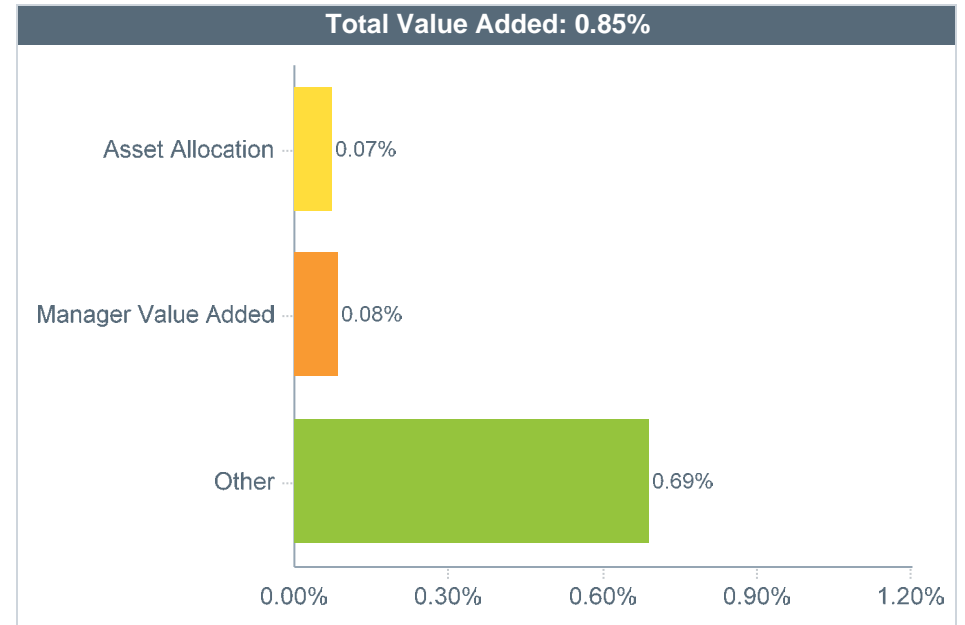
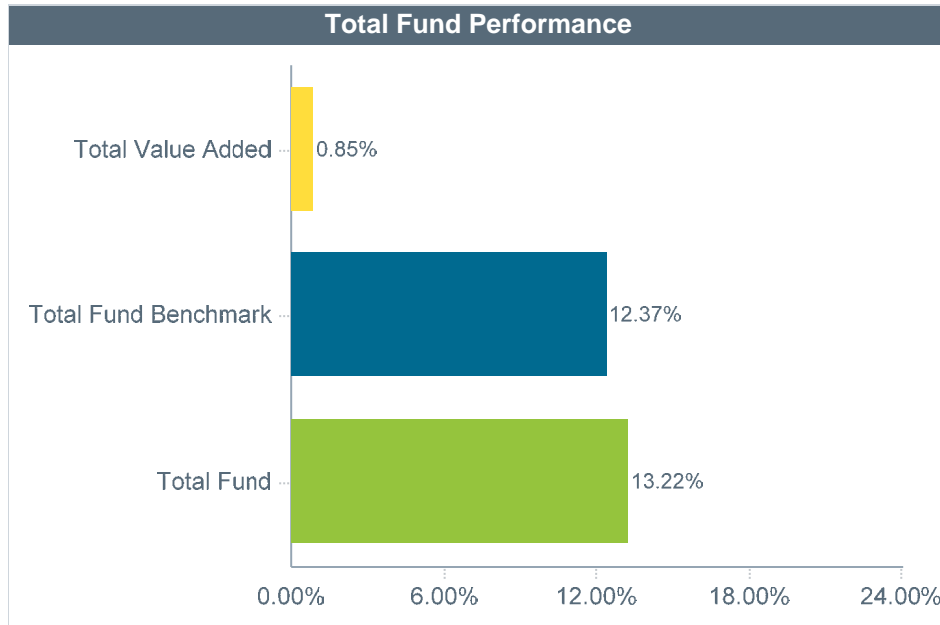
As of June 30, 2020



