



Quarterly Investment Performance Analysis

Oklahoma State Pension Commission

Period Ended: September 30, 2020



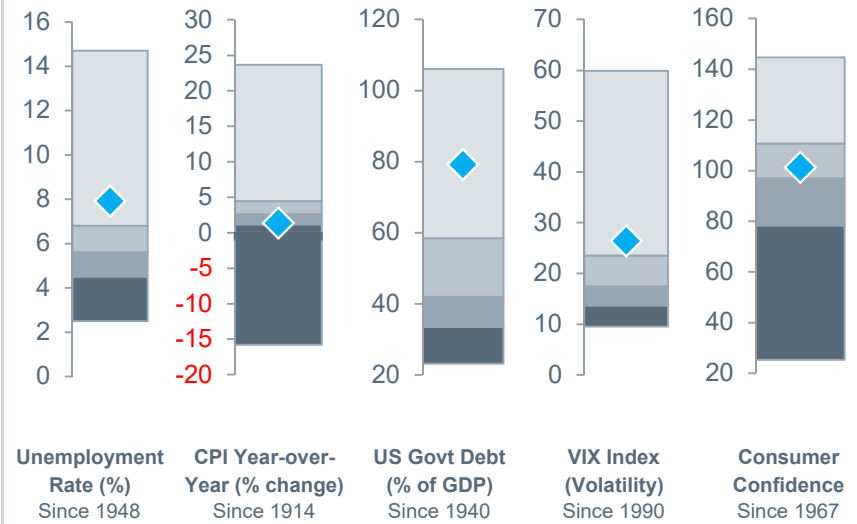
Capital Markets Metrics



Third Quarter Economic Environment

In the first two months of Q3, capital markets generally tracked trends stemming from the latter half of Q2. After strong results in the first two months of the quarter, returns from risk assets reversed in September due to growing concerns over a stagnating recovery and reduced confidence that the US Congress could agree to enact further fiscal stimulus. In addition, the upcoming US presidential and congressional elections offer another source of uncertainty when building expectations for the ongoing economic recovery. The Federal Open Market Committee (FOMC) maintained its accommodative stance and boosted sentiment further by announcing it will use an average inflation target indicating that it could accept levels above its stated 2% target in future periods. Market participants largely saw this as an indication that policy could remain supportive for longer than expected with a fixed inflation target. As of October 1st, the Atlanta Fed's GDPNow annualized estimate for Q3 growth stood at 34.6% which stands in stark contrast to the final reading of the Q2 GDP decline of -31.4%. On a non-annualized basis, the decline in real US GDP, peak to trough, was -10.1%, according to JP Morgan, compared to a -4.0% decline during the great financial crisis. For calendar year 2020, the OECD released a projection in September for a -4.5% contraction in global GDP, which represented an improvement from its June projection for a -6.0% contraction.

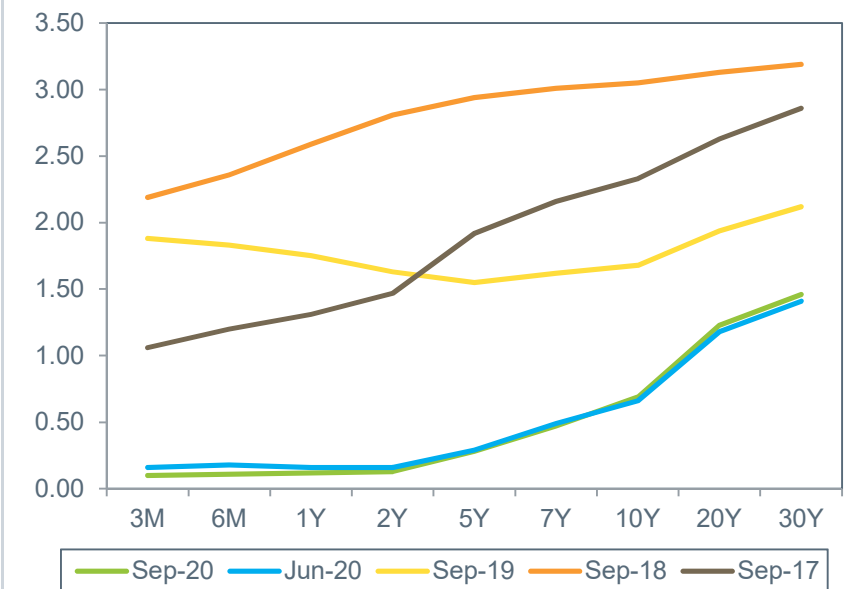
Key Economic Indicators



Economic Indicators	Sep-20	Jun-20	Sep-19	Sep-17	20 Yr
Federal Funds Rate (%)	0.09 ▲	0.08	1.90	1.06	1.57
Breakeven Infl. - 5 Yr (%)	1.49 ▲	1.17	1.35	1.78	1.82
Breakeven Infl. - 10 Yr (%)	1.63 ▲	1.34	1.52	1.85	2.01
CPI YoY (Headline) (%)	1.4 ▲	0.6	1.7	2.2	2.1
Unemployment Rate (%)	7.9 ▼	11.1	3.5	4.2	6.0
Real GDP YoY (%)	-2.9 ▲	-9.0	2.1	2.4	1.8
PMI - Manufacturing	55.4 ▲	52.6	48.2	59.9	52.5
USD Total Wtd Idx	117.35 ▼	120.86	117.99	110.08	103.23
WTI Crude Oil per Barrel (\$)	40.2 ▲	39.3	54.1	51.7	62.2
Gold Spot per Oz (\$)	1,886 ▲	1,781	1,472	1,280	989

Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	8.93	5.57	15.15	14.15	13.74
Russell 2000	4.93	-8.69	0.39	8.00	9.85
MSCI EAFE (Net)	4.80	-7.09	0.49	5.26	4.62
MSCI EAFE SC (Net)	10.25	-4.20	6.84	7.37	7.33
MSCI Emg Mkts (Net)	9.56	-1.16	10.54	8.97	2.51
Bloomberg US Agg Bond	0.62	6.79	6.98	4.18	3.64
ICE BofAML 3 Mo US T-Bill	0.04	0.64	1.10	1.20	0.64
NCREIF ODCE (Gross)	0.48	-0.12	1.39	6.64	10.27
FTSE NAREIT Eq REIT (TR)	1.44	-17.54	-18.16	3.95	7.90
HFRI FOF Comp	4.24	2.54	5.71	3.08	2.88
Bloomberg Cmdty (TR)	9.07	-12.08	-8.20	-3.09	-6.03

Treasury Yield Curve (%)



Third Quarter Review

Broad Market

In Q3, US markets continued their climb from the Q1 selloff, bolstered by substantial pent-up demand being released with re-openings across the country and continued accommodative monetary policy. Domestic equities continued their strong performance from Q2, albeit to a lesser extent, with the S&P 500 hitting an all-time high in early September before a slight drawback to finish the quarter. The S&P 500 ended Q3 up 8.9%, with positive YTD returns of 5.57%.

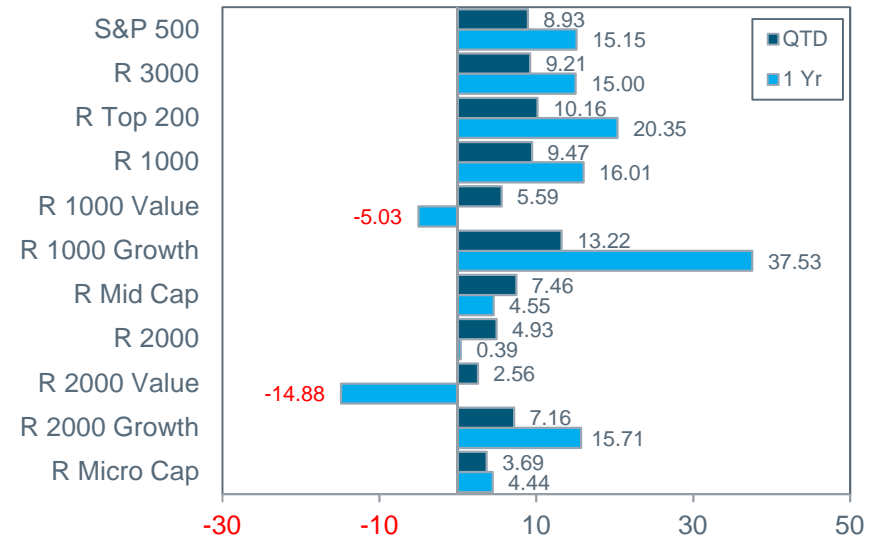
Market Cap

Additionally, larger cap stocks fared best in Q3, a reversal of what was seen in Q2. The Russell Top 200 finished Q3 ahead of its smaller-cap counterparts, returning 10.2%, while the Russell 2000 and Mid Cap indexes returned 4.9% and 7.5%, respectively.

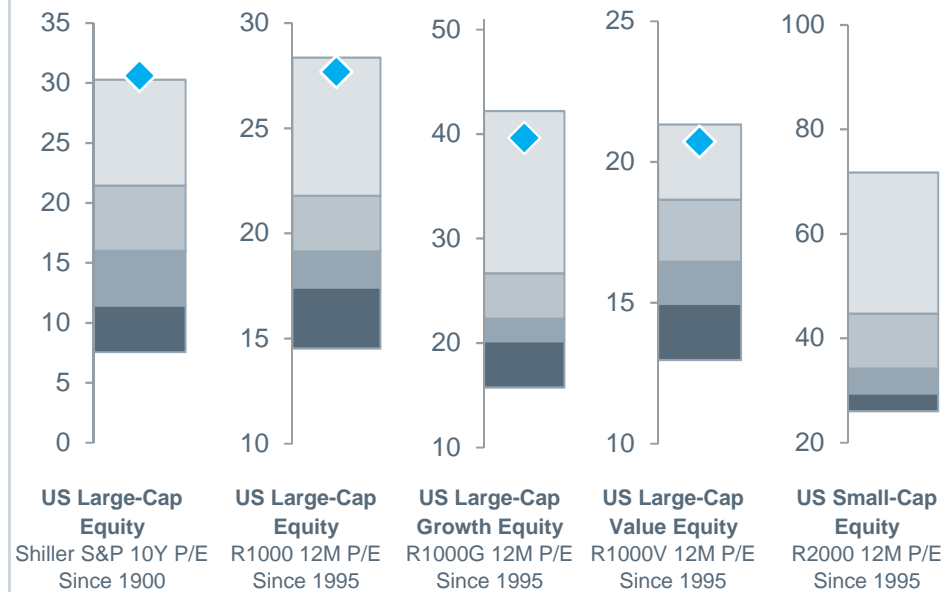
Style and Sector

Growth led value across all market caps by a significant margin once again during Q3. Active management largely struggled once again in Q3.

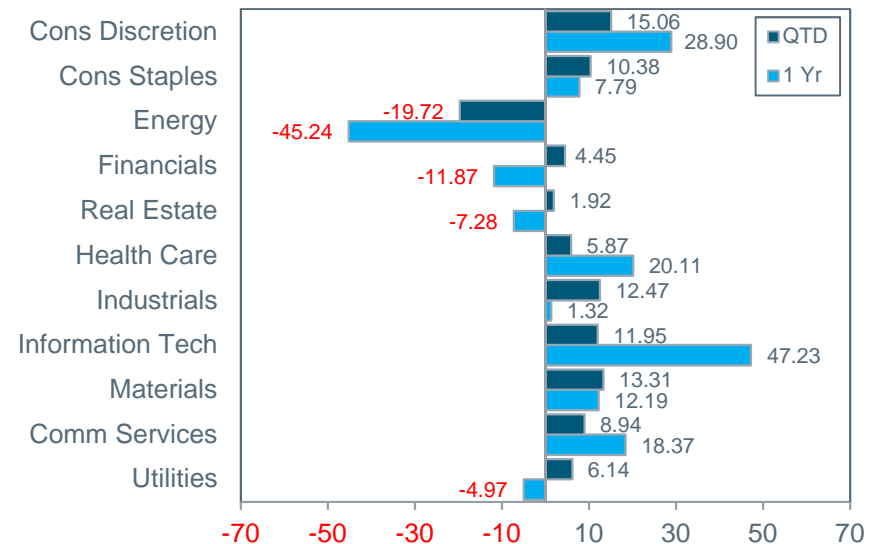
Style and Capitalization Market Performance (%)



Valuations



S&P 500 Index Sector Performance (%)



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. Current R2000 P/E is unavailable and does not appear in the historical ranges.



Third Quarter Review

Developed Markets

Developed international markets had a strong quarter, but remain in negative territory for the year. Growth stocks outperformed value while small outpaced large. The majority of developed market countries had positive returns for the quarter. Active management fared well, with developed equity focused managers beating the benchmark in the large and small cap universes.

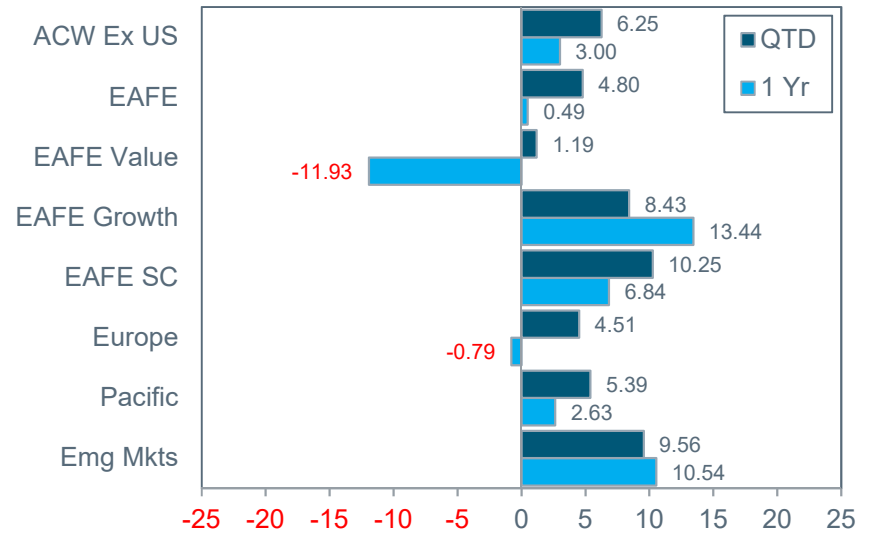
Emerging Markets

Emerging markets outpaced developed markets during Q3. Similar to other regions, value stocks underperformed growth. However, small cap stocks did outperform large within emerging markets. By region, Asia and the Middle East saw double digits returns while Latin America and Eastern Europe delivered negative returns.

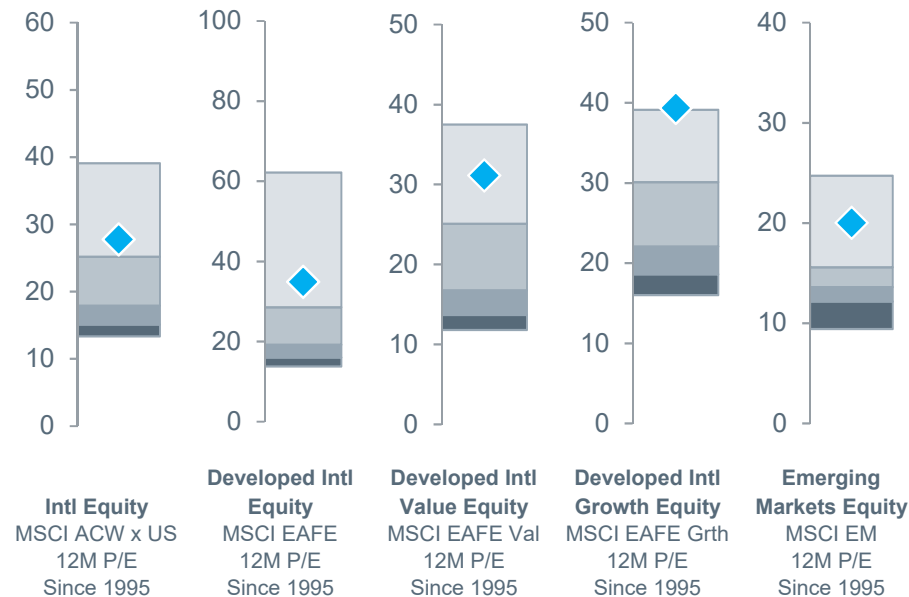
Market Cap & Style

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

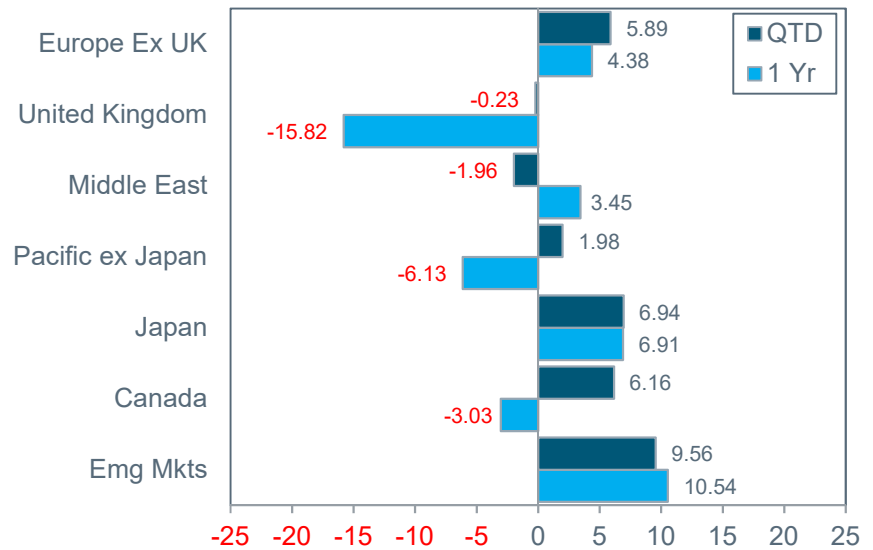
MSCI Style and Capitalization Market Performance (%)



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.



Third Quarter Review

Broad Market

The Bloomberg US Aggregate Index returned a modest 0.6% in Q3, ending the quarter with a yield of just 1.2% as Treasury yields remained at historic lows. Although yields initially declined across the Treasury curve, longer-maturity yields rose again in August amid a record issuance of Treasury debt and the Fed's new policy announcement to shift to average inflation targeting resulting in a modest steepening of the curve.

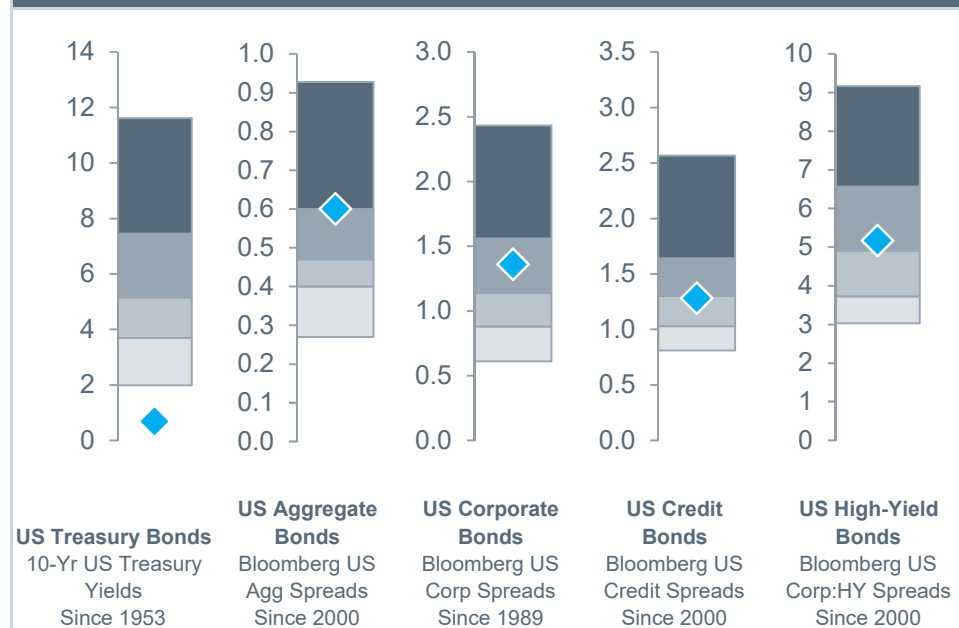
Credit Market

Credit markets extended their rally as the hunt for yield continued, and the Bloomberg US Corporate Investment Grade Index returned 1.5% in Q3 despite record-setting issuance.

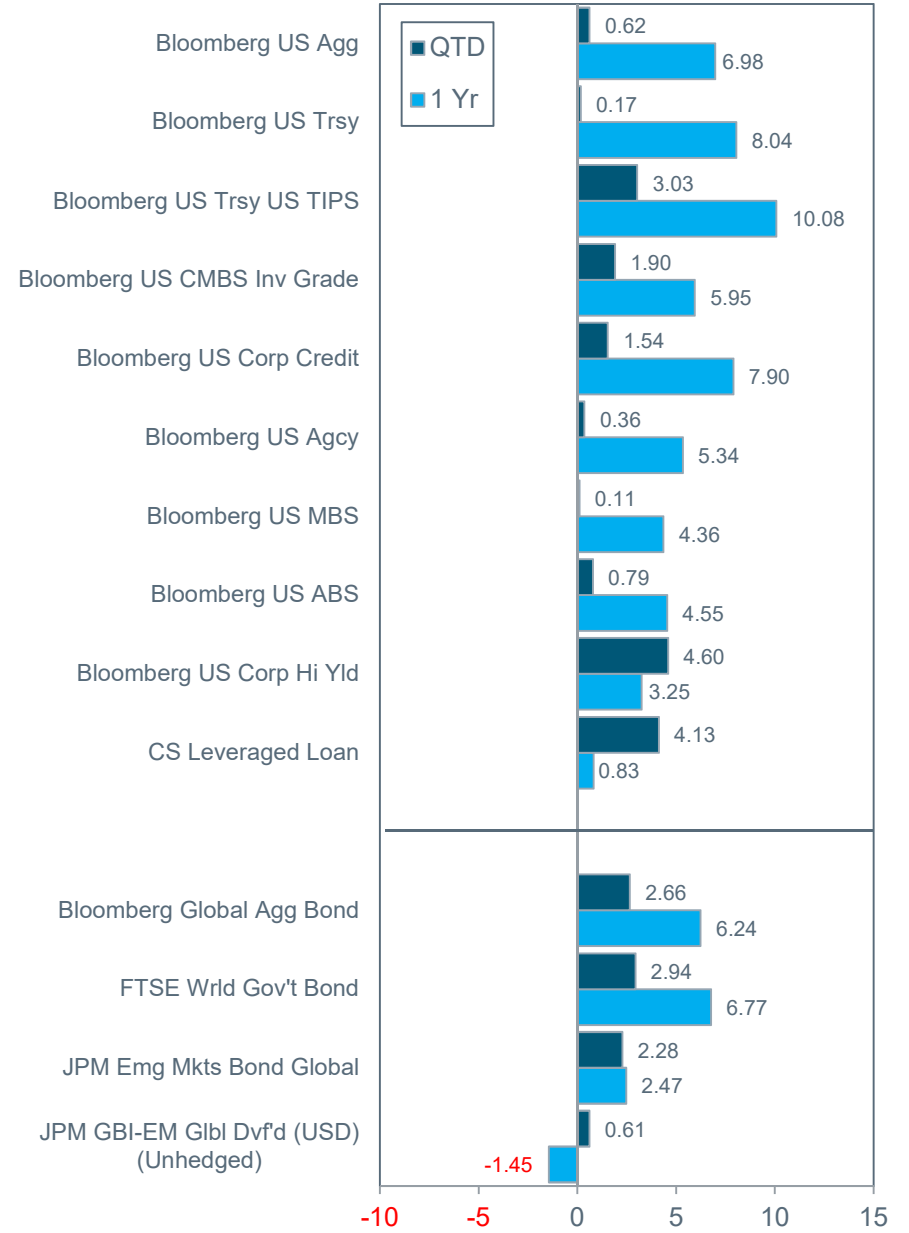
Emerging Market Debt

Emerging market debt also extended its rally, as the JPMorgan EMBI Global Diversified Index returned 2.3% in Q3 despite momentum slowing later in the quarter as uncertainty around the global economic recovery increased.

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.



Third Quarter Review - Absolute Return

General Market - Hedge Funds

Broad hedge fund benchmarks indicated that the industry protected capital relatively well during the heightened equity market volatility in September. The HFRI Fund Weighted Composite Index added to Q2 gains with a return of 4.1% in Q3, bringing the index return into positive territory YTD at 0.5%. Positive performance for the HFRI Hedged Equity and HFRI Event Driven indices helped contribute to the overall index returns.

General Market - Global Tactical Asset Allocation (GTAA)

GTAA strategies RVK follows closely generated positive returns in Q3 ranging from low to high single digits. As with past quarters, long-biased strategies reported mixed performance versus a static and less diversified blend of 60% US equity and 40% US fixed income. The value bias exhibited by some managers in emerging markets has caused them to lag peers. Strategies that have kept risk at relatively higher levels and favored US or other developed markets had a strong quarter with returns ranging from mid to high single digits.

Third Quarter Review - Real Assets

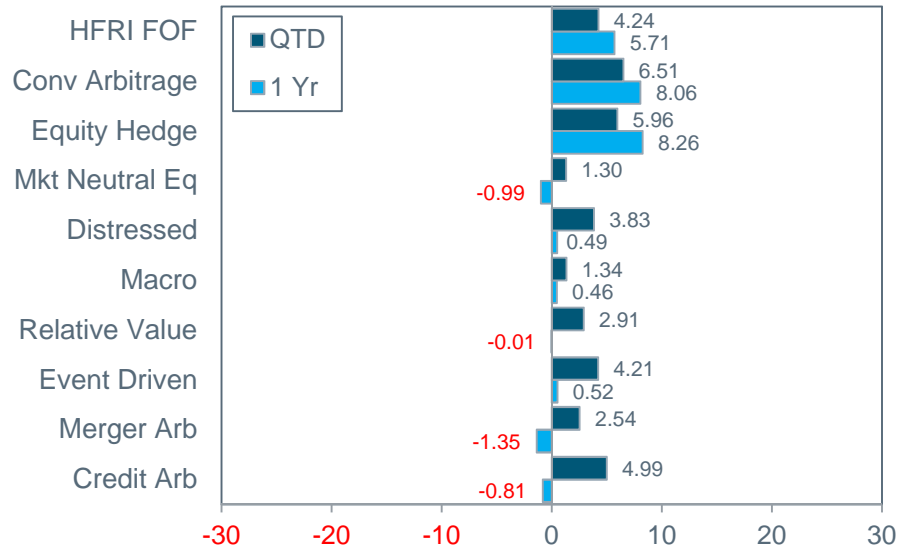
General Market - Diversified Inflation Strategies (DIS)

Performance for DIS managers that RVK follows closely largely saw positive absolute performance during Q3, with many strategies posting returns in the low single digits. Commodities and TIPS indices generally fared better than REITs, listed infrastructure, and global natural resource equities. Divergence across managers within the space was relatively limited when compared to the wide spread in results for the YTD period.

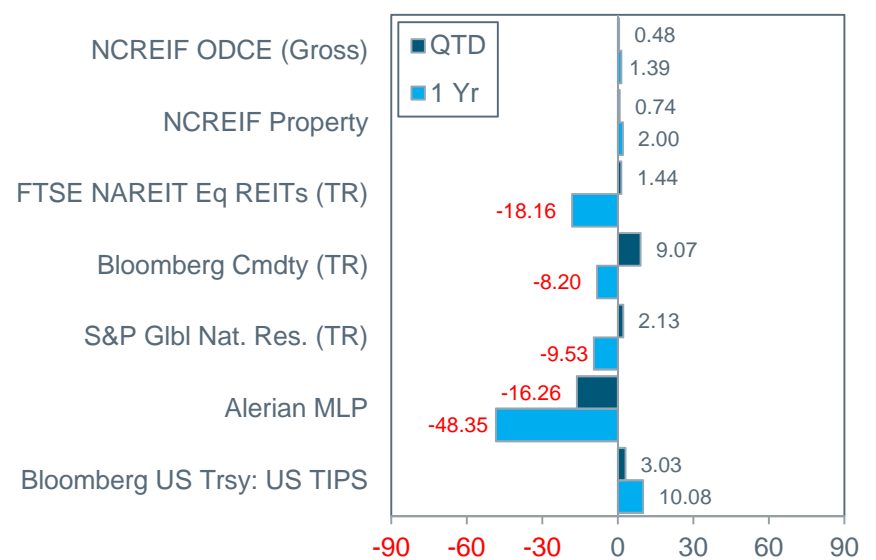
General Market - Real Estate

Core private real estate returned 0.5% during the third quarter (on a preliminary and gross of fee basis), as reported by the NFI-ODCE Index, with the total return comprised of a positive contribution of 1.0% from income and a negative contribution of 0.5% from price appreciation. While the income component remained relatively healthy, price appreciation experienced a further decrease, albeit to a lesser degree relative to the prior quarter. Investors in publicly traded real estate outperformed their private market counterparts.

HFRI Hedge Fund Performance (%)



Real Asset Performance (%)



Performance for the NCREIF Property Index is currently unavailable. Current quarter performance assumes a 0% return until updated quarterly performance is available.



Annual Asset Class Performance

As of September 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	14.20
	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	9.22
	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	6.79
	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	5.57
	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	2.54
	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	0.64
	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	0.62
	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	-0.12
	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	-1.16
	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	-4.20
	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	-7.09
	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	-8.69
	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	-12.08
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	-17.54
	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	Bloombrg US Agg Bond - FI	Bloombrg US Corp Hi Yield - FI	Bloombrg US Trsy US TIPS - FI	Bloombrg US Gov Credit Lng - FI	NCREIF ODCE (Gross) - Real Estate	FTSE NAREIT Eq REITs Index (TR)	HFRI FOF Comp Index - ARS	Bloombrg 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



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

As of September 30, 2020

	Allocation		Performance (%)											
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Oklahoma State Pension Commission	35,548,693,693	100.00												
OTRS (Teachers) Total Fund	17,666,001,941	49.70	5.81	5.81	0.89	6.08	5.87	8.38	7.24	8.71	19.48	-5.29	15.83	11.02
OTRS Policy Index			5.99	5.99	2.64	8.99	6.88	8.84	7.24	8.53	21.09	-5.12	14.05	10.61
Difference			-0.18	-0.18	-1.75	-2.91	-1.01	-0.46	0.00	0.18	-1.61	-0.17	1.78	0.41
OTRS Actual Allocation Index			6.00	6.00	4.32	10.06	7.05	9.02	7.81	8.86	18.94	-4.70	14.35	10.93
Difference			-0.19	-0.19	-3.43	-3.98	-1.18	-0.64	-0.57	-0.15	0.54	-0.59	1.48	0.09
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			3.99	3.99	-4.68	-1.42	-1.63	0.88	-0.26	1.21	11.98	-12.79	8.33	3.52
OPERS (Public Employees) Total Fund	10,571,285,775	29.74	5.61	5.61	3.16	9.59	6.80	8.72	7.42	8.23	21.23	-6.57	17.01	7.59
OPERS Policy Index			5.56	5.56	3.39	9.65	7.07	9.01	7.53	8.15	21.46	-6.09	16.86	8.12
Difference			0.05	0.05	-0.23	-0.06	-0.27	-0.29	-0.11	0.08	-0.23	-0.48	0.15	-0.53
OPERS Actual Allocation Index			5.44	5.44	2.75	8.91	6.52	8.61	7.28	7.90	20.87	-6.49	16.51	8.09
Difference			0.17	0.17	0.41	0.68	0.28	0.11	0.14	0.33	0.36	-0.08	0.50	-0.50
Actuarial Discount Rate (6.5%)			1.59	1.59	4.84	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Difference			4.02	4.02	-1.68	3.09	0.30	2.22	0.92	1.73	14.73	-13.07	10.51	1.09
OFPRS (Firefighters) Total Fund	3,078,610,895	8.66	6.77	6.77	5.17	11.30	8.75	10.20	8.95	9.53	20.15	-2.46	18.66	7.42
OFPRS Policy Index			6.00	6.00	3.07	9.16	7.92	9.72	8.69	9.55	21.76	-3.80	16.41	8.76
Difference			0.77	0.77	2.10	2.14	0.83	0.48	0.26	-0.02	-1.61	1.34	2.25	-1.34
OFPRS Actual Allocation Index			5.92	5.92	3.57	9.97	7.62	9.40	8.05	9.08	20.30	-3.93	15.64	9.45
Difference			0.85	0.85	1.60	1.33	1.13	0.80	0.90	0.45	-0.15	1.47	3.02	-2.03
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			4.95	4.95	-0.40	3.80	1.25	2.70	1.45	2.03	12.65	-9.96	11.16	-0.08
OPPRS (Police) Total Fund	2,714,727,567	7.64	5.14	5.14	1.77	6.84	5.51	6.95	6.22	7.08	15.22	-2.85	12.91	7.04
OPPRS Policy Index			5.19	5.19	2.84	8.50	6.23	7.89	6.32	7.73	18.62	-5.34	15.45	7.07
Difference			-0.05	-0.05	-1.07	-1.66	-0.72	-0.94	-0.10	-0.65	-3.40	2.49	-2.54	-0.03
OPPRS Actual Allocation Index			5.19	5.19	3.97	9.04	6.09	7.33	6.30	7.47	15.02	-3.70	13.78	6.66
Difference			-0.05	-0.05	-2.20	-2.20	-0.58	-0.38	-0.08	-0.39	0.20	0.85	-0.87	0.38
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			3.32	3.32	-3.80	-0.66	-1.99	-0.55	-1.28	-0.42	7.72	-10.35	5.41	-0.46

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	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
OLERS (Law Enforcement) Total Fund	1,026,451,777	2.89	4.01	4.01	0.02	5.82	4.97	7.03	6.29	7.59	17.49	-4.75	14.53	7.16
OLERS Policy Index			4.80	4.80	2.43	8.29	6.67	8.32	7.38	8.33	19.12	-3.67	13.36	8.64
Difference			-0.79	-0.79	-2.41	-2.47	-1.70	-1.29	-1.09	-0.74	-1.63	-1.08	1.17	-1.48
OLERS Actual Allocation Index			4.25	4.25	2.77	8.36	6.48	8.21	7.24	8.07	17.33	-3.47	14.63	8.27
Difference			-0.24	-0.24	-2.75	-2.54	-1.51	-1.18	-0.95	-0.48	0.16	-1.28	-0.10	-1.11
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			2.19	2.19	-5.55	-1.68	-2.53	-0.47	-1.21	0.09	9.99	-12.25	7.03	-0.34
OURSJJ (Judges) Total Fund	367,321,761	1.03	5.57	5.57	3.29	9.54	6.91	8.86	7.41	8.13	21.36	-6.43	16.85	8.05
OURSJJ Policy Index			5.56	5.56	3.39	9.70	7.08	9.02	7.53	8.16	21.51	-6.09	16.86	8.12
Difference			0.01	0.01	-0.10	-0.16	-0.17	-0.16	-0.12	-0.03	-0.15	-0.34	-0.01	-0.07
OURSJJ Actual Allocation Index			5.47	5.47	2.85	9.06	6.59	8.60	7.19	7.88	21.01	-6.52	16.63	7.90
Difference			0.10	0.10	0.44	0.48	0.32	0.26	0.22	0.25	0.35	0.09	0.22	0.15
Actuarial Discount Rate (6.5%)			1.59	1.59	4.84	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Difference			3.98	3.98	-1.55	3.04	0.41	2.36	0.91	1.63	14.86	-12.93	10.35	1.55
OWCRS (Wildlife) Total Fund	124,293,977	0.35	5.28	5.28	4.25	9.17	7.45	8.23	7.21	7.67	19.21	-3.85	13.93	6.18
OWCRS Policy Index			3.63	3.63	1.19	5.86	5.17	7.01	6.06	7.12	17.53	-4.95	12.96	7.34
Difference			1.65	1.65	3.06	3.31	2.28	1.22	1.15	0.55	1.68	1.10	0.97	-1.16
OWCRS Actual Allocation Index			4.28	4.28	1.37	6.76	6.81	8.42	7.32	7.75	20.53	-3.71	14.38	8.04
Difference			1.00	1.00	2.88	2.41	0.64	-0.19	-0.11	-0.08	-1.32	-0.14	-0.45	-1.86
Actuarial Discount Rate (7.0%)			1.71	1.71	5.21	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Difference			3.57	3.57	-0.96	2.17	0.45	1.23	0.21	0.67	12.21	-10.85	6.93	-0.82

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 September 30, 2020

	Allocation		Performance (%)											
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Oklahoma State Pension Commission	35,548,693,693	100.00												
All Public Plans-Total Fund Median			5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	18.56	-4.13	15.20	7.42
OTRS (Teachers) Total Fund	17,666,001,941	49.70	5.81	5.81	1.00	6.27	6.16	8.74	7.63	9.13	19.83	-4.98	16.20	11.54
OTRS Policy Index			5.99	5.99	2.64	8.99	6.88	8.84	7.24	8.53	21.09	-5.12	14.05	10.61
Difference			-0.18	-0.18	-1.64	-2.72	-0.72	-0.10	0.39	0.60	-1.26	0.14	2.15	0.93
OTRS Actual Allocation Index			6.00	6.00	4.32	10.06	7.05	9.02	7.81	8.86	18.94	-4.70	14.35	10.93
Difference			-0.19	-0.19	-3.32	-3.79	-0.89	-0.28	-0.18	0.27	0.89	-0.28	1.85	0.61
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			3.99	3.99	-4.57	-1.23	-1.34	1.24	0.13	1.63	12.33	-12.48	8.70	4.04
Rank			20	20	73	69	53	24	22	7	32	72	31	1
OPERS (Public Employees) Total Fund	10,571,285,775	29.74	5.69	5.69	3.28	9.73	6.93	8.85	7.54	8.36	21.38	-6.48	17.13	7.69
OPERS Policy Index			5.56	5.56	3.39	9.65	7.07	9.01	7.53	8.15	21.46	-6.09	16.86	8.12
Difference			0.13	0.13	-0.11	0.08	-0.14	-0.16	0.01	0.21	-0.08	-0.39	0.27	-0.43
OPERS Actual Allocation Index			5.44	5.44	2.75	8.91	6.52	8.61	7.28	7.90	20.87	-6.49	16.51	8.09
Difference			0.25	0.25	0.53	0.82	0.41	0.24	0.26	0.46	0.51	0.01	0.62	-0.40
Actuarial Discount Rate (6.5%)			1.59	1.59	4.84	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Difference			4.10	4.10	-1.56	3.23	0.43	2.35	1.04	1.86	14.88	-12.98	10.63	1.19
Rank			23	23	34	17	33	22	24	27	11	93	16	42
OFPRS (Firefighters) Total Fund	3,078,610,895	8.66	6.77	6.77	5.17	11.30	8.76	10.21	8.96	9.55	20.15	-2.46	18.67	7.42
OFPRS Policy Index			6.00	6.00	3.07	9.16	7.92	9.72	8.69	9.55	21.76	-3.80	16.41	8.76
Difference			0.77	0.77	2.10	2.14	0.84	0.49	0.27	0.00	-1.61	1.34	2.26	-1.34
OFPRS Actual Allocation Index			5.92	5.92	3.57	9.97	7.62	9.40	8.05	9.08	20.30	-3.93	15.64	9.45
Difference			0.85	0.85	1.60	1.33	1.14	0.81	0.91	0.47	-0.15	1.47	3.03	-2.03
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			4.95	4.95	-0.40	3.80	1.26	2.71	1.46	2.05	12.65	-9.96	11.17	-0.08
Rank			4	4	10	8	4	2	2	3	27	19	6	51

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.



All Plans Summary

Asset Allocation & Performance - Gross of Fees

	Allocation		Performance (%)											
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
OPPRS (Police) Total Fund	2,714,727,567	7.64	5.24	5.24	2.02	7.21	5.93	7.38	6.65	7.50	15.68	-2.46	13.40	7.47
OPPRS Policy Index			5.19	5.19	2.84	8.50	6.23	7.89	6.32	7.73	18.62	-5.34	15.45	7.07
Difference			0.05	0.05	-0.82	-1.29	-0.30	-0.51	0.33	-0.23	-2.94	2.88	-2.05	0.40
OPPRS Actual Allocation Index			5.19	5.19	3.97	9.04	6.09	7.33	6.30	7.47	15.02	-3.70	13.78	6.66
Difference			0.05	0.05	-1.95	-1.83	-0.16	0.05	0.35	0.03	0.66	1.24	-0.38	0.81
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			3.42	3.42	-3.55	-0.29	-1.57	-0.12	-0.85	0.00	8.18	-9.96	5.90	-0.03
Rank			43	43	58	54	61	73	59	57	84	19	77	49
OLERS (Law Enforcement) Total Fund	1,026,451,777	2.89	4.07	4.07	0.16	6.02	5.17	7.22	6.47	7.66	17.70	-4.55	14.71	7.32
OLERS Policy Index			4.80	4.80	2.43	8.29	6.67	8.32	7.38	8.33	19.12	-3.67	13.36	8.64
Difference			-0.73	-0.73	-2.27	-2.27	-1.50	-1.10	-0.91	-0.67	-1.42	-0.88	1.35	-1.32
OLERS Actual Allocation Index			4.25	4.25	2.77	8.36	6.48	8.21	7.24	8.07	17.33	-3.47	14.63	8.27
Difference			-0.18	-0.18	-2.61	-2.34	-1.31	-0.99	-0.77	-0.41	0.37	-1.08	0.08	-0.95
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference			2.25	2.25	-5.41	-1.48	-2.33	-0.28	-1.03	0.16	10.20	-12.05	7.21	-0.18
Rank			84	84	87	72	80	77	67	53	61	59	59	53
OURSJJ (Judges) Total Fund	367,321,761	1.03	5.58	5.58	3.32	9.58	6.95	8.90	7.45	8.18	21.40	-6.38	16.89	8.09
OURSJJ Policy Index			5.56	5.56	3.39	9.70	7.08	9.02	7.53	8.16	21.51	-6.09	16.86	8.12
Difference			0.02	0.02	-0.07	-0.12	-0.13	-0.12	-0.08	0.02	-0.11	-0.29	0.03	-0.03
OURSJJ Actual Allocation Index			5.47	5.47	2.85	9.06	6.59	8.60	7.19	7.88	21.01	-6.52	16.63	7.90
Difference			0.11	0.11	0.47	0.52	0.36	0.30	0.26	0.30	0.39	0.14	0.26	0.19
Actuarial Discount Rate (6.5%)			1.59	1.59	4.84	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Difference			3.99	3.99	-1.52	3.08	0.45	2.40	0.95	1.68	14.90	-12.88	10.39	1.59
Rank			28	28	32	18	32	19	28	33	11	92	20	34
OWCRS (Wildlife) Total Fund	124,293,977	0.35	5.32	5.32	4.39	9.37	7.66	8.43	7.41	7.87	19.46	-3.68	14.13	6.39
OWCRS Policy Index			3.63	3.63	1.19	5.86	5.17	7.01	6.06	7.12	17.53	-4.95	12.96	7.34
Difference			1.69	1.69	3.20	3.51	2.49	1.42	1.35	0.75	1.93	1.27	1.17	-0.95
OWCRS Actual Allocation Index			4.28	4.28	1.37	6.76	6.81	8.42	7.32	7.75	20.53	-3.71	14.38	8.04
Difference			1.04	1.04	3.02	2.61	0.85	0.01	0.09	0.12	-1.07	0.03	-0.25	-1.65
Actuarial Discount Rate (7.0%)			1.71	1.71	5.21	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Difference			3.61	3.61	-0.82	2.37	0.66	1.43	0.41	0.87	12.46	-10.68	7.13	-0.61
Rank			40	40	17	21	14	32	30	45	37	42	67	73

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 September 30, 2020

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
US Equity												
OTRS US Equity	7.62	7.62	-2.62	4.48	6.49	10.28	9.26	11.62	27.64	-8.27	20.72	15.10
S&P 500 Index (Cap Wtd)	8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	31.49	-4.38	21.83	11.96
Difference	-1.31	-1.31	-8.19	-10.67	-5.79	-3.87	-3.42	-2.12	-3.85	-3.89	-1.11	3.14
OPERS US Equity	8.50	8.50	2.81	12.14	9.78	12.46	11.19	13.06	29.26	-6.45	21.27	12.83
OPERS US Equity Custom Index	8.79	8.79	4.07	13.62	10.77	13.21	11.69	13.23	30.56	-5.70	20.71	13.32
Difference	-0.29	-0.29	-1.26	-1.48	-0.99	-0.75	-0.50	-0.17	-1.30	-0.75	0.56	-0.49
OFPRS US Equity	9.27	9.27	6.89	16.27	12.27	13.96	12.16	13.25	31.42	-4.97	22.94	11.11
Russell 3000 Index	9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	31.02	-5.24	21.13	12.74
Difference	0.06	0.06	1.48	1.27	0.62	0.27	0.05	-0.23	0.40	0.27	1.81	-1.63
OLERS US Equity	6.54	6.54	-1.66	8.02	8.06	11.51	10.20	12.49	32.84	-8.58	21.40	13.91
S&P 500 Index (Cap Wtd)	8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	31.49	-4.38	21.83	11.96
Difference	-2.39	-2.39	-7.23	-7.13	-4.22	-2.64	-2.48	-1.25	1.35	-4.20	-0.43	1.95
OURSJJ US Equity	8.77	8.77	4.04	13.59	10.69	13.17	11.64	13.18	30.49	-5.83	20.57	13.48
OURSJJ US Equity Custom Index	8.79	8.79	4.07	13.62	10.77	13.21	11.69	13.23	30.56	-5.70	20.71	13.32
Difference	-0.02	-0.02	-0.03	-0.03	-0.08	-0.04	-0.05	-0.05	-0.07	-0.13	-0.14	0.16
OWCRS US Equity	8.02	8.02	5.62	14.07	11.37	12.87	11.72	13.07	28.92	-5.64	22.16	10.64
Russell 3000 Index	9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	31.02	-5.24	21.13	12.74
Difference	-1.19	-1.19	0.21	-0.93	-0.28	-0.82	-0.39	-0.41	-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. OPPRS Total Equity includes Public Equity, Private Equity, and Long/Short Equity.

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

As of September 30, 2020

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
International Equity												
OTRS International Equity	8.23	8.23	-4.04	5.34	0.96	5.82	3.51	5.18	21.38	-16.32	31.43	-1.34
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	21.51	-14.20	27.19	4.50
Difference	1.98	1.98	1.40	2.34	-0.20	-0.41	0.33	1.18	-0.13	-2.12	4.24	-5.84
OPERS International Equity	6.90	6.90	-4.13	5.27	2.20	6.91	4.01	4.75	23.21	-13.81	27.32	3.82
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	21.51	-14.20	27.19	4.50
Difference	0.65	0.65	1.31	2.27	1.04	0.68	0.83	0.75	1.70	0.39	0.13	-0.68
OFPRS International Equity	10.55	10.55	12.02	21.57	9.39	12.80	7.98	6.83	27.22	-13.23	36.00	1.43
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	21.51	-14.20	27.19	4.50
Difference	4.30	4.30	17.46	18.57	8.23	6.57	4.80	2.83	5.71	0.97	8.81	-3.07
OLERS International Equity	7.23	7.23	-3.24	6.49	2.58	6.99	4.40	4.40	23.97	-14.43	30.46	1.44
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	21.51	-14.20	27.19	4.50
Difference	0.98	0.98	2.20	3.49	1.42	0.76	1.22	0.40	2.46	-0.23	3.27	-3.06
OURSJJ International Equity	6.25	6.25	-5.28	3.21	1.40	6.50	3.42	4.25	21.83	-13.97	27.54	4.81
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	21.51	-14.20	27.19	4.50
Difference	0.00	0.00	0.16	0.21	0.24	0.27	0.24	0.25	0.32	0.23	0.35	0.31
OWCRS International Equity	5.75	5.75	-6.81	2.58	0.83	6.55	3.39	4.29	23.05	-13.82	29.05	4.22
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	21.51	-14.20	27.19	4.50
Difference	-0.50	-0.50	-1.37	-0.42	-0.33	0.32	0.21	0.29	1.54	0.38	1.86	-0.28
Total Equity												
OPPRS Total Equity	7.89	7.89	2.45	10.14	7.24	9.25	8.20	9.16	21.98	-5.24	18.31	8.05
Russell 3000 Index	9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	31.02	-5.24	21.13	12.74
Difference	-1.32	-1.32	-2.96	-4.86	-4.41	-4.44	-3.91	-4.32	-9.04	0.00	-2.82	-4.69

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

As of September 30, 2020

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Fixed Income												
OTRS Fixed Income	2.25	2.25	9.60	9.71	6.90	6.47	5.71	5.72	11.84	-1.44	6.44	7.49
Bloomberg US Unv Bond Index	0.99	0.99	6.20	6.68	5.15	4.49	4.16	3.92	9.29	-0.25	4.09	3.91
Difference	1.26	1.26	3.40	3.03	1.75	1.98	1.55	1.80	2.55	-1.19	2.35	3.58
OPERS Fixed Income	1.18	1.18	9.89	9.59	6.74	5.19	4.89	4.55	10.12	-0.33	4.42	2.82
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	2.65
Difference	0.56	0.56	3.10	2.61	1.50	1.01	0.92	0.91	1.40	-0.34	0.88	0.17
OFPRS Fixed Income	1.94	1.94	3.86	5.23	2.83	3.75	3.37	3.71	7.22	-2.41	7.09	3.21
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	2.65
Difference	1.32	1.32	-2.93	-1.75	-2.41	-0.43	-0.60	0.07	-1.50	-2.42	3.55	0.56
OPPRS Fixed Income	2.27	2.27	3.82	4.75	3.90	3.80	3.21	N/A	7.24	-0.21	5.37	3.70
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	2.65
Difference	1.65	1.65	-2.97	-2.23	-1.34	-0.38	-0.76	N/A	-1.48	-0.22	1.83	1.05
OLERS Fixed Income	0.64	0.64	4.29	4.89	3.54	3.99	3.56	3.82	6.12	0.30	4.37	4.54
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	2.65
Difference	0.02	0.02	-2.50	-2.09	-1.70	-0.19	-0.41	0.18	-2.60	0.29	0.83	1.89
OURSJJ Fixed Income	1.16	1.16	9.99	9.64	6.75	5.17	4.87	4.53	10.06	-0.32	4.37	2.78
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	2.65
Difference	0.54	0.54	3.20	2.66	1.51	0.99	0.90	0.89	1.34	-0.33	0.83	0.13
OWCRS Fixed Income	1.43	1.43	6.91	6.75	5.31	3.75	3.47	3.47	7.94	0.76	3.02	0.96
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	2.65
Difference	0.81	0.81	0.12	-0.23	0.07	-0.43	-0.50	-0.17	-0.78	0.75	-0.52	-1.69

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. OPPRS Total Equity includes Public Equity, Private Equity, and Long/Short Equity.