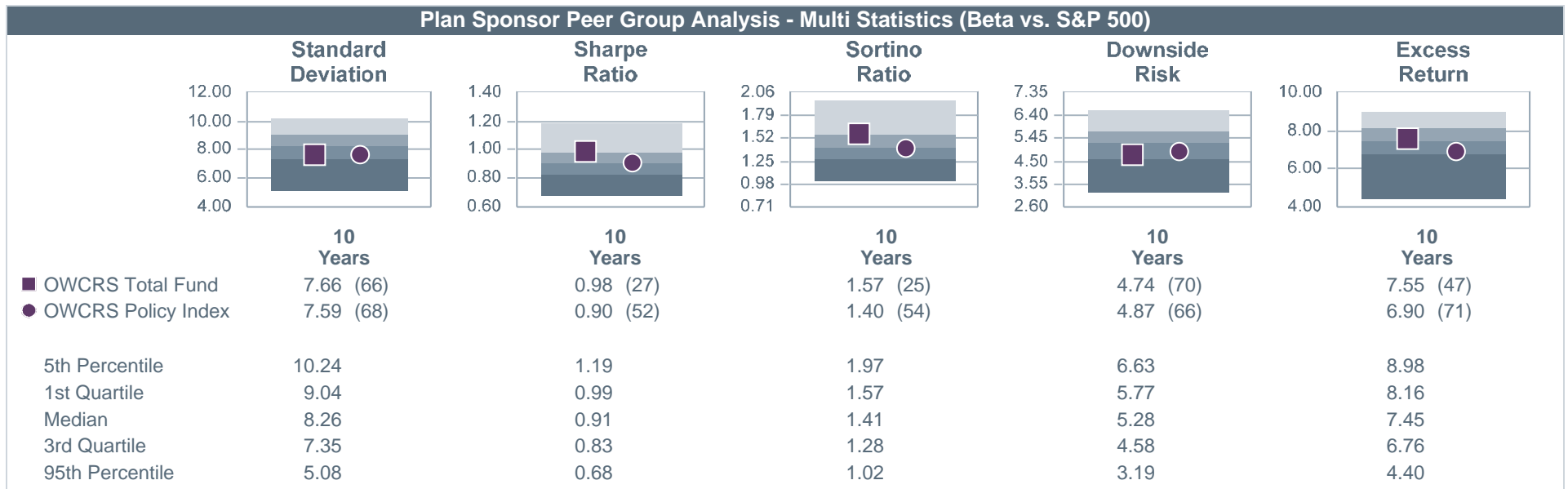
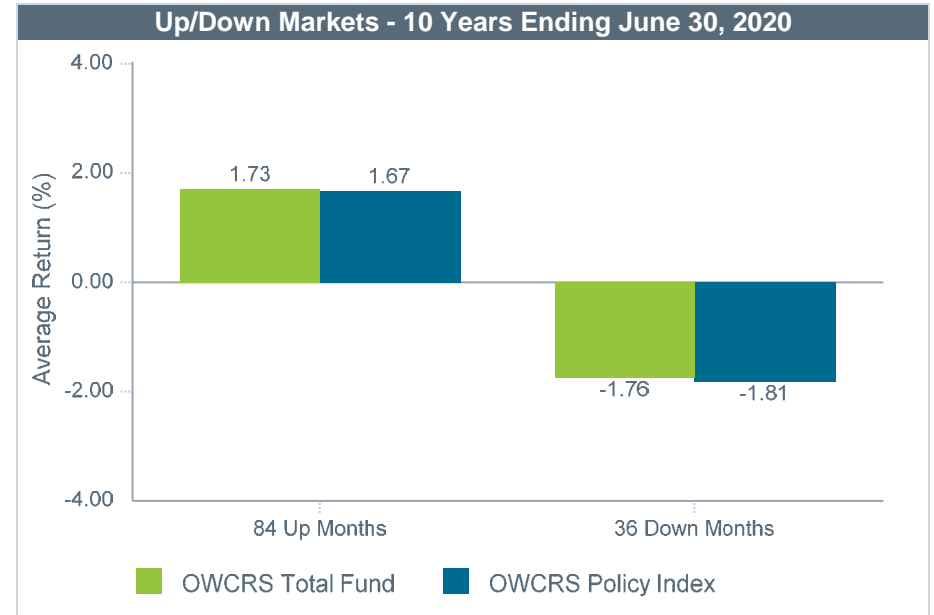
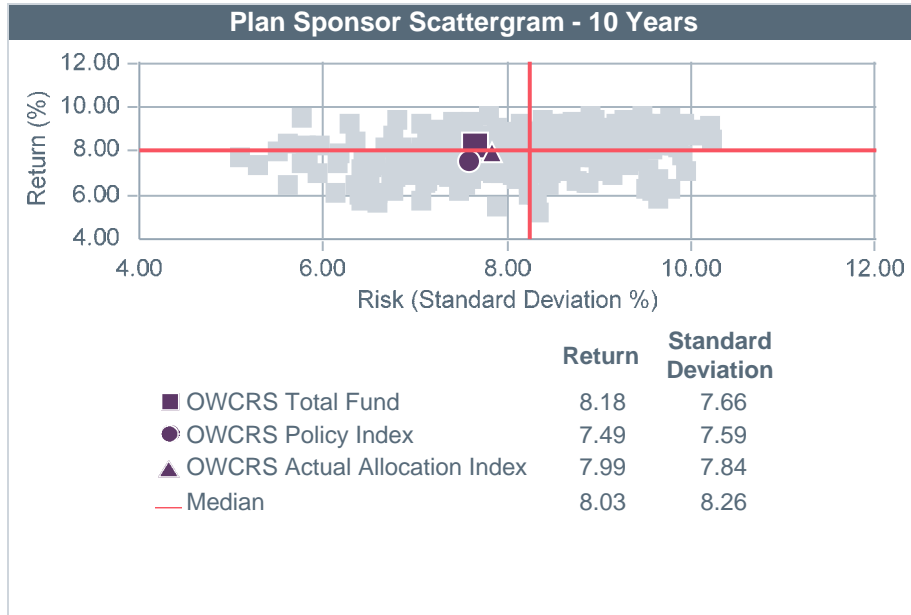
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OWCERS Total Fund	19.49 (37)	-3.52 (37)	14.27 (65)	6.59 (70)	0.19 (44)	7.88 (26)	15.52 (59)	9.12 (92)	2.44 (21)	10.43 (88)
● OWCERS Policy Index	17.53 (64)	-4.95 (71)	12.96 (79)	7.34 (53)	-1.27 (76)	5.80 (71)	15.43 (60)	10.29 (87)	3.69 (12)	12.31 (61)
▲ OWCERS Allocation Index	20.53 (21)	-3.71 (42)	14.38 (63)	8.04 (35)	-0.28 (56)	7.68 (28)	14.39 (70)	9.78 (90)	2.68 (19)	10.83 (83)
5th Percentile	22.10	-0.14	18.72	9.98	2.06	10.06	21.67	15.42	5.20	16.52
1st Quartile	20.27	-2.96	16.59	8.39	0.92	7.93	18.70	13.82	1.93	14.05
Median	18.59	-4.15	15.21	7.42	-0.08	6.74	16.28	12.73	0.48	12.68
3rd Quartile	16.66	-5.14	13.46	6.27	-1.20	5.45	13.03	11.49	-0.57	11.44
95th Percentile	12.27	-6.74	6.66	4.12	-3.18	3.05	6.05	7.32	-2.40	8.02

Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.

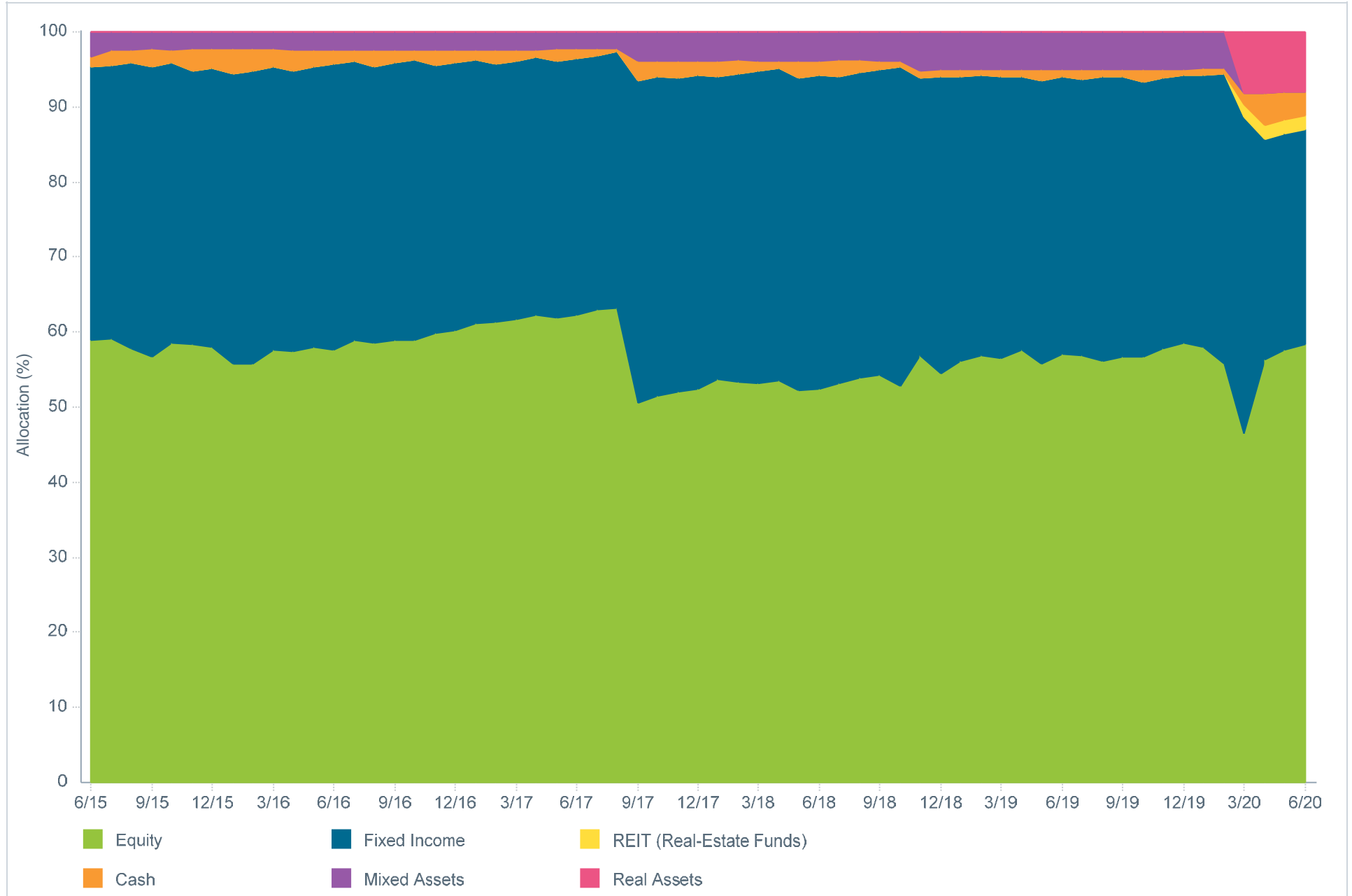




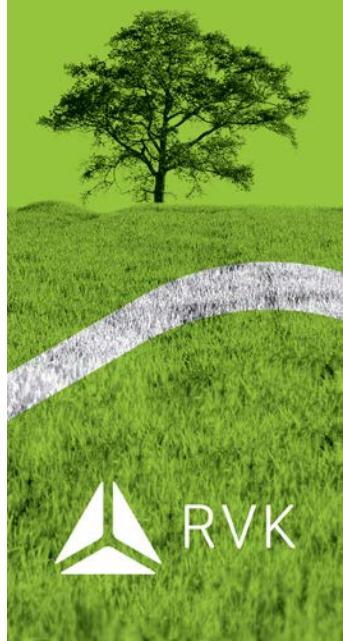
Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation.



Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



Addendum & Glossary



Performance Comments:

- Fiscal year begins on 07/01.
- RVK began monitoring the assets of Oklahoma State Pension Commission as of 07/01/2020. Prior historical data except mutual fund performance was provided by the prior investment consultant.
- Manager inception dates shown reflect the first full month of performance following initial funding.
- Mutual fund performance prior to 07/01/2020 or client inception is product specific.
- Manager inception dates shown represent the first full month following initial funding.
- Indices show N/A for since inception returns when the fund contains more history than the corresponding benchmark.

Custom Index Comments:

- The active **Actual Allocation Index** of each plan is calculated monthly based on beginning of period investment weights applied to the corresponding primary benchmark return.
- **OTRS Policy Index:** OTRS's passive, policy index is calculated monthly and currently consists of 43.5% Russell 3000 Index, 19% MSCI ACW ex US IMI (USD) (Net), 22% Bloomberg US Universal Bond Index, 6.5% NCREIF Property Index (Monthly), and 9% Russell 2000 Index+4%. Performance prior to 07/01/2020 was calculated by the prior investment consultant.
- **OPERS Policy Index:** OTRS's passive, policy index is calculated monthly and currently consists of 40% OPERS US Equity Custom Index, 28% MSCI ACW ex US Index (USD) (Net), and 32% OPERS Fixed Income Custom Index. Performance prior to 07/01/2020 was calculated by the prior investment consultant.
- **OPERS US Equity Custom Index** is calculated monthly and current consists of 85% Russell 1000 Index and 15% Russell 2000 Index. Performance prior to 07/01/2020 was calculated by the prior investment consultant.
- **OPERS Fixed Income Custom Index** is calculated monthly and current consists of 78% Bloomberg US Agg Bond Index, 11% FTSE Treasury Index - 20+ Yr Index, and 11% Bloomberg US Treasury US TIPS Index. Performance prior to 07/01/2020 was calculated by the prior investment consultant.
- **OFPRS Policy Index:** OTRS's passive, policy index is calculated monthly and currently consists of 47% Russell 3000 Index, 15% MSCI ACW ex US Index (USD) (Net), 13% Bloomberg US Agg Bond Index, 7% Bloomberg Global Agg ex US Index (USD) (Unhedged), 10% NCREIF ODCE Index (AWA) (Net) (Monthly), and 8% Cambridge US Private Equity Index (Monthly). Performance prior to 07/01/2020 was calculated by the prior investment consultant.