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

As of September 30, 2020

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Real Estate												
OTRS Real Estate	0.00	0.00	-1.61	-1.05	4.16	6.17	N/A	N/A	5.59	7.43	6.47	9.61
NCREIF Property Index	0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	6.42	6.72	6.96	7.97
Difference	-0.74	-0.74	-2.06	-3.05	-0.95	-0.11	N/A	N/A	-0.83	0.71	-0.49	1.64
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	4.39	7.36	6.66	7.79
Difference	-0.27	-0.27	-0.86	-1.57	-0.09	0.48	N/A	N/A	1.20	0.07	-0.19	1.82
OPERS Real Estate	0.11	0.11	-10.06	-8.12	-1.69	0.44	N/A	N/A	2.90	1.12	-2.11	11.59
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	4.39	7.36	6.66	7.79
Difference	-0.16	-0.16	-9.31	-8.64	-5.94	-5.25	N/A	N/A	-1.49	-6.24	-8.77	3.80
OFPRS Real Estate	-1.90	-1.90	-1.22	-0.35	4.94	6.71	8.39	8.97	4.69	9.39	8.02	9.38
NCREIF Property Index	0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	6.42	6.72	6.96	7.97
Difference	-2.64	-2.64	-1.67	-2.35	-0.17	0.43	0.41	-0.40	-1.73	2.67	1.06	1.41
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	4.39	7.36	6.66	7.79
Difference	-2.17	-2.17	-0.47	-0.87	0.69	1.02	0.77	-0.29	0.30	2.03	1.36	1.59
OLERS Real Estate	-0.11	-0.11	-1.19	0.81	2.38	3.63	4.13	4.90	2.76	3.23	5.55	7.48
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	4.39	7.36	6.66	7.79
Difference	-0.38	-0.38	-0.44	0.29	-1.87	-2.06	-3.49	-4.36	-1.63	-4.13	-1.11	-0.31
Real Assets												
OPPRS Real Assets	-0.28	-0.28	-2.24	-0.50	2.47	3.84	3.99	4.54	3.52	3.55	5.71	8.30
Bloomberg Cmdty Index (TR)	9.07	9.07	-12.08	-8.20	-4.18	-3.09	-7.24	-6.03	7.69	-11.25	1.70	11.77
Difference	-9.35	-9.35	9.84	7.70	6.65	6.93	11.23	10.57	-4.17	14.80	4.01	-3.47

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. OPPRS Total Equity includes Public Equity, Private Equity, and Long/Short Equity.



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

As of September 30, 2020

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Hedge Funds												
OFPRS Hedge Fund	0.44	0.44	-9.46	-9.80	-2.64	-0.20	0.54	1.90	3.52	-2.86	10.18	1.46
HFRI FOF: Cnsvt Index	2.49	2.49	0.41	2.04	2.29	2.34	2.56	2.58	6.30	-0.87	4.12	1.89
Difference	-2.05	-2.05	-9.87	-11.84	-4.93	-2.54	-2.02	-0.68	-2.78	-1.99	6.06	-0.43
OPPRS Long/Short Equity	6.28	6.28	7.68	14.41	6.79	6.50	6.02	N/A	16.34	-4.94	11.59	2.03
HFRI FOF: Strategic Index	5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	10.52	-6.67	11.22	-0.05
Difference	0.33	0.33	4.13	6.17	3.73	2.70	2.60	N/A	5.82	1.73	0.37	2.08
OLERS Long/Short Equity	2.58	2.58	-0.94	4.27	2.43	3.80	3.96	4.67	12.36	-5.53	11.66	1.05
HFRI FOF: Strategic Index	5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	10.52	-6.67	11.22	-0.05
Difference	-3.37	-3.37	-4.49	-3.97	-0.63	0.00	0.54	1.44	1.84	1.14	0.44	1.10

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. OPPRS Total Equity includes Public Equity, Private Equity, and Long/Short Equity.



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

As of September 30, 2020

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Private Equity												
OTRS Private Equity	0.00	0.00	1.18	4.96	14.68	14.46	15.37	N/A	17.73	23.03	13.89	14.86
R 2000 Index+4%	5.97	5.97	-5.96	4.41	5.84	12.32	10.68	14.25	30.55	-7.45	19.23	26.16
Difference	-5.97	-5.97	7.14	0.55	8.84	2.14	4.69	N/A	-12.82	30.48	-5.34	-11.30
OFPRS Private Equity	3.74	3.74	1.60	2.53	10.27	9.53	N/A	N/A	6.45	18.91	19.03	3.09
Cambridge US Prvt Eq Index	0.00	0.00	-0.77	2.97	9.41	10.84	11.14	12.60	13.89	10.15	17.99	13.33
Difference	3.74	3.74	2.37	-0.44	0.86	-1.31	N/A	N/A	-7.44	8.76	1.04	-10.24
OPPRS Private Equity	8.74	8.74	4.39	5.70	11.14	8.76	11.15	11.14	10.51	15.22	9.65	5.98
Cambridge US Prvt Eq Index	0.00	0.00	-0.77	2.97	9.41	10.84	11.14	12.60	13.89	10.15	17.99	13.33
Difference	8.74	8.74	5.16	2.73	1.73	-2.08	0.01	-1.46	-3.38	5.07	-8.34	-7.35
OLERS Private Equity	5.56	5.56	0.92	3.90	9.42	6.30	9.07	9.42	6.84	15.45	7.59	2.47
Cambridge US Prvt Eq Index	0.00	0.00	-0.77	2.97	9.41	10.84	11.14	12.60	13.89	10.15	17.99	13.33
Difference	5.56	5.56	1.69	0.93	0.01	-4.54	-2.07	-3.18	-7.05	5.30	-10.40	-10.86
Other Alternatives												
OWCRS Alternative Investments	3.56	3.56	-4.59	-1.95	2.03	4.92	2.40	N/A	15.31	-6.07	9.36	11.04
OWCRS Alternatives Custom Index	4.24	4.24	2.54	5.70	2.87	3.23	N/A	N/A	8.38	-4.02	7.06	3.07
Difference	-0.68	-0.68	-7.13	-7.65	-0.84	1.69	N/A	N/A	6.93	-2.05	2.30	7.97

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. OPPRS Total Equity includes Public Equity, Private Equity, and Long/Short Equity.



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

As of September 30, 2020

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
US Equity												
OTRS US Equity	7.62	7.62	-2.52	4.65	6.79	10.66	9.55	11.83	28.03	-7.94	21.17	15.65
S&P 500 Index (Cap Wtd)	8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	31.49	-4.38	21.83	11.96
Difference	-1.31	-1.31	-8.09	-10.50	-5.49	-3.49	-3.13	-1.91	-3.46	-3.56	-0.66	3.69
OPERS US Equity	8.59	8.59	2.92	12.29	9.92	12.59	11.31	13.18	29.50	-6.38	21.39	12.90
OPERS US Equity Custom Index	8.79	8.79	4.07	13.62	10.77	13.21	11.69	13.23	30.56	-5.70	20.71	13.32
Difference	-0.20	-0.20	-1.15	-1.33	-0.85	-0.62	-0.38	-0.05	-1.06	-0.68	0.68	-0.42
OFPRS US Equity	9.27	9.27	6.90	16.28	12.28	13.97	12.17	13.26	31.43	-4.96	22.96	11.12
Russell 3000 Index	9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	31.02	-5.24	21.13	12.74
Difference	0.06	0.06	1.49	1.28	0.63	0.28	0.06	-0.22	0.41	0.28	1.83	-1.62
OLERS US Equity	6.54	6.54	-1.66	8.02	8.06	11.52	10.21	12.49	32.84	-8.56	21.40	13.91
S&P 500 Index (Cap Wtd)	8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	31.49	-4.38	21.83	11.96
Difference	-2.39	-2.39	-7.23	-7.13	-4.22	-2.63	-2.47	-1.25	1.35	-4.18	-0.43	1.95
OURSJJ US Equity	8.77	8.77	4.04	13.59	10.70	13.18	11.65	13.19	30.51	-5.81	20.58	13.50
OURSJJ US Equity Custom Index	8.79	8.79	4.07	13.62	10.77	13.21	11.69	13.23	30.56	-5.70	20.71	13.32
Difference	-0.02	-0.02	-0.03	-0.03	-0.07	-0.03	-0.04	-0.04	-0.05	-0.11	-0.13	0.18
OWCRS US Equity	8.07	8.07	5.84	14.39	11.64	13.16	11.96	13.26	29.17	-5.38	22.45	10.96
Russell 3000 Index	9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	31.02	-5.24	21.13	12.74
Difference	-1.14	-1.14	0.43	-0.61	-0.01	-0.53	-0.15	-0.22	-1.85	-0.14	1.32	-1.78

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. OPPRS Total Equity includes Public Equity, Private Equity, and Long/Short Equity.



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

As of September 30, 2020

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
International Equity												
OTRS International Equity	8.23	8.23	-3.81	5.70	1.41	6.29	3.96	5.66	21.95	-15.88	32.00	-0.86
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	21.51	-14.20	27.19	4.50
Difference	1.98	1.98	1.63	2.70	0.25	0.06	0.78	1.66	0.44	-1.68	4.81	-5.36
OPERS International Equity	7.00	7.00	-3.97	5.46	2.36	7.08	4.18	4.92	23.34	-13.69	27.54	4.01
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	21.51	-14.20	27.19	4.50
Difference	0.75	0.75	1.47	2.46	1.20	0.85	1.00	0.92	1.83	0.51	0.35	-0.49
OFPRS International Equity	10.55	10.55	12.02	21.58	9.39	12.80	8.01	6.86	27.22	-13.23	36.00	1.43
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	21.51	-14.20	27.19	4.50
Difference	4.30	4.30	17.46	18.58	8.23	6.57	4.83	2.86	5.71	0.97	8.81	-3.07
OLERS International Equity	7.41	7.41	-2.93	6.92	3.00	7.46	4.88	4.30	24.39	-14.03	31.05	1.98
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	21.51	-14.20	27.19	4.50
Difference	1.16	1.16	2.51	3.92	1.84	1.23	1.70	0.30	2.88	0.17	3.86	-2.52
OURSJJ International Equity	6.25	6.25	-5.27	3.21	1.43	6.54	3.46	4.29	21.86	-13.93	27.58	4.86
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	21.51	-14.20	27.19	4.50
Difference	0.00	0.00	0.17	0.21	0.27	0.31	0.28	0.29	0.35	0.27	0.39	0.36
OWCRS International Equity	5.91	5.91	-6.39	3.22	1.54	7.36	4.01	4.73	23.86	-13.14	30.11	5.09
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	21.51	-14.20	27.19	4.50
Difference	-0.34	-0.34	-0.95	0.22	0.38	1.13	0.83	0.73	2.35	1.06	2.92	0.59
Total Equity												
OPPRS Total Equity	7.99	7.99	2.69	10.48	7.59	9.61	8.57	9.53	22.38	-4.91	18.72	8.40
Russell 3000 Index	9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	31.02	-5.24	21.13	12.74
Difference	-1.22	-1.22	-2.72	-4.52	-4.06	-4.08	-3.54	-3.95	-8.64	0.33	-2.41	-4.34

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

As of September 30, 2020

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Fixed Income												
OTRS Fixed Income	2.25	2.25	9.71	9.87	7.09	6.69	5.94	5.95	12.05	-1.23	6.68	7.77
Bloomberg US Unv Bond Index	0.99	0.99	6.20	6.68	5.15	4.49	4.16	3.92	9.29	-0.25	4.09	3.91
Difference	1.26	1.26	3.51	3.19	1.94	2.20	1.78	2.03	2.76	-0.98	2.59	3.86
OPERS Fixed Income	1.22	1.22	9.98	9.69	6.83	5.27	4.97	4.66	10.19	-0.24	4.49	2.90
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	2.65
Difference	0.60	0.60	3.19	2.71	1.59	1.09	1.00	1.02	1.47	-0.25	0.95	0.25
OFPRS Fixed Income	1.94	1.94	3.86	5.23	2.83	3.76	3.38	3.73	7.22	-2.41	7.10	3.22
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	2.65
Difference	1.32	1.32	-2.93	-1.75	-2.41	-0.42	-0.59	0.09	-1.50	-2.42	3.56	0.57
OPPRS Fixed Income	2.35	2.35	4.09	5.12	4.34	4.27	3.70	4.14	7.74	0.24	5.84	4.22
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	2.65
Difference	1.73	1.73	-2.70	-1.86	-0.90	0.09	-0.27	0.50	-0.98	0.23	2.30	1.57
OLERS Fixed Income	0.67	0.67	4.37	5.00	3.66	4.06	3.62	3.86	6.27	0.44	4.38	4.54
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	2.65
Difference	0.05	0.05	-2.42	-1.98	-1.58	-0.12	-0.35	0.22	-2.45	0.43	0.84	1.89
OURSJJ Fixed Income	1.19	1.19	10.08	9.74	6.84	5.26	4.95	4.63	10.14	-0.23	4.45	2.86
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	2.65
Difference	0.57	0.57	3.29	2.76	1.60	1.08	0.98	0.99	1.42	-0.24	0.91	0.21
OWCRS Fixed Income	1.43	1.43	6.91	6.75	5.31	3.75	3.47	3.47	7.94	0.76	3.02	0.96
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	2.65
Difference	0.81	0.81	0.12	-0.23	0.07	-0.43	-0.50	-0.17	-0.78	0.75	-0.52	-1.69

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

As of September 30, 2020

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Real Estate												
OTRS Real Estate	0.00	0.00	-1.51	-0.88	4.32	6.33	N/A	N/A	5.77	7.60	6.65	9.74
NCREIF Property Index	0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	6.42	6.72	6.96	7.97
Difference	-0.74	-0.74	-1.96	-2.88	-0.79	0.05	N/A	N/A	-0.65	0.88	-0.31	1.77
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	4.39	7.36	6.66	7.79
Difference	-0.27	-0.27	-0.76	-1.40	0.07	0.64	N/A	N/A	1.38	0.24	-0.01	1.95
OPERS Real Estate	0.11	0.11	-10.06	-8.12	-1.69	0.44	N/A	N/A	2.90	1.12	-2.11	11.59
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	4.39	7.36	6.66	7.79
Difference	-0.16	-0.16	-9.31	-8.64	-5.94	-5.25	N/A	N/A	-1.49	-6.24	-8.77	3.80
OFPRS Real Estate	-1.90	-1.90	-1.22	-0.35	4.94	6.71	8.47	9.03	4.69	9.39	8.02	9.38
NCREIF Property Index	0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	6.42	6.72	6.96	7.97
Difference	-2.64	-2.64	-1.67	-2.35	-0.17	0.43	0.49	-0.34	-1.73	2.67	1.06	1.41
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	4.39	7.36	6.66	7.79
Difference	-2.17	-2.17	-0.47	-0.87	0.69	1.02	0.85	-0.23	0.30	2.03	1.36	1.59
OLERS Real Estate	0.12	0.12	-0.55	1.69	3.20	4.45	4.97	7.07	3.58	4.02	6.38	8.30
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	4.39	7.36	6.66	7.79
Difference	-0.15	-0.15	0.20	1.17	-1.05	-1.24	-2.65	-2.19	-0.81	-3.34	-0.28	0.51
Real Assets												
OPPRS Real Assets	-0.13	-0.13	-1.88	0.09	3.23	4.54	4.68	5.42	4.21	4.30	6.68	8.93
Bloomberg Cmdty Index (TR)	9.07	9.07	-12.08	-8.20	-4.18	-3.09	-7.24	-6.03	7.69	-11.25	1.70	11.77
Difference	-9.20	-9.20	10.20	8.29	7.41	7.63	11.92	11.45	-3.48	15.55	4.98	-2.84

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

As of September 30, 2020

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Hedge Funds												
OFPRS Hedge Fund	0.44	0.44	-9.46	-9.80	-2.64	-0.20	0.54	1.90	3.52	-2.86	10.18	1.46
HFRI FOF: Cnsvt Index	2.49	2.49	0.41	2.04	2.29	2.34	2.56	2.58	6.30	-0.87	4.12	1.89
Difference	-2.05	-2.05	-9.87	-11.84	-4.93	-2.54	-2.02	-0.68	-2.78	-1.99	6.06	-0.43
OPPRS Long/Short Equity	6.34	6.34	7.95	14.82	7.23	6.95	6.49	N/A	16.85	-4.52	12.10	2.42
HFRI FOF: Strategic Index	5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	10.52	-6.67	11.22	-0.05
Difference	0.39	0.39	4.40	6.58	4.17	3.15	3.07	N/A	6.33	2.15	0.88	2.47
OLERS Long/Short Equity	2.58	2.58	-0.94	4.27	2.43	3.80	3.96	4.67	12.36	-5.53	11.66	1.05
HFRI FOF: Strategic Index	5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	10.52	-6.67	11.22	-0.05
Difference	-3.37	-3.37	-4.49	-3.97	-0.63	0.00	0.54	1.44	1.84	1.14	0.44	1.10

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

As of September 30, 2020

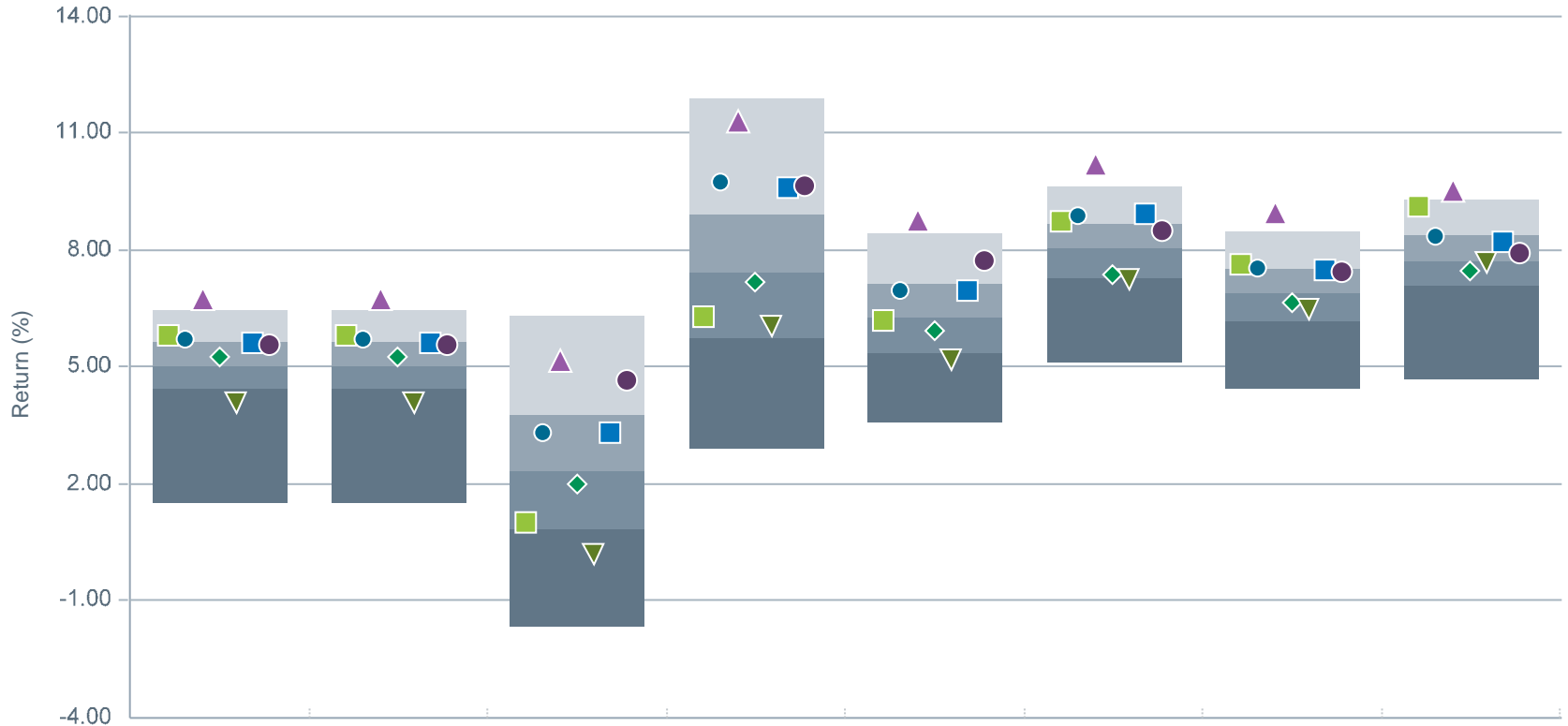
	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016
Private Equity												
OTRS Private Equity	0.00	0.00	1.18	4.96	14.68	14.46	15.37	N/A	17.73	23.03	13.89	14.86
R 2000 Index+4%	5.97	5.97	-5.96	4.41	5.84	12.32	10.68	14.25	30.55	-7.45	19.23	26.16
Difference	-5.97	-5.97	7.14	0.55	8.84	2.14	4.69	N/A	-12.82	30.48	-5.34	-11.30
OFPRS Private Equity	3.74	3.74	1.60	2.53	10.27	9.53	N/A	N/A	6.45	18.91	19.03	3.09
Cambridge US Prvt Eq Index	0.00	0.00	-0.77	2.97	9.41	10.84	11.14	12.60	13.89	10.15	17.99	13.33
Difference	3.74	3.74	2.37	-0.44	0.86	-1.31	N/A	N/A	-7.44	8.76	1.04	-10.24
OPPRS Private Equity	8.74	8.74	4.39	5.70	11.14	8.76	11.15	11.14	10.51	15.22	9.65	5.98
Cambridge US Prvt Eq Index	0.00	0.00	-0.77	2.97	9.41	10.84	11.14	12.60	13.89	10.15	17.99	13.33
Difference	8.74	8.74	5.16	2.73	1.73	-2.08	0.01	-1.46	-3.38	5.07	-8.34	-7.35
OLERS Private Equity	5.56	5.56	0.92	3.90	9.42	6.30	9.07	9.42	6.84	15.45	7.59	2.47
Cambridge US Prvt Eq Index	0.00	0.00	-0.77	2.97	9.41	10.84	11.14	12.60	13.89	10.15	17.99	13.33
Difference	5.56	5.56	1.69	0.93	0.01	-4.54	-2.07	-3.18	-7.05	5.30	-10.40	-10.86
Other Alternatives												
OWCRS Alternative Investments	3.70	3.70	-4.46	-1.82	2.08	4.94	2.42	N/A	15.31	-6.07	9.36	11.04
OWCRS Alternatives Custom Index	4.24	4.24	2.54	5.70	2.87	3.23	N/A	N/A	8.38	-4.02	7.06	3.07
Difference	-0.54	-0.54	-7.00	-7.52	-0.79	1.71	N/A	N/A	6.93	-2.05	2.30	7.97

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. OPPRS Total Equity includes Public Equity, Private Equity, and Long/Short Equity.



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

As of September 30, 2020



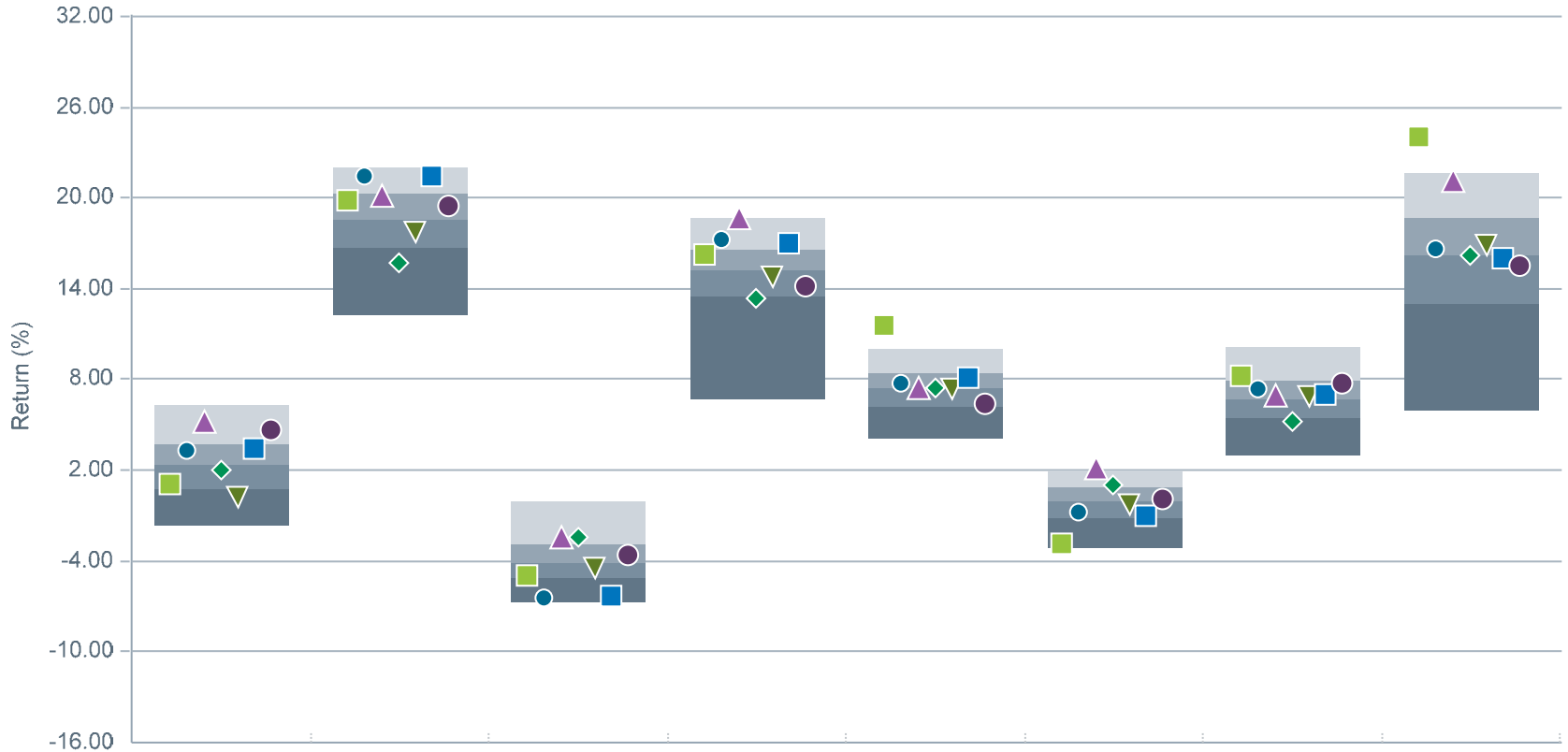
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
OTRS (Teachers)	5.81 (20)	5.81 (20)	1.00 (73)	6.27 (69)	6.16 (53)	8.74 (24)	7.63 (22)	9.13 (7)
OPERS (Public Employees)	5.69 (23)	5.69 (23)	3.28 (34)	9.73 (17)	6.93 (33)	8.85 (22)	7.54 (24)	8.36 (27)
OFPRS (Firefighters)	6.77 (4)	6.77 (4)	5.17 (10)	11.30 (8)	8.76 (4)	10.21 (2)	8.96 (2)	9.55 (3)
OPPRS (Police)	5.24 (43)	5.24 (43)	2.02 (58)	7.21 (54)	5.93 (61)	7.38 (73)	6.65 (59)	7.50 (57)
OLERS (Law Enforcement)	4.07 (84)	4.07 (84)	0.16 (87)	6.02 (72)	5.17 (80)	7.22 (77)	6.47 (67)	7.66 (53)
OURSJJ (Judges)	5.58 (28)	5.58 (28)	3.32 (32)	9.58 (18)	6.95 (32)	8.90 (19)	7.45 (28)	8.18 (33)
OWCRS (Wildlife)	5.55 (29)	5.55 (29)	4.62 (15)	9.61 (18)	7.73 (12)	8.48 (31)	7.44 (28)	7.90 (44)
5th Percentile	6.48	6.48	6.32	11.88	8.45	9.65	8.46	9.28
1st Quartile	5.64	5.64	3.78	8.91	7.13	8.68	7.51	8.39
Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70
3rd Quartile	4.45	4.45	0.84	5.74	5.35	7.29	6.20	7.07
95th Percentile	1.51	1.51	-1.66	2.93	3.59	5.12	4.45	4.69

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 September 30, 2020



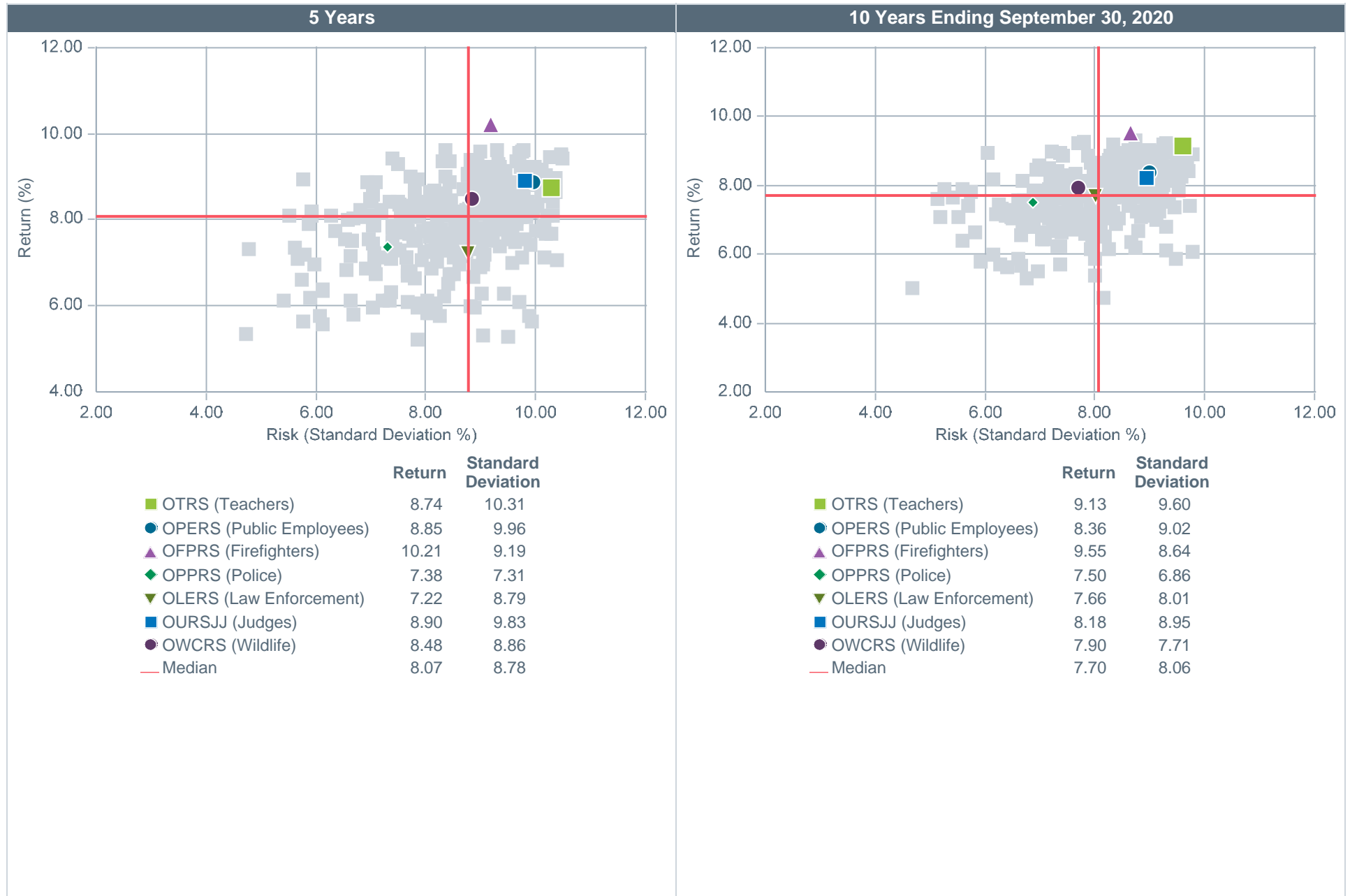
	CYTD	2019	2018	2017	2016	2015	2014	2013
OTRS (Teachers)	1.00 (73)	19.83 (32)	-4.98 (72)	16.20 (31)	11.54 (1)	-2.90 (94)	8.16 (20)	24.03 (2)
OPERS (Public Employees)	3.28 (34)	21.38 (11)	-6.48 (93)	17.13 (16)	7.69 (42)	-0.77 (65)	7.37 (35)	16.60 (48)
OFPRS (Firefighters)	5.17 (10)	20.15 (27)	-2.46 (19)	18.67 (6)	7.42 (51)	2.12 (5)	6.91 (45)	21.10 (7)
OPPRS (Police)	2.02 (58)	15.68 (84)	-2.46 (19)	13.40 (77)	7.47 (49)	1.05 (19)	5.20 (79)	16.18 (51)
OLERS (Law Enforcement)	0.16 (87)	17.70 (61)	-4.55 (59)	14.71 (59)	7.32 (53)	-0.37 (58)	6.83 (48)	16.80 (46)
OURSJJ (Judges)	3.32 (32)	21.40 (11)	-6.38 (92)	16.89 (20)	8.09 (34)	-1.07 (73)	7.00 (42)	16.01 (53)
OWCRS (Wildlife)	4.62 (15)	19.46 (37)	-3.68 (42)	14.13 (67)	6.39 (73)	0.05 (48)	7.71 (27)	15.51 (59)
5th Percentile	6.32	22.04	-0.14	18.72	9.98	2.05	10.13	21.67
1st Quartile	3.78	20.27	-2.96	16.57	8.41	0.92	7.93	18.70
Median	2.32	18.56	-4.13	15.20	7.42	-0.09	6.74	16.20
3rd Quartile	0.84	16.66	-5.14	13.46	6.27	-1.24	5.44	12.94
95th Percentile	-1.66	12.30	-6.76	6.67	4.14	-3.17	3.06	6.01

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



All Plans

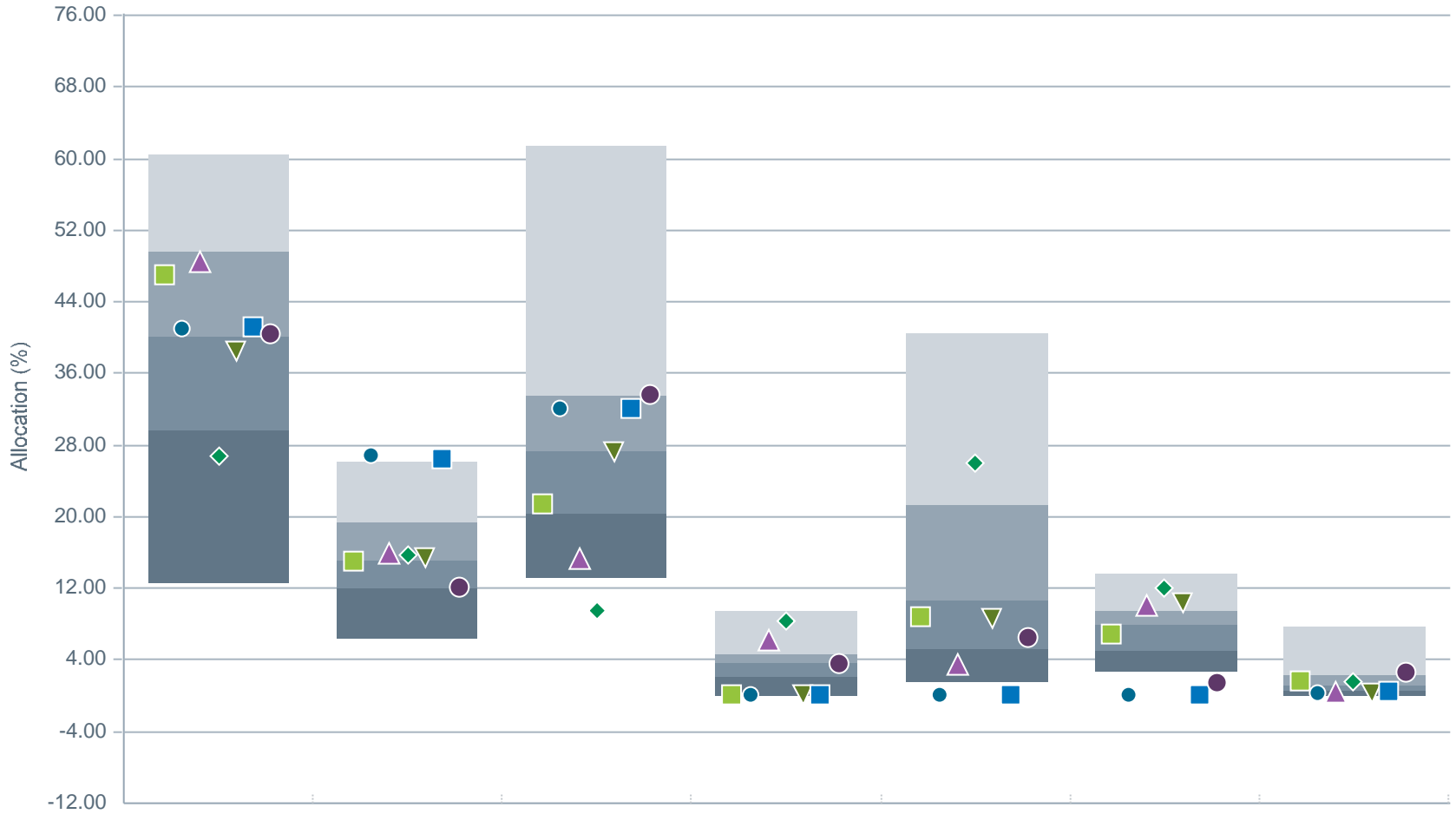
Total Fund Risk & Return vs. All Public Plans-Total Fund



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

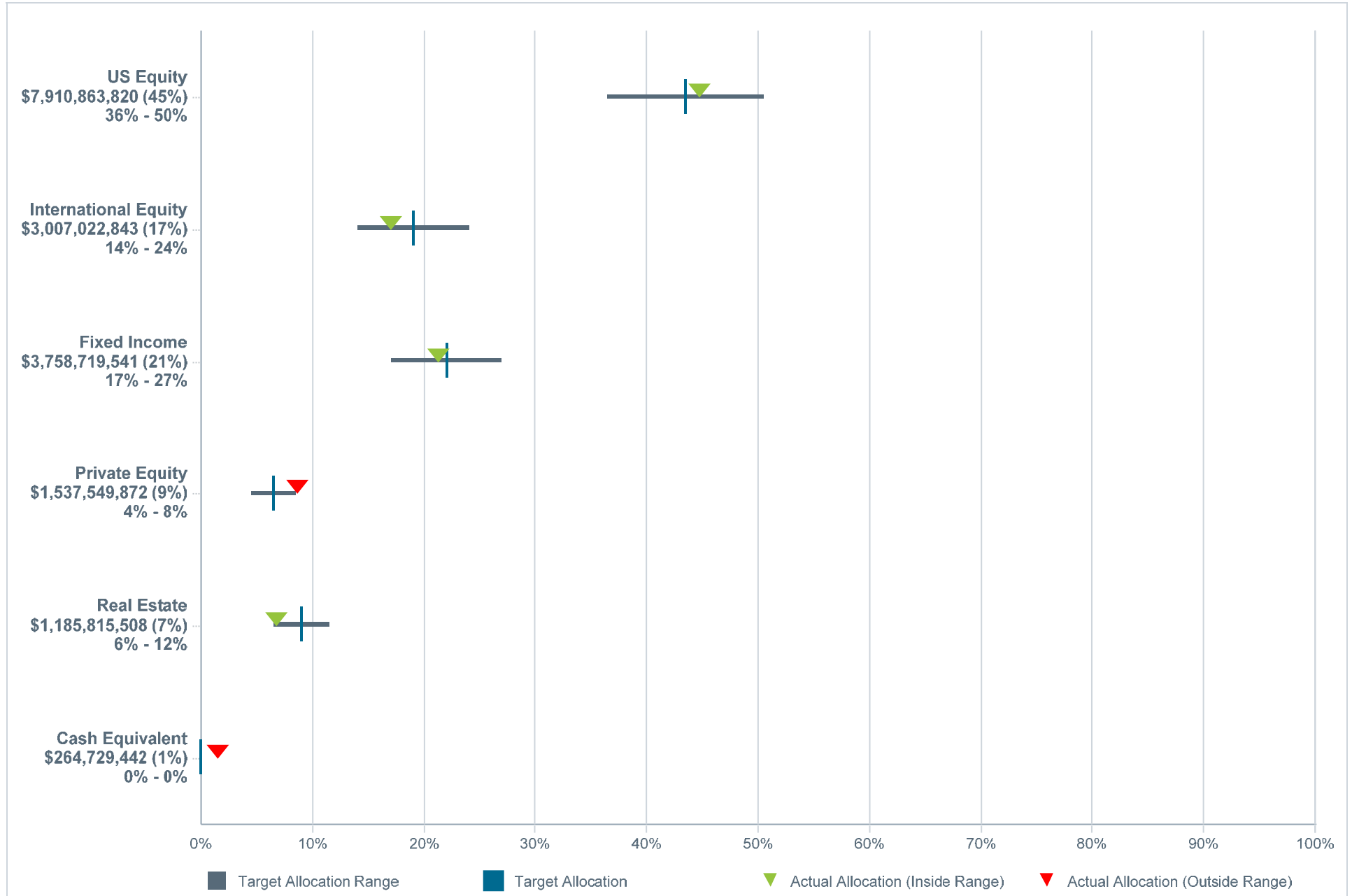
As of September 30, 2020



	US Equity	Intl. Equity	US Fixed Income	Intl. Fixed Income	Alternative Inv.	Real Estate	Cash
OTRS (Teachers)	46.89	14.92	21.28	0.00	8.70	6.71	1.51
OPERS (Public Employees)	40.90	26.84	31.91	0.00	0.00	0.10	0.25
OFPRS (Firefighters)	48.41	15.82	15.41	6.26	3.59	10.11	0.40
OPPRS (Police)	26.70	15.63	9.59	8.41	26.08	11.96	1.63
OLERS (Law Enforcement)	38.41	15.32	27.16	0.00	8.55	10.35	0.21
OURSJJ (Judges)	41.04	26.47	32.02	0.00	0.00	0.00	0.47
OWCRS (Wildlife)	40.42	12.07	33.62	3.50	6.46	1.41	2.52
Median	40.17	15.12	27.28	3.64	10.74	8.02	1.21

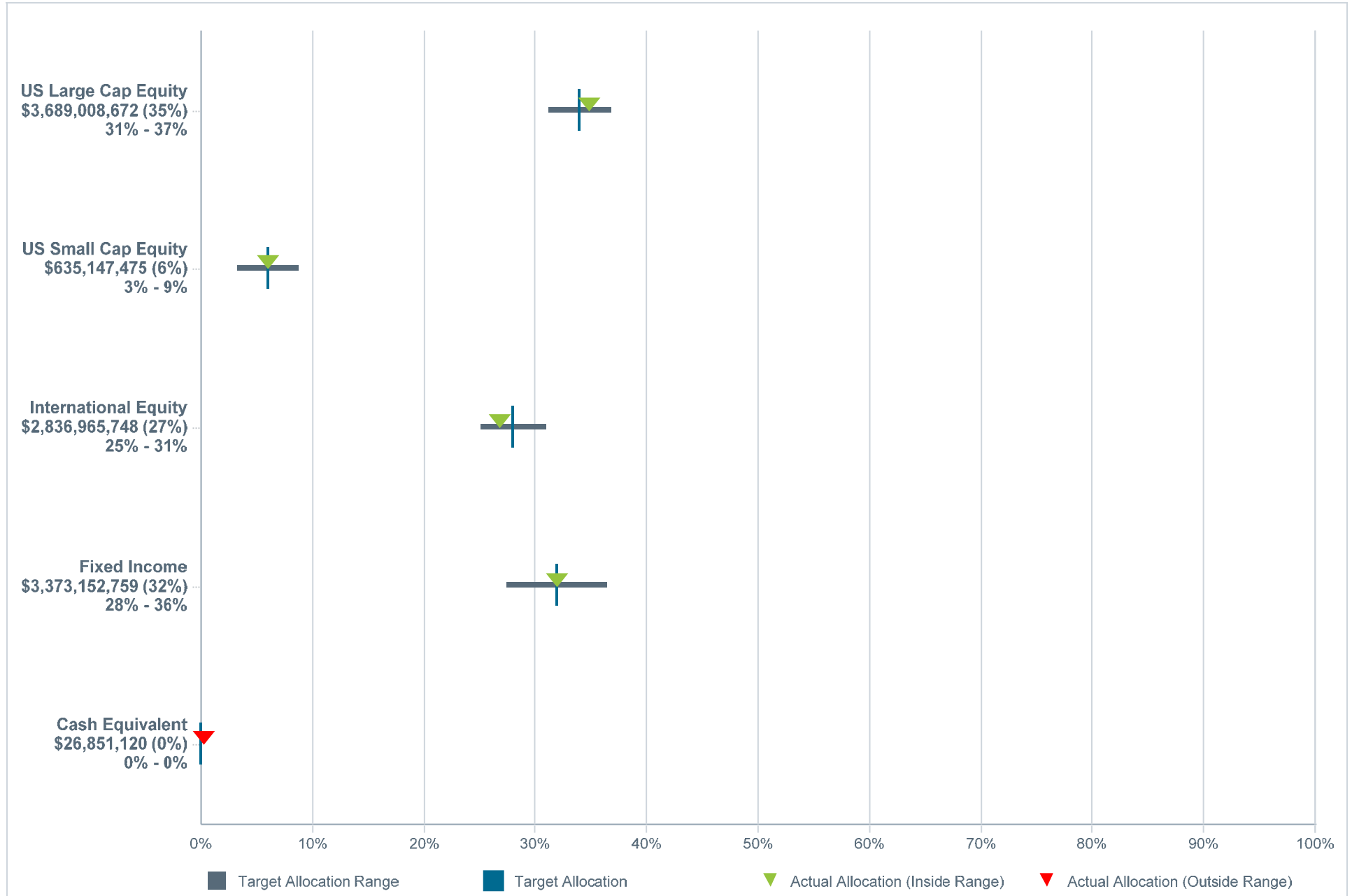
Parentheses contain percentile ranks.





Allocations shown may not sum up to 100% exactly due to rounding. Allocation to Private Equity includes Private Credit. Cash held in short-term investments with the Custodian shall be considered as domestic fixed income for rebalancing purposes.