- **OPPRS Policy Index:** OTRS's passive, policy index is calculated monthly and currently consists of 60% MSCI ACW Index (USD) (Net), 25% Bloomberg US Universal Bond Index, and 15% NCREIF ODCE Index (AWA) (Net) (Monthly). Performance prior to 07/01/2020 was calculated by the prior investment consultant.
- **Oaktree Global Credit Custom Index** is calculated monthly and current consists of 50% ICE BofAML Global High Yield Index and 50% Credit Suisse Leveraged Loan Index.
- **OLERS Policy Index:** OTRS's passive, policy index is calculated monthly and currently consists of 35% S&P 500 Index (Cap Weighted), 10% Russell 2000 Index, 15% MSCI ACW ex US Index (USD) (Net), 30% Bloomberg US Agg Bond Index, and 10% NCREIF ODCE Index (AWA) (Net) (Monthly). Performance prior to 07/01/2020 was calculated by the prior investment consultant.
- **OURSJJ Policy Index:** OTRS's passive, policy index is calculated monthly and currently consists of 40% OURSJJ US Equity Custom Index, 28% MSCI ACW ex US Index (USD) (Net), and 32% OURSJJ Fixed Income Index. Performance prior to 07/01/2020 was calculated by the prior investment consultant.
- **OURSJJ US Equity Custom Index** is calculated monthly and current consists of 85% Russell 1000 Index and 15% Russell 2000 Index. Performance prior to 07/01/2020 was calculated by the prior investment consultant.
- **OURSJJ Fixed Income Custom Index** is calculated monthly and current consists of 78% Bloomberg US Agg Bond Index, 11% FTSE Treasury Index - 20+ Yr Index, and 11% Bloomberg US Treasury US TIPS Index. Performance prior to 07/01/2020 was calculated by the prior investment consultant.
- **OWCRS Policy Index:** OTRS's passive, policy index is calculated monthly and currently consists of 50% OWCRS Equity Custom Index, 40% Bloomberg US Agg Bond Index, and 10% HFRI FoF Composite Index. Performance prior to 07/01/2020 was calculated by the prior investment consultant.
- **OWCRS Equity Custom Index** is calculated monthly and current consists of 25% MSCI EAFE Index (USD) (Net), 25% S&P 500 Index (Cap Weighted), 25% Russell 2000 Index, and 25% S&P Mid Cap 400 Index (Gross) (Cap Weighted). Performance prior to 07/01/2020 was calculated by the prior investment consultant.
- **OWCRS Alternatives Custom Index** is calculated monthly and currently consists of 100% HFRI FoF Composite Index. Performance prior to 07/01/2020 was calculated by the prior investment consultant.