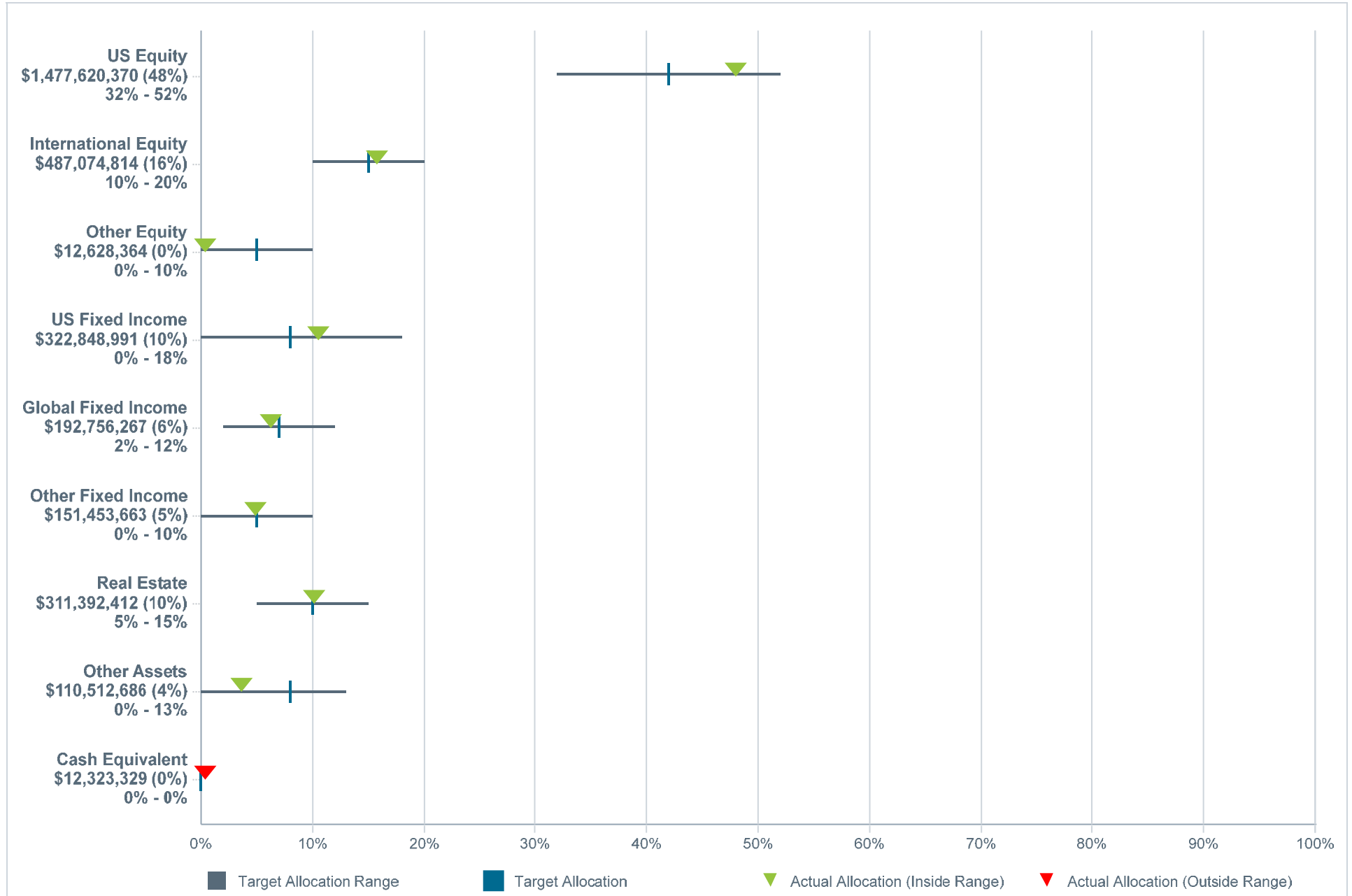




Allocations shown may not sum up to 100% exactly due to rounding. Cash held in short-term investments with the Master Custodian and direct real estate holdings shall be considered as U.S. fixed income for rebalancing purposes.

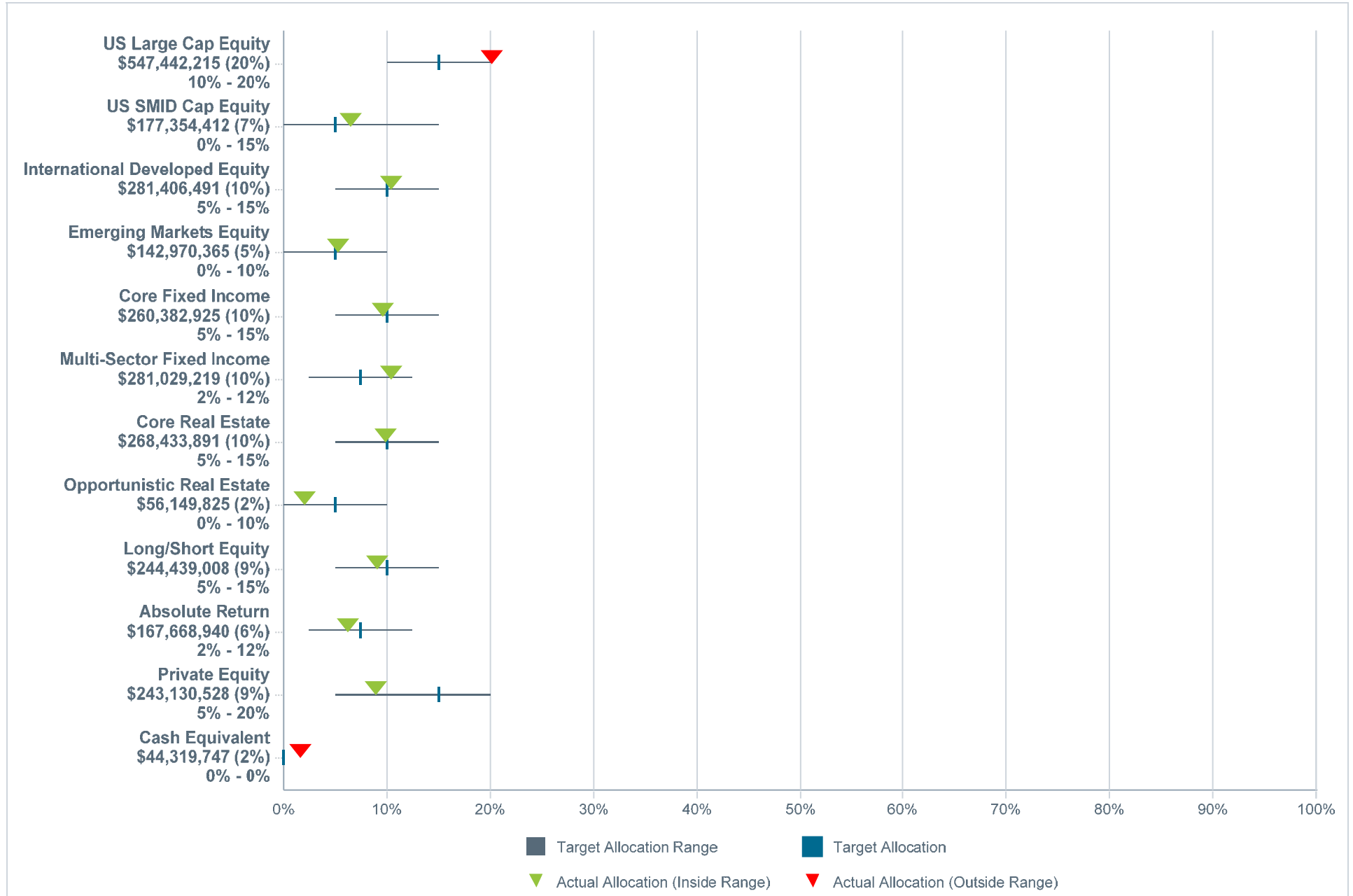
Oklahoma State Pension Commission
 Oklahoma Firefighters Pension & Retirement System
 Asset Allocation vs. Target Allocation

As of September 30, 2020

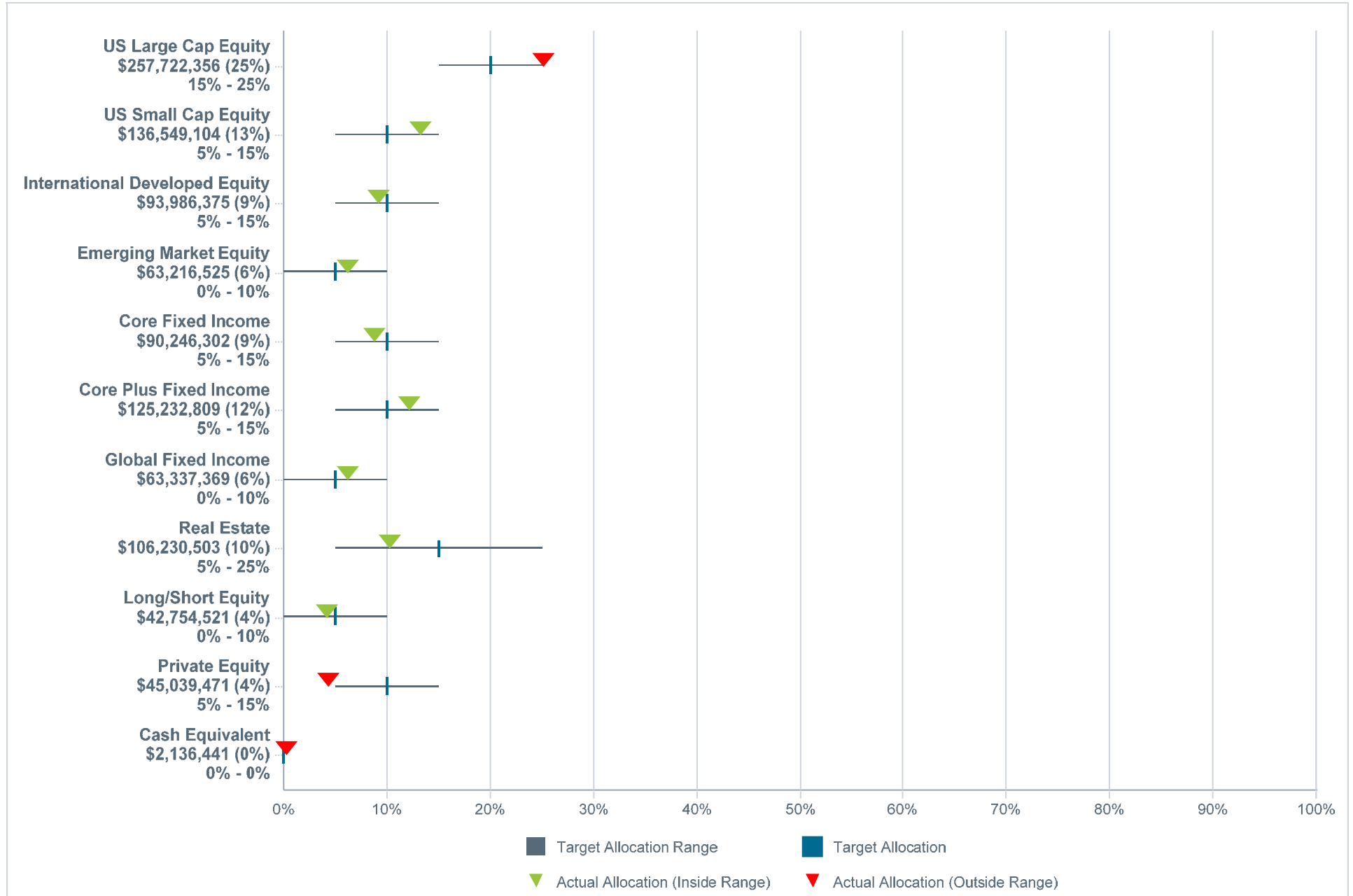


Allocations shown may not sum up to 100% exactly due to rounding. Allocation to Other Equity includes opportunistic equity; Other Fixed Income includes non-core Fixed Income; and Other Assets include Hedge Funds and Private Equity.





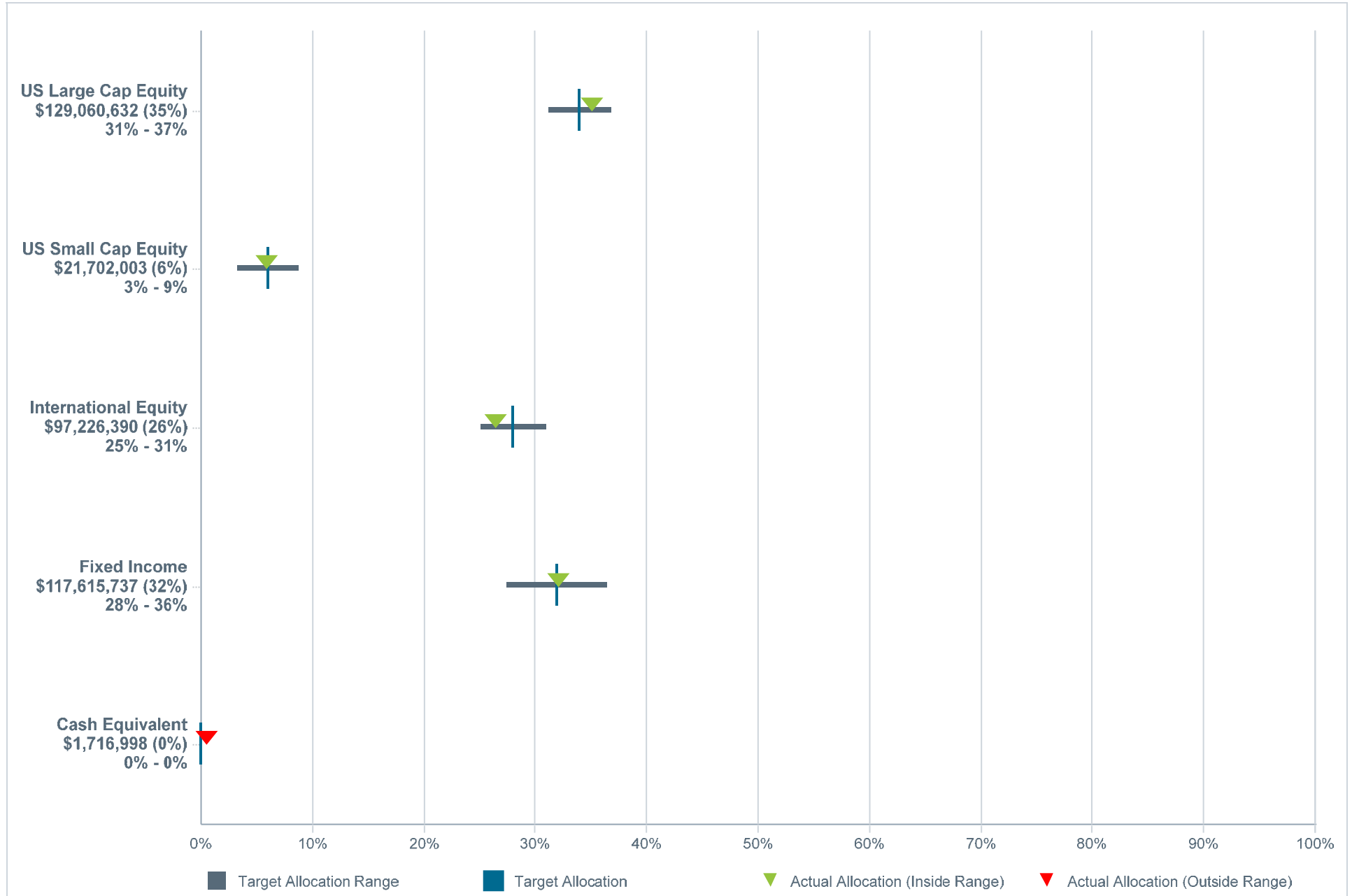
Allocations shown may not sum up to 100% exactly due to rounding. Allocation to Multi-Sector Fixed Income includes Private Credit.



Allocations shown may not sum up to 100% exactly due to rounding. Short term cash reserves shall be considered as fixed income for rebalancing purposes.

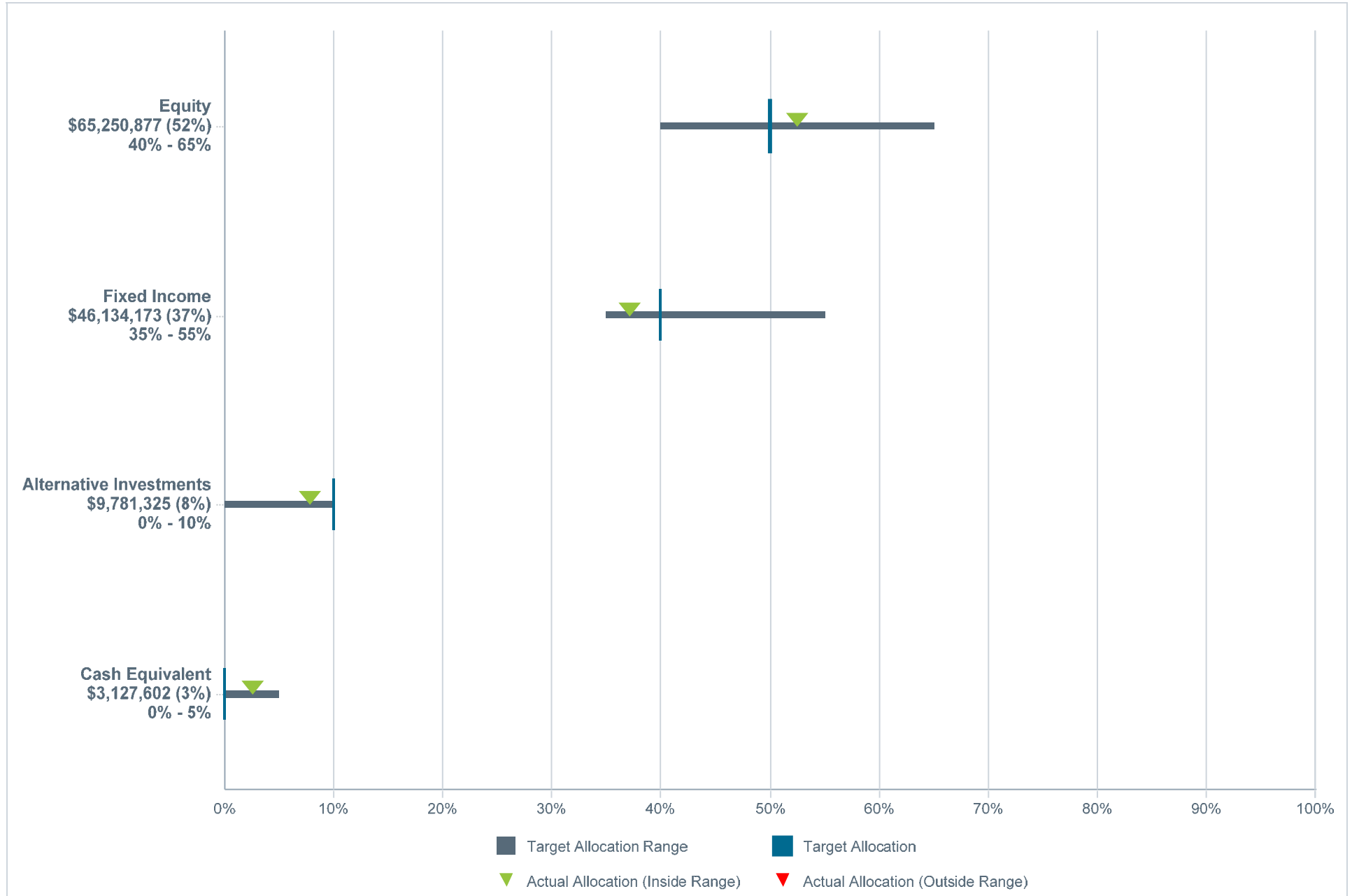
Oklahoma State Pension Commission
 Oklahoma Uniform Retirement System for Justices & Judges
 Asset Allocation vs. Target Allocation

As of September 30, 2020



Allocations shown may not sum up to 100% exactly due to rounding. Cash held in short-term investments with the Master Custodian and direct real estate holdings shall be considered as U.S. fixed income for rebalancing purposes.





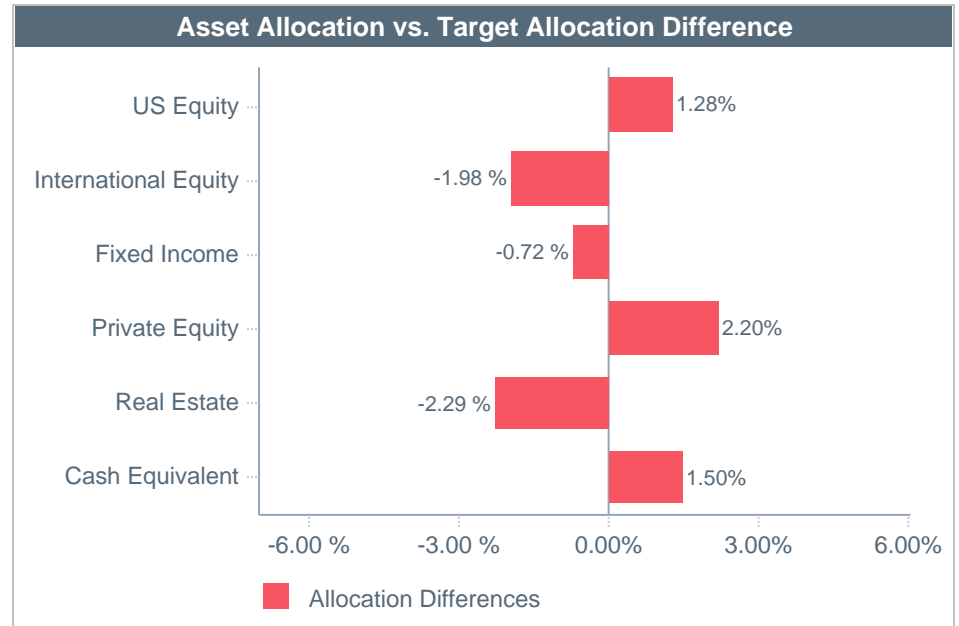
Allocations shown may not sum up to 100% exactly due to rounding.

Oklahoma Teachers' Retirement System (OTRS)



	Performance (%)												
	Trailing							Calendar Year					
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OTRS Total Fund (Net)	5.81	5.81	0.89	6.08	5.87	8.38	7.24	8.71	19.48	-5.29	15.83	11.02	-3.31
OTRS Policy Index	5.99	5.99	2.64	8.99	6.88	8.84	7.24	8.53	21.09	-5.12	14.05	10.61	-2.49
Difference	-0.18	-0.18	-1.75	-2.91	-1.01	-0.46	0.00	0.18	-1.61	-0.17	1.78	0.41	-0.82
OTRS Actual Allocation Index	6.00	6.00	4.32	10.06	7.05	9.02	7.81	8.86	18.94	-4.70	14.35	10.93	-1.95
Difference	-0.19	-0.19	-3.43	-3.98	-1.18	-0.64	-0.57	-0.15	0.54	-0.59	1.48	0.09	-1.36
Actuarial Discount Rate (7.5%)	1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference	3.99	3.99	-4.68	-1.42	-1.63	0.88	-0.26	1.21	11.98	-12.79	8.33	3.52	-10.81
OTRS Total Fund (Gross)	5.81	5.81	1.00	6.27	6.16	8.74	7.63	9.13	19.83	-4.98	16.20	11.54	-2.90
OTRS Policy Index	5.99	5.99	2.64	8.99	6.88	8.84	7.24	8.53	21.09	-5.12	14.05	10.61	-2.49
Difference	-0.18	-0.18	-1.64	-2.72	-0.72	-0.10	0.39	0.60	-1.26	0.14	2.15	0.93	-0.41
OTRS Actual Allocation Index	6.00	6.00	4.32	10.06	7.05	9.02	7.81	8.86	18.94	-4.70	14.35	10.93	-1.95
Difference	-0.19	-0.19	-3.32	-3.79	-0.89	-0.28	-0.18	0.27	0.89	-0.28	1.85	0.61	-0.95
All Public Plans-Total Fund Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	18.56	-4.13	15.20	7.42	-0.09
Rank	20	20	73	69	53	24	22	7	32	72	31	1	94

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OTRS (Teachers)	17,666,001,941	100.00	100.00
US Equity	7,910,863,820	44.78	43.50
International Equity	3,007,022,843	17.02	19.00
Fixed Income	3,758,719,541	21.28	22.00
Private Equity	1,537,549,872	8.70	6.50
Real Estate	1,185,815,508	6.71	9.00
Cash Equivalent	264,729,442	1.50	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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OTRS Total Fund	17,666,001,941	100.00	5.81	5.81	0.89	6.08	5.87	8.38	7.24	8.71	8.80	12/01/1991
OTRS Policy Index			5.99	5.99	2.64	8.99	6.88	8.84	7.24	8.53	8.82	
Difference			-0.18	-0.18	-1.75	-2.91	-1.01	-0.46	0.00	0.18	-0.02	
OTRS Actual Allocation Index			6.00	6.00	4.32	10.06	7.05	9.02	7.81	8.86	N/A	
Difference			-0.19	-0.19	-3.43	-3.98	-1.18	-0.64	-0.57	-0.15	N/A	
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			3.99	3.99	-4.68	-1.42	-1.63	0.88	-0.26	1.21	1.30	
US Equity	7,910,863,820	44.78	7.62	7.62	-2.62	4.48	6.49	10.28	9.26	11.62	10.43	04/01/1990
Russell 3000 Index			9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	10.16	
Difference			-1.59	-1.59	-8.03	-10.52	-5.16	-3.41	-2.85	-1.86	0.27	
US Active Equity	2,580,055,149	14.60	7.35	7.35	-6.65	0.66	4.74	9.30	8.36	10.88	7.94	12/01/1998
Russell 3000 Index			9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	7.32	
Difference			-1.86	-1.86	-12.06	-14.34	-6.91	-4.39	-3.75	-2.60	0.62	
Hotchkis & Wiley Mid Cap Value Equity (SA)	279,346,788	1.58	5.18	5.18	-29.01	-22.70	-11.30	-2.67	-1.16	5.73	9.16	01/01/1990
Russell Mid Cap Val Index			6.40	6.40	-12.84	-7.30	0.82	6.38	6.63	9.71	10.45	
Difference			-1.22	-1.22	-16.17	-15.40	-12.12	-9.05	-7.79	-3.98	-1.29	
Wellington Mid Cap Growth (SA)	622,819,163	3.53	7.38	7.38	10.50	20.46	17.80	16.60	13.02	13.55	10.93	09/01/1998
Russell Mid Cap Grth Index			9.37	9.37	13.92	23.23	16.23	15.53	13.25	14.55	10.13	
Difference			-1.99	-1.99	-3.42	-2.77	1.57	1.07	-0.23	-1.00	0.80	
Frontier Small Cap Value Equity (SA)	172,425,533	0.98	2.73	2.73	-23.16	-18.11	-5.18	3.51	3.78	N/A	4.48	06/01/2013
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	4.10	
Difference			0.17	0.17	-1.62	-3.23	-0.05	-0.60	0.51	N/A	0.38	
Neumeier Poma Small Cap Equity (SA)	244,471,870	1.38	8.79	8.79	-7.76	-0.44	2.81	9.85	9.40	N/A	10.34	06/01/2013
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	7.46	
Difference			3.86	3.86	0.93	-0.83	1.04	1.85	2.98	N/A	2.88	
Shapiro Enhanced Small Cap Equity (SA)	764,468,012	4.33	10.85	10.85	-14.51	-7.50	-2.80	8.32	6.10	9.33	8.41	02/01/1998
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	7.10	
Difference			5.92	5.92	-5.82	-7.89	-4.57	0.32	-0.32	-0.52	1.31	
Geneva US Small Cap Growth Equity (SA)	238,780,089	1.35	1.93	1.93	6.38	14.18	12.09	13.99	11.89	N/A	13.57	06/01/2013
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	10.49	
Difference			-5.23	-5.23	2.50	-1.53	3.91	2.57	2.67	N/A	3.08	

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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Wasatch Small Cap Core Growth (SA)	257,743,694	1.46	6.80	6.80	9.82	19.40	16.61	16.16	12.93	N/A	13.63	06/01/2013
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	10.49	
Difference			-0.36	-0.36	5.94	3.69	8.43	4.74	3.71	N/A	3.14	
US Passive Equity (Cap Wgt)	2,906,771,086	16.45	8.78	8.78	3.01	12.29	10.67	12.99	11.90	N/A	12.58	04/01/2012
Northern Trust Russell 1000 Index (SA)	1,940,490,235	10.98	9.45	9.45	6.19	15.76	N/A	N/A	N/A	N/A	10.98	12/01/2017
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	11.06	
Difference			-0.02	-0.02	-0.21	-0.25	N/A	N/A	N/A	N/A	-0.08	
Northern Trust Russell Mid Cap Index (CF)	966,280,851	5.47	7.45	7.45	N/A	N/A	N/A	N/A	N/A	N/A	7.86	03/01/2020
Russell Mid Cap Index			7.46	7.46	-2.35	4.55	7.13	10.13	9.37	11.76	7.81	
Difference			-0.01	-0.01	N/A	N/A	N/A	N/A	N/A	N/A	0.05	
US Passive Equity (Non-Cap Wgt)	2,424,037,577	13.72	6.54	6.54	-3.66	1.52	8.45	11.42	10.40	N/A	12.02	04/01/2012
S&P 500 Index (Eq Wtd)			6.75	6.75	-4.75	2.50	6.49	10.27	9.68	12.03	11.23	
Difference			-0.21	-0.21	1.09	-0.98	1.96	1.15	0.72	N/A	0.79	
SciBeta US High FactorExposure Index (SA)	2,424,037,577	13.72	6.54	6.54	-3.66	1.52	N/A	N/A	N/A	N/A	5.60	12/01/2017
S&P 500 Index (Eq Wtd)			6.75	6.75	-4.75	2.50	6.49	10.27	9.68	12.03	5.07	
Difference			-0.21	-0.21	1.09	-0.98	N/A	N/A	N/A	N/A	0.53	

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 Teachers' Retirement System
Asset Allocation & Performance - Net of Fees

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity	3,007,022,843	17.02	8.23	8.23	-4.04	5.34	0.96	5.82	3.51	5.18	7.37	02/01/1996
MSCI ACW Ex US IM Index (USD) (Gross)			6.90	6.90	-4.86	3.95	1.60	6.80	3.82	4.64	5.20	
Difference			1.33	1.33	0.82	1.39	-0.64	-0.98	-0.31	0.54	2.17	
Causeway International Opportunities (SA)	476,357,678	2.70	3.65	3.65	-14.00	-3.77	-2.66	3.61	1.70	4.28	7.20	05/01/2003
MSCI ACW Ex US Val Index (USD) (Gross)			2.43	2.43	-17.19	-10.32	-4.51	2.75	0.30	2.08	6.76	
Difference			1.22	1.22	3.19	6.55	1.85	0.86	1.40	2.20	0.44	
Allianz Best Styles AC Intl Equity (SA)	1,029,947,945	5.83	5.82	5.82	-8.87	-0.95	-0.94	N/A	N/A	N/A	6.04	07/01/2016
MSCI ACW Ex US Index (USD) (Gross)			6.36	6.36	-5.08	3.45	1.65	6.74	3.66	4.48	7.32	
Difference			-0.54	-0.54	-3.79	-4.40	-2.59	N/A	N/A	N/A	-1.28	
Wellington Intl Quality Growth (SA)	606,934,210	3.44	11.72	11.72	9.22	19.30	9.33	N/A	N/A	N/A	12.60	07/01/2016
MSCI ACW Ex US Grth Index (USD) (Gross)			10.22	10.22	7.55	17.90	7.71	10.55	6.88	6.75	11.13	
Difference			1.50	1.50	1.67	1.40	1.62	N/A	N/A	N/A	1.47	
Wasatch International Small Cap Growth (SA)	371,892,744	2.11	13.18	13.18	10.57	24.22	8.89	10.84	7.69	N/A	12.17	12/01/2011
MSCI ACW Ex US Sm Cap Index (USD) (Gross)			10.61	10.61	-3.34	7.36	1.32	7.20	4.87	5.70	7.35	
Difference			2.57	2.57	13.91	16.86	7.57	3.64	2.82	N/A	4.82	
Wellington International Small Cap Equity (CF)	252,573,010	1.43	8.57	8.57	-9.50	1.04	-4.09	2.17	1.94	N/A	6.95	12/01/2011
MSCI EAFE Sm Cap Index (USD) (Gross)			10.34	10.34	-3.90	7.21	1.78	7.77	6.08	7.71	9.25	
Difference			-1.77	-1.77	-5.60	-6.17	-5.87	-5.60	-4.14	N/A	-2.30	
SSGA Emerging Market Small Cap (CF)	269,317,256	1.52	11.73	11.73	-4.76	4.16	-1.43	N/A	N/A	N/A	3.13	09/01/2016
MSCI Emg Mkts Sm Cap Index (USD) (Gross)			12.04	12.04	-2.12	7.28	-0.73	4.95	2.41	1.34	3.30	
Difference			-0.31	-0.31	-2.64	-3.12	-0.70	N/A	N/A	N/A	-0.17	
Fixed Income	3,758,719,541	21.28	2.25	2.25	9.60	9.71	6.90	6.47	5.71	5.72	7.06	04/01/1990
Bloomberg US Unv Bond Index			0.99	0.99	6.20	6.68	5.15	4.49	4.16	3.92	6.25	
Difference			1.26	1.26	3.40	3.03	1.75	1.98	1.55	1.80	0.81	
Loomis Sayles Multisector Full Discretion (SA)	979,807,253	5.55	2.58	2.58	8.78	10.35	5.84	5.79	4.93	5.16	6.21	07/01/1999
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.08	
Difference			1.96	1.96	1.99	3.37	0.60	1.61	0.96	1.52	1.13	
Mackay Shields Core+ Extended Discretion (SA)	954,915,335	5.41	3.07	3.07	5.99	7.54	5.21	4.71	4.02	4.52	5.21	11/01/2004
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.35	
Difference			2.45	2.45	-0.80	0.56	-0.03	0.53	0.05	0.88	0.86	
Lord Abbett Core Plus Full Discretion (SA)	936,025,289	5.30	2.81	2.81	4.50	5.27	4.59	4.34	4.17	4.31	5.16	11/01/2004
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.35	
Difference			2.19	2.19	-2.29	-1.71	-0.65	0.16	0.20	0.67	0.81	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Hoisington Active Duration Long Bonds (SA)	887,971,664	5.03	0.45	0.45	24.67	18.62	13.78	9.21	10.19	8.23	8.48	11/01/2004
Bloomberg US Trsy Index			0.17	0.17	8.90	8.04	5.50	3.75	3.54	3.15	4.01	
Difference			0.28	0.28	15.77	10.58	8.28	5.46	6.65	5.08	4.47	
Private Equity	1,537,549,872	8.70	0.00	0.00	1.18	4.96	14.68	14.46	15.37	N/A	13.72	07/01/2015
R 2000 Index+4%			5.97	5.97	-5.96	4.41	5.84	12.32	10.68	14.25	9.24	
Difference			-5.97	-5.97	7.14	0.55	8.84	2.14	4.69	N/A	4.48	
Franklin Park Private Equity LP	1,235,255,635	6.99	0.00	0.00	1.25	5.08	15.01	14.62	15.40	N/A	13.80	07/01/2015
Legacy Private Equity LP	11,707,422	0.07	0.00	0.00	-5.06	-5.54	-3.21	0.88	3.21	4.55	2.24	10/01/2008
Special Opportunities	290,586,815	1.64	0.00	0.00	-11.93	-10.22	1.02	3.95	N/A	N/A	4.31	07/01/2015
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.22	
Difference			-0.62	-0.62	-18.72	-17.20	-4.22	-0.23	N/A	N/A	0.09	
PIMCO Bravo LP	576,761	0.00	0.00	0.00	-61.40	-47.45	-30.00	-20.48	-134.46	N/A	-148.25	03/01/2011
PIMCO Bravo II LP	46,787,589	0.26	0.00	0.00	-18.28	-18.36	-3.63	1.35	6.10	N/A	5.64	03/01/2013
PIMCO Bravo III LP	183,979,199	1.04	0.00	0.00	-9.68	-7.14	5.13	N/A	N/A	N/A	6.34	04/01/2017
PIMCO COF II LP	59,243,266	0.34	0.00	0.00	-11.29	-9.63	2.46	N/A	N/A	N/A	5.69	10/01/2016
Bloomberg US Unv Bond Index			0.99	0.99	6.20	6.68	5.15	4.49	4.16	3.92	4.09	
Difference			-0.99	-0.99	-17.49	-16.31	-2.69	N/A	N/A	N/A	1.60	
Real Estate	1,185,815,508	6.71	0.00	0.00	-1.61	-1.05	4.16	6.17	N/A	N/A	6.64	07/01/2015
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	6.59	
Difference			-0.74	-0.74	-2.06	-3.05	-0.95	-0.11	N/A	N/A	0.05	
AEW Core Property Trust (CF)	327,597,849	1.85	0.00	0.00	-0.07	1.48	4.76	5.85	7.33	N/A	7.34	07/01/2011
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	8.55	
Difference			-0.27	-0.27	0.68	0.96	0.51	0.16	-0.29	N/A	-1.21	
Heitman America Real Estate (CF)	314,876,219	1.78	0.00	0.00	-2.97	-1.41	3.26	5.86	7.37	N/A	7.86	05/01/2011
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	8.89	
Difference			-0.27	-0.27	-2.22	-1.93	-0.99	0.17	-0.25	N/A	-1.03	
L&B Core Income Partners LP	86,374,975	0.49	0.00	0.00	-4.64	-7.52	-1.15	3.33	5.87	N/A	5.43	04/01/2011
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	8.81	
Difference			-0.27	-0.27	-3.89	-8.04	-5.40	-2.36	-1.75	N/A	-3.38	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
American Strategic Value Realty (CF)	71,909,135	0.41	0.00	0.00	3.63	5.56	7.33	8.99	N/A	N/A	8.74	12/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.22	
Difference			-0.27	-0.27	4.38	5.04	3.08	3.30	N/A	N/A	1.52	
Angelo Gordon Value X LP	17,311,458	0.10	0.00	0.00	-1.74	-8.69	N/A	N/A	N/A	N/A	-18.17	07/01/2019
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	1.28	
Difference			-0.27	-0.27	-0.99	-9.21	N/A	N/A	N/A	N/A	-19.45	
Artemis Real Estate III LP	10,701,946	0.06	0.00	0.00	3.77	2.79	N/A	N/A	N/A	N/A	-12.63	02/01/2019
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	2.15	
Difference			-0.27	-0.27	4.52	2.27	N/A	N/A	N/A	N/A	-14.78	
Dune Real Estate III LP	42,806,697	0.24	0.00	0.00	-1.07	-5.72	5.82	7.00	N/A	N/A	7.50	11/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.11	
Difference			-0.27	-0.27	-0.32	-6.24	1.57	1.31	N/A	N/A	0.39	
Dune Real Estate IV LP	14,859,482	0.08	0.00	0.00	-3.47	-24.14	N/A	N/A	N/A	N/A	-22.51	09/01/2019
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	1.48	
Difference			-0.27	-0.27	-2.72	-24.66	N/A	N/A	N/A	N/A	-23.99	
FCP Realty IV LP	14,188,963	0.08	0.00	0.00	5.36	6.64	N/A	N/A	N/A	N/A	-21.34	12/01/2018
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	2.80	
Difference			-0.27	-0.27	6.11	6.12	N/A	N/A	N/A	N/A	-24.14	
GreenOak US II LP	30,830,892	0.17	0.00	0.00	-16.38	-16.39	-2.34	0.81	N/A	N/A	-0.18	10/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.01	
Difference			-0.27	-0.27	-15.63	-16.91	-6.59	-4.88	N/A	N/A	-7.19	
GreenOak US III LP	23,379,536	0.13	0.00	0.00	-2.22	-4.00	N/A	N/A	N/A	N/A	-17.66	06/01/2018
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	3.80	
Difference			-0.27	-0.27	-1.47	-4.52	N/A	N/A	N/A	N/A	-21.46	
Harbert European Real Estate V LP	18,136,206	0.10	0.00	0.00	6.76	17.18	N/A	N/A	N/A	N/A	-11.45	12/01/2018
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	2.80	
Difference			-0.27	-0.27	7.51	16.66	N/A	N/A	N/A	N/A	-14.25	
Invesco Strategic Opportunity (CF)	13,954,742	0.08	0.00	0.00	101.56	101.56	N/A	N/A	N/A	N/A	101.56	10/01/2019
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	0.52	
Difference			-0.27	-0.27	102.31	101.04	N/A	N/A	N/A	N/A	101.04	
L&B Gloden Driller (SA)	74,729,957	0.42	0.00	0.00	-4.13	-1.78	11.12	7.55	N/A	N/A	N/A	07/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.22	
Difference			-0.27	-0.27	-3.38	-2.30	6.87	1.86	N/A	N/A	N/A	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Landmark Real Estate VII LP	12,300,585	0.07	0.00	0.00	-2.37	-2.60	1.50	11.05	N/A	N/A	10.79	12/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.22	
Difference			-0.27	-0.27	-1.62	-3.12	-2.75	5.36	N/A	N/A	3.57	
Lyrical-OTRS Realty Partner IV LP	60,539,057	0.34	0.00	0.00	2.48	5.16	16.16	6.17	N/A	N/A	3.17	11/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.11	
Difference			-0.27	-0.27	3.23	4.64	11.91	0.48	N/A	N/A	-3.94	
Starwood Opportunity X LP	19,193,538	0.11	0.00	0.00	-3.68	-0.86	8.08	10.50	N/A	N/A	9.97	07/01/2015
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	6.09	
Difference			-0.27	-0.27	-2.93	-1.38	3.83	4.81	N/A	N/A	3.88	
Starwood Opportunity XI LP	24,824,271	0.14	0.00	0.00	2.29	10.89	N/A	N/A	N/A	N/A	25.95	08/01/2018
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	3.24	
Difference			-0.27	-0.27	3.04	10.37	N/A	N/A	N/A	N/A	22.71	
Harvey Parkway Building (SA)	7,300,000	0.04	0.00	0.00	-44.36	-44.36	-25.15	N/A	N/A	N/A	-23.95	08/01/2017

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OTRS Total Fund	17,666,001,941	100.00	5.81	5.81	1.00	6.27	6.16	8.74	7.63	9.13	9.14	12/01/1991
OTRS Policy Index			5.99	5.99	2.64	8.99	6.88	8.84	7.24	8.53	8.82	
Difference			-0.18	-0.18	-1.64	-2.72	-0.72	-0.10	0.39	0.60	0.32	
OTRS Actual Allocation Index			6.00	6.00	4.32	10.06	7.05	9.02	7.81	8.86	N/A	
Difference			-0.19	-0.19	-3.32	-3.79	-0.89	-0.28	-0.18	0.27	N/A	
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			3.99	3.99	-4.57	-1.23	-1.34	1.24	0.13	1.63	1.64	
All Public Plans-Total Fund Median			5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	7.86	
Rank			20	20	73	69	53	24	22	7	3	
US Equity	7,910,863,820	44.78	7.62	7.62	-2.52	4.65	6.79	10.66	9.55	11.83	10.49	04/01/1990
Russell 3000 Index			9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	10.16	
Difference			-1.59	-1.59	-7.93	-10.35	-4.86	-3.03	-2.56	-1.65	0.33	
IM U.S. Equity (SA+CF) Median			6.98	6.98	-2.35	5.79	7.14	10.71	9.45	12.19	11.11	
Rank			45	45	51	52	52	51	50	54	67	
US Active Equity	2,580,055,149	14.60	7.35	7.35	-6.40	1.06	5.19	9.69	8.77	11.32	8.40	12/01/1998
Russell 3000 Index			9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	7.32	
Difference			-1.86	-1.86	-11.81	-13.94	-6.46	-4.00	-3.34	-2.16	1.08	
IM U.S. Equity (SA+CF) Median			6.98	6.98	-2.35	5.79	7.14	10.71	9.45	12.19	9.00	
Rank			47	47	59	59	57	56	55	58	63	
Hotchkis & Wiley Mid Cap Value Equity (SA)	279,346,788	1.58	5.18	5.18	-28.93	-22.57	-10.96	-2.24	-0.71	6.23	9.83	01/01/1990
Russell Mid Cap Val Index			6.40	6.40	-12.84	-7.30	0.82	6.38	6.63	9.71	10.45	
Difference			-1.22	-1.22	-16.09	-15.27	-11.78	-8.62	-7.34	-3.48	-0.62	
IM U.S. Mid Cap Value Equity (SA+CF) Median			5.66	5.66	-13.30	-7.45	0.76	6.40	6.86	10.13	N/A	
Rank			60	60	100	100	100	100	100	100	N/A	
Wellington Mid Cap Growth (SA)	622,819,163	3.53	7.38	7.38	10.64	20.68	18.07	16.88	13.36	13.93	11.37	09/01/1998
Russell Mid Cap Grth Index			9.37	9.37	13.92	23.23	16.23	15.53	13.25	14.55	10.13	
Difference			-1.99	-1.99	-3.28	-2.55	1.84	1.35	0.11	-0.62	1.24	
IM U.S. Mid Cap Growth Equity (SA+CF) Median			9.17	9.17	14.51	22.86	17.02	15.75	13.45	15.00	11.29	
Rank			76	76	70	61	39	37	52	67	48	
Frontier Small Cap Value Equity (SA)	172,425,533	0.98	2.73	2.73	-22.81	-17.58	-4.46	4.38	4.68	N/A	5.38	06/01/2013
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	4.10	
Difference			0.17	0.17	-1.27	-2.70	0.67	0.27	1.41	N/A	1.28	
IM U.S. Small Cap Value Equity (SA+CF) Median			2.39	2.39	-19.54	-13.35	-3.72	4.39	4.27	8.57	5.22	
Rank			46	46	76	80	60	51	38	N/A	46	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Neumeier Poma Small Cap Equity (SA)	244,471,870	1.38	8.79	8.79	-7.46	0.03	3.38	10.51	10.08	N/A	11.03	06/01/2013
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	7.46	
Difference			3.86	3.86	1.23	-0.36	1.61	2.51	3.66	N/A	3.57	
IM U.S. Small Cap Equity (SA+CF) Median			5.10	5.10	-9.39	-1.86	1.80	8.03	6.90	10.61	8.06	
Rank			24	24	44	47	42	35	26	N/A	29	
Shapiro Enhanced Small Cap Equity (SA)	764,468,012	4.33	10.85	10.85	-14.24	-7.07	-2.25	9.01	6.83	10.12	9.29	02/01/1998
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	7.10	
Difference			5.92	5.92	-5.55	-7.46	-4.02	1.01	0.41	0.27	2.19	
IM U.S. Small Cap Equity (SA+CF) Median			5.10	5.10	-9.39	-1.86	1.80	8.03	6.90	10.61	9.65	
Rank			12	12	63	64	71	43	51	58	57	
Geneva US Small Cap Growth Equity (SA)	238,780,089	1.35	1.93	1.93	6.73	14.76	12.80	14.75	12.45	N/A	14.11	06/01/2013
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	10.49	
Difference			-5.23	-5.23	2.85	-0.95	4.62	3.33	3.23	N/A	3.62	
IM U.S. Small Cap Growth Equity (SA+CF) Median			9.05	9.05	11.07	20.98	13.56	15.11	11.70	14.77	13.30	
Rank			99	99	62	64	54	52	41	N/A	37	
Wasatch Small Cap Core Growth (SA)	257,743,694	1.46	6.80	6.80	10.23	20.07	17.46	17.09	13.87	N/A	14.57	06/01/2013
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	10.49	
Difference			-0.36	-0.36	6.35	4.36	9.28	5.67	4.65	N/A	4.08	
IM U.S. Small Cap Growth Equity (SA+CF) Median			9.05	9.05	11.07	20.98	13.56	15.11	11.70	14.77	13.30	
Rank			71	71	53	54	34	31	25	N/A	32	
US Passive Equity (Cap Wgt)	2,906,771,086	16.45	8.78	8.78	3.01	12.30	10.68	13.00	11.91	N/A	12.59	04/01/2012
Northern Trust Russell 1000 Index (SA)	1,940,490,235	10.98	9.45	9.45	6.19	15.77	N/A	N/A	N/A	N/A	10.99	12/01/2017
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	11.06	
Difference			-0.02	-0.02	-0.21	-0.24	N/A	N/A	N/A	N/A	-0.07	
IM U.S. Large Cap Index Equity (SA+CF) Median			9.03	9.03	5.55	15.11	12.26	14.07	12.57	13.72	10.92	
Rank			26	26	31	30	N/A	N/A	N/A	N/A	33	
Northern Trust Russell Mid Cap Index (CF)	966,280,851	5.47	7.45	7.45	N/A	N/A	N/A	N/A	N/A	N/A	7.86	03/01/2020
Russell Mid Cap Index			7.46	7.46	-2.35	4.55	7.13	10.13	9.37	11.76	7.81	
Difference			-0.01	-0.01	N/A	N/A	N/A	N/A	N/A	N/A	0.05	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Passive Equity (Non-Cap Wgt)	2,424,037,577	13.72	6.54	6.54	-3.62	1.56	8.51	11.46	10.44	N/A	12.06	04/01/2012
S&P 500 Index (Eq Wtd)			6.75	6.75	-4.75	2.50	6.49	10.27	9.68	12.03	11.23	
Difference			-0.21	-0.21	1.13	-0.94	2.02	1.19	0.76	N/A	0.83	
SciBeta US High FactorExposure Index (SA)	2,424,037,577	13.72	6.54	6.54	-3.62	1.56	N/A	N/A	N/A	N/A	5.66	12/01/2017
S&P 500 Index (Eq Wtd)			6.75	6.75	-4.75	2.50	6.49	10.27	9.68	12.03	5.07	
Difference			-0.21	-0.21	1.13	-0.94	N/A	N/A	N/A	N/A	0.59	
IM U.S. Large Cap Index Equity (SA+CF) Median			9.03	9.03	5.55	15.11	12.26	14.07	12.57	13.72	10.92	
Rank			82	82	82	82	N/A	N/A	N/A	N/A	81	
International Equity	3,007,022,843	17.02	8.23	8.23	-3.81	5.70	1.41	6.29	3.96	5.66	7.80	02/01/1996
MSCI ACW Ex US IM Index (USD) (Gross)			6.90	6.90	-4.86	3.95	1.60	6.80	3.82	4.64	5.20	
Difference			1.33	1.33	1.05	1.75	-0.19	-0.51	0.14	1.02	2.60	
IM International Equity (SA+CF) Median			8.49	8.41	-2.20	7.23	2.26	7.57	4.85	6.00	7.41	
Rank			52	51	56	56	57	64	62	55	41	
Causeway International Opportunities (SA)	476,357,678	2.70	3.65	3.65	-13.85	-3.52	-2.36	3.95	1.95	4.46	7.31	05/01/2003
MSCI ACW Ex US Val Index (USD) (Gross)			2.43	2.43	-17.19	-10.32	-4.51	2.75	0.30	2.08	6.76	
Difference			1.22	1.22	3.34	6.80	2.15	1.20	1.65	2.38	0.55	
IM ACWI Ex US Value (SA+CF) Median			5.20	5.20	-11.04	-3.52	-0.68	5.23	2.60	4.77	8.05	
Rank			64	64	66	51	60	65	71	65	66	
Allianz Best Styles AC Intl Equity (SA)	1,029,947,945	5.83	5.82	5.82	-8.74	-0.75	-0.69	N/A	N/A	N/A	6.32	07/01/2016
MSCI ACW Ex US Index (USD) (Gross)			6.36	6.36	-5.08	3.45	1.65	6.74	3.66	4.48	7.32	
Difference			-0.54	-0.54	-3.66	-4.20	-2.34	N/A	N/A	N/A	-1.00	
IM ACWI Ex US Core (SA+CF) Median			8.08	8.08	-1.17	7.69	2.49	6.86	4.50	6.16	7.78	
Rank			94	94	98	97	92	N/A	N/A	N/A	72	
Wellington Intl Quality Growth (SA)	606,934,210	3.44	11.72	11.72	9.54	19.80	9.89	N/A	N/A	N/A	13.20	07/01/2016
MSCI ACW Ex US Grth Index (USD) (Gross)			10.22	10.22	7.55	17.90	7.71	10.55	6.88	6.75	11.13	
Difference			1.50	1.50	1.99	1.90	2.18	N/A	N/A	N/A	2.07	
IM ACWI Ex US Growth (SA+CF) Median			10.37	10.37	6.72	17.67	7.62	10.53	7.54	8.25	11.84	
Rank			34	34	42	44	20	N/A	N/A	N/A	31	
Wasatch International Small Cap Growth (SA)	371,892,744	2.11	13.18	13.18	10.98	24.90	9.67	11.68	8.54	N/A	13.10	12/01/2011
MSCI ACW Ex US Sm Cap Index (USD) (Gross)			10.61	10.61	-3.34	7.36	1.32	7.20	4.87	5.70	7.35	
Difference			2.57	2.57	14.32	17.54	8.35	4.48	3.67	N/A	5.75	
IM International Small Cap Equity (SA+CF) Median			10.48	10.48	-1.30	10.62	1.78	7.90	6.54	8.94	9.88	
Rank			23	23	20	20	15	18	22	N/A	8	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Wellington International Small Cap Equity (CF)	252,573,010	1.43	8.57	8.57	-9.26	1.43	-3.56	2.82	2.60	N/A	7.68	12/01/2011
MSCI EAFE Sm Cap Index (USD) (Gross)			10.34	10.34	-3.90	7.21	1.78	7.77	6.08	7.71	9.25	
Difference			-1.77	-1.77	-5.36	-5.78	-5.34	-4.95	-3.48	N/A	-1.57	
IM EAFE Core (SA+CF) Median			6.06	6.06	-5.68	2.52	1.54	5.84	4.43	6.27	7.36	
Rank			11	11	91	61	98	99	92	N/A	39	
SSGA Emerging Market Small Cap (CF)	269,317,256	1.52	11.73	11.73	-4.39	4.73	-0.77	N/A	N/A	N/A	3.73	09/01/2016
MSCI Emg Mkts Sm Cap Index (USD) (Gross)			12.04	12.04	-2.12	7.28	-0.73	4.95	2.41	1.34	3.30	
Difference			-0.31	-0.31	-2.27	-2.55	-0.04	N/A	N/A	N/A	0.43	
IM Emerging Markets Equity (SA+CF) Median			9.91	9.91	-1.12	10.19	2.45	8.85	4.41	4.09	7.27	
Rank			25	24	67	73	76	N/A	N/A	N/A	80	
Fixed Income	3,758,719,541	21.28	2.25	2.25	9.71	9.87	7.09	6.69	5.94	5.95	7.24	04/01/1990
Bloomberg US Unv Bond Index			0.99	0.99	6.20	6.68	5.15	4.49	4.16	3.92	6.25	
Difference			1.26	1.26	3.51	3.19	1.94	2.20	1.78	2.03	0.99	
IM U.S. Fixed Income (SA+CF) Median			1.34	1.34	4.98	5.87	4.62	4.47	4.16	4.17	6.30	
Rank			29	29	9	12	13	17	16	23	21	
Loomis Sayles Multisector Full Discretion (SA)	979,807,253	5.55	2.58	2.58	8.92	10.55	6.04	5.97	5.11	5.33	6.40	07/01/1999
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.08	
Difference			1.96	1.96	2.13	3.57	0.80	1.79	1.14	1.69	1.32	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			1.71	1.71	6.96	7.44	5.72	5.09	4.70	4.65	5.89	
Rank			14	14	4	2	25	16	24	17	23	
Mackay Shields Core+ Extended Discretion (SA)	954,915,335	5.41	3.07	3.07	6.11	7.72	5.42	4.92	4.24	4.74	5.45	11/01/2004
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.35	
Difference			2.45	2.45	-0.68	0.74	0.18	0.74	0.27	1.10	1.10	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			1.71	1.71	6.96	7.44	5.72	5.09	4.70	4.65	5.21	
Rank			7	7	70	43	67	59	82	48	35	
Lord Abbett Core Plus Full Discretion (SA)	936,025,289	5.30	2.81	2.81	4.60	5.42	4.76	4.51	4.34	4.48	5.33	11/01/2004
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.35	
Difference			2.19	2.19	-2.19	-1.56	-0.48	0.33	0.37	0.84	0.98	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			1.71	1.71	6.96	7.44	5.72	5.09	4.70	4.65	5.21	
Rank			11	11	87	91	87	83	77	63	43	
Hoisington Active Duration Long Bonds (SA)	887,971,664	5.03	0.45	0.45	24.72	18.69	13.88	9.33	10.32	8.37	8.62	11/01/2004
Bloomberg US Trsy Index			0.17	0.17	8.90	8.04	5.50	3.75	3.54	3.15	4.01	
Difference			0.28	0.28	15.82	10.65	8.38	5.58	6.78	5.22	4.61	
IM U.S. Long Duration (SA+CF) Median			1.69	1.69	13.77	12.56	10.34	9.25	8.84	7.92	8.06	
Rank			100	100	1	1	1	47	3	26	18	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Private Equity	1,537,549,872	8.70	0.00	0.00	1.18	4.96	14.68	14.46	15.37	N/A	13.72	07/01/2015
R 2000 Index+4%			5.97	5.97	-5.96	4.41	5.84	12.32	10.68	14.25	9.24	
Difference			-5.97	-5.97	7.14	0.55	8.84	2.14	4.69	N/A	4.48	
Franklin Park Private Equity LP	1,235,255,635	6.99	0.00	0.00	1.25	5.08	15.01	14.78	15.57	N/A	14.02	07/01/2015
Legacy Private Equity LP	11,707,422	0.07	0.00	0.00	-5.06	-5.54	-3.21	0.96	3.26	4.59	2.27	10/01/2008
Special Opportunities	290,586,815	1.64	0.00	0.00	-11.93	-10.22	1.02	3.95	N/A	N/A	4.31	07/01/2015
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.22	
Difference			-0.62	-0.62	-18.72	-17.20	-4.22	-0.23	N/A	N/A	0.09	
PIMCO Bravo LP	576,761	0.00	0.00	0.00	-61.40	-47.45	-30.00	-20.26	-9.66	N/A	-2.10	03/01/2011
PIMCO Bravo II LP	46,787,589	0.26	0.00	0.00	-18.28	-18.36	-3.63	1.66	6.78	N/A	6.37	03/01/2013
PIMCO Bravo III LP	183,979,199	1.04	0.00	0.00	-9.68	-7.14	5.13	N/A	N/A	N/A	6.34	04/01/2017
PIMCO COF II LP	59,243,266	0.34	0.00	0.00	-11.29	-9.63	2.46	N/A	N/A	N/A	5.69	10/01/2016
Bloomberg US Unv Bond Index			0.99	0.99	6.20	6.68	5.15	4.49	4.16	3.92	4.09	
Difference			-0.99	-0.99	-17.49	-16.31	-2.69	N/A	N/A	N/A	1.60	
Real Estate	1,185,815,508	6.71	0.00	0.00	-1.51	-0.88	4.32	6.33	N/A	N/A	6.79	07/01/2015
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	6.59	
Difference			-0.74	-0.74	-1.96	-2.88	-0.79	0.05	N/A	N/A	0.20	
AEW Core Property Trust (CF)	327,597,849	1.85	0.00	0.00	-0.07	1.48	4.76	6.46	8.02	N/A	8.08	07/01/2011
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	8.55	
Difference			-0.27	-0.27	0.68	0.96	0.51	0.77	0.40	N/A	-0.47	
Heitman America Real Estate (CF)	314,876,219	1.78	0.00	0.00	-2.63	-0.88	3.94	6.56	8.11	N/A	8.63	05/01/2011
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	8.89	
Difference			-0.27	-0.27	-1.88	-1.40	-0.31	0.87	0.49	N/A	-0.26	
L&B Core Income Partners LP	86,374,975	0.49	0.00	0.00	-4.96	-7.83	-1.50	3.12	5.82	N/A	5.49	04/01/2011
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	8.81	
Difference			-0.27	-0.27	-4.21	-8.35	-5.75	-2.57	-1.80	N/A	-3.32	
American Strategic Value Realty (CF)	71,909,135	0.41	0.00	0.00	4.22	6.48	8.47	10.20	N/A	N/A	10.01	12/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.22	
Difference			-0.27	-0.27	4.97	5.96	4.22	4.51	N/A	N/A	2.79	

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

As of September 30, 2020

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	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Angelo Gordon Value X LP	17,311,458	0.10	0.00	0.00	-1.74	-8.69	N/A	N/A	N/A	N/A	-18.17	07/01/2019
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	1.28	
Difference			-0.27	-0.27	-0.99	-9.21	N/A	N/A	N/A	N/A	-19.45	
Artemis Real Estate III LP	10,701,946	0.06	0.00	0.00	3.77	2.79	N/A	N/A	N/A	N/A	-12.63	02/01/2019
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	2.15	
Difference			-0.27	-0.27	4.52	2.27	N/A	N/A	N/A	N/A	-14.78	
Dune Real Estate III LP	42,806,697	0.24	0.00	0.00	-1.07	-5.72	5.82	7.35	N/A	N/A	8.87	11/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.11	
Difference			-0.27	-0.27	-0.32	-6.24	1.57	1.66	N/A	N/A	1.76	
Dune Real Estate IV LP	14,859,482	0.08	0.00	0.00	-3.47	-24.14	N/A	N/A	N/A	N/A	-22.51	09/01/2019
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	1.48	
Difference			-0.27	-0.27	-2.72	-24.66	N/A	N/A	N/A	N/A	-23.99	
FCP Realty IV LP	14,188,963	0.08	0.00	0.00	5.36	6.64	N/A	N/A	N/A	N/A	-21.34	12/01/2018
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	2.80	
Difference			-0.27	-0.27	6.11	6.12	N/A	N/A	N/A	N/A	-24.14	
GreenOak US II LP	30,830,892	0.17	0.00	0.00	-16.38	-16.39	-2.34	1.22	N/A	N/A	1.08	10/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.01	
Difference			-0.27	-0.27	-15.63	-16.91	-6.59	-4.47	N/A	N/A	-5.93	
GreenOak US III LP	23,379,536	0.13	0.00	0.00	-2.22	-4.00	N/A	N/A	N/A	N/A	-17.66	06/01/2018
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	3.80	
Difference			-0.27	-0.27	-1.47	-4.52	N/A	N/A	N/A	N/A	-21.46	
Harbert European Real Estate V LP	18,136,206	0.10	0.00	0.00	6.76	17.18	N/A	N/A	N/A	N/A	-11.45	12/01/2018
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	2.80	
Difference			-0.27	-0.27	7.51	16.66	N/A	N/A	N/A	N/A	-14.25	
Invesco Strategic Opportunity (CF)	13,954,742	0.08	0.00	0.00	101.56	101.56	N/A	N/A	N/A	N/A	101.56	10/01/2019
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	0.52	
Difference			-0.27	-0.27	102.31	101.04	N/A	N/A	N/A	N/A	101.04	
L&B Gloden Driller (SA)	74,729,957	0.42	0.00	0.00	-4.13	-1.78	11.12	7.68	N/A	N/A	5.75	07/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.22	
Difference			-0.27	-0.27	-3.38	-2.30	6.87	1.99	N/A	N/A	-1.47	
Landmark Real Estate VII LP	12,300,585	0.07	0.00	0.00	-2.37	-2.60	1.50	11.73	N/A	N/A	13.32	12/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.22	
Difference			-0.27	-0.27	-1.62	-3.12	-2.75	6.04	N/A	N/A	6.10	

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 September 30, 2020

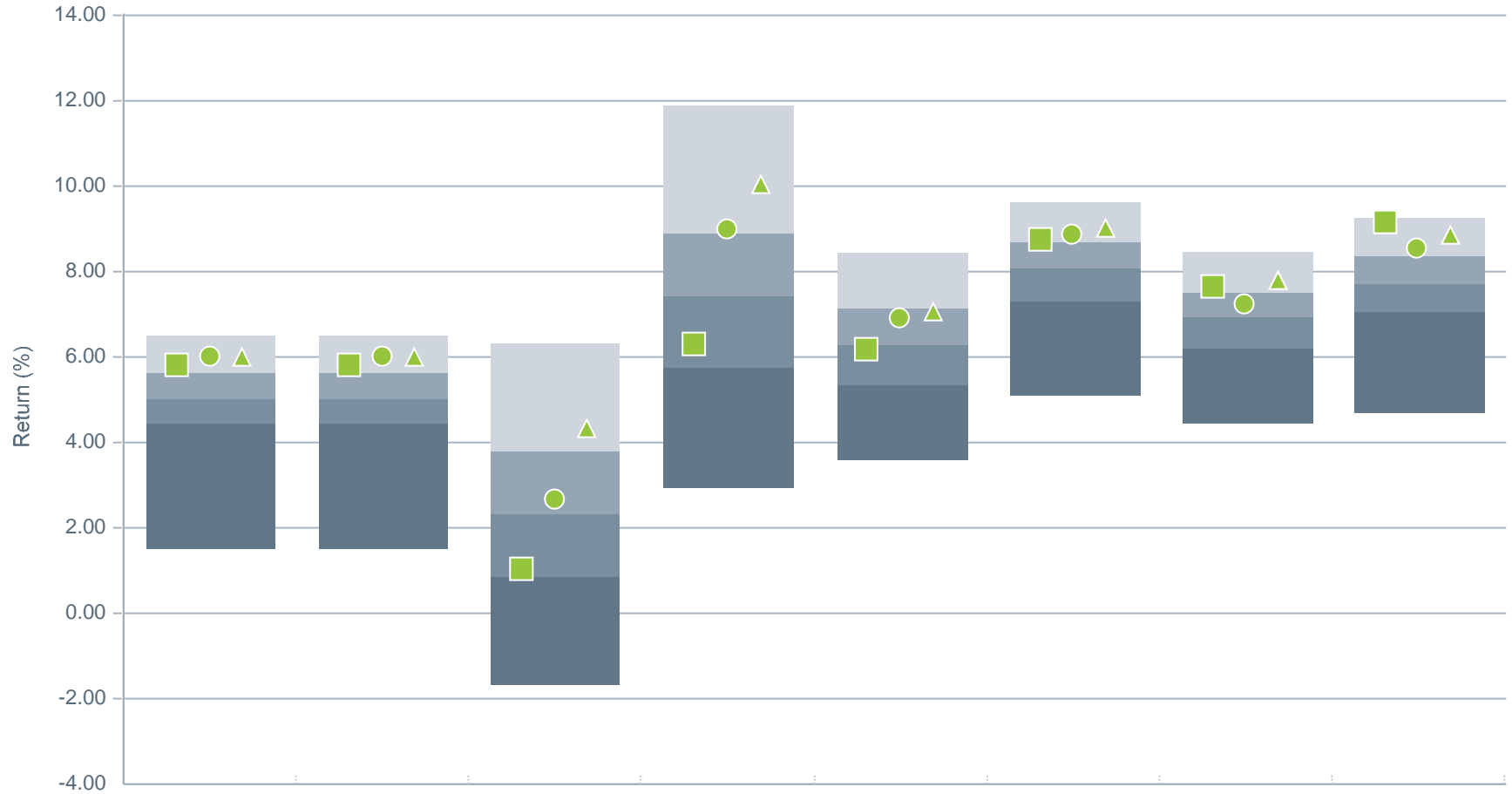
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Lyrical-OTRS Realty Partner IV LP	60,539,057	0.34	0.00	0.00	2.48	5.16	16.16	6.79	N/A	N/A	5.71	11/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.11	
Difference			-0.27	-0.27	3.23	4.64	11.91	1.10	N/A	N/A	-1.40	
Starwood Opportunity X LP	19,193,538	0.11	0.00	0.00	-3.68	-0.86	8.08	11.65	N/A	N/A	11.07	07/01/2015
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	6.09	
Difference			-0.27	-0.27	-2.93	-1.38	3.83	5.96	N/A	N/A	4.98	
Starwood Opportunity XI LP	24,824,271	0.14	0.00	0.00	2.29	10.89	N/A	N/A	N/A	N/A	25.95	08/01/2018
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	3.24	
Difference			-0.27	-0.27	3.04	10.37	N/A	N/A	N/A	N/A	22.71	
Harvey Parkway Building (SA)	7,300,000	0.04	0.00	0.00	-44.36	-44.36	-16.99	N/A	N/A	N/A	-16.12	08/01/2017

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 September 30, 2020



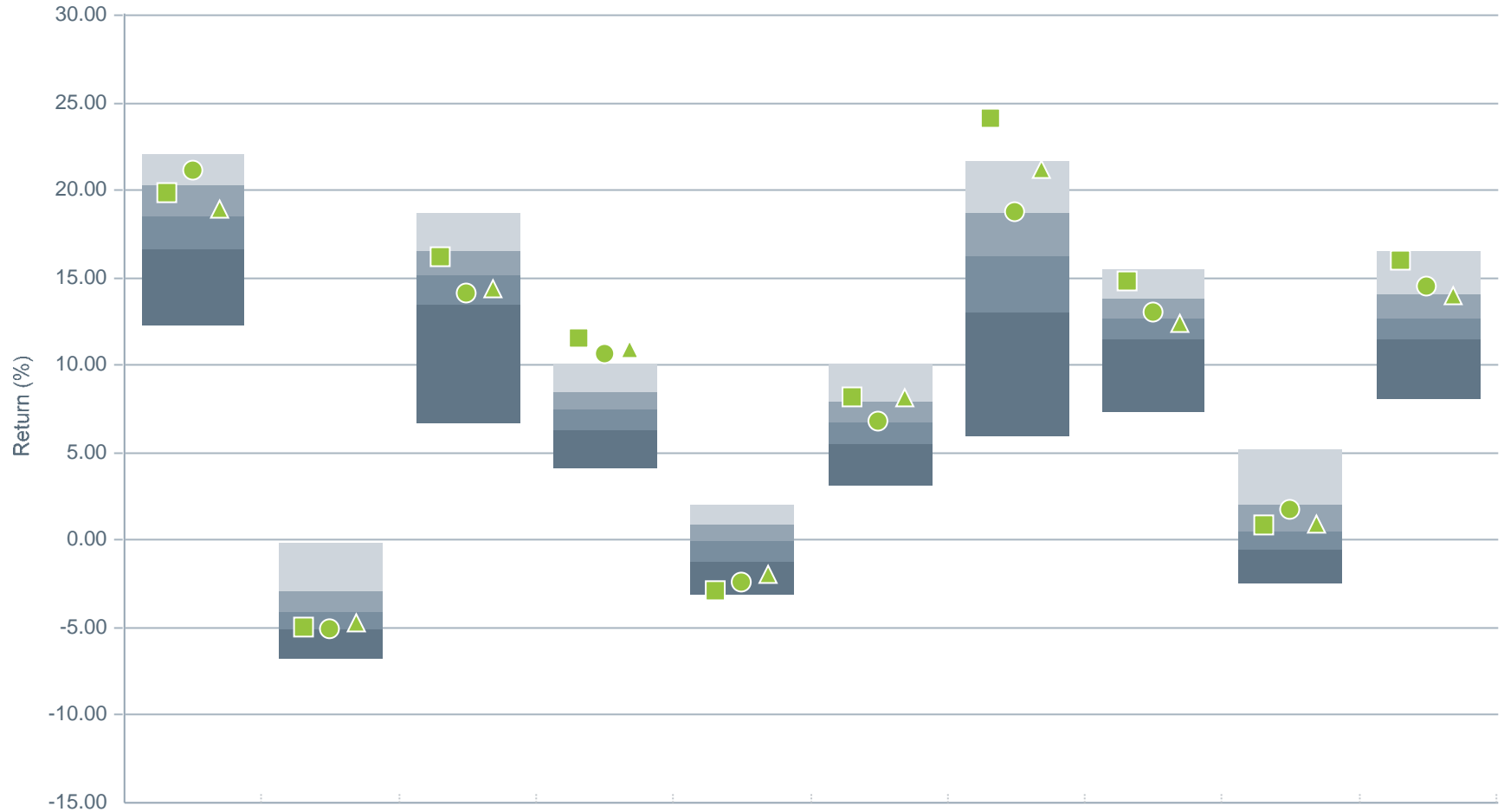
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OTRS Total Fund	5.81 (20)	5.81 (20)	1.00 (73)	6.27 (69)	6.16 (53)	8.74 (24)	7.63 (22)	9.13 (7)
● OTRS Policy Index	5.99 (15)	5.99 (15)	2.64 (45)	8.99 (25)	6.88 (34)	8.84 (22)	7.24 (37)	8.53 (21)
▲ OTRS Allocation Index	6.00 (15)	6.00 (15)	4.32 (18)	10.06 (14)	7.05 (29)	9.02 (16)	7.81 (17)	8.86 (12)
5th Percentile	6.48	6.48	6.32	11.88	8.45	9.65	8.46	9.28
1st Quartile	5.64	5.64	3.78	8.91	7.13	8.68	7.51	8.39
Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70
3rd Quartile	4.45	4.45	0.84	5.74	5.35	7.29	6.20	7.07
95th Percentile	1.51	1.51	-1.66	2.93	3.59	5.12	4.45	4.69

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

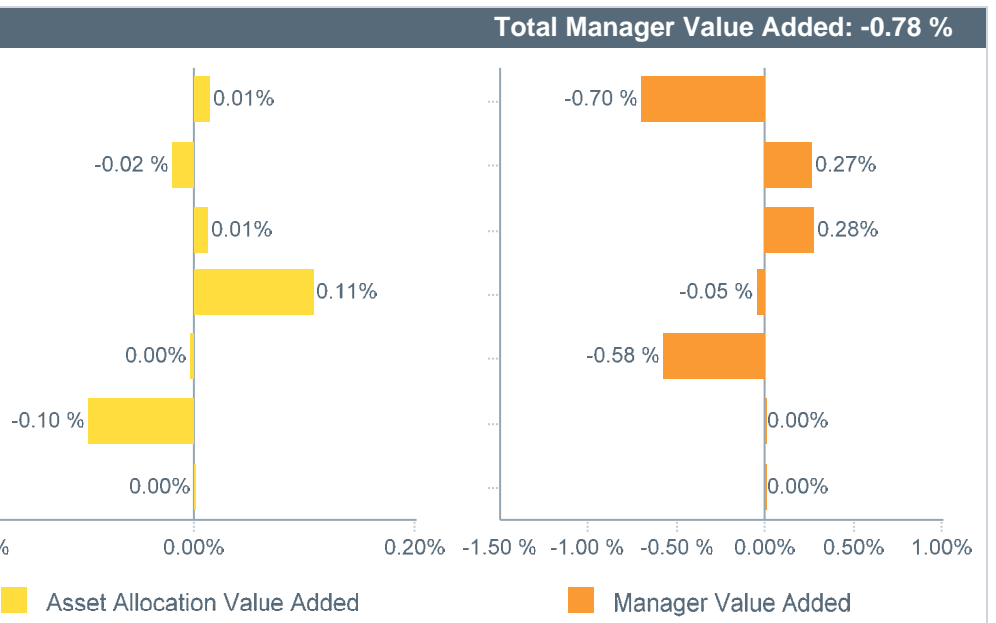
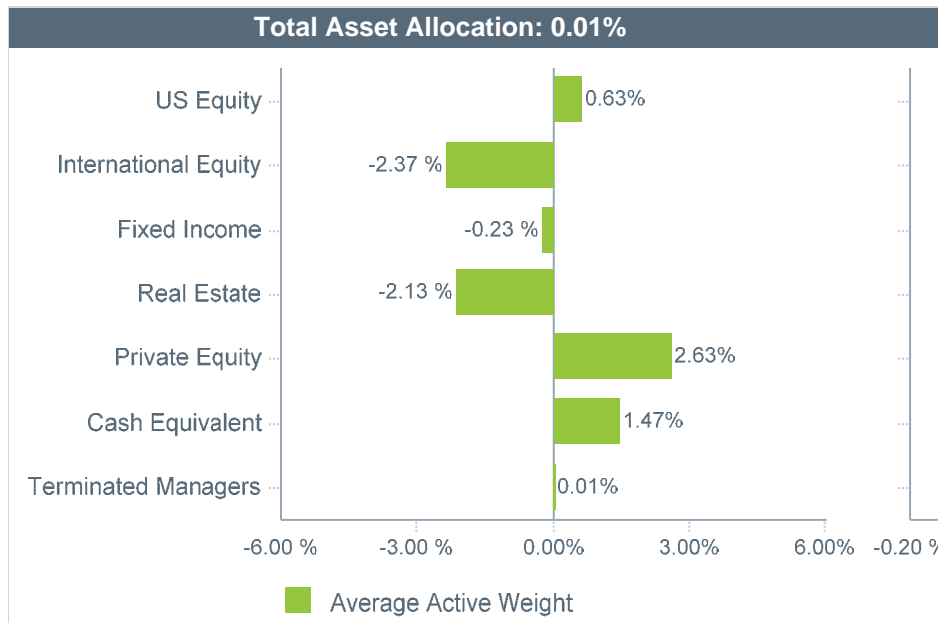
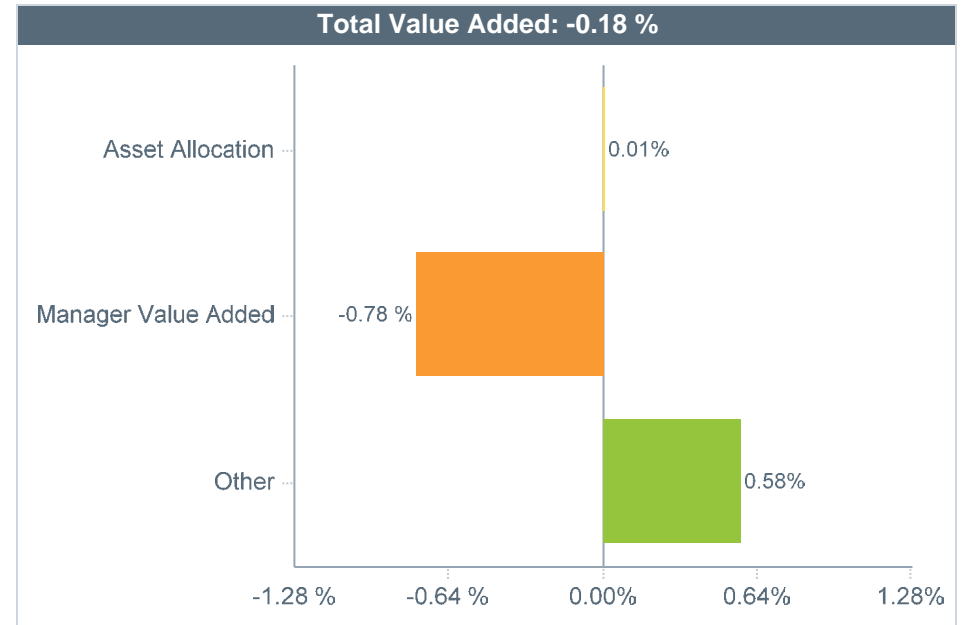
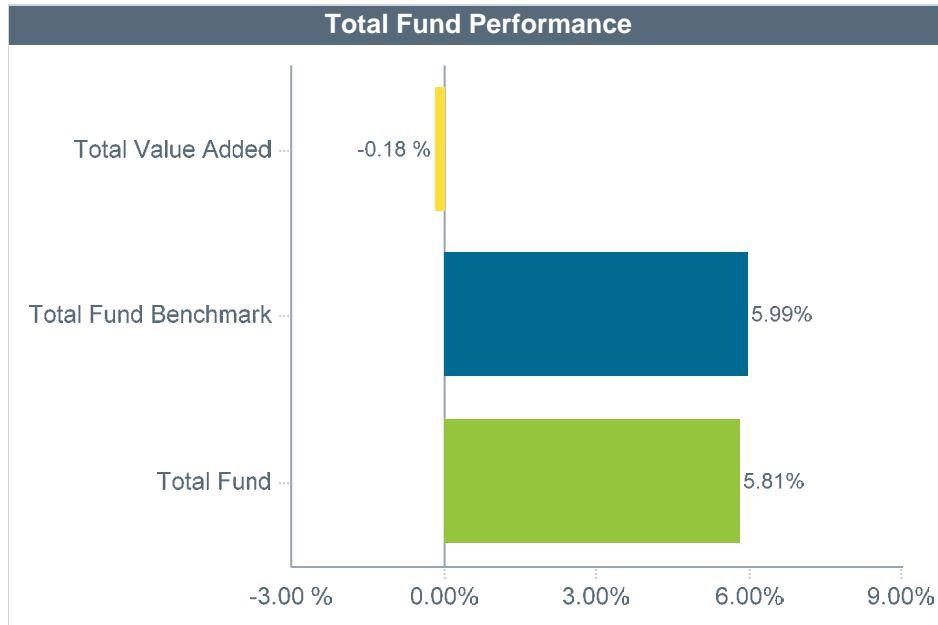
As of September 30, 2020



	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OTRS Total Fund	19.83 (32)	-4.98 (72)	16.20 (31)	11.54 (1)	-2.90 (94)	8.16 (20)	24.03 (2)	14.76 (11)	0.87 (43)	15.91 (9)
● OTRS Policy Index	21.09 (15)	-5.12 (75)	14.05 (68)	10.61 (4)	-2.49 (90)	6.73 (51)	18.69 (26)	12.95 (44)	1.73 (29)	14.44 (19)
▲ OTRS Allocation Index	18.94 (44)	-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	22.04	-0.14	18.72	9.98	2.05	10.13	21.67	15.42	5.21	16.51
1st Quartile	20.27	-2.96	16.57	8.41	0.92	7.93	18.70	13.81	1.97	14.06
Median	18.56	-4.13	15.20	7.42	-0.09	6.74	16.20	12.73	0.54	12.71
3rd Quartile	16.66	-5.14	13.46	6.27	-1.24	5.44	12.94	11.49	-0.56	11.49
95th Percentile	12.30	-6.76	6.67	4.14	-3.17	3.06	6.01	7.33	-2.40	8.04

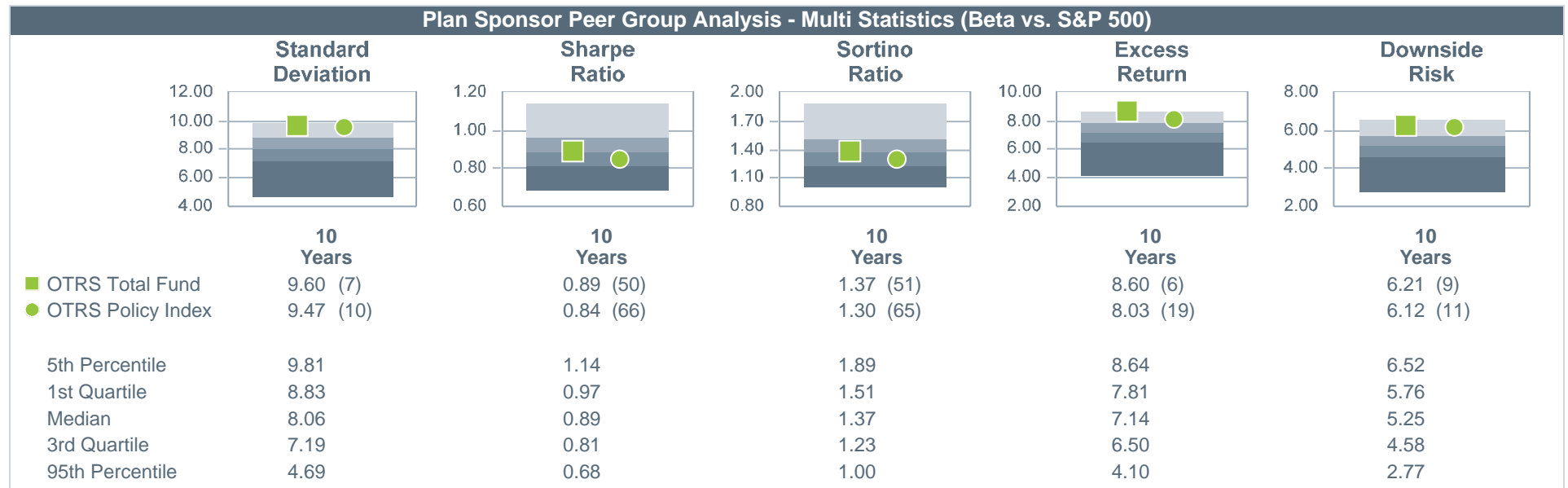
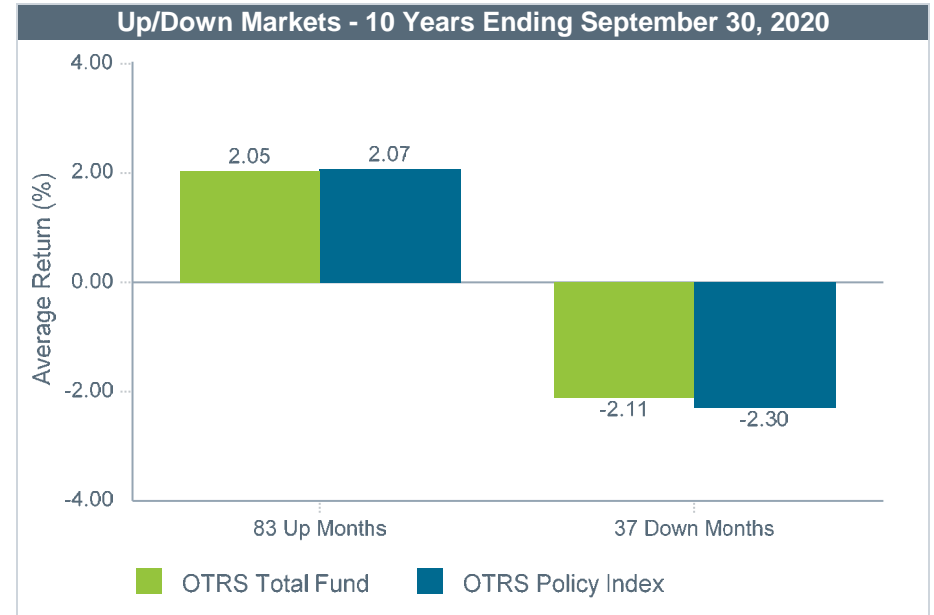
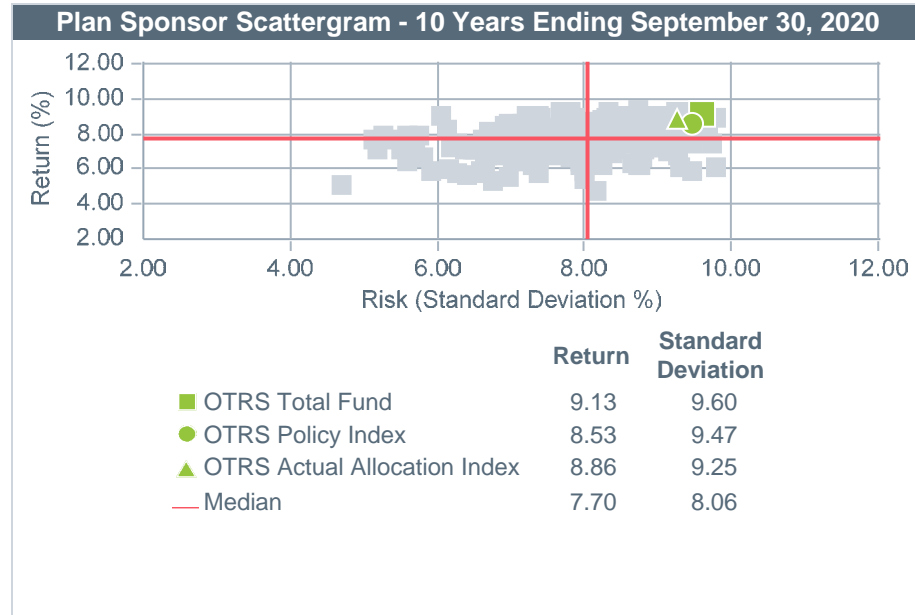
Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



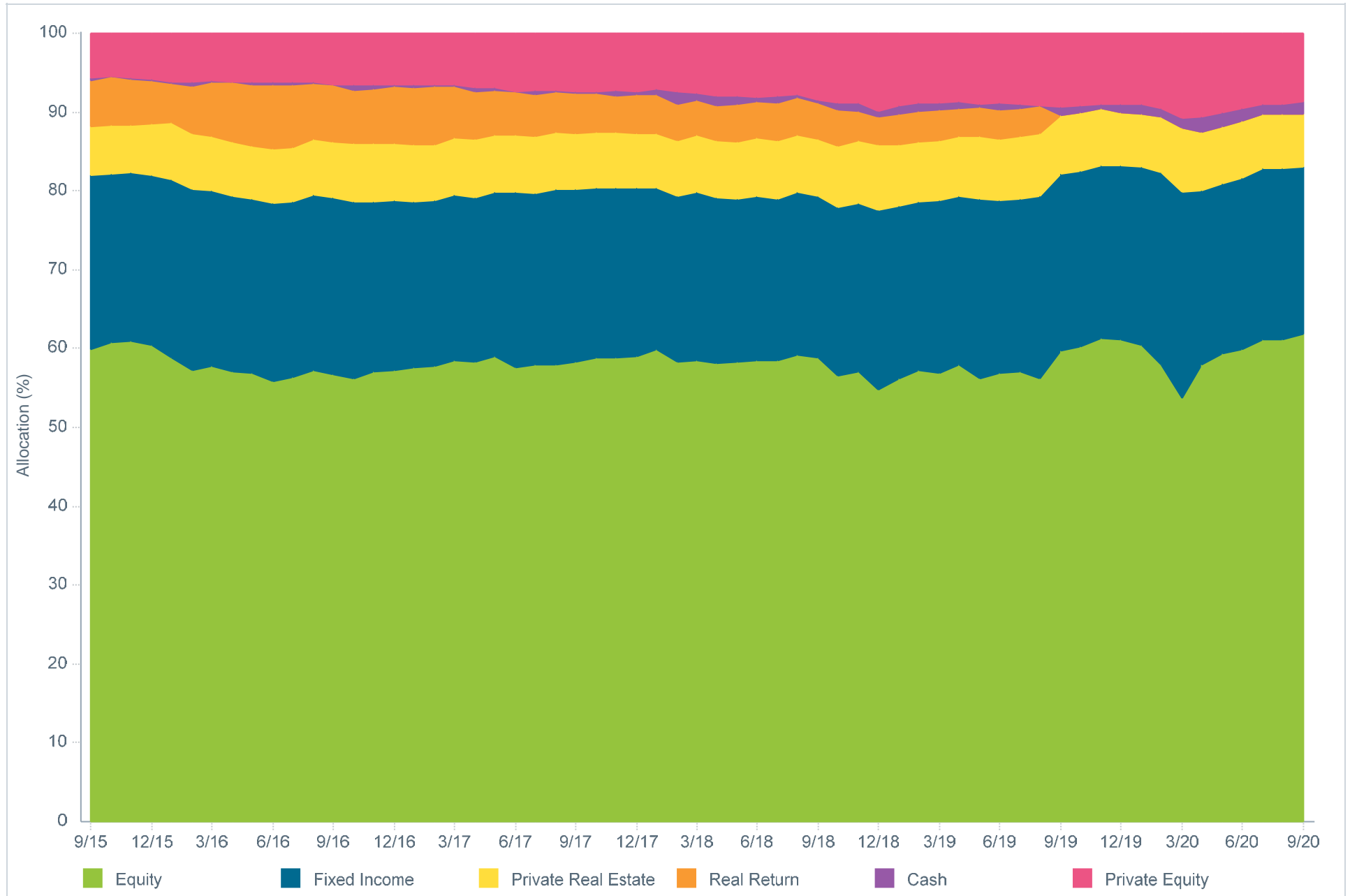


Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation. Allocation to Private Equity includes Private Credit.

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.

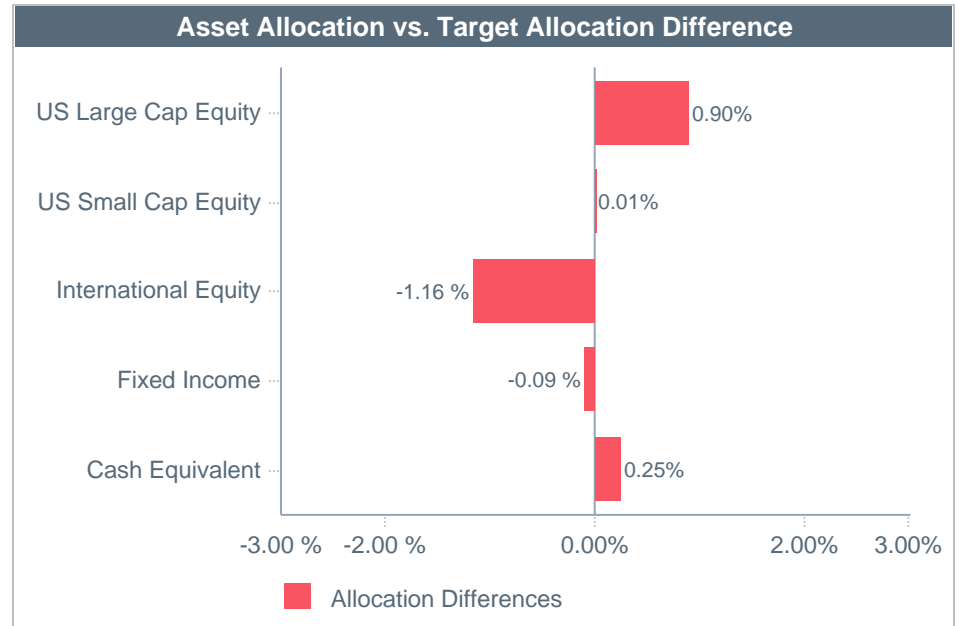


Oklahoma Public Employees Retirement System (OPERS)



	Performance (%)												
	Trailing							Calendar Year					
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OPERS Total Fund (Net)	5.61	5.61	3.16	9.59	6.80	8.72	7.42	8.23	21.23	-6.57	17.01	7.59	-0.90
OPERS Policy Index	5.56	5.56	3.39	9.65	7.07	9.01	7.53	8.15	21.46	-6.09	16.86	8.12	-0.89
Difference	0.05	0.05	-0.23	-0.06	-0.27	-0.29	-0.11	0.08	-0.23	-0.48	0.15	-0.53	-0.01
OPERS Actual Allocation Index	5.44	5.44	2.75	8.91	6.52	8.61	7.28	7.90	20.87	-6.49	16.51	8.09	-0.94
Difference	0.17	0.17	0.41	0.68	0.28	0.11	0.14	0.33	0.36	-0.08	0.50	-0.50	0.04
Actuarial Discount Rate (6.5%)	1.59	1.59	4.84	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Difference	4.02	4.02	-1.68	3.09	0.30	2.22	0.92	1.73	14.73	-13.07	10.51	1.09	-7.40
OPERS Total Fund (Gross)	5.69	5.69	3.28	9.73	6.93	8.85	7.54	8.36	21.38	-6.48	17.13	7.69	-0.77
OPERS Policy Index	5.56	5.56	3.39	9.65	7.07	9.01	7.53	8.15	21.46	-6.09	16.86	8.12	-0.89
Difference	0.13	0.13	-0.11	0.08	-0.14	-0.16	0.01	0.21	-0.08	-0.39	0.27	-0.43	0.12
OPERS Actual Allocation Index	5.44	5.44	2.75	8.91	6.52	8.61	7.28	7.90	20.87	-6.49	16.51	8.09	-0.94
Difference	0.25	0.25	0.53	0.82	0.41	0.24	0.26	0.46	0.51	0.01	0.62	-0.40	0.17
All Public Plans-Total Fund Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	18.56	-4.13	15.20	7.42	-0.09
Rank	23	23	34	17	33	22	24	27	11	93	16	42	65

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OPERS (Public Employees)	10,571,285,775	100.00	100.00
US Large Cap Equity	3,689,008,672	34.90	34.00
US Small Cap Equity	635,147,475	6.01	6.00
International Equity	2,836,965,748	26.84	28.00
Fixed Income	3,373,152,759	31.91	32.00
Cash Equivalent	26,851,120	0.25	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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OPERS Total Fund	10,571,285,775	100.00	5.61	5.61	3.16	9.59	6.80	8.72	7.42	8.23	N/A	03/01/1987
OPERS Policy Index			5.56	5.56	3.39	9.65	7.07	9.01	7.53	8.15	8.22	
Difference			0.05	0.05	-0.23	-0.06	-0.27	-0.29	-0.11	0.08	N/A	
OPERS Actual Allocation Index			5.44	5.44	2.75	8.91	6.52	8.61	7.28	7.90	8.14	
Difference			0.17	0.17	0.41	0.68	0.28	0.11	0.14	0.33	N/A	
Actuarial Discount Rate (6.5%)			1.59	1.59	4.84	6.50	6.50	6.50	6.50	6.50	6.50	
Difference			4.02	4.02	-1.68	3.09	0.30	2.22	0.92	1.73	N/A	
US Equity	4,324,156,148	40.90	8.50	8.50	2.81	12.14	9.78	12.46	11.19	13.06	N/A	09/01/1988
OPERS US Equity Custom Index			8.79	8.79	4.07	13.62	10.77	13.21	11.69	13.23	N/A	
Difference			-0.29	-0.29	-1.26	-1.48	-0.99	-0.75	-0.50	-0.17	N/A	
US Active Large Cap Equity	624,155,534	5.90	8.39	8.39	3.47	13.24	10.11	12.10	10.78	13.10	N/A	08/01/2003
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	9.80	
Difference			-1.08	-1.08	-2.93	-2.77	-2.27	-1.99	-1.76	-0.66	N/A	
AJO Large Cap Absolute Value Equity (SA)	274,435,079	2.60	2.81	2.81	-15.41	-9.97	-0.65	4.29	5.21	9.02	N/A	10/01/2003
Russell 1000 Val Index			5.59	5.59	-11.58	-5.03	2.63	7.66	7.35	9.95	7.73	
Difference			-2.78	-2.78	-3.83	-4.94	-3.28	-3.37	-2.14	-0.93	N/A	
Westfield Large Cap Growth Equity (SA)	349,720,455	3.31	12.90	12.90	22.74	38.05	20.54	N/A	N/A	N/A	22.04	02/01/2017
Russell 1000 Grth Index			13.22	13.22	24.33	37.53	21.67	20.10	17.39	17.25	22.49	
Difference			-0.32	-0.32	-1.59	0.52	-1.13	N/A	N/A	N/A	-0.45	
US Large Cap Enhanced Index Equity	1,231,218,836	11.65	7.71	7.71	0.34	8.95	8.62	11.49	11.07	13.07	N/A	03/01/2000
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	6.66	
Difference			-1.76	-1.76	-6.06	-7.06	-3.76	-2.60	-1.47	-0.69	N/A	
State Street Large Cap Enhanced Index (SA)	609,647,742	5.77	7.70	7.70	2.47	11.31	10.74	12.79	12.25	13.76	8.99	09/01/2004
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	9.62	
Difference			-1.77	-1.77	-3.93	-4.70	-1.64	-1.30	-0.29	0.00	-0.63	
Mellon EB DV Large Cap Stock Index (SA)	621,571,094	5.88	7.73	7.73	3.98	12.85	8.54	11.41	10.77	13.00	N/A	06/01/2004
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	9.38	
Difference			-1.74	-1.74	-2.42	-3.16	-3.84	-2.68	-1.77	-0.76	N/A	