Glossary

Active Return - The difference between the investment manager/composite performance relative to the performance of an appropriate market benchmark.

Active Share - Measures the degree to which the holdings of a fund differ from the holdings of the benchmark. Active share is calculated by taking the sum of the absolute value of the differences of the weight of each holding in the fund versus the weight of each holding in the benchmark and dividing by two.

Alpha - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. It is a measure of the portfolio's historical performance not explained by movements of the market or a portfolio's non-systematic return.

Alpha Ratio - A measure of a portfolio's non-systematic return per unit of downside risk. It is measured by dividing the alpha of a portfolio by the downside risk. The non-systematic return is a measure of a portfolio's historical performance not explained by movements of the market.

Average Quality - Bond quality ratings are reported using the investment managers' and the index providers' preferred rating agency. *Average Quality for managers unable to provide this statistic is instead provided by Morningstar; if unavailable on Morningstar, it has been estimated using a credit quality distribution provided by the manager.* There are two primary rating agencies in the US. *Moody's* assigns ratings on a system that employs up to four symbols (consisting of letters and numbers) such as, Aaa, Aa2, etc., with Aaa being the highest or safest rating. *Standard & Poor's (S&P)* employs a system that uses + and - along with letters such as AAA, AA+, etc. The two rating agencies' systems are summarized below:

<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>	<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>
Higher Credit Quality – Investment Grade			Lower Credit Quality – Below Investment Grade		
AAA	Aaa	Prime/Highest credit quality	BB+	Ba1	Speculative/Low credit quality
AA+	Aa1	High credit quality	BB	Ba2	
AA	Aa2		BB-	Ba3	
AA-	Aa3		B+	B1	Highly speculative
A+	A1	Upper-medium credit quality	B	B2	
A	A2		B-	B3	
A-	A3		CCC+	Caa1	Substantial credit/default risk
BBB+	Baa1	Lower-medium credit quality	CCC	Caa2	Extremely speculative
BBB	Baa2		CCC-	Caa3	
BBB-	Baa3		CC	Ca	Vulnerable to default
			C	Ca	
			D	C	In default

Benchmark Effect - The difference between the blended return of each respective managers' benchmark within a composite and the composite's benchmark return.

Beta - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of a portfolio's non-diversifiable or systematic risk.

Box Plots - A graphical representation of the distribution of observations. From top to bottom, the four boxes represent the spread between the maximum value and the minimum value in each quartile. A quartile represents the values that divide the observations into four quarters (i.e., 1st quartile, 2nd quartile, 3rd quartile, and 4th quartile). The median observation is where the 2nd quartile and 3rd quartile meet.

Buy and Hold Attribution - At the beginning of the time period under analysis, the manager and benchmark portfolios are broken down into segments (i.e., styles, sectors, countries, and regions) based on the desired type of attribution. The formula assumes zero turn-over to the manager and benchmark portfolios throughout the period and calculates the segment returns ("buy and hold returns") to arrive at performance attribution. Due to portfolio turnover, buy and hold attribution may not accurately represent quarterly performance relative to the benchmark. Country, region, sector, and style allocations are as of the date one quarter prior to the reporting date, and the returns shown are for those segments throughout the quarter reported. Due to disclosure guidelines set by each investment manager, equity characteristics shown are as of the most recent date available. The following is the methodology for segment classification:

Sector - Attribution is calculated using the Global Industry Classification Standard (GICS) which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector, as defined by S&P Capital IQ data.

Country/Region - Attribution is calculated using the Morgan Stanley Capital International (MSCI) region standards. Stocks are classified by their domicile country/region, as defined by S&P Capital IQ data, and thus may differ from the classification of the investment manager and/or index provider.

Style - Stocks are classified into the following style boxes: large/mid/small vs. growth/neutral/value. Stocks are classified along large/mid/small categories at the time of the Russell index rebalancing, using the index market cap boundaries as cutoff points. Stocks are classified along growth/neutral/value categories at the time of the Russell index rebalancing, using the price/book ratio as supplied by S&P Capital IQ. Stocks in the Russell 3000 Index portfolio are sorted by price/book ratio; names with the highest price/book ratio that make up 1/3 of the total market capitalization are assigned to the growth category, names that make up the subsequent 1/3 of the total market capitalization are assigned to the neutral category, while the balance of the names are assigned to the value category. Stocks are unclassified when there is not enough data to determine a size and style metric.