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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Large Cap Passive Equity	1,833,634,302	17.35	9.46	9.46	6.42	16.03	12.41	14.07	12.60	13.80	N/A	01/01/2003
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	10.30	
Difference			-0.01	-0.01	0.02	0.02	0.03	-0.02	0.06	0.04	N/A	
Blackrock Russell 1000 Index (CF)	1,833,634,302	17.35	9.46	9.46	6.42	16.03	12.41	14.12	12.57	13.79	14.66	09/01/2010
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	14.63	
Difference			-0.01	-0.01	0.02	0.02	0.03	0.03	0.03	0.03	0.03	
US Active Small Cap Equity	635,147,475	6.01	7.39	7.39	-2.96	6.54	4.85	9.96	7.55	11.53	N/A	08/01/2003
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	8.39	
Difference			2.46	2.46	5.73	6.15	3.08	1.96	1.13	1.68	N/A	
BHMS Small Cap Value Equity (SA)	200,436,237	1.90	5.08	5.08	-10.31	0.63	-1.46	7.16	5.96	9.87	8.90	12/01/2004
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	5.08	
Difference			2.52	2.52	11.23	15.51	3.67	3.05	2.69	2.78	3.82	
UBS US Small Cap Growth Equity (SA)	264,982,702	2.51	14.42	14.42	25.09	36.61	18.55	15.98	12.20	15.77	N/A	06/01/2003
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	10.15	
Difference			7.26	7.26	21.21	20.90	10.37	4.56	2.98	3.43	N/A	
DePrince Race & Zollo Micro Cap Value (SA)	169,728,537	1.61	0.38	0.38	-22.58	-16.39	-3.31	6.09	3.91	N/A	6.31	03/01/2011
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	5.27	
Difference			-2.18	-2.18	-1.04	-1.51	1.82	1.98	0.64	N/A	1.04	
International Equity	2,836,965,748	26.84	6.90	6.90	-4.13	5.27	2.20	6.91	4.01	4.75	N/A	05/01/1994
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	N/A	
Difference			0.65	0.65	1.31	2.27	1.04	0.68	0.83	0.75	N/A	
International Core Active Equity	548,890,870	5.19	3.03	3.03	-16.31	-7.64	-2.92	2.86	1.53	3.09	N/A	08/01/2003
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	6.72	
Difference			-3.22	-3.22	-10.87	-10.64	-4.08	-3.37	-1.65	-0.91	N/A	
Mondrian ACWI ex US Equity (SA)	548,890,870	5.19	3.03	3.03	-16.31	-7.64	-2.92	2.86	1.53	3.09	N/A	08/01/2001
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	5.52	
Difference			-3.22	-3.22	-10.87	-10.64	-4.08	-3.37	-1.65	-0.91	N/A	

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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Core Passive Equity	1,472,053,533	13.93	6.25	6.25	-5.28	3.21	1.40	6.51	3.43	4.25	N/A	08/01/2003
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	6.72	
Difference			0.00	0.00	0.16	0.21	0.24	0.28	0.25	0.25	N/A	
Blackrock ACWI Ex US Index (CF)	1,472,053,533	13.93	6.25	6.25	-5.28	3.21	1.40	6.51	3.43	4.25	4.72	11/01/2009
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	4.48	
Difference			0.00	0.00	0.16	0.21	0.24	0.28	0.25	0.25	0.24	
International Growth Equity	816,021,345	7.72	10.93	10.93	8.89	21.00	8.11	11.06	7.04	6.85	6.95	05/01/2005
MSCI ACW Ex US Grth Index (USD) (Net)			10.16	10.16	7.27	17.54	7.33	10.16	6.50	6.38	6.54	
Difference			0.77	0.77	1.62	3.46	0.78	0.90	0.54	0.47	0.41	
Baillie Gifford International Growth Equity (SA)	452,177,242	4.28	12.93	12.93	14.92	29.87	10.34	12.87	8.46	N/A	8.46	10/01/2013
MSCI ACW Ex US Grth Index (USD) (Net)			10.16	10.16	7.27	17.54	7.33	10.16	6.50	6.38	6.50	
Difference			2.77	2.77	7.65	12.33	3.01	2.71	1.96	N/A	1.96	
Blackrock ACWI Ex US Growth (CF)	363,844,103	3.44	8.54	8.54	2.23	11.54	5.55	9.04	5.49	5.79	6.37	11/01/2009
MSCI ACW Ex US Grth Index (USD) (Net)			10.16	10.16	7.27	17.54	7.33	10.16	6.50	6.38	6.93	
Difference			-1.62	-1.62	-5.04	-6.00	-1.78	-1.12	-1.01	-0.59	-0.56	
Fixed Income	3,373,152,759	31.91	1.18	1.18	9.89	9.59	6.74	5.19	4.89	4.55	N/A	04/01/1989
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	6.26	
Difference			0.56	0.56	3.10	2.61	1.50	1.01	0.92	0.91	N/A	
Active Fixed Income	1,382,826,989	13.08	0.92	0.92	12.55	11.21	8.17	6.02	5.97	5.50	N/A	08/01/2003
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.49	
Difference			0.30	0.30	5.76	4.23	2.93	1.84	2.00	1.86	N/A	
MetWest Core Plus Fixed Income (SA)	998,751,300	9.45	1.08	1.08	8.12	8.37	6.05	4.77	4.45	4.44	N/A	09/01/2001
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.66	
Difference			0.46	0.46	1.33	1.39	0.81	0.59	0.48	0.80	N/A	
Hoisington Long Duration Fixed Income (SA)	384,075,689	3.63	0.49	0.49	24.22	18.21	13.52	8.75	10.05	8.06	N/A	10/01/1991
Bloomberg US Trsy Lng Trm Bond Index			0.12	0.12	21.35	16.34	11.87	8.21	8.77	7.21	8.10	
Difference			0.37	0.37	2.87	1.87	1.65	0.54	1.28	0.85	N/A	

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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Enhanced Fixed Income	1,627,089,264	15.39	0.99	0.99	7.76	8.06	5.70	4.58	4.28	3.98	N/A	06/01/2000
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.19	
Difference			0.37	0.37	0.97	1.08	0.46	0.40	0.31	0.34	N/A	
Blackrock Enhanced Core (SA)	1,627,089,264	15.39	0.99	0.99	7.76	8.06	5.70	4.58	4.28	3.98	N/A	06/01/2000
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.19	
Difference			0.37	0.37	0.97	1.08	0.46	0.40	0.31	0.34	N/A	
Passive Fixed Income	363,236,505	3.44	3.09	3.09	9.40	10.30	5.94	4.78	3.52	3.69	4.04	03/01/2010
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.00	
Difference			2.47	2.47	2.61	3.32	0.70	0.60	-0.45	0.05	0.04	
Blackrock TIPS (SA)	363,236,505	3.44	3.09	3.09	9.40	10.30	5.94	4.78	3.52	3.69	4.04	03/01/2010
Bloomberg US Trsy US TIPS Index			3.03	3.03	9.22	10.08	5.79	4.61	3.38	3.57	4.00	
Difference			0.06	0.06	0.18	0.22	0.15	0.17	0.14	0.12	0.04	
Real Estate	10,160,000	0.10	0.11	0.11	-10.06	-8.12	-1.69	0.44	N/A	N/A	0.46	12/01/2015
NCREIF ODCE Index (EWA) (Net)			0.38	0.38	-0.40	0.90	4.64	6.09	7.92	9.43	6.31	
Difference			-0.27	-0.27	-9.66	-9.02	-6.33	-5.65	N/A	N/A	-5.85	
Grand Centre (CF)	10,160,000	0.10	0.11	0.11	-10.06	-8.12	-1.69	N/A	N/A	N/A	0.46	12/01/2015
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	5.89	
Difference			-0.16	-0.16	-9.31	-8.64	-5.94	N/A	N/A	N/A	-5.43	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OPERS Total Fund	10,571,285,775	100.00	5.69	5.69	3.28	9.73	6.93	8.85	7.54	8.36	8.34	03/01/1987
OPERS Policy Index			5.56	5.56	3.39	9.65	7.07	9.01	7.53	8.15	8.22	
Difference			0.13	0.13	-0.11	0.08	-0.14	-0.16	0.01	0.21	0.12	
OPERS Actual Allocation Index			5.44	5.44	2.75	8.91	6.52	8.61	7.28	7.90	8.14	
Difference			0.25	0.25	0.53	0.82	0.41	0.24	0.26	0.46	0.20	
Actuarial Discount Rate (6.5%)			1.59	1.59	4.84	6.50	6.50	6.50	6.50	6.50	6.50	
Difference			4.10	4.10	-1.56	3.23	0.43	2.35	1.04	1.86	1.84	
All Public Plans-Total Fund Median			5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	8.09	
Rank			23	23	34	17	33	22	24	27	25	
US Equity	4,324,156,148	40.90	8.59	8.59	2.92	12.29	9.92	12.59	11.31	13.18	10.16	09/01/1988
OPERS US Equity Custom Index			8.79	8.79	4.07	13.62	10.77	13.21	11.69	13.23	N/A	
Difference			-0.20	-0.20	-1.15	-1.33	-0.85	-0.62	-0.38	-0.05	N/A	
IM U.S. Equity (SA+CF) Median			6.98	6.98	-2.35	5.79	7.14	10.71	9.45	12.19	11.36	
Rank			37	37	41	40	42	40	40	42	93	
US Active Large Cap Equity	624,155,534	5.90	8.40	8.40	3.51	13.30	10.17	12.18	10.94	13.24	8.97	08/01/2003
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	9.80	
Difference			-1.07	-1.07	-2.89	-2.71	-2.21	-1.91	-1.60	-0.52	-0.83	
IM U.S. Large Cap Equity (SA+CF) Median			8.45	8.45	4.02	13.31	10.98	13.11	12.07	13.49	9.92	
Rank			51	51	51	51	54	57	59	54	75	
AJO Large Cap Absolute Value Equity (SA)	274,435,079	2.60	2.81	2.81	-15.41	-9.97	-0.65	4.29	5.31	9.11	7.39	10/01/2003
Russell 1000 Val Index			5.59	5.59	-11.58	-5.03	2.63	7.66	7.35	9.95	7.73	
Difference			-2.78	-2.78	-3.83	-4.94	-3.28	-3.37	-2.04	-0.84	-0.34	
IM U.S. Large Cap Value Equity (SA+CF) Median			5.39	5.39	-10.38	-3.35	3.51	8.06	7.79	10.39	8.71	
Rank			87	87	81	87	87	96	90	83	88	
Westfield Large Cap Growth Equity (SA)	349,720,455	3.31	12.92	12.92	22.80	38.14	20.64	N/A	N/A	N/A	22.27	02/01/2017
Russell 1000 Grth Index			13.22	13.22	24.33	37.53	21.67	20.10	17.39	17.25	22.49	
Difference			-0.30	-0.30	-1.53	0.61	-1.03	N/A	N/A	N/A	-0.22	
IM U.S. Large Cap Growth Equity (SA+CF) Median			11.14	11.14	21.85	33.27	19.69	18.16	16.03	16.36	20.62	
Rank			24	24	44	25	44	N/A	N/A	N/A	36	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Large Cap Enhanced Index Equity	1,231,218,836	11.65	7.72	7.72	0.36	8.97	8.65	11.52	11.10	13.11	5.36	03/01/2000
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	6.66	
Difference			-1.75	-1.75	-6.04	-7.04	-3.73	-2.57	-1.44	-0.65	-1.30	
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median			8.29	8.29	3.92	12.62	10.71	13.07	12.40	13.73	7.05	
Rank			58	58	62	66	66	69	66	63	100	
State Street Large Cap Enhanced Index (SA)	609,647,742	5.77	7.70	7.70	2.48	11.33	10.77	12.83	12.28	13.79	9.05	09/01/2004
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	9.62	
Difference			-1.77	-1.77	-3.92	-4.68	-1.61	-1.26	-0.26	0.03	-0.57	
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median			8.29	8.29	3.92	12.62	10.71	13.07	12.40	13.73	9.67	
Rank			58	58	56	57	50	52	54	49	77	
Mellon EB DV Large Cap Stock Index (SA)	621,571,094	5.88	7.73	7.73	4.00	12.87	8.57	11.44	10.80	13.03	8.50	06/01/2004
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	9.38	
Difference			-1.74	-1.74	-2.40	-3.14	-3.81	-2.65	-1.74	-0.73	-0.88	
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median			8.29	8.29	3.92	12.62	10.71	13.07	12.40	13.73	9.43	
Rank			58	58	50	49	67	69	68	65	86	
US Large Cap Passive Equity	1,833,634,302	17.35	9.46	9.46	6.42	16.03	12.42	14.08	12.61	13.81	10.49	01/01/2003
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	10.30	
Difference			-0.01	-0.01	0.02	0.02	0.04	-0.01	0.07	0.05	0.19	
Blackrock Russell 1000 Index (CF)	1,833,634,302	17.35	9.46	9.46	6.42	16.03	12.42	14.13	12.58	13.79	14.67	09/01/2010
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	14.63	
Difference			-0.01	-0.01	0.02	0.02	0.04	0.04	0.04	0.03	0.04	
IM U.S. Large Cap Index Equity (SA+CF) Median			9.03	9.03	5.55	15.11	12.26	14.07	12.57	13.72	14.58	
Rank			24	24	19	21	23	40	49	27	24	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Active Small Cap Equity	635,147,475	6.01	7.96	7.96	-2.28	7.39	5.62	10.66	8.19	12.17	10.91	08/01/2003
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	8.39	
Difference			3.03	3.03	6.41	7.00	3.85	2.66	1.77	2.32	2.52	
IM U.S. Small Cap Equity (SA+CF) Median			5.10	5.10	-9.39	-1.86	1.80	8.03	6.90	10.61	9.80	
Rank			26	26	33	33	35	35	40	37	32	
BHMS Small Cap Value Equity (SA)	200,436,237	1.90	5.20	5.20	-9.96	1.15	-0.95	7.71	6.51	10.44	9.53	12/01/2004
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	5.08	
Difference			2.64	2.64	11.58	16.03	4.18	3.60	3.24	3.35	4.45	
IM U.S. Small Cap Value Equity (SA+CF) Median			2.39	2.39	-19.54	-13.35	-3.72	4.39	4.27	8.57	7.09	
Rank			24	24	13	7	26	16	14	14	7	
UBS US Small Cap Growth Equity (SA)	264,982,702	2.51	15.65	15.65	26.54	38.25	19.59	16.86	12.92	16.45	12.07	06/01/2003
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	10.15	
Difference			8.49	8.49	22.66	22.54	11.41	5.44	3.70	4.11	1.92	
IM U.S. Small Cap Growth Equity (SA+CF) Median			9.05	9.05	11.07	20.98	13.56	15.11	11.70	14.77	12.42	
Rank			10	10	18	20	26	33	36	23	61	
DePrince Race & Zollo Micro Cap Value (SA)	169,728,537	1.61	0.52	0.52	-22.31	-16.02	-2.60	6.70	4.51	N/A	6.94	03/01/2011
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	5.27	
Difference			-2.04	-2.04	-0.77	-1.14	2.53	2.59	1.24	N/A	1.67	
IM U.S. Micro Cap Equity (SA+CF) Median			6.02	6.02	-10.59	-2.84	-0.05	8.49	6.22	11.50	9.07	
Rank			81	81	81	85	63	59	74	N/A	82	
International Equity	2,836,965,748	26.84	7.00	7.00	-3.97	5.46	2.36	7.08	4.18	4.92	5.71	05/01/1994
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	N/A	
Difference			0.75	0.75	1.47	2.46	1.20	0.85	1.00	0.92	N/A	
IM All ACWI Ex US (SA+CF) Median			8.08	8.08	-1.01	7.96	3.26	7.38	5.00	6.26	7.10	
Rank			65	65	61	58	57	54	63	73	97	
International Core Active Equity	548,890,870	5.19	3.11	3.11	-16.00	-7.31	-2.56	3.24	1.90	3.46	6.28	08/01/2003
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	6.72	
Difference			-3.14	-3.14	-10.56	-10.31	-3.72	-2.99	-1.28	-0.54	-0.44	
IM All ACWI Ex US (SA+CF) Median			8.08	8.08	-1.01	7.96	3.26	7.38	5.00	6.26	8.18	
Rank			92	92	93	94	87	92	89	90	89	
Mondrian ACWI ex US Equity (SA)	548,890,870	5.19	3.11	3.11	-16.00	-7.31	-2.56	3.24	1.90	3.46	6.17	08/01/2001
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	5.52	
Difference			-3.14	-3.14	-10.56	-10.31	-3.72	-2.99	-1.28	-0.54	0.65	
IM ACWI Ex US Core (SA+CF) Median			8.08	8.08	-1.17	7.69	2.49	6.86	4.50	6.16	N/A	
Rank			100	100	100	100	99	100	100	100	N/A	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Core Passive Equity	1,472,053,533	13.93	6.25	6.25	-5.27	3.21	1.43	6.54	3.47	4.29	6.40	08/01/2003
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	6.72	
Difference			0.00	0.00	0.17	0.21	0.27	0.31	0.29	0.29	-0.32	
Blackrock ACWI Ex US Index (CF)	1,472,053,533	13.93	6.25	6.25	-5.27	3.21	1.43	6.54	3.47	4.29	4.77	11/01/2009
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	4.48	
Difference			0.00	0.00	0.17	0.21	0.27	0.31	0.29	0.29	0.29	
International Growth Equity	816,021,345	7.72	11.24	11.24	9.26	21.44	8.34	11.33	7.26	7.02	7.09	05/01/2005
MSCI ACW Ex US Grth Index (USD) (Net)			10.16	10.16	7.27	17.54	7.33	10.16	6.50	6.38	6.54	
Difference			1.08	1.08	1.99	3.90	1.01	1.17	0.76	0.64	0.55	
IM ACWI Ex US Growth (SA+CF) Median			10.37	10.37	6.72	17.67	7.62	10.53	7.54	8.25	8.03	
Rank			36	36	42	40	46	39	59	75	77	
Baillie Gifford International Growth Equity (SA)	452,177,242	4.28	13.50	13.50	15.61	30.72	10.73	13.36	8.85	N/A	8.85	10/01/2013
MSCI ACW Ex US Grth Index (USD) (Net)			10.16	10.16	7.27	17.54	7.33	10.16	6.50	6.38	6.50	
Difference			3.34	3.34	8.34	13.18	3.40	3.20	2.35	N/A	2.35	
IM ACWI Ex US Growth (SA+CF) Median			10.37	10.37	6.72	17.67	7.62	10.53	7.54	8.25	7.54	
Rank			10	10	18	10	15	17	20	N/A	20	
Blackrock ACWI Ex US Growth (CF)	363,844,103	3.44	8.55	8.55	2.24	11.55	5.59	9.09	5.54	5.84	6.43	11/01/2009
MSCI ACW Ex US Grth Index (USD) (Net)			10.16	10.16	7.27	17.54	7.33	10.16	6.50	6.38	6.93	
Difference			-1.61	-1.61	-5.03	-5.99	-1.74	-1.07	-0.96	-0.54	-0.50	
IM ACWI Ex US Growth (SA+CF) Median			10.37	10.37	6.72	17.67	7.62	10.53	7.54	8.25	8.86	
Rank			76	76	76	79	71	69	88	92	98	

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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income	3,373,152,759	31.91	1.22	1.22	9.98	9.69	6.83	5.27	4.97	4.66	7.05	04/01/1989
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	6.26	
Difference			0.60	0.60	3.19	2.71	1.59	1.09	1.00	1.02	0.79	
IM U.S. Broad Market Fixed Income (SA+CF) Median			1.32	1.32	7.31	7.55	5.72	4.87	4.56	4.40	6.69	
Rank			56	56	3	4	3	25	20	34	12	
Active Fixed Income	1,382,826,989	13.08	1.00	1.00	12.68	11.36	8.30	6.12	6.08	5.65	6.91	08/01/2003
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.49	
Difference			0.38	0.38	5.89	4.38	3.06	1.94	2.11	2.01	2.42	
IM U.S. Broad Market Fixed Income (SA+CF) Median			1.32	1.32	7.31	7.55	5.72	4.87	4.56	4.40	5.15	
Rank			71	71	1	2	1	6	3	7	3	
MetWest Core Plus Fixed Income (SA)	998,751,300	9.45	1.18	1.18	8.26	8.52	6.18	4.86	4.55	4.58	5.80	09/01/2001
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.66	
Difference			0.56	0.56	1.47	1.54	0.94	0.68	0.58	0.94	1.14	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			1.71	1.71	6.96	7.44	5.72	5.09	4.70	4.65	5.57	
Rank			83	83	11	19	15	65	61	55	35	
Hoisington Long Duration Fixed Income (SA)	384,075,689	3.63	0.52	0.52	24.34	18.35	13.67	8.89	10.19	8.21	8.99	10/01/1991
Bloomberg US Trsy Lng Trm Bond Index			0.12	0.12	21.35	16.34	11.87	8.21	8.77	7.21	8.10	
Difference			0.40	0.40	2.99	2.01	1.80	0.68	1.42	1.00	0.89	
IM U.S. Long Duration (SA+CF) Median			1.69	1.69	13.77	12.56	10.34	9.25	8.84	7.92	N/A	
Rank			100	100	1	1	1	71	4	31	N/A	
Enhanced Fixed Income	1,627,089,264	15.39	0.99	0.99	7.82	8.14	5.78	4.66	4.37	4.06	5.41	06/01/2000
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.19	
Difference			0.37	0.37	1.03	1.16	0.54	0.48	0.40	0.42	0.22	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			1.11	1.11	7.33	7.55	5.67	4.73	4.44	4.17	5.58	
Rank			60	60	34	30	41	54	58	61	76	
Blackrock Enhanced Core (SA)	1,627,089,264	15.39	0.99	0.99	7.82	8.14	5.78	4.66	4.37	4.06	5.41	06/01/2000
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.19	
Difference			0.37	0.37	1.03	1.16	0.54	0.48	0.40	0.42	0.22	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			1.11	1.11	7.33	7.55	5.67	4.73	4.44	4.17	5.58	
Rank			60	60	34	30	41	54	58	61	76	

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 September 30, 2020

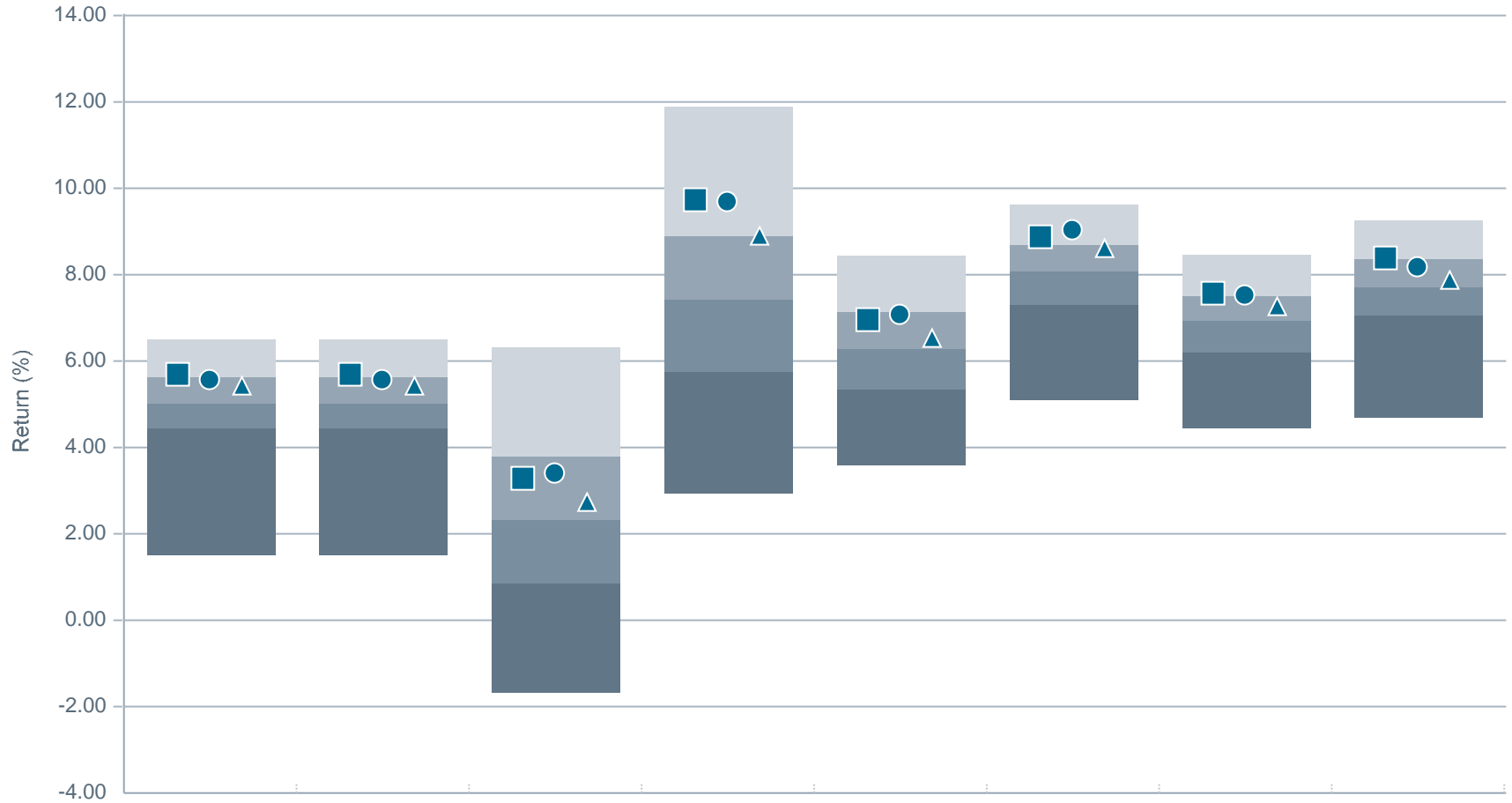
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Passive Fixed Income	363,236,505	3.44	3.10	3.10	9.40	10.31	5.95	4.79	3.53	3.70	4.05	03/01/2010
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.00	
Difference			2.48	2.48	2.61	3.33	0.71	0.61	-0.44	0.06	0.05	
Blackrock TIPS (SA)	363,236,505	3.44	3.10	3.10	9.40	10.31	5.95	4.79	3.53	3.70	4.05	03/01/2010
Bloomberg US Trsy US TIPS Index			3.03	3.03	9.22	10.08	5.79	4.61	3.38	3.57	4.00	
Difference			0.07	0.07	0.18	0.23	0.16	0.18	0.15	0.13	0.05	
IM U.S. TIPS (SA+CF) Median			3.01	3.01	9.22	10.07	5.80	4.61	3.38	3.57	3.99	
Rank			39	39	22	21	28	24	22	25	33	
Real Estate	10,160,000	0.10	0.11	0.11	-10.06	-8.12	-1.69	0.44	N/A	N/A	0.46	12/01/2015
NCREIF ODCE Index (EWA) (Net)			0.38	0.38	-0.40	0.90	4.64	6.09	7.92	9.43	6.31	
Difference			-0.27	-0.27	-9.66	-9.02	-6.33	-5.65	N/A	N/A	-5.85	
Grand Centre (CF)	10,160,000	0.10	0.11	0.11	-10.06	-8.12	-1.69	N/A	N/A	N/A	0.46	12/01/2015
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	5.89	
Difference			-0.16	-0.16	-9.31	-8.64	-5.94	N/A	N/A	N/A	-5.43	

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 September 30, 2020



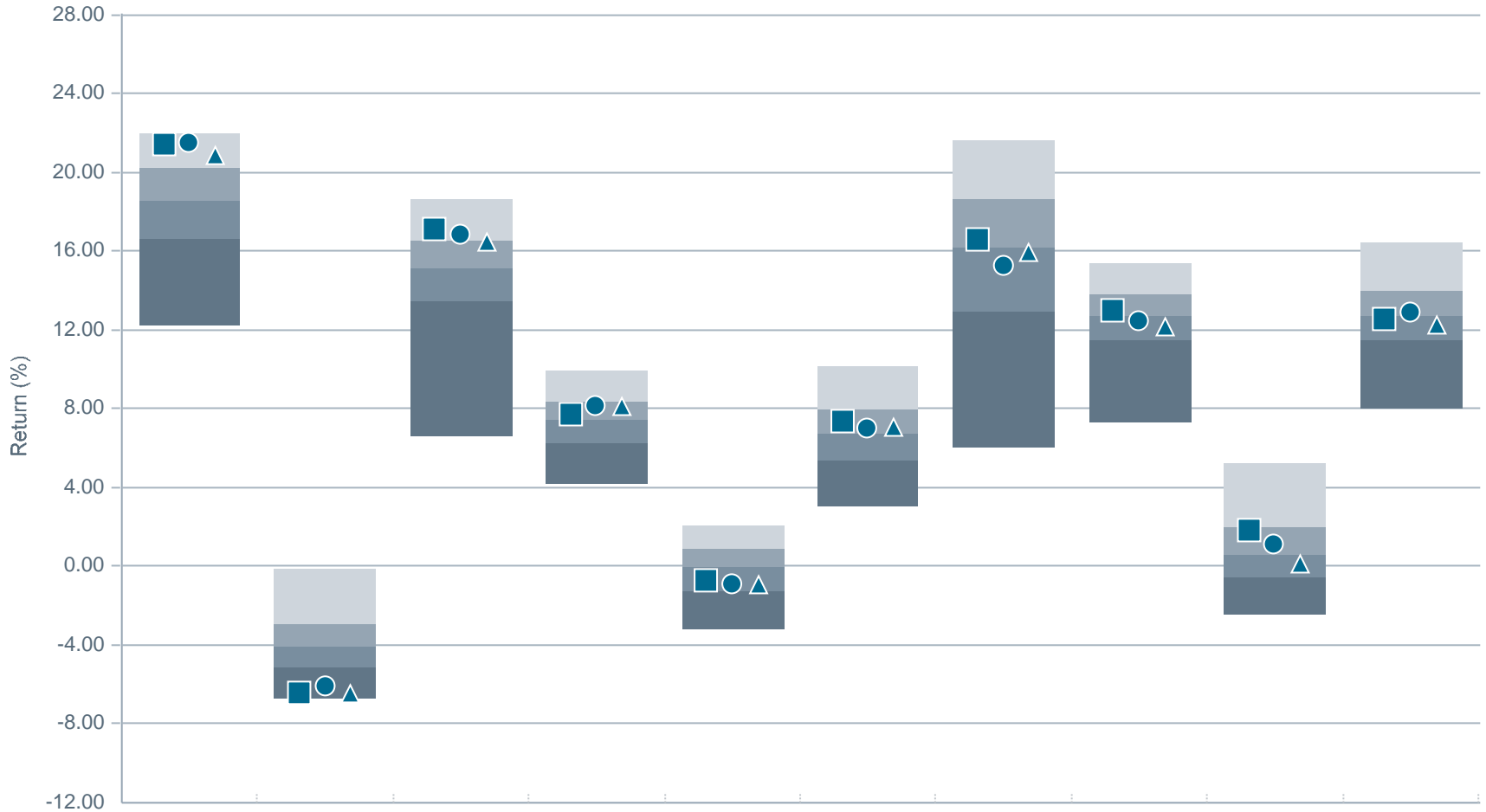
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OPERS Total Fund	5.69 (23)	5.69 (23)	3.28 (34)	9.73 (17)	6.93 (33)	8.85 (22)	7.54 (24)	8.36 (27)
● OPERS Policy Index	5.56 (28)	5.56 (28)	3.39 (31)	9.65 (17)	7.07 (29)	9.01 (16)	7.53 (25)	8.15 (35)
▲ OPERS Allocation Index	5.44 (35)	5.44 (35)	2.75 (43)	8.91 (26)	6.52 (43)	8.61 (28)	7.28 (35)	7.90 (44)
5th Percentile	6.48	6.48	6.32	11.88	8.45	9.65	8.46	9.28
1st Quartile	5.64	5.64	3.78	8.91	7.13	8.68	7.51	8.39
Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70
3rd Quartile	4.45	4.45	0.84	5.74	5.35	7.29	6.20	7.07
95th Percentile	1.51	1.51	-1.66	2.93	3.59	5.12	4.45	4.69

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

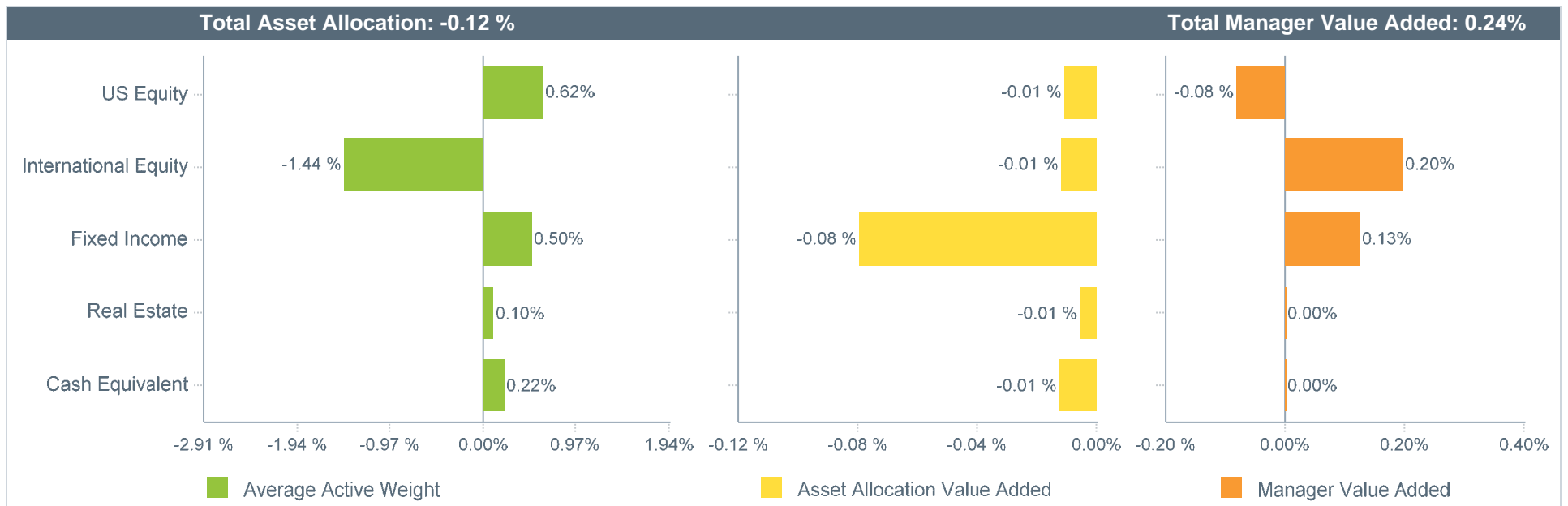
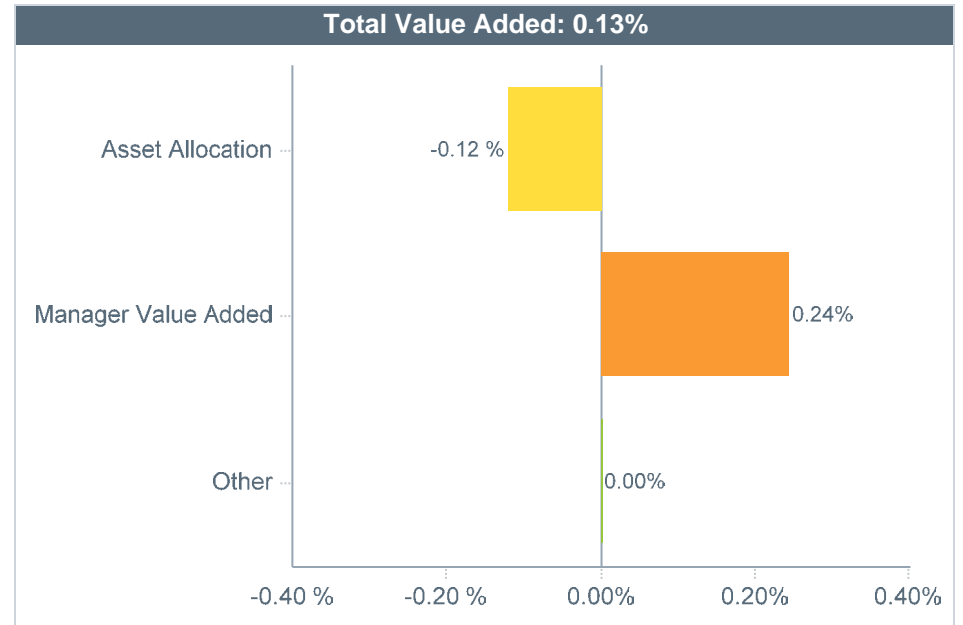
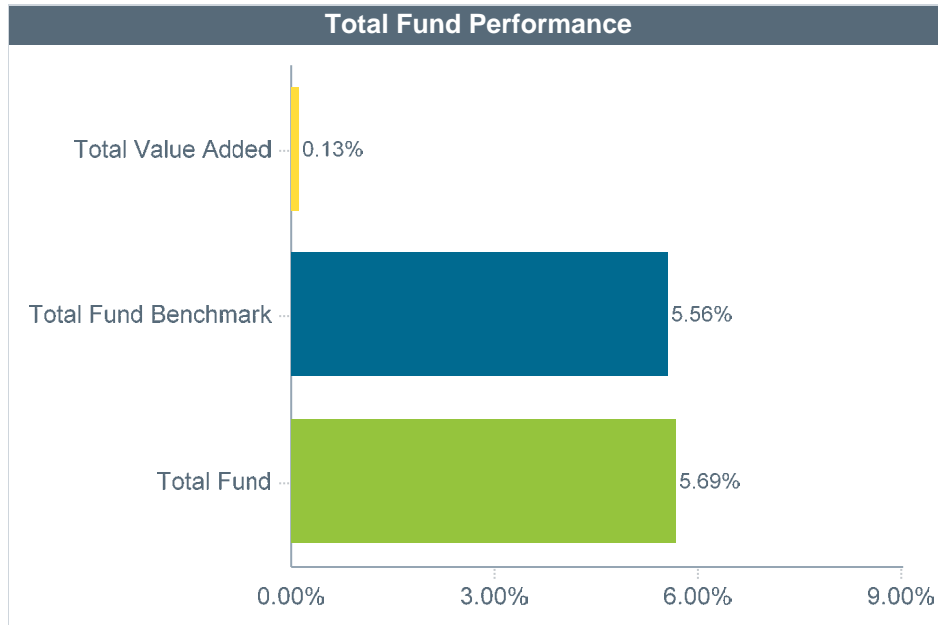
As of September 30, 2020



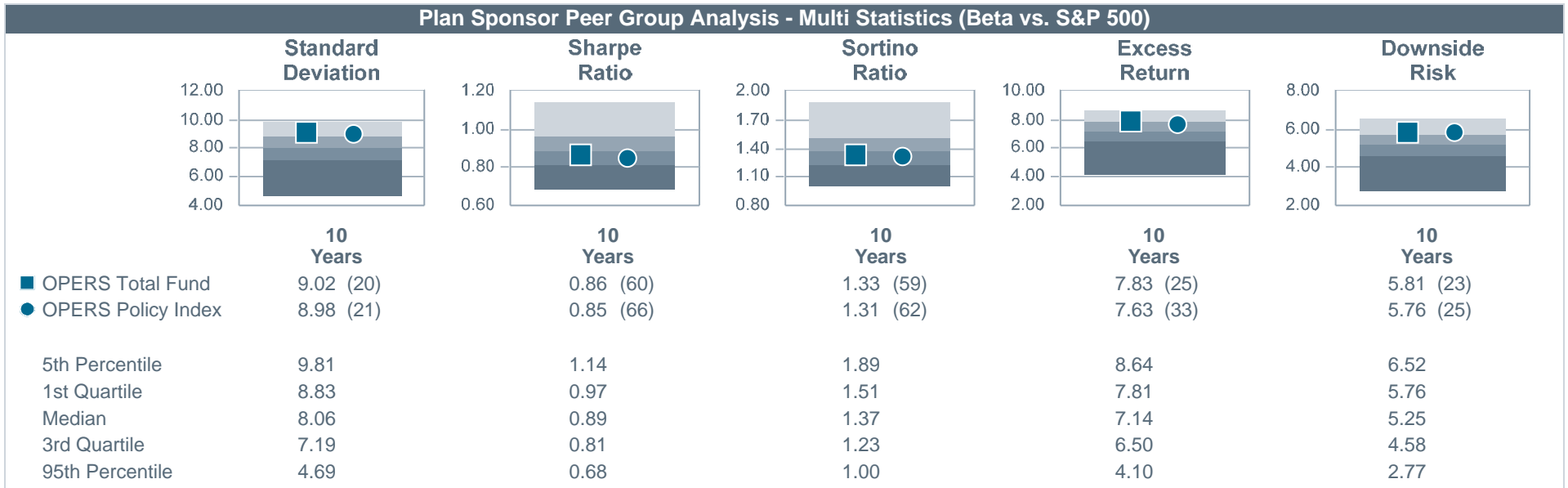
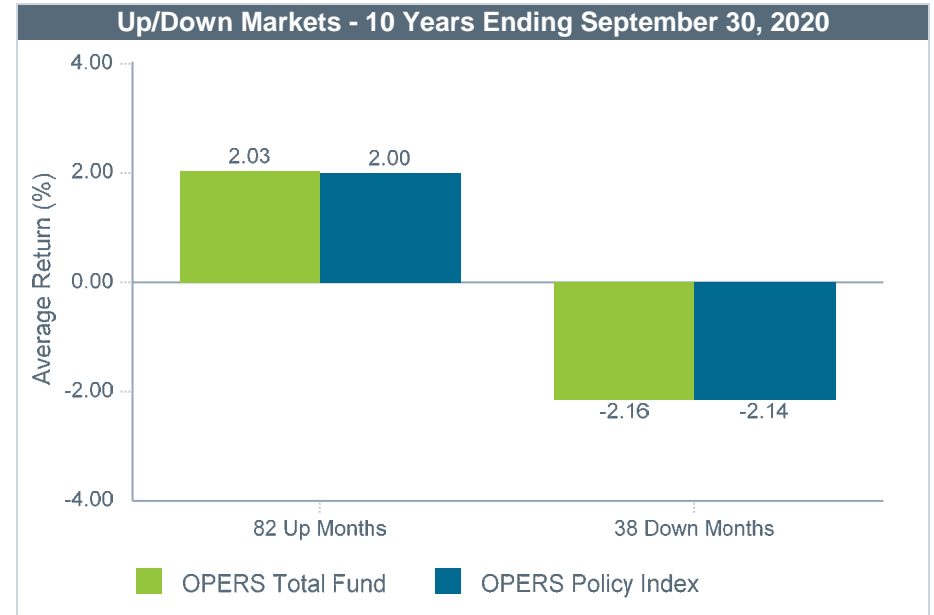
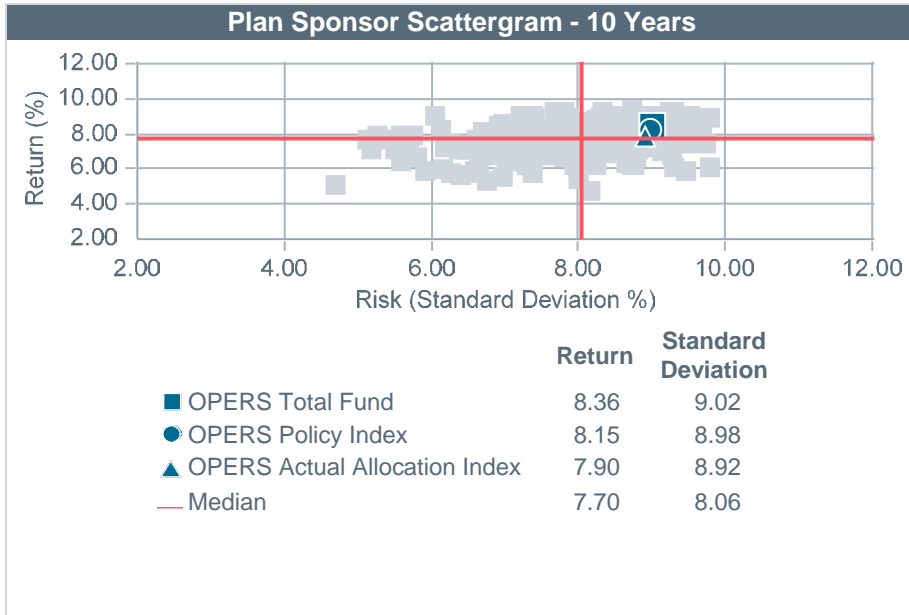
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OPERS Total Fund	21.38 (11)	-6.48 (93)	17.13 (16)	7.69 (42)	-0.77 (65)	7.37 (35)	16.60 (48)	12.94 (44)	1.81 (28)	12.54 (57)
● OPERS Policy Index	21.46 (10)	-6.09 (90)	16.86 (20)	8.12 (33)	-0.89 (70)	7.00 (42)	15.27 (61)	12.47 (56)	1.11 (39)	12.89 (46)
▲ OPERS Allocation Index	20.87 (17)	-6.49 (93)	16.51 (27)	8.09 (34)	-0.94 (71)	7.05 (41)	15.94 (54)	12.21 (62)	0.13 (61)	12.29 (62)
5th Percentile	22.04	-0.14	18.72	9.98	2.05	10.13	21.67	15.42	5.21	16.51
1st Quartile	20.27	-2.96	16.57	8.41	0.92	7.93	18.70	13.81	1.97	14.06
Median	18.56	-4.13	15.20	7.42	-0.09	6.74	16.20	12.73	0.54	12.71
3rd Quartile	16.66	-5.14	13.46	6.27	-1.24	5.44	12.94	11.49	-0.56	11.49
95th Percentile	12.30	-6.76	6.67	4.14	-3.17	3.06	6.01	7.33	-2.40	8.04

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

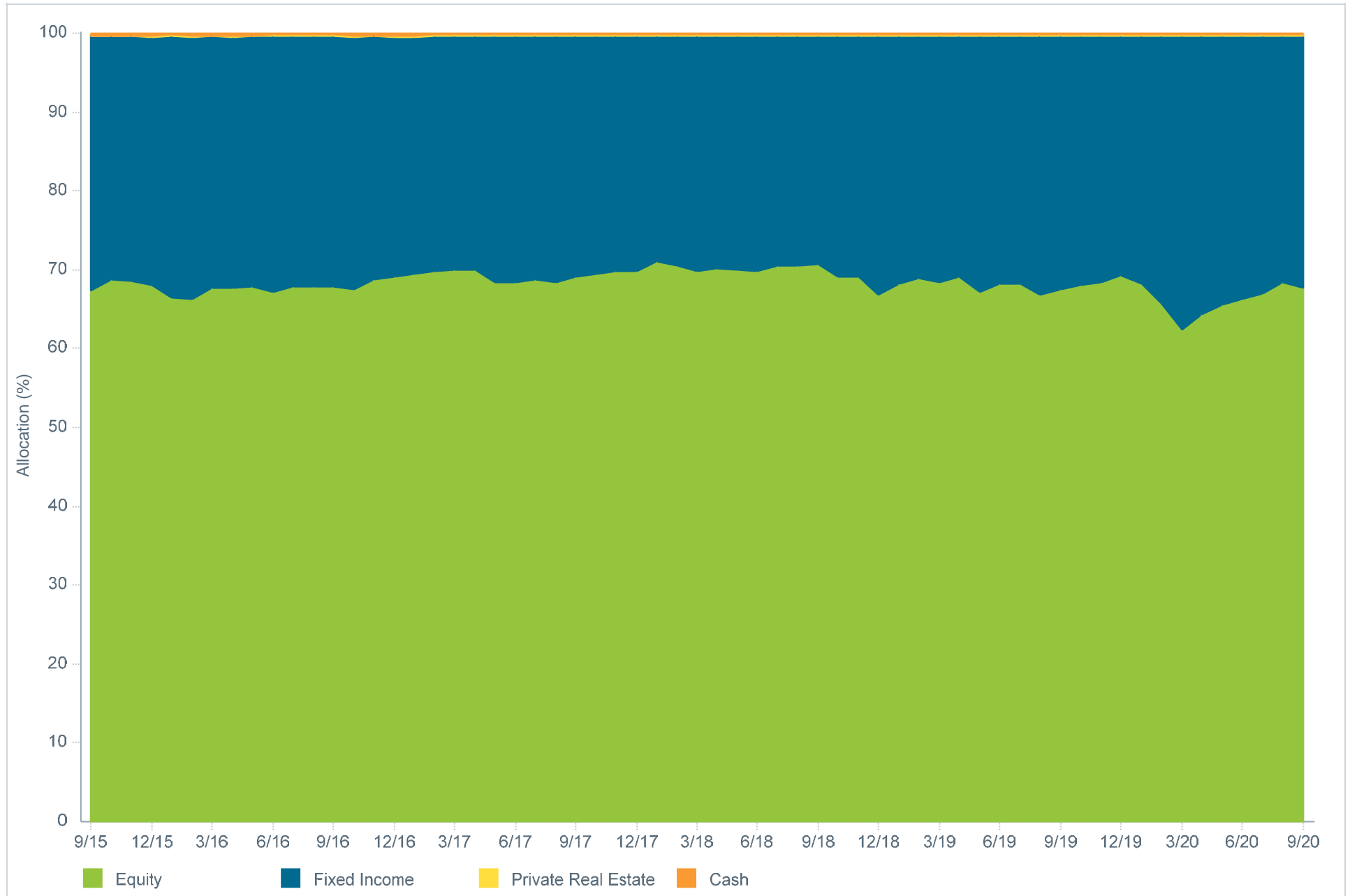




Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation.



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.