Portfolio Characteristics and Buy and Hold Attribution reports utilize product-specific data for all mutual funds and commingled funds.

Capital Markets Review -

Breakeven Inflation - Measures the expected inflation rate at each stated maturity by taking the difference between the real yield of the inflation-linked maturity curve and the yield of the closest nominal Treasury maturity.

Consumer Confidence - Measures domestic consumer confidence as defined by the degree of optimism on the state of the economy that consumers express through saving and spending.

Consumer Price Index (CPI) - Measures the change in the price level of consumer goods and services.

Federal Funds Rate - The interest rate at which a depository institution lends funds maintained at the Federal Reserve to another depository institution overnight. It is one of the most influential interest rates in the US economy, since it affects monetary and financial conditions, which in turn have a bearing on key aspects of the broad economy including employment, growth and inflation.



Glossary

- Option-Adjusted Spread** - Measures the flat spread of an index or bond to the Treasury yield curve after removing the effect of any embedded options.
- Purchasing Managers Index (PMI)** - Measures economic activity by surveying purchasing managers on a monthly basis as to whether business conditions have improved, worsened, or stayed the same.
- Real Gross Domestic Product (Real GDP)** - An inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year.
- US Dollar Total Weighted Index** - Measures the value of the US Dollar relative to a basket of other world currencies. It is calculated as the weighted geometric mean of the dollar's value versus the EUR, GBP, CAD, SEK, CHF, and JPY.
- Unemployment Rate** - The percentage of the total labor force that is unemployed but actively seeking employment.
- VIX** - Measures the implied volatility of S&P 500 Index options by looking at the market's expectation of the S&P 500 Index volatility over the next 30 day period. Commonly referred to as the "fear index" or the "fear gauge."
- Cash Flow Effect** – The composite's active return minus the sum of each managers' active return minus the benchmark effect.
- Consistency** - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.
- Convexity** - A measure of the shape of the curve that describes the relationship between bond prices and bond yields.
- Correlation** - A statistical measure of the relationship between asset class returns. A value of 1.00 is a perfect correlation; that is, the asset classes always move in the same direction. A value of -1.00 indicates a perfect negative correlation, in which the asset classes always move in opposite directions of each other. A value of 0 indicates there is no relationship between the direction of returns of the two asset classes. Correlation calculations only consider the direction of changes relative to two variables and not the magnitude of those changes.
- Coupon Rate** - The percentage rate of interest paid on a bond or fixed income security; it is typically paid twice per year.
- Current Yield** - The annual income of a security divided by the security's current price.
- Down Market Capture** - Down market by definition is negative benchmark return and down market capture represents the ratio in % terms of the average portfolios return over the benchmark during the down market period. The lower the value of the down market capture the better the product's performance.
- Downside Risk** - A measure similar to standard deviation, but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative returns for the selected periodicity. The higher the factor, the riskier the product.
- Earnings Per Share** - It is backward looking, calculated using the one year current EPS divided by the one year EPS five years ago.
- Effective Duration** - The approximate percentage change in a bond's price for a 100 basis point change in yield.
- Excess Return vs. Market** - Average of the monthly arithmetic difference between the manager's return and the benchmark return over a specified time period, shown on an annualized basis.
- Excess Return vs. Risk Free** - Average of the monthly arithmetic difference between the manager's return and the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) over a specified time period, shown on an annualized basis.
- Excess Risk** - A measure of the standard deviation of a portfolio's performance relative to the risk free return.
- Expense Ratios** - Morningstar is the source for mutual fund expense ratios.
- Gain/Loss** - The net increase or decrease in the market value of a portfolio excluding its Net Cash Flow for a given period.
- Indices** - All indices and related information are considered intellectual property and are licensed by each index provider. The indices may not be copied, used or distributed without the index provider's prior written approval. Index providers make no warranties and bear no liability with respect to the indices, any related data, their quality, accuracy, suitability and/or completeness.
- Information Ratio** - Measured by dividing the active rate of return by the tracking error. The higher the information ratio, the more value-added contribution by the manager.
- Liability Driven Investing (LDI)** - A method to optimally structure asset investments relative to liabilities. The change in liabilities is estimated by the Ryan Labs Generic PPA Index of appropriate duration for that Plan. This benchmark is based on generic data and is therefore an approximation. RVK is not an actuarial firm, and does not have actuarial expertise.
- Estimated Funded Status** - The estimated ratio of a Plan's assets relative to its future liabilities. This is calculated by dividing the Plan's asset market value by the estimated present value of its liabilities. The higher the estimated funded status, the better the Plan's ability to cover its projected benefit obligations. An estimated funded status of 100% indicates a Plan that is fully funded.
- Estimated PV of Liabilities** - An estimate of a Plan's future liabilities in present value terms. The beginning of the period liability is provided by the Plan's actuary. The period-end present value liability estimate provided in this report is derived by applying the estimated percentage change generated using the Ryan Labs Generic PPA Index with duration similar to that reported on the most recent actuarial valuation report.
- Duration of Liabilities** - The sensitivity of the value of a Plan's liabilities to changes in interest rates, as calculated by the Plan's actuary.
- Duration of Assets** - The dollar-weighted average duration of all the individual Plan assets.
- Estimated Plan Hedge Ratio** - The estimate of how well a Plan's investment portfolio is hedged against changes in interest rates - a primary driver of funded status movements. This is calculated by dividing the dollar-weighted values of both the Plan asset duration by the liability duration and multiplying by the estimated funded status. An estimated plan hedge ratio of zero indicates that the Plan's liabilities have not been hedged, whereas a value of one indicates fully hedged.

Glossary

Modified Duration - The approximate percentage change in a bond's price for a 100 basis point change in yield, assuming the bonds' expected cash flows do not change.

Mutual Fund Performance - Whenever possible, manager performance is extended for any share class that does not have 10 years of history. Using Morningstar's methodology, a single ticker within the same fund family (often the oldest share class) is chosen to append historical performance.

Net Cash Flow - The sum, in dollars, of a portfolio's contributions and withdrawals. This includes all management fees and expenses only when performance shown is gross of fees.

Peer Groups -

Plan Sponsor Peer Groups - RVK utilizes the Mellon Analytical Solutions Trust Universe along with the Investment Metrics Plan Sponsor Universe. The combined Mellon Analytical Solutions Trust Universe and Investment Metrics Plan Sponsor Universe is used for comparison of total fund composite results and utilizes actual client performance compiled from consultant and custodian data. The Plan Sponsor Peer Group database includes performance and other quantitative data for over 2,100 plans which include corporate, endowment, foundation, public, and Taft Hartley plans. Plan Sponsor Peer Groups are gross of fees.

Investment Manager Peer Groups - RVK utilizes Investment Metrics' Peer Groups for investment manager peer comparison and ranking. The Investment Metrics Peer Group database includes performance and other quantitative data for over 840 investment management firms and 29,000 investments products, across more than 160 standard peer groups. Mutual Fund Peer Groups are net of fees.

Percentile Rankings - Percentile rank compares an individual fund's performance with those of other funds within a defined peer group of managers possessing a similar investment style. Percentile rank identifies the percentage of a fund's peer group that has a higher return (or other comparative measurement) than the fund being ranked. Conversely, 100 minus the individual fund's ranking will identify the percentage of funds within the peer group that have a lower return than the fund being ranked.

1 - Highest Statistical Value

100 - Lowest Statistical Value

Example: American Funds AMCP;R-4 (RAFEX) is ranked in the 4th percentile within the IM US Equity Large-Cap Growth Funds (MF) Peer Group for the Sharpe Ratio. Within the IM US Equity Large-Cap Growth Funds peer group, 4% of the other funds performed better than American Funds AMCP;R-4 (RAFEX), while 96% of the funds performed worse.

Performance Methodology - RVK calculates performance for investment managers and composites using different methodologies.

Investment Managers - Performance is calculated for interim periods between all large external cash flows for a given month and geometrically linked to calculate period returns. An external cash flow is defined as cash, securities, or assets that enter or exit a portfolio. RVK defines a "large cash flow" as a net aggregate cash flow of $\geq 10\%$ of the beginning-period portfolio market value or any cash flow that causes RVK calculated performance to deviate from manager/custodian reported performance in excess of 5 basis points for a given month.

Composites - The Modified Dietz methodology is utilized to calculate asset class, sub-asset class, and total fund composite performance. The Modified Dietz method calculates a time-weighted total rate of return that considers the timing of external cash flows; however, it does not utilize interim period performance to mitigate the impact of significant cash in- and outflows to the composite.

RVK calculates performance beginning with the first full month following inception. Since inception performance may vary from manager reported performance due to RVK using the first full month of returns as the inception date. Performance for both managers and composites is annualized for periods greater than one year.

Portfolio Characteristics - Due to disclosure guidelines set by each investment manager, portfolio characteristics shown are as of the most recent date available.

Price to Earnings Ratio - The ratio of a company's share price to its per-share earnings

Private Equity Quartile Ranks - Private Equity quartile ranks are generated using vintage year peer group data provided by Thomson Reuters, and are based on each fund's annualized, since inception internal rate of return (IRR). Three Private Equity peer groups are available via Thomson Reuters: Buyout, Venture, and All Private Equity. Ranks are available quarterly, at a one-quarter lag.

R-Squared - The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio's performance to the appropriate benchmark.

Return - Compounded rate of return for the period.

% Return - The time-weighted rate of return of a portfolio for a given period.

Risk Free Benchmark - ICE BofAML 3 Mo US T-Bill Index unless specified otherwise.

Glossary

RVK Liquidity Rating - A qualitative method for determining the relative amount of liquidity in a portfolio. The characteristics considered when determining relative liquidity include trading volume, gates for redemption, leverage, nature of transactions, and pricing mechanisms. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating.