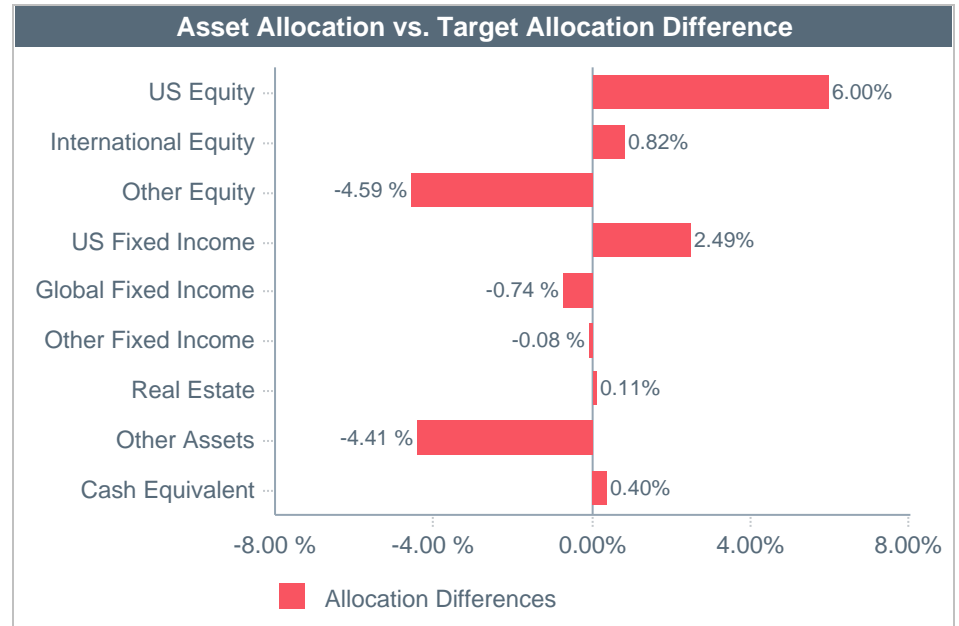


Oklahoma Firefighters Pension & Retirement System (OFPRS)



	Performance (%)												
	Trailing							Calendar Year					
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OFPRS Total Fund (Net)	6.77	6.77	5.17	11.30	8.75	10.20	8.95	9.53	20.15	-2.46	18.66	7.42	2.11
OFPRS Policy Index	6.00	6.00	3.07	9.16	7.92	9.72	8.69	9.55	21.76	-3.80	16.41	8.76	1.60
Difference	0.77	0.77	2.10	2.14	0.83	0.48	0.26	-0.02	-1.61	1.34	2.25	-1.34	0.51
OFPRS Actual Allocation Index	5.92	5.92	3.57	9.97	7.62	9.40	8.05	9.08	20.30	-3.93	15.64	9.45	0.56
Difference	0.85	0.85	1.60	1.33	1.13	0.80	0.90	0.45	-0.15	1.47	3.02	-2.03	1.55
Actuarial Discount Rate (7.5%)	1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference	4.95	4.95	-0.40	3.80	1.25	2.70	1.45	2.03	12.65	-9.96	11.16	-0.08	-5.39
OFPRS Total Fund (Gross)	6.77	6.77	5.17	11.30	8.76	10.21	8.96	9.55	20.15	-2.46	18.67	7.42	2.12
OFPRS Policy Index	6.00	6.00	3.07	9.16	7.92	9.72	8.69	9.55	21.76	-3.80	16.41	8.76	1.60
Difference	0.77	0.77	2.10	2.14	0.84	0.49	0.27	0.00	-1.61	1.34	2.26	-1.34	0.52
OFPRS Actual Allocation Index	5.92	5.92	3.57	9.97	7.62	9.40	8.05	9.08	20.30	-3.93	15.64	9.45	0.56
Difference	0.85	0.85	1.60	1.33	1.14	0.81	0.91	0.47	-0.15	1.47	3.03	-2.03	1.56
All Public Plans-Total Fund Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	18.56	-4.13	15.20	7.42	-0.09
Rank	4	4	10	8	4	2	2	3	27	19	6	51	5

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OFPRS (Firefighters)	3,078,610,895	100.00	100.00
US Equity	1,477,620,370	48.00	42.00
International Equity	487,074,814	15.82	15.00
Other Equity	12,628,364	0.41	5.00
US Fixed Income	322,848,991	10.49	8.00
Global Fixed Income	192,756,267	6.26	7.00
Other Fixed Income	151,453,663	4.92	5.00
Real Estate	311,392,412	10.11	10.00
Other Assets	110,512,686	3.59	8.00
Cash Equivalent	12,323,329	0.40	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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OFPRS Total Fund	3,078,610,895	100.00	6.77	6.77	5.17	11.30	8.75	10.20	8.95	9.53	N/A	07/01/1989
OFPRS Policy Index			6.00	6.00	3.07	9.16	7.92	9.72	8.69	9.55	N/A	
Difference			0.77	0.77	2.10	2.14	0.83	0.48	0.26	-0.02	N/A	
OFPRS Actual Allocation Index			5.92	5.92	3.57	9.97	7.62	9.40	8.05	9.08	8.14	
Difference			0.85	0.85	1.60	1.33	1.13	0.80	0.90	0.45	N/A	
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			4.95	4.95	-0.40	3.80	1.25	2.70	1.45	2.03	N/A	
Total Equity	1,977,323,548	64.23	9.58	9.58	8.07	17.49	11.73	13.75	11.21	11.91	N/A	07/01/1989
Wilshire 5000 Index			9.14	9.14	5.54	15.12	11.70	13.83	12.25	13.48	10.11	
Difference			0.44	0.44	2.53	2.37	0.03	-0.08	-1.04	-1.57	N/A	
US Equity	1,477,620,370	48.00	9.27	9.27	6.89	16.27	12.27	13.96	12.16	13.25	N/A	07/01/1989
Wilshire 5000 Index			9.14	9.14	5.54	15.12	11.70	13.83	12.25	13.48	10.11	
Difference			0.13	0.13	1.35	1.15	0.57	0.13	-0.09	-0.23	N/A	
US Large Cap Equity	1,044,669,682	33.93	9.36	9.36	5.82	15.05	11.65	13.51	12.32	13.60	N/A	07/01/1989
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	10.28	
Difference			-0.11	-0.11	-0.58	-0.96	-0.73	-0.58	-0.22	-0.16	N/A	
US Large Cap Core Equity	636,607,275	20.68	8.74	8.74	2.52	11.24	10.19	12.72	11.83	13.29	N/A	11/01/1996
S&P 500 Index (Cap Wtd)			8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	8.78	
Difference			-0.19	-0.19	-3.05	-3.91	-2.09	-1.43	-0.85	-0.45	N/A	
SSgA Equity Index (SA)	215,282,809	6.99	8.96	8.96	5.55	15.12	12.26	14.14	12.68	13.76	N/A	10/01/1996
S&P 500 Index (Cap Wtd)			8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	8.88	
Difference			0.03	0.03	-0.02	-0.03	-0.02	-0.01	0.00	0.02	N/A	
SSgA Eq Wtd S&P Index (SA)	210,354,197	6.83	6.68	6.68	-5.83	1.44	6.27	10.17	9.57	11.96	9.73	11/01/2001
S&P 500 Index (Eq Wtd)			6.75	6.75	-4.75	2.50	6.49	10.27	9.68	12.03	9.71	
Difference			-0.07	-0.07	-1.08	-1.06	-0.22	-0.10	-0.11	-0.07	0.02	
Intech Enhanced Investment Technologies (SA)	210,970,269	6.85	10.39	10.39	7.71	17.12	11.90	13.52	13.00	13.99	9.04	01/01/2002
S&P 500 Index (Cap Wtd)			8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	8.05	
Difference			1.46	1.46	2.14	1.97	-0.38	-0.63	0.32	0.25	0.99	

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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Large Cap Value Equity	187,739,701	6.10	6.68	6.68	-6.61	0.34	4.44	8.71	7.70	9.97	N/A	06/01/1990
Russell 1000 Val Index			5.59	5.59	-11.58	-5.03	2.63	7.66	7.35	9.95	9.22	
Difference			1.09	1.09	4.97	5.37	1.81	1.05	0.35	0.02	N/A	
AJO Large Cap Equity (SA)	48,231	0.00	2.95	2.95	-15.27	-9.85	-0.52	4.37	5.35	9.10	7.99	08/01/2002
Russell 1000 Val Index			5.59	5.59	-11.58	-5.03	2.63	7.66	7.35	9.95	7.85	
Difference			-2.64	-2.64	-3.69	-4.82	-3.15	-3.29	-2.00	-0.85	0.14	
Beutel Goodman American Equity (CF)	100,895,252	3.28	6.54	6.54	-1.38	6.97	8.03	N/A	N/A	N/A	12.08	05/01/2016
Russell 1000 Val Index			5.59	5.59	-11.58	-5.03	2.63	7.66	7.35	9.95	6.47	
Difference			0.95	0.95	10.20	12.00	5.40	N/A	N/A	N/A	5.61	
Aristotle Capital Management	86,796,218	2.82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.80	09/01/2020
Russell 1000 Val Index			5.59	5.59	-11.58	-5.03	2.63	7.66	7.35	9.95	-2.46	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.66	
US Large Cap Growth Equity	220,322,707	7.16	13.91	13.91	29.49	43.41	23.45	20.74	18.41	18.14	N/A	07/01/1989
Russell 1000 Grth Index			13.22	13.22	24.33	37.53	21.67	20.10	17.39	17.25	10.86	
Difference			0.69	0.69	5.16	5.88	1.78	0.64	1.02	0.89	N/A	
Fred Alger Capital Appreciation (SA)	220,322,707	7.16	13.91	13.91	29.49	43.41	23.45	20.71	18.39	18.13	18.44	08/01/2010
Russell 1000 Grth Index			13.22	13.22	24.33	37.53	21.67	20.10	17.39	17.25	17.56	
Difference			0.69	0.69	5.16	5.88	1.78	0.61	1.00	0.88	0.88	
US Small Cap Equity	432,950,688	14.06	9.09	9.09	9.89	19.76	13.86	14.97	11.86	13.69	N/A	07/01/1992
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	9.12	
Difference			4.16	4.16	18.58	19.37	12.09	6.97	5.44	3.84	N/A	
US Small Cap Value Equity	173,251,201	5.63	3.77	3.77	-11.32	-3.65	3.37	10.04	8.26	10.64	N/A	09/01/1992
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	9.16	
Difference			-1.16	-1.16	-2.63	-4.04	1.60	2.04	1.84	0.79	N/A	
Earnest Partner Small Cap Value Equity (SA)	94,423,364	3.07	5.41	5.41	-5.44	1.25	4.55	11.04	9.48	11.37	8.19	09/01/2005
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	4.89	
Difference			2.85	2.85	16.10	16.13	9.68	6.93	6.21	4.28	3.30	
River Road Small Cap Value Equity (SA)	78,827,837	2.56	1.87	1.87	-17.40	-8.90	2.04	8.93	6.89	9.83	5.92	05/01/2007
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	3.64	
Difference			-0.69	-0.69	4.14	5.98	7.17	4.82	3.62	2.74	2.28	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Small Cap Growth Equity	259,699,487	8.44	12.95	12.95	30.88	43.08	24.77	19.74	15.33	16.72	N/A	07/01/1992
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	8.36	
Difference			5.79	5.79	27.00	27.37	16.59	8.32	6.11	4.38	N/A	
Lord Abbett Small Cap Growth Equity (SA)	132,051,437	4.29	16.44	16.44	36.98	47.32	27.90	19.76	14.31	N/A	14.62	05/01/2011
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	9.82	
Difference			9.28	9.28	33.10	31.61	19.72	8.34	5.09	N/A	4.80	
Delaware SMID Cap Focus Growth Equity (SA)	127,648,050	4.15	9.56	9.56	25.12	38.93	21.88	19.52	16.16	N/A	15.02	05/01/2011
Russell 2500 Grth Index			9.37	9.37	11.58	23.37	13.36	14.19	11.69	14.06	11.67	
Difference			0.19	0.19	13.54	15.56	8.52	5.33	4.47	N/A	3.35	
Other Equity												
Tortoise Direct Opportunities (CF)	12,628,364	0.41	35.81	35.81	-28.78	-27.89	-10.41	N/A	N/A	N/A	-7.00	10/01/2016
Alerian MLP Index			-16.26	-16.26	-46.16	-48.35	-20.75	-11.58	-11.86	-4.17	-16.80	
Difference			52.07	52.07	17.38	20.46	10.34	N/A	N/A	N/A	9.80	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity	487,074,814	15.82	10.55	10.55	12.02	21.57	9.39	12.80	7.98	6.83	N/A	07/01/1989
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	N/A	
Difference			4.30	4.30	17.46	18.57	8.23	6.57	4.80	2.83	N/A	
International Developed Equity	379,581,600	12.33	10.92	10.92	17.12	26.17	12.82	15.20	10.08	8.68	N/A	04/01/1994
MSCI EAFE Index (USD) (Net)			4.80	4.80	-7.09	0.49	0.62	5.26	3.01	4.62	4.72	
Difference			6.12	6.12	24.21	25.68	12.20	9.94	7.07	4.06	N/A	
Chautauqua International Growth Equity (SA)	170,451,626	5.54	13.01	13.01	20.10	25.96	9.47	13.88	8.83	N/A	10.30	09/01/2012
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	5.18	
Difference			6.76	6.76	25.54	22.96	8.31	7.65	5.65	N/A	5.12	
WCM Berkeley Street International Equity (CF)	209,099,192	6.79	9.28	9.28	14.80	26.34	15.88	16.35	12.65	N/A	13.89	09/01/2012
MSCI EAFE Index (USD) (Net)			4.80	4.80	-7.09	0.49	0.62	5.26	3.01	4.62	5.72	
Difference			4.48	4.48	21.89	25.85	15.26	11.09	9.64	N/A	8.17	
Emerging Markets Equity	107,493,215	3.49	9.25	9.25	-2.89	7.72	-0.38	5.86	2.06	N/A	2.81	09/01/2012
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	4.11	
Difference			-0.31	-0.31	-1.73	-2.82	-2.80	-3.11	-1.68	N/A	-1.30	
RBC GAM Emerging Markets Equity (CF)	53,844,350	1.75	9.49	9.49	-1.57	8.31	N/A	N/A	N/A	N/A	4.54	02/01/2019
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	4.51	
Difference			-0.07	-0.07	-0.41	-2.23	N/A	N/A	N/A	N/A	0.03	
Wellington Emerging Markets (CF)	53,648,865	1.74	9.00	9.00	-4.20	7.06	N/A	N/A	N/A	N/A	4.33	02/01/2019
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	4.51	
Difference			-0.56	-0.56	-3.04	-3.48	N/A	N/A	N/A	N/A	-0.18	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income ex Other	515,605,257	16.75	1.94	1.94	3.86	5.23	2.83	3.75	3.37	3.71	N/A	07/01/1989
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	6.05	
Difference			1.32	1.32	-2.93	-1.75	-2.41	-0.43	-0.60	0.07	N/A	
Garcia Hamilton Core Fixed Income (CF)	178,554,786	5.80	0.84	0.84	7.23	7.19	5.46	4.47	N/A	N/A	4.31	08/01/2014
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	3.93	
Difference			0.22	0.22	0.44	0.21	0.22	0.29	N/A	N/A	0.38	
Orleans Core Fixed Income (CF)	132,093,659	4.29	0.68	0.68	5.68	6.57	5.16	4.49	N/A	N/A	3.96	08/01/2014
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	3.93	
Difference			0.06	0.06	-1.11	-0.41	-0.08	0.31	N/A	N/A	0.03	
Garrison Middle Market Funding (SA)	1,070,623	0.03	9.01	9.01	3.26	-13.72	-2.13	-1.19	1.33	N/A	1.37	08/01/2013
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	3.94	
Difference			8.39	8.39	-3.53	-20.70	-7.37	-5.37	-2.64	N/A	-2.57	
Medley Opportunity II (SA)	11,129,923	0.36	-2.80	-2.80	-11.58	-17.24	-13.73	-6.28	-3.39	N/A	-3.31	08/01/2013
CS Lvg'd Loan Index			4.13	4.13	-0.83	0.83	3.16	4.03	3.67	4.44	3.63	
Difference			-6.93	-6.93	-10.75	-18.07	-16.89	-10.31	-7.06	N/A	-6.94	
Brandywine Global Fixed Income (CF)	192,756,267	6.26	3.55	3.55	1.24	5.38	1.73	4.70	3.09	4.15	4.98	10/01/2009
FTSE Wrld Gov't Bond Index			2.94	2.94	7.14	6.77	4.37	3.95	2.22	1.86	2.14	
Difference			0.61	0.61	-5.90	-1.39	-2.64	0.75	0.87	2.29	2.84	
Other Fixed Income												
PIMCO Corporate Opp II (CF)	21,005,776	0.68	8.84	8.84	-3.59	-1.81	5.54	N/A	N/A	N/A	7.51	01/01/2017
Bloomberg US Corp Hi Yld Index			4.60	4.60	0.62	3.25	4.21	6.79	5.33	6.47	5.24	
Difference			4.24	4.24	-4.21	-5.06	1.33	N/A	N/A	N/A	2.27	
PIMCO Bravo III (CF)	52,392,422	1.70	5.87	5.87	-5.19	-2.56	N/A	N/A	N/A	N/A	6.87	12/01/2017
Bloomberg US Corp Hi Yld Index			4.60	4.60	0.62	3.25	4.21	6.79	5.33	6.47	4.40	
Difference			1.27	1.27	-5.81	-5.81	N/A	N/A	N/A	N/A	2.47	
PIMCO Private Income (CF)	78,055,465	2.54	7.23	7.23	2.61	5.15	N/A	N/A	N/A	N/A	3.99	05/01/2019
Bloomberg US Corp Hi Yld Index			4.60	4.60	0.62	3.25	4.21	6.79	5.33	6.47	4.02	
Difference			2.63	2.63	1.99	1.90	N/A	N/A	N/A	N/A	-0.03	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Hedge Fund	8,054,839	0.26	0.44	0.44	-9.46	-9.80	-2.64	-0.20	0.54	1.90	-0.26	07/01/2015
HFRI FOF: Cnsvt Index			2.49	2.49	0.41	2.04	2.29	2.34	2.56	2.58	1.87	
Difference			-2.05	-2.05	-9.87	-11.84	-4.93	-2.54	-2.02	-0.68	-2.13	
Glouston Capital Partners Permal (CF)	8,054,839	0.26	0.44	0.44	-9.47	-9.79	-2.37	-0.31	N/A	N/A	-0.50	07/01/2015
HFRI FOF: Cnsvt Index			2.49	2.49	0.41	2.04	2.29	2.34	2.56	2.58	1.87	
Difference			-2.05	-2.05	-9.88	-11.83	-4.66	-2.65	N/A	N/A	-2.37	
Real Estate	311,392,412	10.11	-1.90	-1.90	-1.22	-0.35	4.94	6.71	8.39	8.97	6.47	05/01/2005
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.89	
Difference			-2.64	-2.64	-1.67	-2.35	-0.17	0.43	0.41	-0.40	-1.42	
JP Morgan Strategic Property	109,334,256	3.55	-0.03	-0.03	-0.51	1.77	4.53	6.15	8.02	10.10	7.46	05/01/2005
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.89	
Difference			-0.77	-0.77	-0.96	-0.23	-0.58	-0.13	0.04	0.73	-0.43	
Portfolio Advisors Real Estate III LP	2,553,351	0.08	-9.08	-9.08	-9.71	-13.68	-6.06	0.23	5.74	5.11	-1.45	08/01/2008
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	5.93	
Difference			-9.82	-9.82	-10.16	-15.68	-11.17	-6.05	-2.24	-4.26	-7.38	
Portfolio Advisors Real Estate IV LP	1,500,546	0.05	-2.87	-2.87	-7.99	-6.18	3.99	7.29	10.56	N/A	7.16	08/01/2011
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	8.87	
Difference			-3.61	-3.61	-8.44	-8.18	-1.12	1.01	2.58	N/A	-1.71	
Angelo Gordon Net Lease III LP	23,361,533	0.76	1.43	1.43	3.42	5.40	6.94	6.77	N/A	N/A	4.57	04/01/2014
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.75	
Difference			0.69	0.69	2.97	3.40	1.83	0.49	N/A	N/A	-3.18	
Mesirow	27,414,707	0.89	1.42	1.42	11.73	12.82	11.65	10.85	N/A	N/A	8.28	05/01/2014
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.86	
Difference			0.68	0.68	11.28	10.82	6.54	4.57	N/A	N/A	0.42	
Dune Real Estate III LP	19,910,061	0.65	-17.05	-17.05	-17.92	-21.78	-0.64	5.34	N/A	N/A	5.95	06/01/2014
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.97	
Difference			-17.79	-17.79	-18.37	-23.78	-5.75	-0.94	N/A	N/A	-2.02	
Portfolio Advisors Real Estate	5,276,759	0.17	-8.44	-8.44	-11.73	-13.20	-2.84	0.82	N/A	N/A	4.61	07/01/2014
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.58	
Difference			-9.18	-9.18	-12.18	-15.20	-7.95	-5.46	N/A	N/A	-2.97	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Landmark Real Estate VII LP	8,786,131	0.29	-5.00	-5.00	-7.17	-7.38	-0.21	10.17	N/A	N/A	11.81	10/01/2014
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.44	
Difference			-5.74	-5.74	-7.62	-9.38	-5.32	3.89	N/A	N/A	4.37	
JP Morgan Special Situation Property (CF)	70,875,501	2.30	0.70	0.70	1.30	2.78	7.04	8.61	N/A	N/A	10.78	12/01/2014
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.67	
Difference			-0.04	-0.04	0.85	0.78	1.93	2.33	N/A	N/A	3.11	
Hall Capital III LP	11,231,701	0.36	-0.08	-0.08	3.42	4.57	5.35	6.81	N/A	N/A	1.70	12/01/2014
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.67	
Difference			-0.82	-0.82	2.97	2.57	0.24	0.53	N/A	N/A	-5.97	
Portfolio Advisors Real Estate VI LP	16,211,426	0.53	-2.03	-2.03	-1.41	-0.67	18.13	N/A	N/A	N/A	8.76	02/01/2017
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	5.58	
Difference			-2.77	-2.77	-1.86	-2.67	13.02	N/A	N/A	N/A	3.18	
Dune Real Estate IV LP	12,295,239	0.40	-14.36	-14.36	-17.51	-23.69	N/A	N/A	N/A	N/A	-22.08	09/01/2019
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	3.18	
Difference			-15.10	-15.10	-17.96	-25.69	N/A	N/A	N/A	N/A	-25.26	
Hall Capital Real Estate LP	2,641,202	0.09	1.68	1.68	4.72	7.07	N/A	N/A	N/A	N/A	4.30	10/01/2018
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	4.10	
Difference			0.94	0.94	4.27	5.07	N/A	N/A	N/A	N/A	0.20	
Private Equity	102,457,847	3.33	3.74	3.74	1.60	2.53	10.27	9.53	N/A	N/A	13.75	04/01/2014
Pomona Captial VIII LP	3,903,649	0.13	25.92	25.92	3.80	0.74	8.90	10.08	N/A	N/A	14.32	04/01/2014
Capital Dynamics Global Secondaries IV	27,241,993	0.88	8.76	8.76	4.71	4.58	10.44	9.39	N/A	N/A	10.39	01/01/2015
Ardian AESF VI LP	22,789,009	0.74	-2.15	-2.15	0.54	3.76	10.79	N/A	N/A	N/A	8.30	04/01/2017
Pomona Capital IX LP	21,158,613	0.69	9.04	9.04	3.74	5.81	N/A	N/A	N/A	N/A	35.29	03/01/2018
Argonaut Private Equity IV LP	7,557,922	0.25	-13.52	-13.52	-9.92	-9.78	N/A	N/A	N/A	N/A	-2.14	09/01/2018
Ardian ASF VIII LP	14,674,685	0.48	6.56	6.56	N/A	N/A	N/A	N/A	N/A	N/A	6.56	05/01/2020
Ardian	5,131,975	0.17	-6.80	-6.80	-15.57	-15.74	1.88	4.30	N/A	N/A	8.28	05/01/2014

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

As of September 30, 2020

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	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OFPRS Total Fund	3,078,610,895	100.00	6.77	6.77	5.17	11.30	8.76	10.21	8.96	9.55	8.36	07/01/1989
OFPRS Policy Index			6.00	6.00	3.07	9.16	7.92	9.72	8.69	9.55	N/A	
Difference			0.77	0.77	2.10	2.14	0.84	0.49	0.27	0.00	N/A	
OFPRS Actual Allocation Index			5.92	5.92	3.57	9.97	7.62	9.40	8.05	9.08	8.14	
Difference			0.85	0.85	1.60	1.33	1.14	0.81	0.91	0.47	0.22	
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			4.95	4.95	-0.40	3.80	1.26	2.71	1.46	2.05	0.86	
All Public Plans-Total Fund Median			5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	8.09	
Rank			4	4	10	8	4	2	2	3	23	
Total Equity	1,977,323,548	64.23	9.59	9.59	8.08	17.50	11.74	13.76	11.23	11.93	9.35	07/01/1989
Wilshire 5000 Index			9.14	9.14	5.54	15.12	11.70	13.83	12.25	13.48	10.11	
Difference			0.45	0.45	2.54	2.38	0.04	-0.07	-1.02	-1.55	-0.76	
US Equity	1,477,620,370	48.00	9.27	9.27	6.90	16.28	12.28	13.97	12.17	13.26	9.76	07/01/1989
Wilshire 5000 Index			9.14	9.14	5.54	15.12	11.70	13.83	12.25	13.48	10.11	
Difference			0.13	0.13	1.36	1.16	0.58	0.14	-0.08	-0.22	-0.35	
IM U.S. Equity (SA+CF) Median			6.98	6.98	-2.35	5.79	7.14	10.71	9.45	12.19	11.08	
Rank			29	29	30	30	32	31	33	41	90	
US Large Cap Equity	1,044,669,682	33.93	9.36	9.36	5.83	15.07	11.66	13.52	12.33	13.61	10.07	07/01/1989
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	10.28	
Difference			-0.11	-0.11	-0.57	-0.94	-0.72	-0.57	-0.21	-0.15	-0.21	
IM U.S. Large Cap Equity (SA+CF) Median			8.45	8.45	4.02	13.31	10.98	13.11	12.07	13.49	10.61	
Rank			36	36	41	44	46	48	46	48	81	
US Large Cap Core Equity	636,607,275	20.68	8.74	8.74	2.53	11.26	10.21	12.74	11.85	13.31	9.48	11/01/1996
S&P 500 Index (Cap Wtd)			8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	8.78	
Difference			-0.19	-0.19	-3.04	-3.89	-2.07	-1.41	-0.83	-0.43	0.70	
IM U.S. Large Cap Core Equity (SA+CF) Median			8.06	8.06	3.33	12.87	10.68	13.14	12.16	13.55	9.46	
Rank			39	39	56	57	58	58	62	58	50	
SSgA Equity Index (SA)	215,282,809	6.99	8.97	8.97	5.58	15.16	12.30	14.18	12.71	13.78	8.68	10/01/1996
S&P 500 Index (Cap Wtd)			8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	8.88	
Difference			0.04	0.04	0.01	0.01	0.02	0.03	0.03	0.04	-0.20	
IM U.S. Large Cap Index Equity (SA+CF) Median			9.03	9.03	5.55	15.11	12.26	14.07	12.57	13.72	8.94	
Rank			52	52	43	40	38	24	25	29	81	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
SSgA Eq Wtd S&P Index (SA)	210,354,197	6.83	6.69	6.69	-5.80	1.47	6.31	10.20	9.60	11.98	9.74	11/01/2001
S&P 500 Index (Eq Wtd)			6.75	6.75	-4.75	2.50	6.49	10.27	9.68	12.03	9.71	
Difference			-0.06	-0.06	-1.05	-1.03	-0.18	-0.07	-0.08	-0.05	0.03	
IM U.S. Large Cap Index Equity (SA+CF) Median			9.03	9.03	5.55	15.11	12.26	14.07	12.57	13.72	8.62	
Rank			82	82	84	83	83	83	81	82	12	
Intech Enhanced Investment Technologies (SA)	210,970,269	6.85	10.39	10.39	7.71	17.12	11.90	13.52	13.00	13.99	9.04	01/01/2002
S&P 500 Index (Cap Wtd)			8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	8.05	
Difference			1.46	1.46	2.14	1.97	-0.38	-0.63	0.32	0.25	0.99	
IM U.S. Large Cap Index Equity (SA+CF) Median			9.03	9.03	5.55	15.11	12.26	14.07	12.57	13.72	8.16	
Rank			15	15	16	15	56	74	18	19	14	
US Large Cap Value Equity	187,739,701	6.10	6.68	6.68	-6.61	0.34	4.44	8.71	7.70	9.97	8.96	06/01/1990
Russell 1000 Val Index			5.59	5.59	-11.58	-5.03	2.63	7.66	7.35	9.95	9.22	
Difference			1.09	1.09	4.97	5.37	1.81	1.05	0.35	0.02	-0.26	
IM U.S. Large Cap Value Equity (SA+CF) Median			5.39	5.39	-10.38	-3.35	3.51	8.06	7.79	10.39	10.12	
Rank			34	34	32	35	40	44	52	65	93	
AJO Large Cap Equity (SA)	48,231	0.00	2.95	2.95	-15.27	-9.85	-0.52	4.37	5.35	9.10	7.99	08/01/2002
Russell 1000 Val Index			5.59	5.59	-11.58	-5.03	2.63	7.66	7.35	9.95	7.85	
Difference			-2.64	-2.64	-3.69	-4.82	-3.15	-3.29	-2.00	-0.85	0.14	
IM U.S. Large Cap Value Equity (SA+CF) Median			5.39	5.39	-10.38	-3.35	3.51	8.06	7.79	10.39	8.69	
Rank			83	83	81	87	85	95	89	83	79	
Beutel Goodman American Equity (CF)	100,895,252	3.28	6.54	6.54	-1.38	6.97	8.03	N/A	N/A	N/A	12.08	05/01/2016
Russell 1000 Val Index			5.59	5.59	-11.58	-5.03	2.63	7.66	7.35	9.95	6.47	
Difference			0.95	0.95	10.20	12.00	5.40	N/A	N/A	N/A	5.61	
IM U.S. Large Cap Value Equity (SA+CF) Median			5.39	5.39	-10.38	-3.35	3.51	8.06	7.79	10.39	7.19	
Rank			35	35	18	19	18	N/A	N/A	N/A	12	
Aristotle Capital Management	86,796,218	2.82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.80	09/01/2020
Russell 1000 Val Index			5.59	5.59	-11.58	-5.03	2.63	7.66	7.35	9.95	-2.46	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.66	
IM U.S. Large Cap Value Equity (SA+CF) Median			5.39	5.39	-10.38	-3.35	3.51	8.06	7.79	10.39	-2.68	
Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Large Cap Growth Equity	220,322,707	7.16	13.91	13.91	29.49	43.41	23.45	20.74	18.41	18.14	10.51	07/01/1989
Russell 1000 Grth Index			13.22	13.22	24.33	37.53	21.67	20.10	17.39	17.25	10.86	
Difference			0.69	0.69	5.16	5.88	1.78	0.64	1.02	0.89	-0.35	
IM U.S. Large Cap Growth Equity (SA+CF) Median			11.14	11.14	21.85	33.27	19.69	18.16	16.03	16.36	11.94	
Rank			16	16	17	16	21	22	16	16	94	
Fred Alger Capital Appreciation (SA)	220,322,707	7.16	13.91	13.91	29.49	43.41	23.45	20.71	18.39	18.13	18.44	08/01/2010
Russell 1000 Grth Index			13.22	13.22	24.33	37.53	21.67	20.10	17.39	17.25	17.56	
Difference			0.69	0.69	5.16	5.88	1.78	0.61	1.00	0.88	0.88	
IM U.S. Large Cap Growth Equity (SA+CF) Median			11.14	11.14	21.85	33.27	19.69	18.16	16.03	16.36	16.80	
Rank			16	16	17	16	21	23	17	16	16	
US Small Cap Equity	432,950,688	14.06	9.09	9.09	9.89	19.76	13.86	14.97	11.86	13.69	10.08	07/01/1992
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	9.12	
Difference			4.16	4.16	18.58	19.37	12.09	6.97	5.44	3.84	0.96	
IM U.S. Small Cap Equity (SA+CF) Median			5.10	5.10	-9.39	-1.86	1.80	8.03	6.90	10.61	12.09	
Rank			21	21	18	17	16	17	17	25	90	
US Small Cap Value Equity	173,251,201	5.63	3.77	3.77	-11.32	-3.65	3.37	10.04	8.26	10.64	10.11	09/01/1992
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	9.16	
Difference			-1.16	-1.16	-2.63	-4.04	1.60	2.04	1.84	0.79	0.95	
IM U.S. Small Cap Value Equity (SA+CF) Median			2.39	2.39	-19.54	-13.35	-3.72	4.39	4.27	8.57	11.61	
Rank			37	37	16	17	7	7	6	12	87	
Earnest Partner Small Cap Value Equity (SA)	94,423,364	3.07	5.41	5.41	-5.44	1.25	4.55	11.04	9.48	11.37	8.19	09/01/2005
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	4.89	
Difference			2.85	2.85	16.10	16.13	9.68	6.93	6.21	4.28	3.30	
IM U.S. Small Cap Value Equity (SA+CF) Median			2.39	2.39	-19.54	-13.35	-3.72	4.39	4.27	8.57	6.72	
Rank			22	22	7	7	6	5	4	8	20	
River Road Small Cap Value Equity (SA)	78,827,837	2.56	1.87	1.87	-17.40	-8.90	2.04	8.93	6.89	9.83	5.92	05/01/2007
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	3.64	
Difference			-0.69	-0.69	4.14	5.98	7.17	4.82	3.62	2.74	2.28	
IM U.S. Small Cap Value Equity (SA+CF) Median			2.39	2.39	-19.54	-13.35	-3.72	4.39	4.27	8.57	5.77	
Rank			61	61	40	29	13	9	11	22	46	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Small Cap Growth Equity	259,699,487	8.44	12.95	12.95	30.88	43.08	24.77	19.74	15.33	16.72	9.12	07/01/1992
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	8.36	
Difference			5.79	5.79	27.00	27.37	16.59	8.32	6.11	4.38	0.76	
IM U.S. Small Cap Growth Equity (SA+CF) Median			9.05	9.05	11.07	20.98	13.56	15.11	11.70	14.77	13.18	
Rank			19	19	13	15	15	23	15	20	98	
Lord Abbett Small Cap Growth Equity (SA)	132,051,437	4.29	16.44	16.44	36.98	47.32	27.90	19.76	14.31	N/A	14.62	05/01/2011
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	9.82	
Difference			9.28	9.28	33.10	31.61	19.72	8.34	5.09	N/A	4.80	
IM U.S. Small Cap Growth Equity (SA+CF) Median			9.05	9.05	11.07	20.98	13.56	15.11	11.70	14.77	12.20	
Rank			7	7	9	10	8	23	18	N/A	19	
Delaware SMID Cap Focus Growth Equity (SA)	127,648,050	4.15	9.56	9.56	25.12	38.93	21.88	19.52	16.16	N/A	15.02	05/01/2011
Russell 2500 Grth Index			9.37	9.37	11.58	23.37	13.36	14.19	11.69	14.06	11.67	
Difference			0.19	0.19	13.54	15.56	8.52	5.33	4.47	N/A	3.35	
IM U.S. SMID Cap Growth Equity (SA+CF) Median			9.19	9.19	13.48	24.91	17.52	15.85	12.27	14.94	12.46	
Rank			44	44	31	26	18	18	6	N/A	12	
Other Equity												
Tortoise Direct Opportunities (CF)	12,628,364	0.41	35.81	35.81	-28.78	-27.89	-10.41	N/A	N/A	N/A	-7.00	10/01/2016
Alerian MLP Index			-16.26	-16.26	-46.16	-48.35	-20.75	-11.58	-11.86	-4.17	-16.80	
Difference			52.07	52.07	17.38	20.46	10.34	N/A	N/A	N/A	9.80	
International Equity	487,074,814	15.82	10.55	10.55	12.02	21.58	9.39	12.80	8.01	6.86	N/A	07/01/1989
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	N/A	
Difference			4.30	4.30	17.46	18.58	8.23	6.57	4.83	2.86	N/A	
IM International Equity (SA+CF) Median			8.49	8.41	-2.20	7.23	2.26	7.57	4.85	6.00	8.61	
Rank			27	27	11	14	13	14	18	36	N/A	
International Developed Equity	379,581,600	12.33	10.92	10.92	17.12	26.17	12.82	15.20	10.10	8.69	6.75	04/01/1994
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	N/A	
Difference			4.67	4.67	22.56	23.17	11.66	8.97	6.92	4.69	N/A	
IM International Equity Developed Markets (SA+CF) Median			7.81	7.72	-3.02	6.64	2.26	7.12	5.12	6.58	7.22	
Rank			19	19	5	9	4	4	8	21	68	
Chautauqua International Growth Equity (SA)	170,451,626	5.54	13.01	13.01	20.10	25.96	9.47	13.88	8.83	N/A	10.30	09/01/2012
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	5.18	
Difference			6.76	6.76	25.54	22.96	8.31	7.65	5.65	N/A	5.12	
IM All ACWI Ex US (SA+CF) Median			8.08	8.08	-1.01	7.96	3.26	7.38	5.00	6.26	7.27	
Rank			9	9	3	10	13	8	11	N/A	14	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
WCM Berkeley Street International Equity (CF)	209,099,192	6.79	9.28	9.28	14.80	26.34	15.88	16.35	12.65	N/A	13.89	09/01/2012
MSCI EAFE Index (USD) (Net)			4.80	4.80	-7.09	0.49	0.62	5.26	3.01	4.62	5.72	
Difference			4.48	4.48	21.89	25.85	15.26	11.09	9.64	N/A	8.17	
IM EAFE Core (SA+CF) Median			6.06	6.06	-5.68	2.52	1.54	5.84	4.43	6.27	7.10	
Rank			8	8	1	1	1	1	1	N/A	1	
Emerging Markets Equity	107,493,215	3.49	9.25	9.25	-2.89	7.72	-0.38	5.86	2.10	N/A	2.89	09/01/2012
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	4.11	
Difference			-0.31	-0.31	-1.73	-2.82	-2.80	-3.11	-1.64	N/A	-1.22	
IM Emerging Markets Equity (SA+CF) Median			9.91	9.91	-1.12	10.19	2.45	8.85	4.41	4.09	5.41	
Rank			60	60	62	60	73	81	84	N/A	88	
RBC GAM Emerging Markets Equity (CF)	53,844,350	1.75	9.49	9.49	-1.57	8.31	N/A	N/A	N/A	N/A	4.54	02/01/2019
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	4.51	
Difference			-0.07	-0.07	-0.41	-2.23	N/A	N/A	N/A	N/A	0.03	
IM Emerging Markets Equity (SA+CF) Median			9.91	9.91	-1.12	10.19	2.45	8.85	4.41	4.09	6.08	
Rank			57	57	54	59	N/A	N/A	N/A	N/A	57	
Wellington Emerging Markets (CF)	53,648,865	1.74	9.00	9.00	-4.20	7.06	N/A	N/A	N/A	N/A	4.33	02/01/2019
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	4.51	
Difference			-0.56	-0.56	-3.04	-3.48	N/A	N/A	N/A	N/A	-0.18	
IM Emerging Markets Equity (SA+CF) Median			9.91	9.91	-1.12	10.19	2.45	8.85	4.41	4.09	6.08	
Rank			64	64	66	62	N/A	N/A	N/A	N/A	60	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income ex Other	515,605,257	16.75	1.94	1.94	3.86	5.23	2.83	3.76	3.38	3.73	5.93	07/01/1989
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	6.05	
Difference			1.32	1.32	-2.93	-1.75	-2.41	-0.42	-0.59	0.09	-0.12	
IM Global Fixed Income (SA+CF) Median			3.50	3.41	2.92	4.77	4.29	4.95	3.89	3.77	N/A	
Rank			85	84	43	47	75	84	61	52	N/A	
Garcia Hamilton Core Fixed Income (CF)	178,554,786	5.80	0.84	0.84	7.23	7.19	5.46	4.47	N/A	N/A	4.31	08/01/2014
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	3.93	
Difference			0.22	0.22	0.44	0.21	0.22	0.29	N/A	N/A	0.38	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			1.11	1.11	7.33	7.55	5.67	4.73	4.44	4.17	4.37	
Rank			68	68	55	61	67	70	N/A	N/A	55	
Orleans Core Fixed Income (CF)	132,093,659	4.29	0.68	0.68	5.68	6.57	5.16	4.49	N/A	N/A	3.96	08/01/2014
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	3.93	
Difference			0.06	0.06	-1.11	-0.41	-0.08	0.31	N/A	N/A	0.03	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			1.11	1.11	7.33	7.55	5.67	4.73	4.44	4.17	4.37	
Rank			82	82	93	87	93	69	N/A	N/A	89	
Garrison Middle Market Funding (SA)	1,070,623	0.03	9.01	9.01	3.26	-13.72	-2.13	-1.19	1.33	N/A	1.37	08/01/2013
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	3.94	
Difference			8.39	8.39	-3.53	-20.70	-7.37	-5.37	-2.64	N/A	-2.57	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			1.71	1.71	6.96	7.44	5.72	5.09	4.70	4.65	4.65	
Rank			1	1	92	100	100	100	100	N/A	100	
Medley Opportunity II (SA)	11,129,923	0.36	-2.80	-2.80	-11.58	-17.24	-13.73	-6.28	-3.39	N/A	-3.31	08/01/2013
CS Lvg'd Loan Index			4.13	4.13	-0.83	0.83	3.16	4.03	3.67	4.44	3.63	
Difference			-6.93	-6.93	-10.75	-18.07	-16.89	-10.31	-7.06	N/A	-6.94	
Brandywine Global Fixed Income (CF)	192,756,267	6.26	3.55	3.55	1.24	5.38	1.73	4.70	3.09	4.15	4.98	10/01/2009
FTSE Wrld Gov't Bond Index			2.94	2.94	7.14	6.77	4.37	3.95	2.22	1.86	2.14	
Difference			0.61	0.61	-5.90	-1.39	-2.64	0.75	0.87	2.29	2.84	
IM Global Fixed Income (SA+CF) Median			3.50	3.41	2.92	4.77	4.29	4.95	3.89	3.77	4.36	
Rank			50	48	64	45	89	62	67	43	40	
Other Fixed Income												
PIMCO Corporate Opp II (CF)	21,005,776	0.68	8.84	8.84	-3.59	-1.81	5.54	N/A	N/A	N/A	7.51	01/01/2017
Bloomberg US Corp Hi Yld Index			4.60	4.60	0.62	3.25	4.21	6.79	5.33	6.47	5.24	
Difference			4.24	4.24	-4.21	-5.06	1.33	N/A	N/A	N/A	2.27	

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

As of September 30, 2020

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date	
PIMCO Bravo III (CF)	52,392,422	1.70	5.87	5.87	-5.19	-2.56	N/A	N/A	N/A	N/A	6.87	12/01/2017	
Bloomberg US Corp Hi Yld Index			4.60	4.60	0.62	3.25	4.21	6.79	5.33	6.47	4.40		
Difference			1.27	1.27	-5.81	-5.81	N/A	N/A	N/A	N/A	2.47		
PIMCO Private Income (CF)	78,055,465	2.54	7.23	7.23	2.61	5.15	N/A	N/A	N/A	N/A	3.99	05/01/2019	
Bloomberg US Corp Hi Yld Index			4.60	4.60	0.62	3.25	4.21	6.79	5.33	6.47	4.02		
Difference			2.63	2.63	1.99	1.90	N/A	N/A	N/A	N/A	-0.03		
Hedge Fund	8,054,839	0.26	0.44	0.44	-9.46	-9.80	-2.64	-0.20	0.54	1.90	-0.11	06/01/2015	
HFRI FOF: Cnsvt Index			2.49	2.49	0.41	2.04	2.29	2.34	2.56	2.58	1.73		
Difference			-2.05	-2.05	-9.87	-11.84	-4.93	-2.54	-2.02	-0.68	-1.84		
Glouston Capital Partners Permal (CF)	8,054,839	0.26	0.44	0.44	-9.47	-9.79	-2.37	-0.31	N/A	N/A	-0.49	06/01/2015	
HFRI FOF: Cnsvt Index			2.49	2.49	0.41	2.04	2.29	2.34	2.56	2.58	1.73		
Difference			-2.05	-2.05	-9.88	-11.83	-4.66	-2.65	N/A	N/A	-2.22		
Real Estate	311,392,412	10.11	-1.90	-1.90	-1.22	-0.35	4.94	6.71	8.47	9.03	6.51	05/01/2005	
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.89		
Difference			-2.64	-2.64	-1.67	-2.35	-0.17	0.43	0.49	-0.34	-1.38		
JP Morgan Strategic Property	109,334,256	3.55	-0.03	-0.03	-0.51	1.77	4.53	6.15	8.15	10.19	7.52	05/01/2005	
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.89		
Difference			-0.77	-0.77	-0.96	-0.23	-0.58	-0.13	0.17	0.82	-0.37		
Portfolio Advisors Real Estate III LP	2,553,351	0.08	-9.08	-9.08	-9.71	-13.68	-6.06	0.23	5.74	5.11	-1.45	08/01/2008	
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	5.93		
Difference			-9.82	-9.82	-10.16	-15.68	-11.17	-6.05	-2.24	-4.26	-7.38		
Portfolio Advisors Real Estate IV LP	1,500,546	0.05	-2.87	-2.87	-7.99	-6.18	3.99	7.29	10.56	N/A	7.16	08/01/2011	
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	8.87		
Difference			-3.61	-3.61	-8.44	-8.18	-1.12	1.01	2.58	N/A	-1.71		
Angelo Gordon Net Lease III LP	23,361,533	0.76	1.43	1.43	3.42	5.40	6.94	6.77	N/A	N/A	4.57	04/01/2014	
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.75		
Difference			0.69	0.69	2.97	3.40	1.83	0.49	N/A	N/A	-3.18		
Mesirow	27,414,707	0.89	1.42	1.42	11.73	12.82	11.65	10.85	N/A	N/A	8.28	05/01/2014	
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.86		
Difference			0.68	0.68	11.28	10.82	6.54	4.57	N/A	N/A	0.42		
Dune Real Estate III LP	19,910,061	0.65	-17.05	-17.05	-17.92	-21.78	-0.64	5.34	N/A	N/A	5.95	06/01/2014	
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.97		
Difference			-17.79	-17.79	-18.37	-23.78	-5.75	-0.94	N/A	N/A	-2.02		