<u>Asset Class</u>	<u>RVK Liquidity Rating</u>	<u>Asset Class</u>	<u>RVK Liquidity Rating</u>
<u>Liquid Investments</u>		<u>Less Liquid Investments</u>	
T-Bills and Treasuries	100	Fixed Income Plus Sector	50
Cash Equivalents	98	Bank Loans	50
TIPS	95	Stable Value (Plan Sponsor Directed)	50
US Large Cap Equity	95	Absolute Return Strategies	35
Diversified Real Return	93		
Stable Value (Participant Directed)	91		
Non-US Large Cap Equity	90	<u>Not Liquid Investments</u>	
Global Tactical Asset Allocation	88	Core Real Estate	25
US Small Cap Equity	85	Core Plus Real Estate	15
REITS	85	Non-Core Real Estate	5
Non-US Small Cap Equity	85	Private Equity Funds of Funds	5
Emerging Markets Equity	85		
Core Fixed Income	85		
Core Plus Fixed Income	80		

Sector Allocation - Negative fixed income sector allocation reflects manager's use of derivatives, short selling, or interest rate swaps.

Sharpe Ratio - Represents the excess rate of return over the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise), divided by the standard deviation of the excess return to the risk free asset. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.

Simple Alpha - The difference between the manager's return and the benchmark's return.

Spread Duration - The approximate percentage change in a bond's price for a 100 basis point change in its spread over a Treasury of the same maturity.

Standard Deviation - A statistical measure of the range of a portfolio's performance. The variability of a return around its average return over a specified time period.

Thematic Classification - Represents dedicated manager allocations; as such, thematic allocations are approximations. RVK categorizes the following asset classes as Alpha, Capital Appreciation, Capital Preservation, and Inflation:

<u>Alpha</u>	<u>Capital Appreciation</u>	<u>Capital Preservation</u>	<u>Inflation</u>
Absolute Return Strategies	Public Equity	Core Fixed Income	TIPS
Currency Overlay	Private Equity	CMBS Fixed Income	Bank Loans
	Preferred Securities	Asset Backed Fixed Income	Core Real Estate
	High Yield	Domestic Core Plus Fixed Income	Real Return
	Convertible Fixed Income	Mortgage Backed Fixed Income	Inflation Hedges
	TALF Funds	International Developed Fixed Income	REITS
	Distressed Debt	Cash Equivalents	Commodities
	Emerging Market Fixed Income	Stable Value	
	Value Added Real Estate		
	Opportunistic Real Estate		

Time Period Abbreviations - **QTD** - Quarter-to-Date. **CYTD** - Calendar Year-to-Date. **FYTD** - Fiscal Year-to-Date. **YOY** - Year Over Year.

Total Fund Attribution - The Investment Decision Process (IDP) model provides an approach to evaluating investment performance that applies to all asset classes and investment styles. The IDP model is based on a top-down hierarchy framework of investment decisions, with each decision contributing to the overall profit or loss. The IDP approach starts from the strategic asset allocation and follows the flow of the investments down to the manager's skill.

Strategic Asset Allocation (SAA) - The percentage return gained or lost from the long-term strategic asset allocation decision, the most significant determinant of long-term performance. SAA is the product of the target asset allocation multiplied by the corresponding benchmark returns.

Tactical Asset Allocation (TAA) - The percentage return gained or lost from not having been precisely allocated at the target asset allocation mix, whether by deviations that are tactical in nature or a by-product of moving towards the target mix. TAA is the product of the actual asset allocation multiplied by the broad asset class benchmarks, less the SAA.

Style Selection (SS) - The percentage return gained or lost from intentional style biases within each asset class (e.g. value rather than core or overweight to emerging markets relative to benchmark). SS is the product of the actual manager allocation within each asset class multiplied by their specific benchmark, less TAA.

Manager's Skill (MS) - The percentage return gained or lost from manager value added relative to their specific benchmark. MS is the product of the actual manager allocation multiplied by their achieved excess return.

Total Fund Beta - Total Fund Beta is calculated using the S&P 500 as the benchmark. It represents a measure of the sensitivity of the total fund to movements in the S&P 500 and is a measure of the Total Fund's non-diversifiable or systematic risk.

Tracking Error - A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.



Glossary

Treynor Ratio - Similar to Sharpe ratio, but focuses on beta rather than excess risk (standard deviation). Treynor ratio represents the excess rate of return over the risk-free rate (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) divided by the beta. The result is the absolute rate of return per unit of risk. The higher the value, the better historical risk-adjusted performance.

Unit Value - The dollar value of a portfolio, assuming an initial nominal investment of \$100, growing at the compounded rate of %Return for a given period.

Up Market Capture - Up market by definition is positive benchmark return and up market capture represents the ratio in % terms of the average portfolios return over the benchmark during the up market period. The higher the value of the up market capture the better the product's performance.

Yield to Maturity - The rate of return achieved on a bond or other fixed income security assuming the security is bought and held to maturity and that the coupon interest paid over the life of the bond will be reinvested at the same rate of return. The 30-Day SEC Yield is similar to the Yield to Maturity and is reported for mutual funds.

Yield to Worst - The bond yield calculated by using the worst possible yield taking into consideration all call, put, and optional sink dates.

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