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

As of September 30, 2020

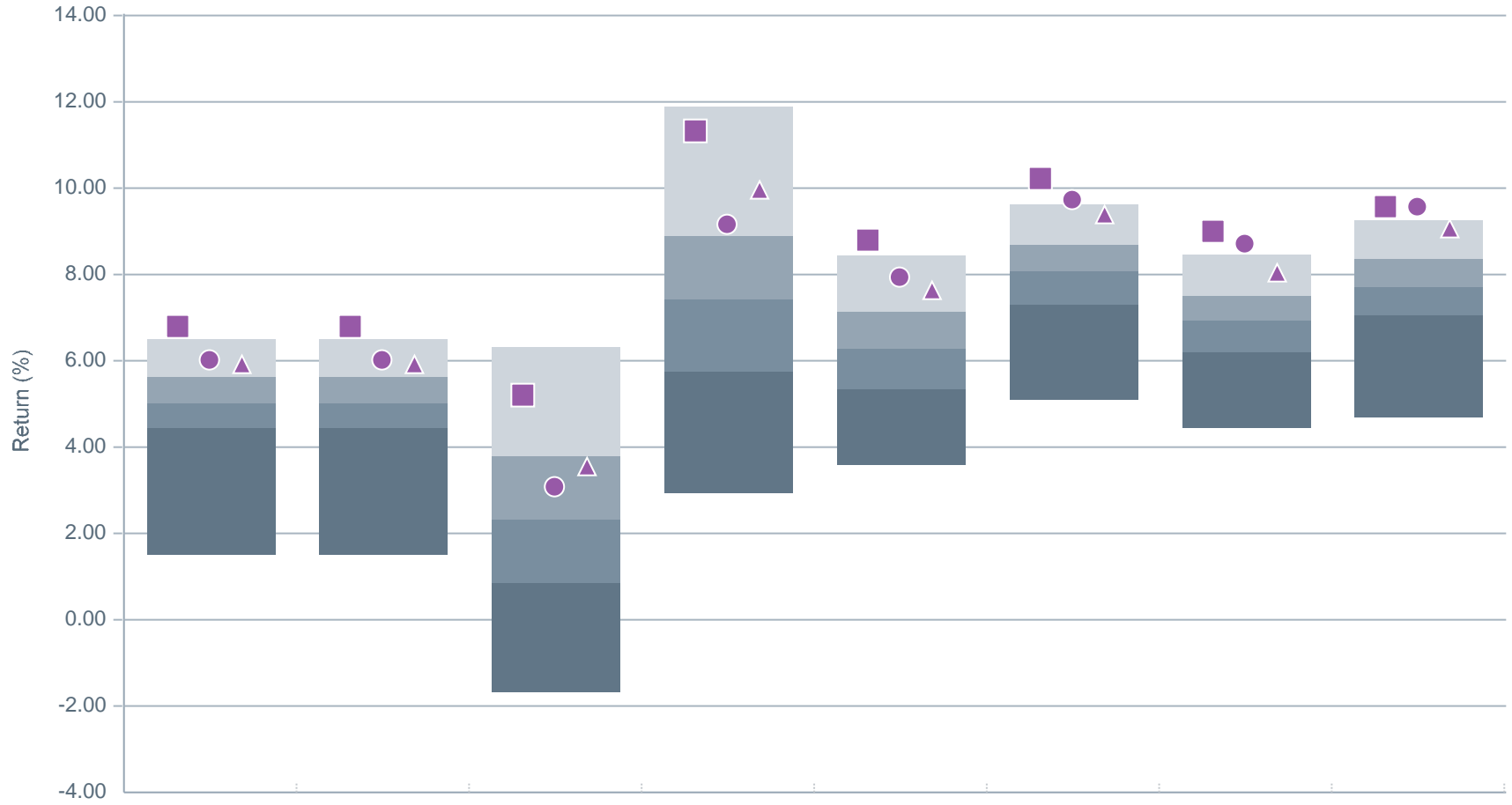
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Portfolio Advisors Real Estate	5,276,759	0.17	-8.44	-8.44	-11.73	-13.20	-2.84	0.82	N/A	N/A	4.61	07/01/2014
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.58	
Difference			-9.18	-9.18	-12.18	-15.20	-7.95	-5.46	N/A	N/A	-2.97	
Landmark Real Estate VII LP	8,786,131	0.29	-5.00	-5.00	-7.17	-7.38	-0.21	10.17	N/A	N/A	11.81	10/01/2014
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.44	
Difference			-5.74	-5.74	-7.62	-9.38	-5.32	3.89	N/A	N/A	4.37	
JP Morgan Special Situation Property (CF)	70,875,501	2.30	0.70	0.70	1.30	2.78	7.04	8.61	N/A	N/A	10.78	12/01/2014
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.67	
Difference			-0.04	-0.04	0.85	0.78	1.93	2.33	N/A	N/A	3.11	
Hall Capital III LP	11,231,701	0.36	-0.08	-0.08	3.42	4.57	5.35	6.81	N/A	N/A	1.70	12/01/2014
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	7.67	
Difference			-0.82	-0.82	2.97	2.57	0.24	0.53	N/A	N/A	-5.97	
Portfolio Advisors Real Estate VI LP	16,211,426	0.53	-2.03	-2.03	-1.41	-0.67	18.13	N/A	N/A	N/A	8.76	02/01/2017
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	5.58	
Difference			-2.77	-2.77	-1.86	-2.67	13.02	N/A	N/A	N/A	3.18	
Dune Real Estate IV LP	12,295,239	0.40	-14.36	-14.36	-17.51	-23.69	N/A	N/A	N/A	N/A	-22.08	09/01/2019
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	3.18	
Difference			-15.10	-15.10	-17.96	-25.69	N/A	N/A	N/A	N/A	-25.26	
Hall Capital Real Estate LP	2,641,202	0.09	1.68	1.68	4.72	7.07	N/A	N/A	N/A	N/A	4.30	10/01/2018
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	4.10	
Difference			0.94	0.94	4.27	5.07	N/A	N/A	N/A	N/A	0.20	
Private Equity	102,457,847	3.33	3.74	3.74	1.60	2.53	10.27	9.53	N/A	N/A	13.75	04/01/2014
Pomona Captial VIII LP	3,903,649	0.13	25.92	25.92	3.80	0.74	8.90	10.08	N/A	N/A	14.32	04/01/2014
Capital Dynamics Global Secondaries IV	27,241,993	0.88	8.76	8.76	4.71	4.58	10.44	9.39	N/A	N/A	10.39	01/01/2015
Ardian AESF VI LP	22,789,009	0.74	-2.15	-2.15	0.54	3.76	10.79	N/A	N/A	N/A	8.30	04/01/2017
Pomona Capital IX LP	21,158,613	0.69	9.04	9.04	3.74	5.81	N/A	N/A	N/A	N/A	35.29	03/01/2018
Argonaut Private Equity IV LP	7,557,922	0.25	-13.52	-13.52	-9.92	-9.78	N/A	N/A	N/A	N/A	-2.14	09/01/2018
Ardian ASF VIII LP	14,674,685	0.48	6.56	6.56	N/A	N/A	N/A	N/A	N/A	N/A	6.56	05/01/2020
Ardian	5,131,975	0.17	-6.80	-6.80	-15.57	-15.74	1.88	4.30	N/A	N/A	8.28	05/01/2014

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

As of September 30, 2020



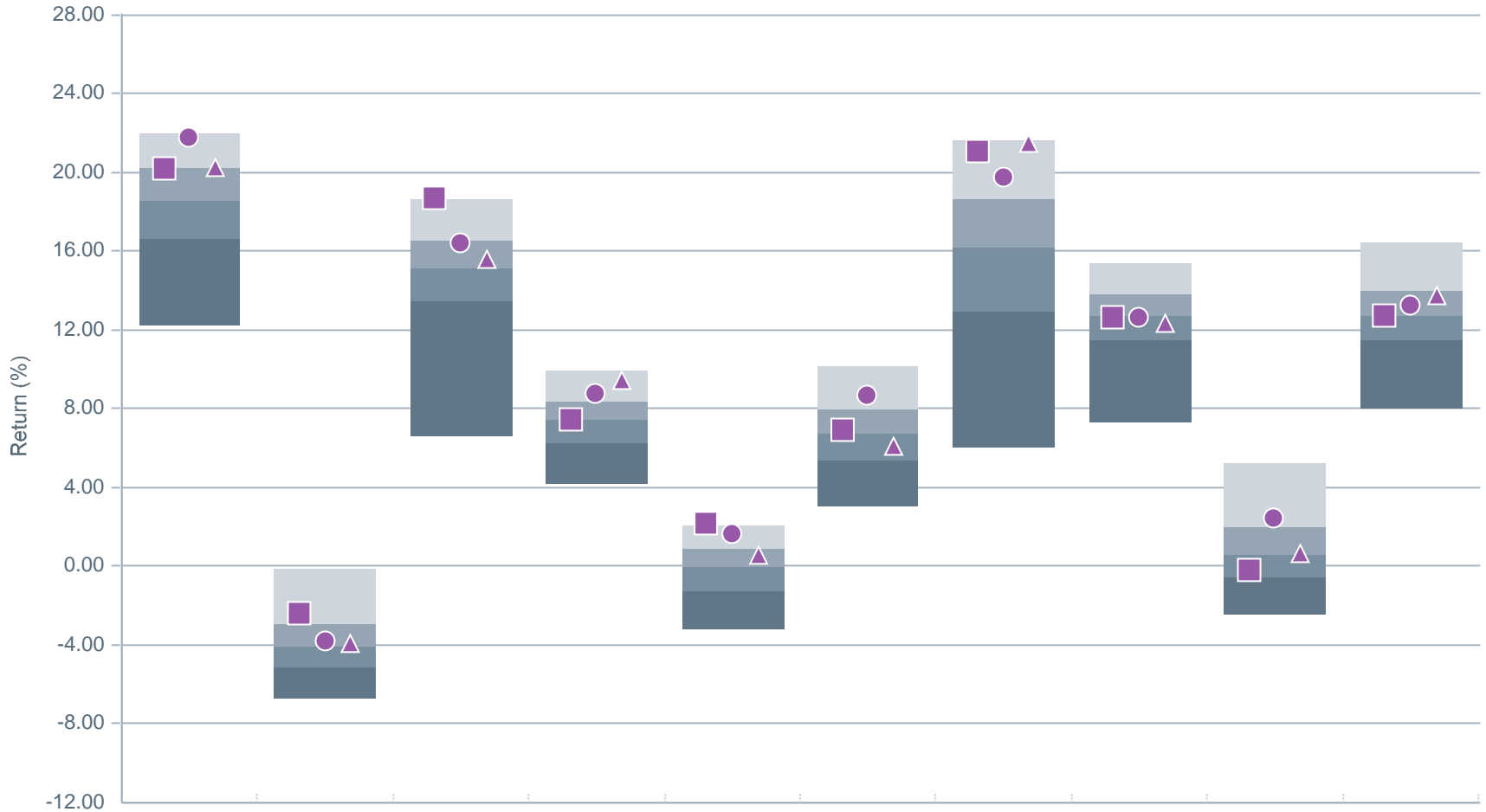
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OFPRS Total Fund	6.77 (4)	6.77 (4)	5.17 (10)	11.30 (8)	8.76 (4)	10.21 (2)	8.96 (2)	9.55 (3)
● OFPRS Policy Index	6.00 (15)	6.00 (15)	3.07 (38)	9.16 (24)	7.92 (10)	9.72 (5)	8.69 (3)	9.55 (3)
▲ OFPRS Allocation Index	5.92 (18)	5.92 (18)	3.57 (28)	9.97 (15)	7.62 (15)	9.40 (9)	8.05 (11)	9.08 (7)
5th Percentile	6.48	6.48	6.32	11.88	8.45	9.65	8.46	9.28
1st Quartile	5.64	5.64	3.78	8.91	7.13	8.68	7.51	8.39
Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70
3rd Quartile	4.45	4.45	0.84	5.74	5.35	7.29	6.20	7.07
95th Percentile	1.51	1.51	-1.66	2.93	3.59	5.12	4.45	4.69

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.



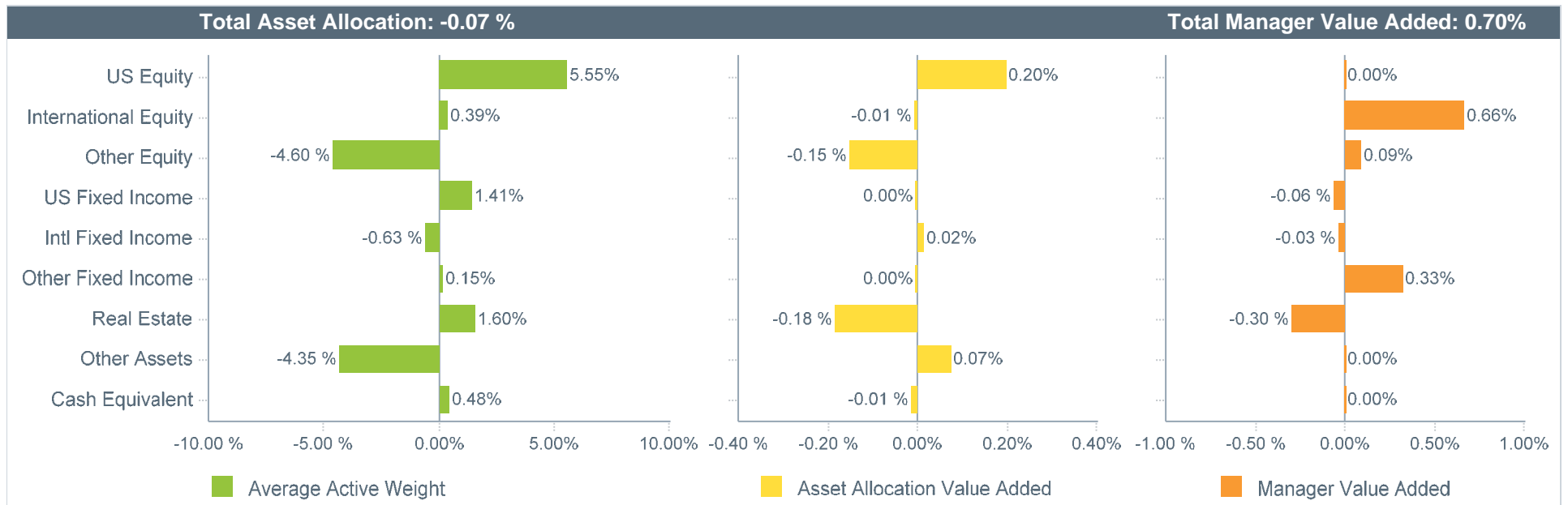
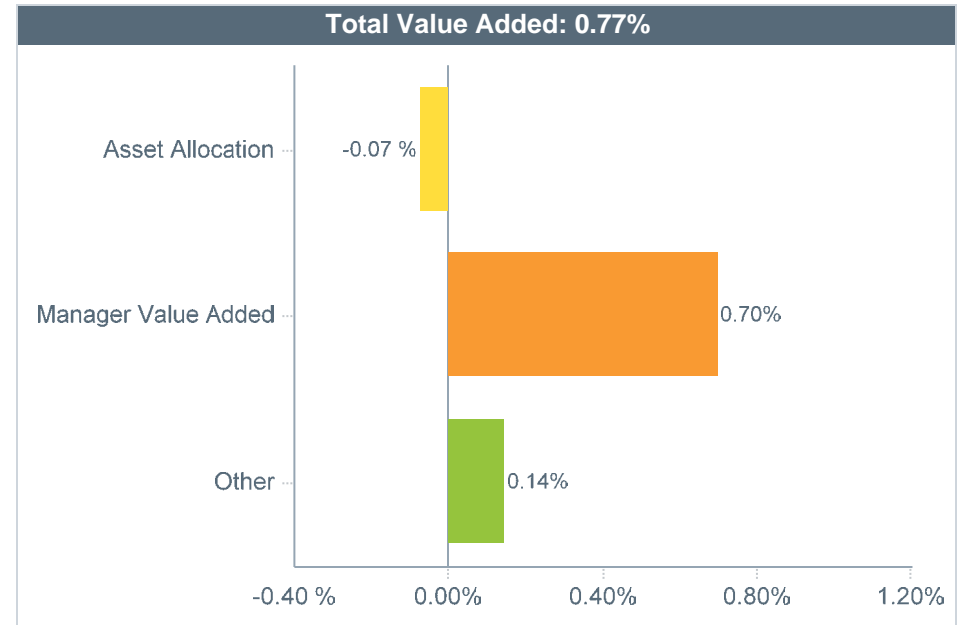
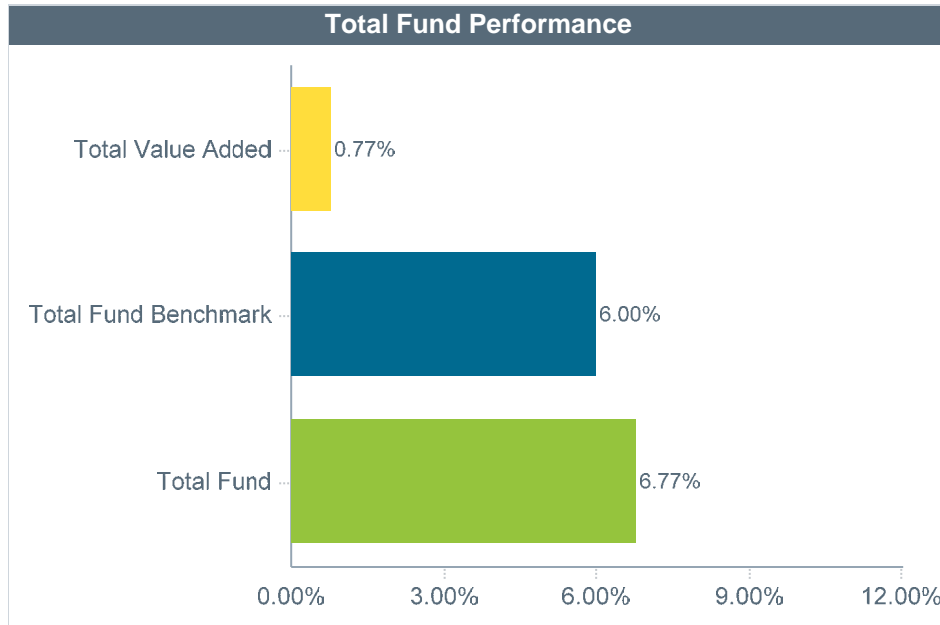
Oklahoma State Pension Commission
 Oklahoma Firefighters Pension & Retirement System vs. All Public Plans-Total Fund
 Plan Sponsor Peer Group Analysis

As of September 30, 2020

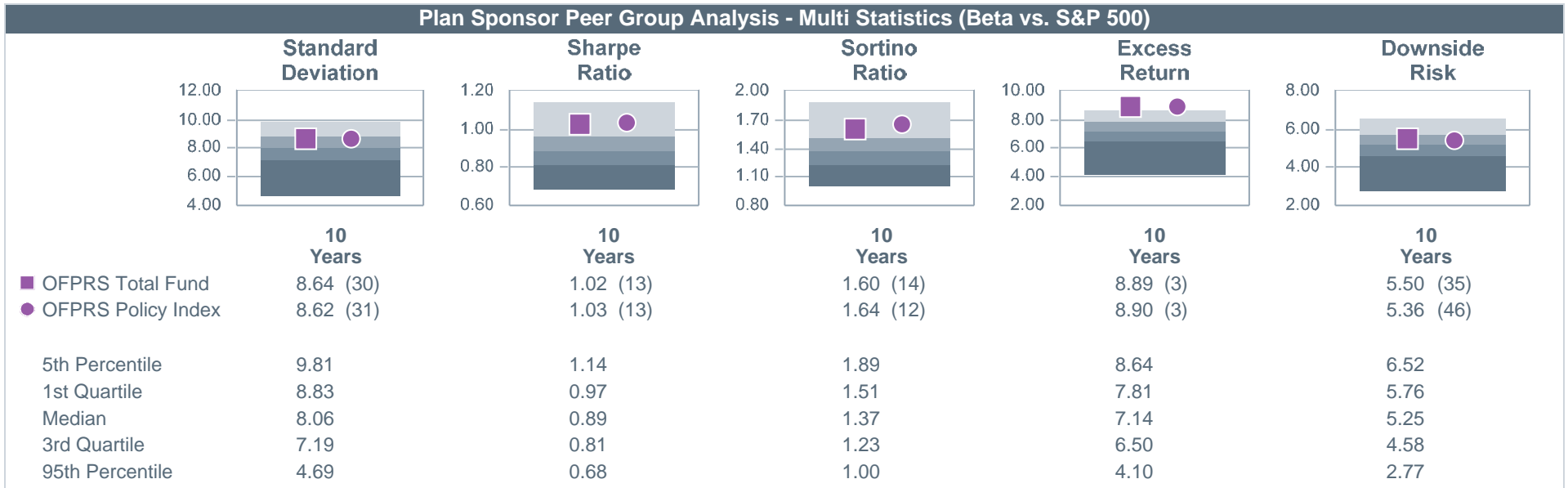
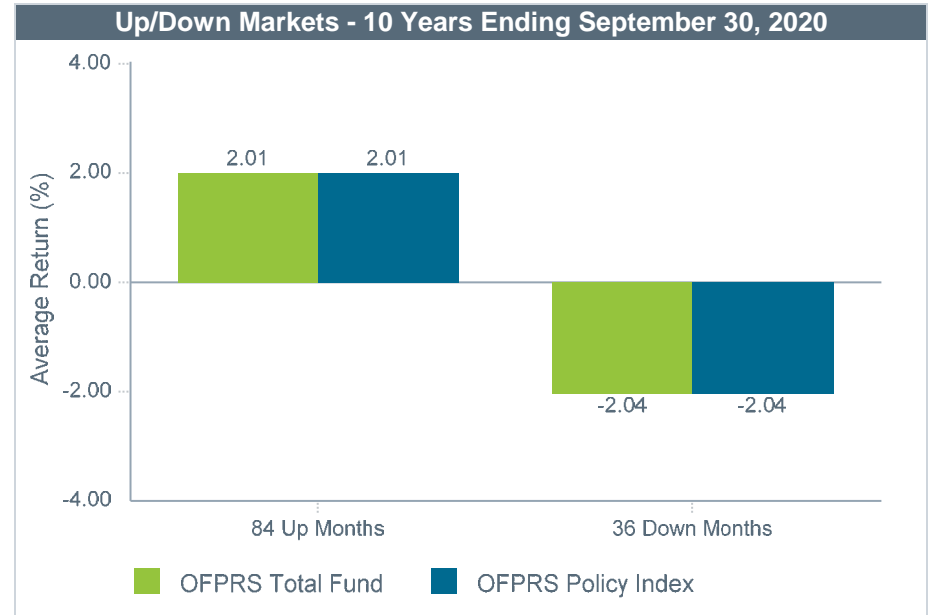
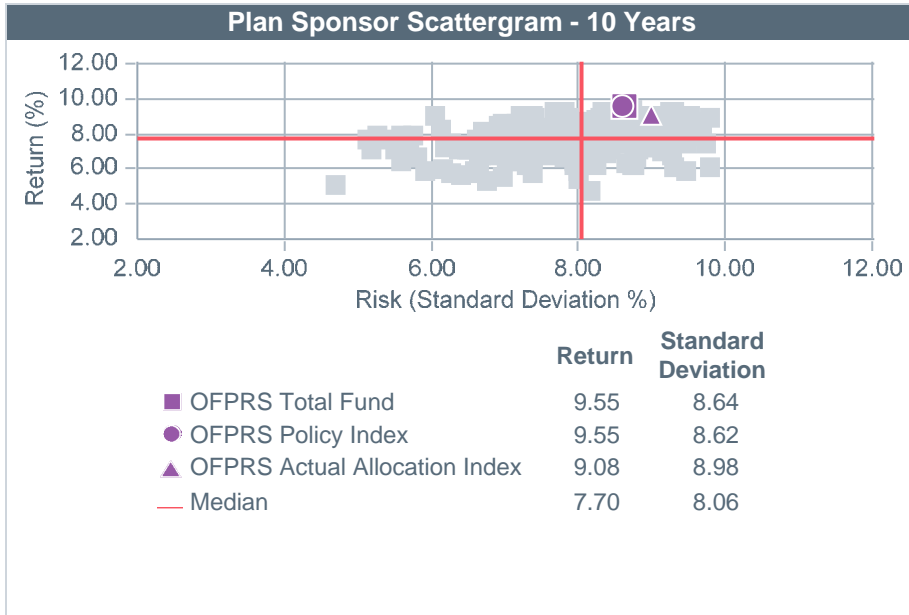


	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OFPRS Total Fund	20.15 (27)	-2.46 (19)	18.67 (6)	7.42 (51)	2.12 (5)	6.91 (45)	21.10 (7)	12.57 (54)	-0.19 (68)	12.71 (51)
● OFPRS Policy Index	21.76 (8)	-3.80 (45)	16.41 (29)	8.76 (18)	1.60 (10)	8.64 (14)	19.76 (15)	12.63 (52)	2.41 (21)	13.24 (39)
▲ OFPRS Allocation Index	20.30 (25)	-3.93 (46)	15.64 (42)	9.45 (10)	0.56 (34)	6.12 (64)	21.48 (6)	12.32 (59)	0.67 (48)	13.74 (31)
5th Percentile	22.04	-0.14	18.72	9.98	2.05	10.13	21.67	15.42	5.21	16.51
1st Quartile	20.27	-2.96	16.57	8.41	0.92	7.93	18.70	13.81	1.97	14.06
Median	18.56	-4.13	15.20	7.42	-0.09	6.74	16.20	12.73	0.54	12.71
3rd Quartile	16.66	-5.14	13.46	6.27	-1.24	5.44	12.94	11.49	-0.56	11.49
95th Percentile	12.30	-6.76	6.67	4.14	-3.17	3.06	6.01	7.33	-2.40	8.04

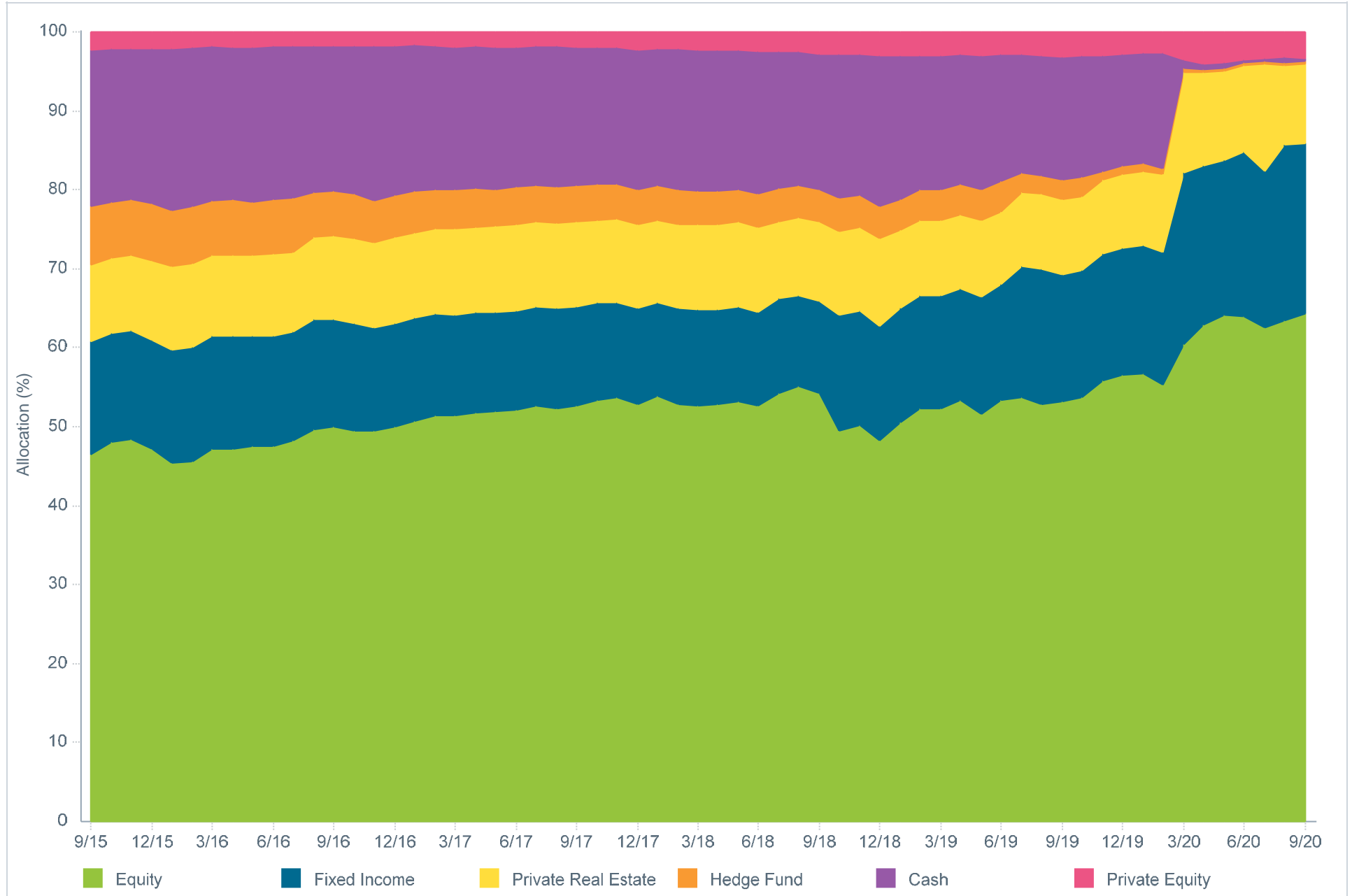
Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



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.

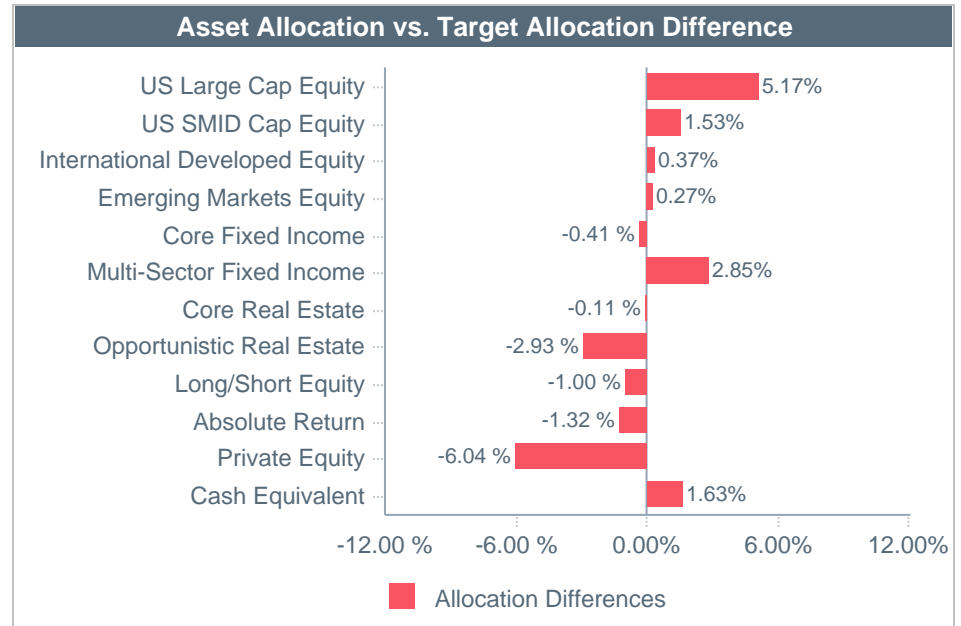


Oklahoma Police Pension & Retirement System (OPPRS)



	Performance (%)												
	Trailing							Calendar Year					
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OPPRS Total Fund (Net)	5.14	5.14	1.77	6.84	5.51	6.95	6.22	7.08	15.22	-2.85	12.91	7.04	0.59
OPPRS Policy Index	5.19	5.19	2.84	8.50	6.23	7.89	6.32	7.73	18.62	-5.34	15.45	7.07	-1.93
Difference	-0.05	-0.05	-1.07	-1.66	-0.72	-0.94	-0.10	-0.65	-3.40	2.49	-2.54	-0.03	2.52
OPPRS Actual Allocation Index	5.19	5.19	3.97	9.04	6.09	7.33	6.30	7.47	15.02	-3.70	13.78	6.66	-0.35
Difference	-0.05	-0.05	-2.20	-2.20	-0.58	-0.38	-0.08	-0.39	0.20	0.85	-0.87	0.38	0.94
Actuarial Discount Rate (7.5%)	1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference	3.32	3.32	-3.80	-0.66	-1.99	-0.55	-1.28	-0.42	7.72	-10.35	5.41	-0.46	-6.91
OPPRS Total Fund (Gross)	5.24	5.24	2.02	7.21	5.93	7.38	6.65	7.50	15.68	-2.46	13.40	7.47	1.05
OPPRS Policy Index	5.19	5.19	2.84	8.50	6.23	7.89	6.32	7.73	18.62	-5.34	15.45	7.07	-1.93
Difference	0.05	0.05	-0.82	-1.29	-0.30	-0.51	0.33	-0.23	-2.94	2.88	-2.05	0.40	2.98
OPPRS Actual Allocation Index	5.19	5.19	3.97	9.04	6.09	7.33	6.30	7.47	15.02	-3.70	13.78	6.66	-0.35
Difference	0.05	0.05	-1.95	-1.83	-0.16	0.05	0.35	0.03	0.66	1.24	-0.38	0.81	1.40
All Public Plans-Total Fund Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	18.56	-4.13	15.20	7.42	-0.09
Rank	43	43	58	54	61	73	59	57	84	19	77	49	19

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OPPRS (Police)	2,714,727,567	100.00	100.00
US Large Cap Equity	547,442,215	20.17	15.00
US SMID Cap Equity	177,354,412	6.53	5.00
International Developed Equity	281,406,491	10.37	10.00
Emerging Markets Equity	142,970,365	5.27	5.00
Core Fixed Income	260,382,925	9.59	10.00
Multi-Sector Fixed Income	281,029,219	10.35	7.50
Core Real Estate	268,433,891	9.89	10.00
Opportunistic Real Estate	56,149,825	2.07	5.00
Long/Short Equity	244,439,008	9.00	10.00
Absolute Return	167,668,940	6.18	7.50
Private Equity	243,130,528	8.96	15.00
Cash Equivalent	44,319,747	1.63	0.00



Parenteses 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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OPPRS Total Fund	2,714,727,567	100.00	5.14	5.14	1.77	6.84	5.51	6.95	6.22	7.08	6.18	07/01/2005
OPPRS Policy Index			5.19	5.19	2.84	8.50	6.23	7.89	6.32	7.73	6.13	
Difference			-0.05	-0.05	-1.07	-1.66	-0.72	-0.94	-0.10	-0.65	0.05	
OPPRS Actual Allocation Index			5.19	5.19	3.97	9.04	6.09	7.33	6.30	7.47	6.26	
Difference			-0.05	-0.05	-2.20	-2.20	-0.58	-0.38	-0.08	-0.39	-0.08	
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			3.32	3.32	-3.80	-0.66	-1.99	-0.55	-1.28	-0.42	-1.32	
Total Equity	1,636,743,019	60.29	7.89	7.89	2.45	10.14	7.24	9.25	8.20	9.16	7.12	07/01/2005
Russell 3000 Index			9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	9.25	
Difference			-1.32	-1.32	-2.96	-4.86	-4.41	-4.44	-3.91	-4.32	-2.13	
Northern Trust Russell 1000 Index (SA)	547,442,215	20.17	9.44	9.44	6.36	15.96	12.36	14.08	12.53	13.74	N/A	07/01/1998
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	7.27	
Difference			-0.03	-0.03	-0.04	-0.05	-0.02	-0.01	-0.01	-0.02	N/A	
Boston Partners SMID Cap Value Equity (SA)	78,856,303	2.90	6.48	6.48	-19.92	-13.07	-3.82	3.90	3.85	8.22	N/A	06/01/1997
Russell 2500 Val Index			3.54	3.54	-18.39	-12.62	-2.69	4.65	4.33	8.01	8.18	
Difference			2.94	2.94	-1.53	-0.45	-1.13	-0.75	-0.48	0.21	N/A	
Silvercrest Small Cap Growth Equity (SA)	98,498,109	3.63	9.59	9.59	14.03	27.57	13.67	16.04	N/A	N/A	6.99	01/01/2014
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	8.31	
Difference			2.43	2.43	10.15	11.86	5.49	4.62	N/A	N/A	-1.32	
Mondrian International Value Equity (SA)	123,887,636	4.56	1.25	1.25	-18.97	-10.61	-4.16	2.04	1.18	3.12	N/A	04/01/2004
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	5.32	
Difference			-5.00	-5.00	-13.53	-13.61	-5.32	-4.19	-2.00	-0.88	N/A	
Barings Focused EAFE Plus Equity (SA)	157,518,855	5.80	5.90	5.90	-2.07	6.26	2.73	7.11	4.61	N/A	4.69	02/01/2012
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	4.78	
Difference			-0.35	-0.35	3.37	3.26	1.57	0.88	1.43	N/A	-0.09	
AB EM Strategic Core Equity (CF)	97,366,689	3.59	12.33	12.33	1.96	10.29	0.82	N/A	N/A	N/A	5.44	10/01/2016
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	7.10	
Difference			2.77	2.77	3.12	-0.25	-1.60	N/A	N/A	N/A	-1.66	

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. Total Equity includes Public Equity, Private Equity, and Long/Short Equity.



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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Wasatch EM Small Cap (SA)	45,603,675	1.68	8.08	8.08	11.41	24.81	8.09	9.22	5.46	N/A	5.51	08/01/2012
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	4.03	
Difference			-1.48	-1.48	12.57	14.27	5.67	0.25	1.72	N/A	1.48	
Fixed Income	541,412,145	19.94	2.27	2.27	3.82	4.75	3.90	3.80	3.21	N/A	N/A	07/01/2005
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.36	
Difference			1.65	1.65	-2.97	-2.23	-1.34	-0.38	-0.76	N/A	N/A	
Agincourt Core Fixed Income (SA)	260,382,925	9.59	0.78	0.78	7.86	8.09	5.82	4.68	4.36	4.06	N/A	07/01/1998
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.99	
Difference			0.16	0.16	1.07	1.11	0.58	0.50	0.39	0.42	N/A	
Loomis Sayles Global World Bond (SA)	88,932,303	3.28	4.03	4.03	8.03	8.36	4.75	5.04	2.88	2.78	3.59	05/01/2008
FTSE Wrld Gov't Bond Index			2.94	2.94	7.14	6.77	4.37	3.95	2.22	1.86	2.62	
Difference			1.09	1.09	0.89	1.59	0.38	1.09	0.66	0.92	0.97	
Oaktree Global Credit (SA)	139,244,076	5.13	4.15	4.15	-2.33	-0.07	1.15	4.17	3.49	4.88	5.41	01/01/1998
Oaktree Global Credit Custom Index			4.53	4.53	-0.16	2.38	1.87	2.16	2.53	2.63	N/A	
Difference			-0.38	-0.38	-2.17	-2.45	-0.72	2.01	0.96	2.25	N/A	
Private Credit	52,852,840	1.95	2.76	2.76	5.70	7.25	7.82	N/A	N/A	N/A	7.85	10/01/2016
Real Assets	324,583,716	11.96	-0.28	-0.28	-2.24	-0.50	2.47	3.84	3.99	4.54	4.68	07/01/2005
Bloomberg Cmdty Index (TR)			9.07	9.07	-12.08	-8.20	-4.18	-3.09	-7.24	-6.03	-3.73	
Difference			-9.35	-9.35	9.84	7.70	6.65	6.93	11.23	10.57	8.41	
JP Morgan Strategic Property (CF)	150,422,798	5.54	-0.23	-0.23	-1.12	0.91	3.62	5.20	7.18	9.24	4.52	11/01/2007
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	4.14	
Difference			-0.50	-0.50	-0.37	0.39	-0.63	-0.49	-0.44	-0.02	0.38	
Blackstone Property Partners (CF)	113,444,291	4.18	-0.52	-0.52	-1.48	-0.44	4.20	7.36	N/A	N/A	8.50	12/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.22	
Difference			-0.79	-0.79	-0.73	-0.96	-0.05	1.67	N/A	N/A	1.28	
Columbus Square (SA)	4,566,803	0.17	-7.19	-7.19	-5.83	-5.38	1.96	4.92	5.48	6.66	N/A	03/01/1995
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.80	
Difference			-7.46	-7.46	-5.08	-5.90	-2.29	-0.77	-2.14	-2.60	N/A	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Private Real Estate	56,149,825	2.07	0.29	0.29	-0.18	1.79	8.50	8.89	10.50	N/A	8.46	08/01/2011
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	8.63	
Difference			0.02	0.02	0.57	1.27	4.25	3.20	2.88	N/A	-0.17	
Long/Short Equity	244,439,008	9.00	6.28	6.28	7.68	14.41	6.79	6.50	6.02	N/A	6.60	05/01/2012
HFRI FOF: Strategic Index			5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	3.78	
Difference			0.33	0.33	4.13	6.17	3.73	2.70	2.60	N/A	2.82	
Grosvenor Long/Short Equity (CF)	57,813,680	2.13	7.11	7.11	4.75	11.29	5.81	5.91	5.60	5.77	N/A	09/01/2003
HFRI FOF: Strategic Index			5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	3.85	
Difference			1.16	1.16	1.20	3.05	2.75	2.11	2.18	2.54	N/A	
K2 Mauna Kea LLC	186,625,328	6.87	5.99	5.99	N/A	N/A	N/A	N/A	N/A	N/A	7.21	06/01/2020
HFRI FOF: Strategic Index			5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	8.82	
Difference			0.04	0.04	N/A	N/A	N/A	N/A	N/A	N/A	-1.61	
Absolute Return												
PAAMCO (CF)	89,805,929	3.31	3.79	3.79	-1.25	0.47	0.71	0.89	1.27	2.50	N/A	10/01/2002
HFRI FOF: Cnsvt Index			2.49	2.49	0.41	2.04	2.29	2.34	2.56	2.58	2.97	
Difference			1.30	1.30	-1.66	-1.57	-1.58	-1.45	-1.29	-0.08	N/A	
Wellington Global Total Return (CF)	77,863,011	2.87	-0.01	-0.01	1.13	1.04	4.16	N/A	N/A	N/A	3.20	12/01/2016
HFRI FOF: Cnsvt Index			2.49	2.49	0.41	2.04	2.29	2.34	2.56	2.58	2.77	
Difference			-2.50	-2.50	0.72	-1.00	1.87	N/A	N/A	N/A	0.43	
Private Equity	243,130,528	8.96	8.74	8.74	4.39	5.70	11.14	8.76	11.15	11.14	11.66	07/01/2003
Cambridge US Prvt Eq Index			0.00	0.00	-0.77	2.97	9.41	10.84	11.14	12.60	13.64	
Difference			8.74	8.74	5.16	2.73	1.73	-2.08	0.01	-1.46	-1.98	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OPPRS Total Fund	2,714,727,567	100.00	5.24	5.24	2.02	7.21	5.93	7.38	6.65	7.50	6.52	07/01/2005
OPPRS Policy Index			5.19	5.19	2.84	8.50	6.23	7.89	6.32	7.73	6.13	
Difference			0.05	0.05	-0.82	-1.29	-0.30	-0.51	0.33	-0.23	0.39	
OPPRS Actual Allocation Index			5.19	5.19	3.97	9.04	6.09	7.33	6.30	7.47	6.26	
Difference			0.05	0.05	-1.95	-1.83	-0.16	0.05	0.35	0.03	0.26	
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			3.42	3.42	-3.55	-0.29	-1.57	-0.12	-0.85	0.00	-0.98	
All Public Plans-Total Fund Median			5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	6.50	
Rank			43	43	58	54	61	73	59	57	49	
Total Equity	1,636,743,019	60.29	7.99	7.99	2.69	10.48	7.59	9.61	8.57	9.53	7.41	07/01/2005
Russell 3000 Index			9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	9.25	
Difference			-1.22	-1.22	-2.72	-4.52	-4.06	-4.08	-3.54	-3.95	-1.84	
IM Global Equity (SA+CF) Median			7.77	7.72	1.00	8.79	6.60	9.78	8.38	9.72	7.75	
Rank			48	48	46	48	46	53	47	53	57	
US Equity	724,796,627	26.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	01/01/2000
S&P 500 Index (Cap Wtd)			8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	6.11	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IM U.S. Equity (SA+CF) Median			6.98	6.98	-2.35	5.79	7.14	10.71	9.45	12.19	8.25	
Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Northern Trust Russell 1000 Index (SA)	547,442,215	20.17	9.45	9.45	6.36	15.98	12.37	14.09	12.55	13.76	7.40	07/01/1998
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	7.27	
Difference			-0.02	-0.02	-0.04	-0.03	-0.01	0.00	0.01	0.00	0.13	
IM U.S. Large Cap Index Equity (SA+CF) Median			9.03	9.03	5.55	15.11	12.26	14.07	12.57	13.72	7.10	
Rank			28	28	28	27	29	48	52	38	12	
Boston Partners SMID Cap Value Equity (SA)	78,856,303	2.90	6.63	6.63	-19.59	-12.57	-3.27	4.50	4.47	8.87	8.55	06/01/1997
Russell 2500 Val Index			3.54	3.54	-18.39	-12.62	-2.69	4.65	4.33	8.01	8.18	
Difference			3.09	3.09	-1.20	0.05	-0.58	-0.15	0.14	0.86	0.37	
IM U.S. SMID Cap Value Equity (SA+CF) Median			4.25	4.25	-17.06	-10.32	-1.35	5.71	5.33	9.14	9.98	
Rank			24	24	71	63	70	64	62	57	90	
Silvercrest Small Cap Growth Equity (SA)	98,498,109	3.63	9.82	9.82	14.73	28.62	N/A	N/A	N/A	N/A	N/A	01/01/2014
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	8.31	
Difference			2.66	2.66	10.85	12.91	N/A	N/A	N/A	N/A	N/A	
IM U.S. Small Cap Growth Equity (SA+CF) Median			9.05	9.05	11.07	20.98	13.56	15.11	11.70	14.77	11.01	
Rank			43	43	44	39	N/A	N/A	N/A	N/A	N/A	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity	424,376,856	15.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	06/01/2004
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	5.57	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IM International Equity (SA+CF) Median			8.49	8.41	-2.20	7.23	2.26	7.57	4.85	6.00	7.64	
Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Mondrian International Value Equity (SA)	123,887,636	4.56	1.37	1.37	-18.69	-10.21	-3.74	2.47	1.62	3.57	4.85	04/01/2004
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	5.32	
Difference			-4.88	-4.88	-13.25	-13.21	-4.90	-3.76	-1.56	-0.43	-0.47	
IM International Value Equity (SA+CF) Median			5.18	4.96	-12.27	-3.48	-1.91	4.55	2.65	5.44	6.39	
Rank			97	97	91	92	71	82	78	79	80	
Barings Focused EAFE Plus Equity (SA)	157,518,855	5.80	6.31	6.31	-1.52	6.96	3.10	7.73	5.30	N/A	5.24	02/01/2012
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	4.78	
Difference			0.06	0.06	3.92	3.96	1.94	1.50	2.12	N/A	0.46	
IM International Equity (SA+CF) Median			8.49	8.41	-2.20	7.23	2.26	7.57	4.85	6.00	6.75	
Rank			69	69	47	52	43	49	45	N/A	72	
AB EM Strategic Core Equity (CF)	97,366,689	3.59	12.51	12.51	2.46	11.01	1.20	N/A	N/A	N/A	5.74	10/01/2016
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	7.10	
Difference			2.95	2.95	3.62	0.47	-1.22	N/A	N/A	N/A	-1.36	
IM Emerging Markets Equity (SA+CF) Median			9.91	9.91	-1.12	10.19	2.45	8.85	4.41	4.09	7.07	
Rank			18	17	34	46	59	N/A	N/A	N/A	64	
Wasatch EM Small Cap (SA)	45,603,675	1.68	8.45	8.45	12.55	26.51	N/A	N/A	N/A	N/A	N/A	08/01/2012
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	4.03	
Difference			-1.11	-1.11	13.71	15.97	N/A	N/A	N/A	N/A	N/A	
IM Emerging Markets Equity (SA+CF) Median			9.91	9.91	-1.12	10.19	2.45	8.85	4.41	4.09	5.45	
Rank			70	70	12	11	N/A	N/A	N/A	N/A	N/A	
Fixed Income	541,412,145	19.94	2.35	2.35	4.09	5.12	4.34	4.27	3.70	4.14	5.02	07/01/2005
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.36	
Difference			1.73	1.73	-2.70	-1.86	-0.90	0.09	-0.27	0.50	0.66	
IM U.S. Fixed Income (SA+CF) Median			1.34	1.34	4.98	5.87	4.62	4.47	4.16	4.17	4.67	
Rank			28	28	56	56	59	55	60	51	40	
Agincourt Core Fixed Income (SA)	260,382,925	9.59	0.81	0.81	7.97	8.24	5.99	4.86	4.54	4.24	5.44	07/01/1998
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.99	
Difference			0.19	0.19	1.18	1.26	0.75	0.68	0.57	0.60	0.45	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			1.11	1.11	7.33	7.55	5.67	4.73	4.44	4.17	5.37	
Rank			70	70	27	25	26	36	42	43	48	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Loomis Sayles Global World Bond (SA)	88,932,303	3.28	4.12	4.12	8.30	8.72	5.10	5.39	3.22	3.12	3.90	05/01/2008
FTSE Wrld Gov't Bond Index			2.94	2.94	7.14	6.77	4.37	3.95	2.22	1.86	2.62	
Difference			1.18	1.18	1.16	1.95	0.73	1.44	1.00	1.26	1.28	
IM Global Fixed Income (SA+CF) Median			3.50	3.41	2.92	4.77	4.29	4.95	3.89	3.77	4.49	
Rank			35	33	9	12	26	41	65	67	64	
Oaktree Global Credit (SA)	139,244,076	5.13	4.30	4.30	-1.89	0.53	1.80	4.80	4.11	5.36	5.88	01/01/1998
Oaktree Global Credit Custom Index			4.53	4.53	-0.16	2.38	1.87	2.16	2.53	2.63	N/A	
Difference			-0.23	-0.23	-1.73	-1.85	-0.07	2.64	1.58	2.73	N/A	
Private Credit	52,852,840	1.95	2.76	2.76	5.70	7.25	7.82	N/A	N/A	N/A	7.85	10/01/2016
Real Assets	324,583,716	11.96	-0.13	-0.13	-1.88	0.09	3.23	4.54	4.68	5.42	5.39	07/01/2005
Bloomberg Cmdb Index (TR)			9.07	9.07	-12.08	-8.20	-4.18	-3.09	-7.24	-6.03	-3.73	
Difference			-9.20	-9.20	10.20	8.29	7.41	7.63	11.92	11.45	9.12	
JP Morgan Strategic Property (CF)	150,422,798	5.54	-0.03	-0.03	-0.51	1.75	N/A	N/A	N/A	N/A	N/A	11/01/2007
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	4.14	
Difference			-0.30	-0.30	0.24	1.23	N/A	N/A	N/A	N/A	N/A	
Blackstone Property Partners (CF)	113,444,291	4.18	-0.34	-0.34	-1.39	-0.02	5.96	8.80	N/A	N/A	9.82	12/01/2014
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.22	
Difference			-0.61	-0.61	-0.64	-0.54	1.71	3.11	N/A	N/A	2.60	
Columbus Square (SA)	4,566,803	0.17	-7.19	-7.19	-5.83	-5.38	1.96	5.01	5.70	8.86	12.88	03/01/1995
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	7.80	
Difference			-7.46	-7.46	-5.08	-5.90	-2.29	-0.68	-1.92	-0.40	5.08	
Private Real Estate	56,149,825	2.07	0.29	0.29	-0.18	1.79	8.50	8.89	10.50	N/A	8.46	08/01/2011
NCREIF ODCE Index (AWA) (Net)			0.27	0.27	-0.75	0.52	4.25	5.69	7.62	9.26	8.63	
Difference			0.02	0.02	0.57	1.27	4.25	3.20	2.88	N/A	-0.17	
Long/Short Equity	244,439,008	9.00	6.34	6.34	7.95	14.82	7.23	6.95	6.49	N/A	7.09	05/01/2012
HFRI FOF: Strategic Index			5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	3.78	
Difference			0.39	0.39	4.40	6.58	4.17	3.15	3.07	N/A	3.31	
Grosvenor Long/Short Equity (CF)	57,813,680	2.13	7.33	7.33	5.28	11.97	N/A	N/A	N/A	N/A	N/A	09/01/2003
HFRI FOF: Strategic Index			5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	3.85	
Difference			1.38	1.38	1.73	3.73	N/A	N/A	N/A	N/A	N/A	
K2 Mauna Kea LLC	186,625,328	6.87	5.99	5.99	N/A	N/A	N/A	N/A	N/A	N/A	7.21	06/01/2020
HFRI FOF: Strategic Index			5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	8.82	
Difference			0.04	0.04	N/A	N/A	N/A	N/A	N/A	N/A	-1.61	

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. Total Equity includes Public Equity, Private Equity, and Long/Short Equity.



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

As of September 30, 2020

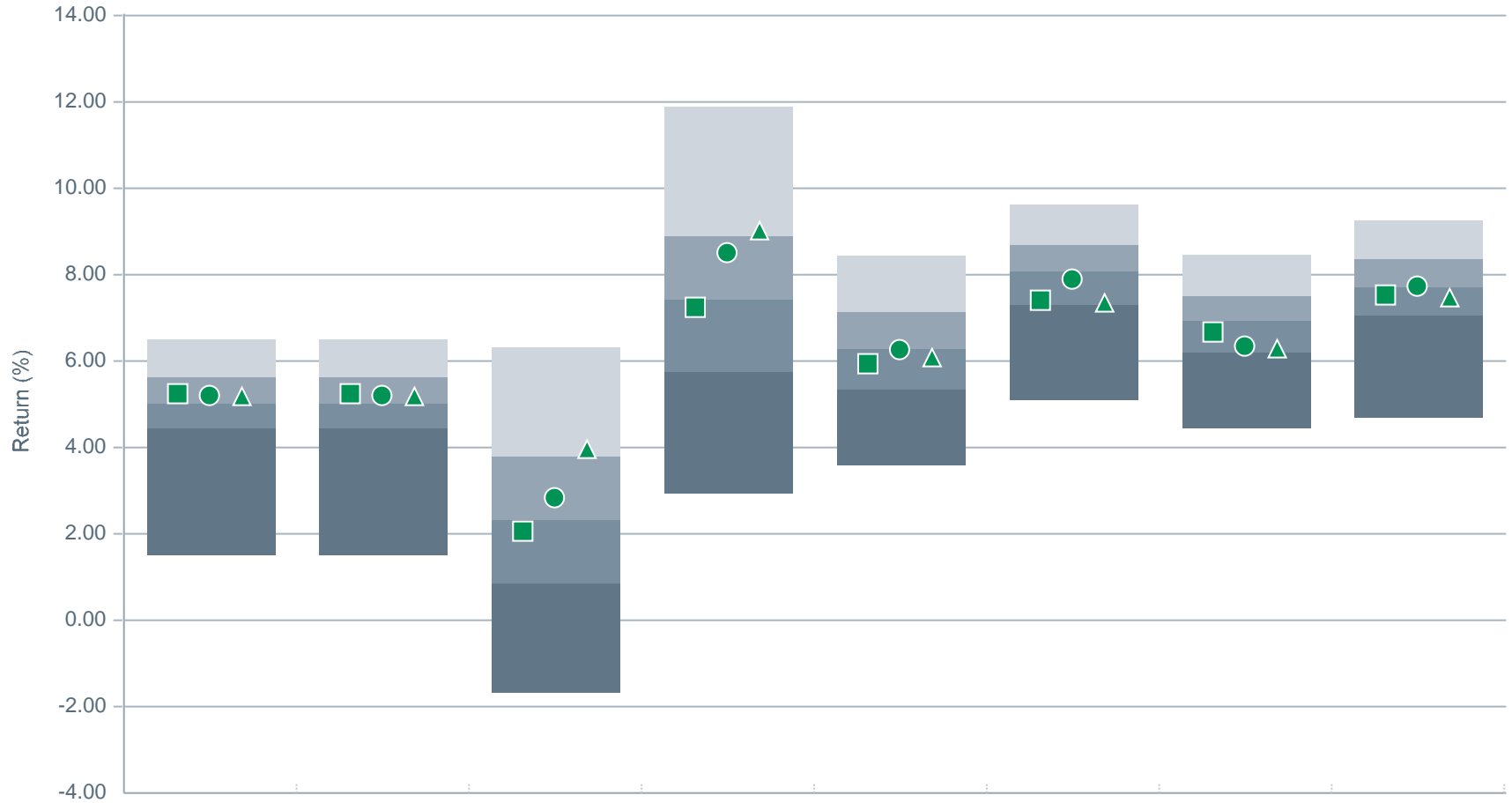
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Absolute Return												
PAAMCO (CF)	89,805,929	3.31	4.02	4.02	-0.58	1.38	N/A	N/A	N/A	N/A	N/A	10/01/2002
HFRI FOF: Cnsvt Index			2.49	2.49	0.41	2.04	2.29	2.34	2.56	2.58	2.97	
Difference			1.53	1.53	-0.99	-0.66	N/A	N/A	N/A	N/A	N/A	
Wellington Global Total Return (CF)												
Wellington Global Total Return (CF)	77,863,011	2.87	0.05	0.05	1.32	1.29	N/A	N/A	N/A	N/A	N/A	12/01/2016
HFRI FOF: Cnsvt Index			2.49	2.49	0.41	2.04	2.29	2.34	2.56	2.58	2.77	
Difference			-2.44	-2.44	0.91	-0.75	N/A	N/A	N/A	N/A	N/A	
Private Equity												
Private Equity	243,130,528	8.96	8.74	8.74	4.39	5.70	11.14	8.76	11.15	11.14	11.66	07/01/2003
Cambridge US Prvt Eq Index			0.00	0.00	-0.77	2.97	9.41	10.84	11.14	12.60	13.64	
Difference			8.74	8.74	5.16	2.73	1.73	-2.08	0.01	-1.46	-1.98	

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. Total Equity includes Public Equity, Private Equity, and Long/Short Equity.



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

As of September 30, 2020



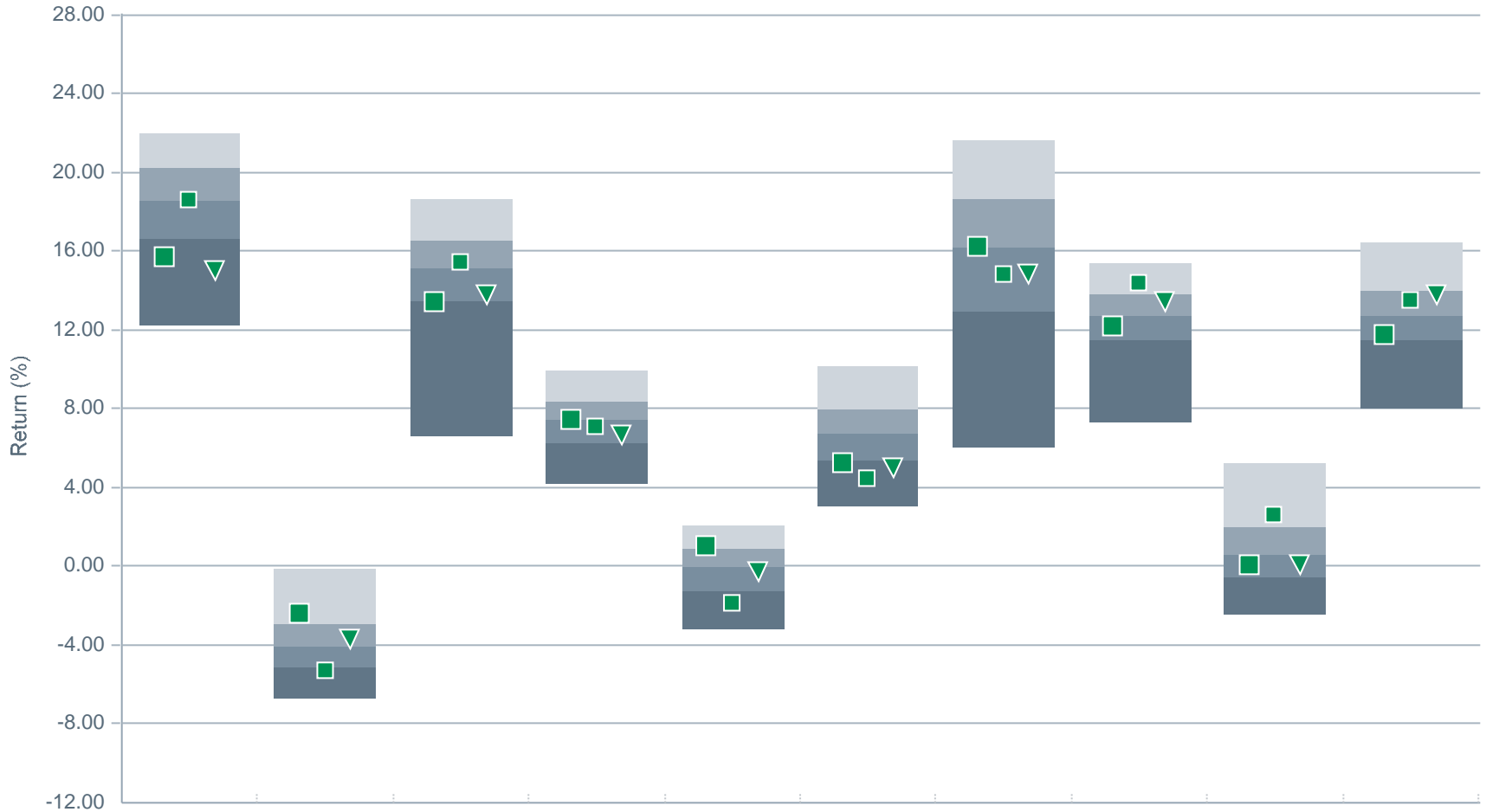
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OPPRS Total Fund	5.24 (43)	5.24 (43)	2.02 (58)	7.21 (54)	5.93 (61)	7.38 (73)	6.65 (59)	7.50 (57)
● OPPRS Policy Index	5.19 (45)	5.19 (45)	2.84 (41)	8.50 (32)	6.23 (51)	7.89 (56)	6.32 (72)	7.73 (49)
▲ OPPRS Allocation Index	5.19 (45)	5.19 (45)	3.97 (22)	9.04 (25)	6.09 (54)	7.33 (75)	6.30 (72)	7.47 (59)
5th Percentile	6.48	6.48	6.32	11.88	8.45	9.65	8.46	9.28
1st Quartile	5.64	5.64	3.78	8.91	7.13	8.68	7.51	8.39
Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70
3rd Quartile	4.45	4.45	0.84	5.74	5.35	7.29	6.20	7.07
95th Percentile	1.51	1.51	-1.66	2.93	3.59	5.12	4.45	4.69

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

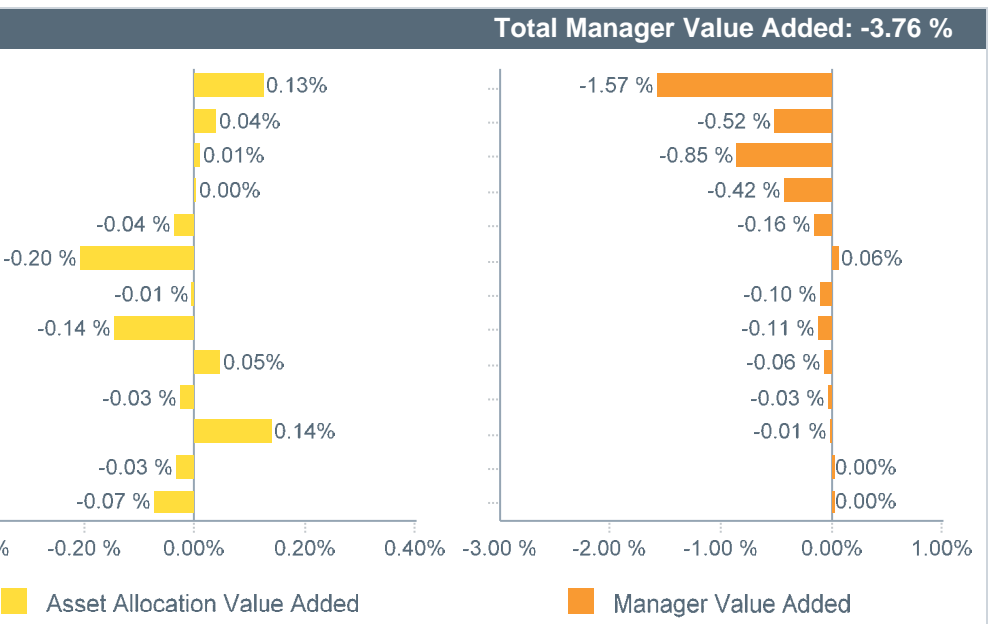
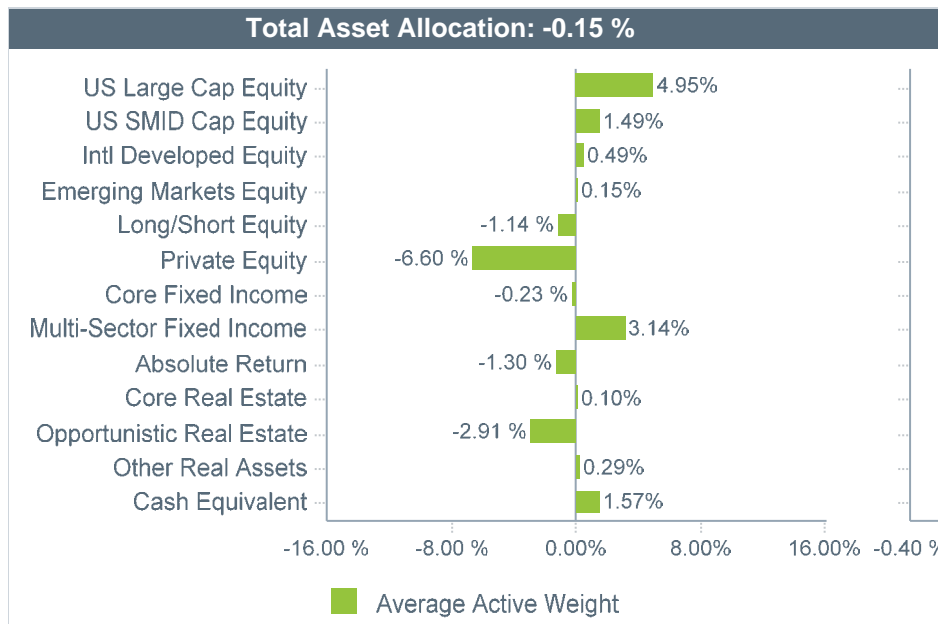
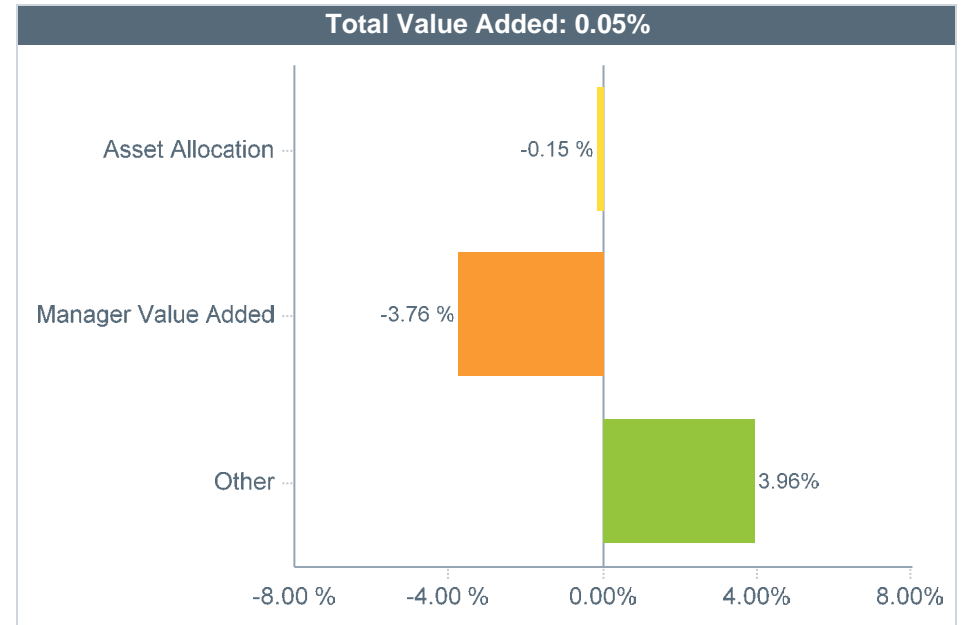
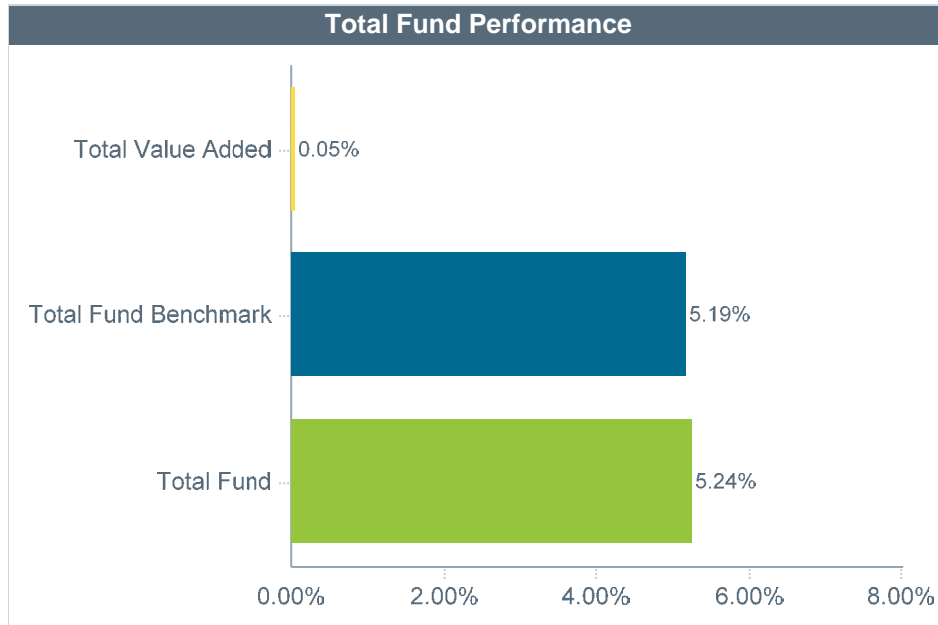
As of September 30, 2020



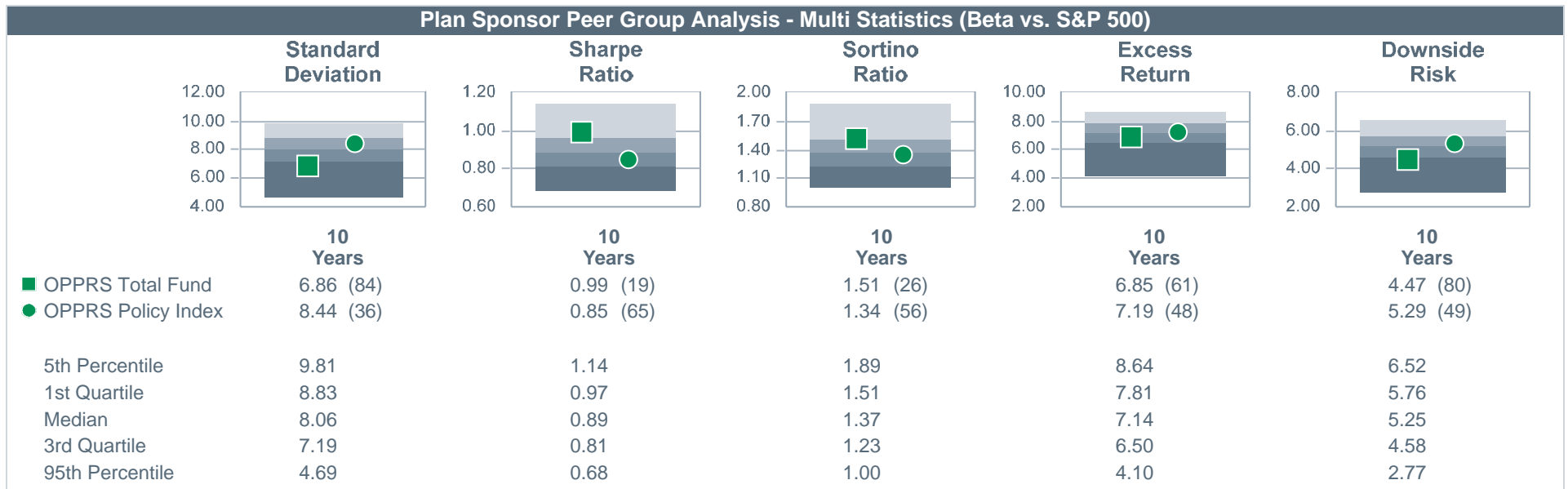
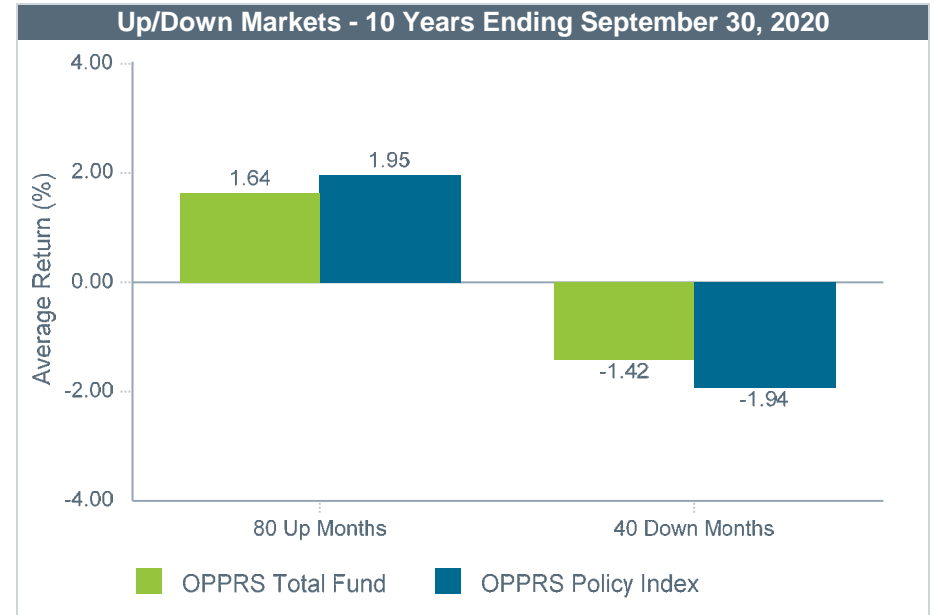
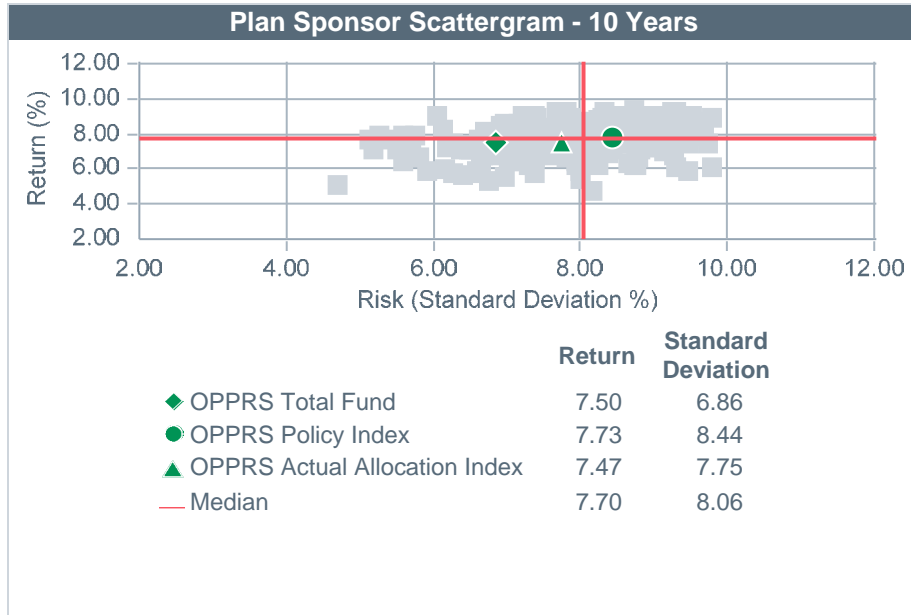
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OPPRS Total Fund	15.68 (84)	-2.46 (19)	13.40 (77)	7.47 (49)	1.05 (19)	5.20 (79)	16.18 (51)	12.20 (62)	0.02 (64)	11.70 (72)
■ OPPRS Policy Index	18.62 (49)	-5.34 (78)	15.45 (45)	7.07 (59)	-1.93 (84)	4.47 (88)	14.82 (65)	14.35 (17)	2.56 (20)	13.53 (34)
▼ OPPRS Allocation Index	15.02 (88)	-3.70 (42)	13.78 (72)	6.66 (68)	-0.35 (57)	4.97 (83)	14.77 (65)	13.44 (32)	0.09 (62)	13.78 (31)
5th Percentile	22.04	-0.14	18.72	9.98	2.05	10.13	21.67	15.42	5.21	16.51
1st Quartile	20.27	-2.96	16.57	8.41	0.92	7.93	18.70	13.81	1.97	14.06
Median	18.56	-4.13	15.20	7.42	-0.09	6.74	16.20	12.73	0.54	12.71
3rd Quartile	16.66	-5.14	13.46	6.27	-1.24	5.44	12.94	11.49	-0.56	11.49
95th Percentile	12.30	-6.76	6.67	4.14	-3.17	3.06	6.01	7.33	-2.40	8.04

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

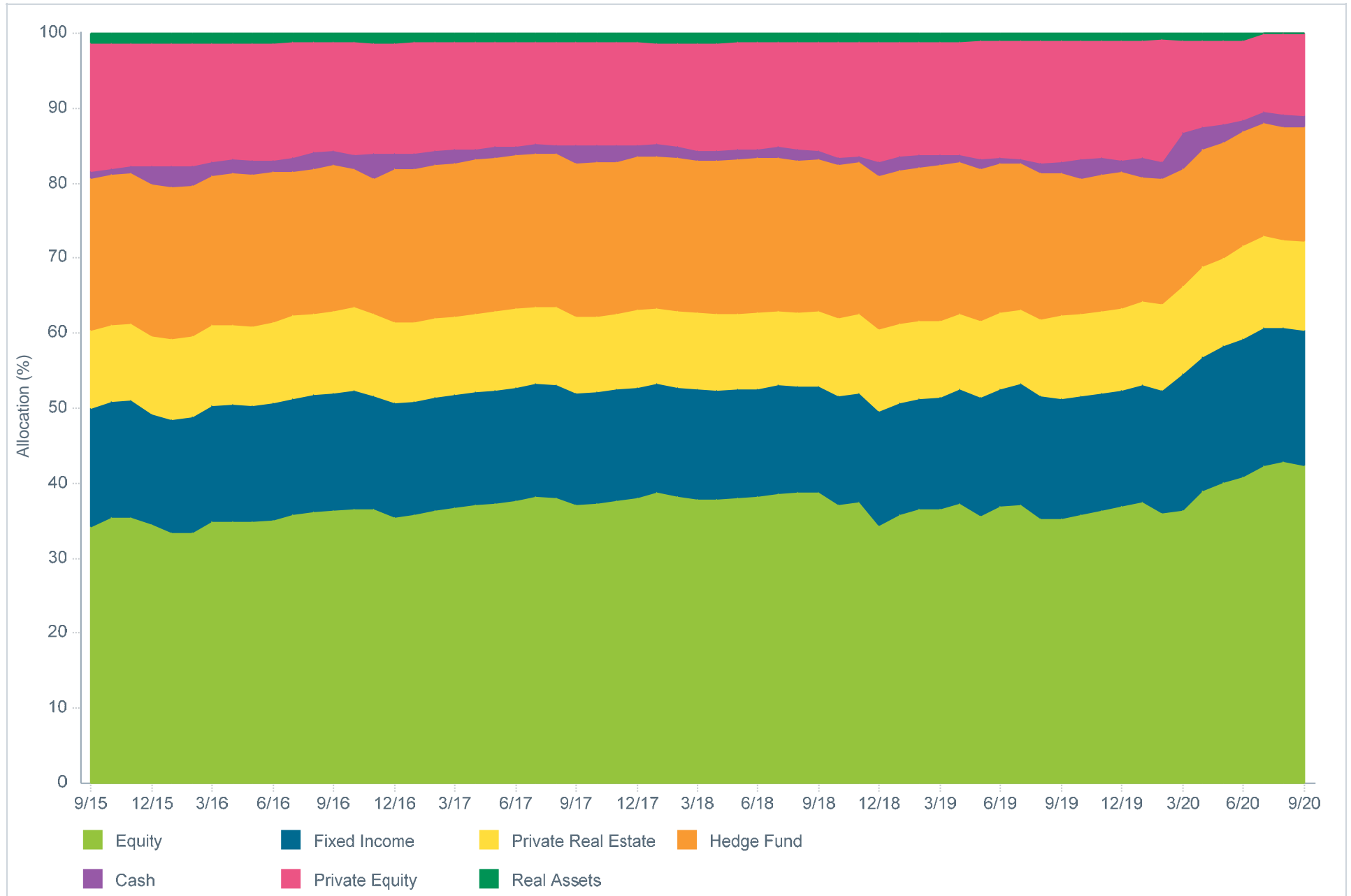




Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation. Allocation to Multi-Sector Fixed Income includes Private Credit.



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.



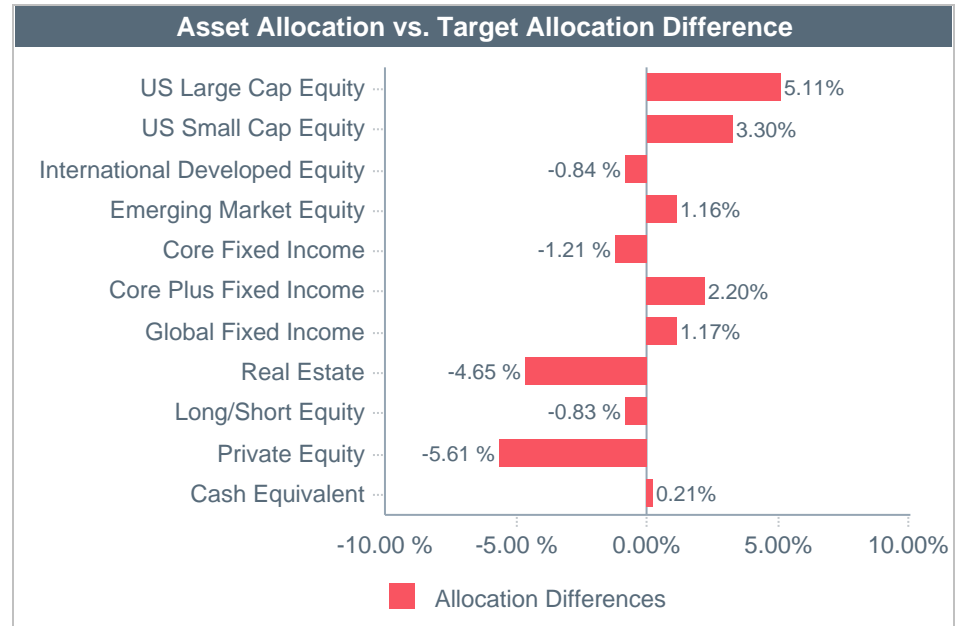
Allocation to Fixed Income includes Private Credit.

Oklahoma Law Enforcement Retirement System (OLERS)



	Performance (%)												
	Trailing								Calendar Year				
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OLERS Total Fund (Net)	4.01	4.01	0.02	5.82	4.97	7.03	6.29	7.59	17.49	-4.75	14.53	7.16	-0.53
OLERS Policy Index	4.80	4.80	2.43	8.29	6.67	8.32	7.38	8.33	19.12	-3.67	13.36	8.64	1.00
Difference	-0.79	-0.79	-2.41	-2.47	-1.70	-1.29	-1.09	-0.74	-1.63	-1.08	1.17	-1.48	-1.53
OLERS Actual Allocation Index	4.25	4.25	2.77	8.36	6.48	8.21	7.24	8.07	17.33	-3.47	14.63	8.27	0.33
Difference	-0.24	-0.24	-2.75	-2.54	-1.51	-1.18	-0.95	-0.48	0.16	-1.28	-0.10	-1.11	-0.86
Actuarial Discount Rate (7.5%)	1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Difference	2.19	2.19	-5.55	-1.68	-2.53	-0.47	-1.21	0.09	9.99	-12.25	7.03	-0.34	-8.03
OLERS Total Fund (Gross)	4.07	4.07	0.16	6.02	5.17	7.22	6.47	7.66	17.70	-4.55	14.71	7.32	-0.37
OLERS Policy Index	4.80	4.80	2.43	8.29	6.67	8.32	7.38	8.33	19.12	-3.67	13.36	8.64	1.00
Difference	-0.73	-0.73	-2.27	-2.27	-1.50	-1.10	-0.91	-0.67	-1.42	-0.88	1.35	-1.32	-1.37
OLERS Actual Allocation Index	4.25	4.25	2.77	8.36	6.48	8.21	7.24	8.07	17.33	-3.47	14.63	8.27	0.33
Difference	-0.18	-0.18	-2.61	-2.34	-1.31	-0.99	-0.77	-0.41	0.37	-1.08	0.08	-0.95	-0.70
All Public Plans-Total Fund Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	18.56	-4.13	15.20	7.42	-0.09
Rank	84	84	87	72	80	77	67	53	61	59	59	53	58

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OLERS (Law Enforcement)	1,026,451,777	100.00	100.00
US Large Cap Equity	257,722,356	25.11	20.00
US Small Cap Equity	136,549,104	13.30	10.00
International Developed Equity	93,986,375	9.16	10.00
Emerging Market Equity	63,216,525	6.16	5.00
Core Fixed Income	90,246,302	8.79	10.00
Core Plus Fixed Income	125,232,809	12.20	10.00
Global Fixed Income	63,337,369	6.17	5.00
Real Estate	106,230,503	10.35	15.00
Long/Short Equity	42,754,521	4.17	5.00
Private Equity	45,039,471	4.39	10.00
Cash Equivalent	2,136,441	0.21	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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OLERS Total Fund	1,026,451,777	100.00	4.01	4.01	0.02	5.82	4.97	7.03	6.29	7.59	11.65	10/01/1990
OLERS Policy Index			4.80	4.80	2.43	8.29	6.67	8.32	7.38	8.33	N/A	
Difference			-0.79	-0.79	-2.41	-2.47	-1.70	-1.29	-1.09	-0.74	N/A	
OLERS Actual Allocation Index			4.25	4.25	2.77	8.36	6.48	8.21	7.24	8.07	8.33	
Difference			-0.24	-0.24	-2.75	-2.54	-1.51	-1.18	-0.95	-0.48	3.32	
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			2.19	2.19	-5.55	-1.68	-2.53	-0.47	-1.21	0.09	4.15	
US Equity	394,271,460	38.41	6.54	6.54	-1.66	8.02	8.06	11.51	10.20	12.49	N/A	10/01/1990
S&P 500 Index (Cap Wtd)			8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	10.59	
Difference			-2.39	-2.39	-7.23	-7.13	-4.22	-2.64	-2.48	-1.25	N/A	
Hotchkis Wiley Large Cap Value Equity (SA)	66,788,577	6.51	1.46	1.46	-21.67	-14.66	-1.12	6.26	6.50	9.93	11.06	11/01/1990
Russell 1000 Val Index			5.59	5.59	-11.58	-5.03	2.63	7.66	7.35	9.95	10.04	
Difference			-4.13	-4.13	-10.09	-9.63	-3.75	-1.40	-0.85	-0.02	1.02	
Kennedy Capital Small Cap Value Equity (SA)	60,552,966	5.90	2.22	2.22	-8.61	-1.57	-0.21	7.70	6.53	9.69	21.44	02/01/1996
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	8.17	
Difference			-0.34	-0.34	12.93	13.31	4.92	3.59	3.26	2.60	13.27	
NTGI S&P 500 Index (CF)	118,866,857	11.58	8.92	8.92	5.53	15.10	12.25	14.13	12.67	13.70	10.25	08/01/2008
S&P 500 Index (Cap Wtd)			8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	10.67	
Difference			-0.01	-0.01	-0.04	-0.05	-0.03	-0.02	-0.01	-0.04	-0.42	
Polen Focus Growth (CF)	72,066,922	7.02	9.99	9.99	21.92	34.81	N/A	N/A	N/A	N/A	34.80	01/01/2019
Russell 1000 Grth Index			13.22	13.22	24.33	37.53	21.67	20.10	17.39	17.25	35.23	
Difference			-3.23	-3.23	-2.41	-2.72	N/A	N/A	N/A	N/A	-0.43	
Wellington Small Cap Growth (CF)	75,996,139	7.40	6.35	6.35	13.44	28.51	12.71	N/A	N/A	N/A	15.07	08/01/2016
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	11.44	
Difference			-0.81	-0.81	9.56	12.80	4.53	N/A	N/A	N/A	3.63	

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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity	157,202,900	15.32	7.23	7.23	-3.24	6.49	2.58	6.99	4.40	4.40	N/A	10/01/1990
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	N/A	
Difference			0.98	0.98	2.20	3.49	1.42	0.76	1.22	0.40	N/A	
International Developed Equity	93,986,375	9.16	3.76	3.76	-10.76	-2.33	-0.80	4.48	2.70	3.28	N/A	11/01/1995
MSCI EAFE Index (USD) (Net)			4.80	4.80	-7.09	0.49	0.62	5.26	3.01	4.62	4.69	
Difference			-1.04	-1.04	-3.67	-2.82	-1.42	-0.78	-0.31	-1.34	N/A	
Barings Focused International Equity (SA)	52,184,698	5.08	5.89	5.89	-2.08	6.25	2.72	7.09	4.56	N/A	5.12	02/01/2012
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	4.78	
Difference			-0.36	-0.36	3.36	3.25	1.56	0.86	1.38	N/A	0.34	
Mondrian International Equity (SA)	41,801,677	4.07	1.23	1.23	-19.06	-10.74	-4.30	1.87	1.02	2.95	3.40	01/01/2005
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	4.63	
Difference			-5.02	-5.02	-13.62	-13.74	-5.46	-4.36	-2.16	-1.05	-1.23	
Emerging Market Equity	63,216,525	6.16	12.83	12.83	10.35	22.58	8.41	10.74	6.51	N/A	6.46	07/01/2012
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	4.23	
Difference			3.27	3.27	11.51	12.04	5.99	1.77	2.77	N/A	2.23	
Wasatch:Emg Mkt SC;Inv (WAEMX)	15,637,559	1.52	8.08	8.08	11.40	24.79	8.08	9.21	5.45	N/A	5.56	07/01/2012
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	4.23	
Difference			-1.48	-1.48	12.56	14.25	5.66	0.24	1.71	N/A	1.33	
William Blair Emerging Markets Leaders (CF)	47,578,966	4.64	14.48	14.48	10.02	21.90	8.53	N/A	N/A	N/A	12.31	09/01/2016
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	7.28	
Difference			4.92	4.92	11.18	11.36	6.11	N/A	N/A	N/A	5.03	
Fixed Income	278,816,480	27.16	0.64	0.64	4.29	4.89	3.54	3.99	3.56	3.82	N/A	10/01/1990
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	6.01	
Difference			0.02	0.02	-2.50	-2.09	-1.70	-0.19	-0.41	0.18	N/A	
NTGI Aggregate Index (SA)	90,246,302	8.79	0.60	0.60	6.81	6.98	5.25	4.17	4.00	3.66	4.33	04/01/2004
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.28	
Difference			-0.02	-0.02	0.02	0.00	0.01	-0.01	0.03	0.02	0.05	
TCW Core Plus Fixed Income (SA)	125,232,809	12.20	1.50	1.50	8.41	8.73	6.43	5.29	5.03	5.34	6.47	03/01/1996
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.26	
Difference			0.88	0.88	1.62	1.75	1.19	1.11	1.06	1.70	1.21	

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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Franklin Templeton Global Bonds (SA)	63,337,369	6.17	-0.96	-0.96	-5.95	-4.46	-2.74	1.53	0.81	N/A	0.82	06/01/2013
Bloomberg Gbl Agg Bond Index			2.66	2.66	5.72	6.24	4.10	3.93	2.48	2.36	2.58	
Difference			-3.62	-3.62	-11.67	-10.70	-6.84	-2.40	-1.67	N/A	-1.76	
Long/Short Equity	42,754,521	4.17	2.58	2.58	-0.94	4.27	2.43	3.80	3.96	4.67	N/A	01/01/2008
HFRI FOF: Strategic Index			5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	1.36	
Difference			-3.37	-3.37	-4.49	-3.97	-0.63	0.00	0.54	1.44	N/A	
Grosvenor (CF)	13,256,746	1.29	1.97	1.97	-1.54	3.65	2.23	3.68	3.87	4.61	3.69	01/01/2008
HFRI FOF: Strategic Index			5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	1.36	
Difference			-3.98	-3.98	-5.09	-4.59	-0.83	-0.12	0.45	1.38	2.33	
Mauna Kea	29,497,775	2.87	1.72	1.72	N/A	N/A	N/A	N/A	N/A	N/A	1.72	08/01/2020
HFRI FOF: Strategic Index			5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	2.80	
Difference			-4.23	-4.23	N/A	N/A	N/A	N/A	N/A	N/A	-1.08	
Real Estate	106,230,503	10.35	-0.11	-0.11	-1.19	0.81	2.38	3.63	4.13	4.90	N/A	04/01/1999
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	8.53	
Difference			-0.85	-0.85	-1.64	-1.19	-2.73	-2.65	-3.85	-4.47	N/A	
JPMCB Strategic Property (CF)	86,109,825	8.39	-0.29	-0.29	-1.20	1.06	3.61	5.17	7.14	N/A	8.26	04/01/2012
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	8.47	
Difference			-1.03	-1.03	-1.65	-0.94	-1.50	-1.11	-0.84	N/A	-0.21	
UBS Trumbull Property (SA)	15,009,780	1.46	-0.36	-0.36	-2.67	-2.85	0.73	3.41	4.96	N/A	5.38	01/01/2013
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	8.28	
Difference			-1.10	-1.10	-3.12	-4.85	-4.38	-2.87	-3.02	N/A	-2.90	
Colcord Center (CF)	5,110,899	0.50	3.76	3.76	3.80	13.00	5.08	3.53	4.99	3.30	3.56	05/01/2008
Private Equity	45,039,471	4.39	5.56	5.56	0.92	3.90	9.42	6.30	9.07	9.42	N/A	10/01/1990
Cambridge US Prvt Eq Index			0.00	0.00	-0.77	2.97	9.41	10.84	11.14	12.60	13.95	
Difference			5.56	5.56	1.69	0.93	0.01	-4.54	-2.07	-3.18	N/A	
American Private Equity II LP	585,406	0.06	-24.37	-24.37	-30.94	-30.87	-12.10	-8.29	-3.93	0.44	1.66	02/01/2006
Apollo IX LP	1,954,903	0.19	7.53	7.53	6.42	-2.69	N/A	N/A	N/A	N/A	-14.86	03/01/2019
Apollo VIII LP	7,108,177	0.69	9.85	9.85	-6.30	-0.59	5.49	9.32	N/A	N/A	1.33	02/01/2014

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Carval CR Value	752,500	0.07	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	0.00	08/01/2020
FirstMark Capital Opportunity III LP	972,705	0.09	-0.77	-0.77	N/A	N/A	N/A	N/A	N/A	N/A	0.00	08/01/2020
FirstMark V LP	273,025	0.03	-14.66	-14.66	N/A	N/A	N/A	N/A	N/A	N/A	-14.66	07/01/2020
Francisco PTRS	243,000	0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10/01/2020
Knightsbridge VI LP	2,621,654	0.26	12.23	12.23	11.45	22.43	14.12	7.01	11.08	11.60	6.79	12/01/2004
Knightsbridge VII LP	7,489,150	0.73	18.67	18.67	18.69	19.49	19.82	12.21	15.76	13.31	7.78	09/01/2008
Oaktree Opp XI LP	750,000	0.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	08/01/2020
Warburg Pincus Global Growth LP	11,412,470	1.11	-0.96	-0.96	-7.05	-9.48	N/A	N/A	N/A	N/A	-26.51	03/01/2019
Warburg Pincus XII LP	10,876,481	1.06	2.87	2.87	2.20	6.43	14.56	N/A	N/A	N/A	-2.13	12/01/2015

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OLERS Total Fund	1,026,451,777	100.00	4.07	4.07	0.16	6.02	5.17	7.22	6.47	7.66	11.14	10/01/1990
OLERS Policy Index			4.80	4.80	2.43	8.29	6.67	8.32	7.38	8.33	N/A	
Difference			-0.73	-0.73	-2.27	-2.27	-1.50	-1.10	-0.91	-0.67	N/A	
OLERS Actual Allocation Index			4.25	4.25	2.77	8.36	6.48	8.21	7.24	8.07	8.33	
Difference			-0.18	-0.18	-2.61	-2.34	-1.31	-0.99	-0.77	-0.41	2.81	
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			2.25	2.25	-5.41	-1.48	-2.33	-0.28	-1.03	0.16	3.64	
All Public Plans-Total Fund Median			5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	8.27	
Rank			84	84	87	72	80	77	67	53	1	
US Equity	394,271,460	38.41	6.54	6.54	-1.66	8.02	8.06	11.52	10.21	12.49	N/A	10/01/1990
S&P 500 Index (Cap Wtd)			8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	10.59	
Difference			-2.39	-2.39	-7.23	-7.13	-4.22	-2.63	-2.47	-1.25	N/A	
IM U.S. Equity (SA+CF) Median			6.98	6.98	-2.35	5.79	7.14	10.71	9.45	12.19	11.70	
Rank			55	55	49	47	48	46	46	47	N/A	
Hotchkis Wiley Large Cap Value Equity (SA)	66,788,577	6.51	1.46	1.46	-21.67	-14.66	-1.12	6.26	6.50	9.93	10.64	11/01/1990
Russell 1000 Val Index			5.59	5.59	-11.58	-5.03	2.63	7.66	7.35	9.95	10.04	
Difference			-4.13	-4.13	-10.09	-9.63	-3.75	-1.40	-0.85	-0.02	0.60	
IM U.S. Large Cap Value Equity (SA+CF) Median			5.39	5.39	-10.38	-3.35	3.51	8.06	7.79	10.39	10.98	
Rank			94	94	98	97	91	82	77	66	80	
Kennedy Capital Small Cap Value Equity (SA)	60,552,966	5.90	2.22	2.22	-8.61	-1.57	-0.21	7.70	6.54	9.69	21.44	02/01/1996
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	8.17	
Difference			-0.34	-0.34	12.93	13.31	4.92	3.59	3.27	2.60	13.27	
IM U.S. Small Cap Value Equity (SA+CF) Median			2.39	2.39	-19.54	-13.35	-3.72	4.39	4.27	8.57	10.76	
Rank			54	54	11	12	22	16	14	26	1	
NTGI S&P 500 Index (CF)	118,866,857	11.58	8.93	8.93	5.55	15.13	12.29	14.16	12.69	13.71	10.68	08/01/2008
S&P 500 Index (Cap Wtd)			8.93	8.93	5.57	15.15	12.28	14.15	12.68	13.74	10.67	
Difference			0.00	0.00	-0.02	-0.02	0.01	0.01	0.01	-0.03	0.01	
IM U.S. Large Cap Index Equity (SA+CF) Median			9.03	9.03	5.55	15.11	12.26	14.07	12.57	13.72	10.68	
Rank			66	66	49	43	39	30	32	55	48	
Polen Focus Growth (CF)	72,066,922	7.02	9.99	9.99	21.92	34.81	N/A	N/A	N/A	N/A	34.80	01/01/2019
Russell 1000 Grth Index			13.22	13.22	24.33	37.53	21.67	20.10	17.39	17.25	35.23	
Difference			-3.23	-3.23	-2.41	-2.72	N/A	N/A	N/A	N/A	-0.43	
IM U.S. Large Cap Growth Equity (SA+CF) Median			11.14	11.14	21.85	33.27	19.69	18.16	16.03	16.36	31.66	
Rank			70	70	50	42	N/A	N/A	N/A	N/A	33	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Wellington Small Cap Growth (CF)	75,996,139	7.40	6.35	6.35	13.44	28.51	12.71	N/A	N/A	N/A	15.07	08/01/2016
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	11.44	
Difference			-0.81	-0.81	9.56	12.80	4.53	N/A	N/A	N/A	3.63	
IM U.S. Small Cap Growth Equity (SA+CF) Median			9.05	9.05	11.07	20.98	13.56	15.11	11.70	14.77	15.61	
Rank			79	79	46	39	54	N/A	N/A	N/A	52	
International Equity	157,202,900	15.32	7.41	7.41	-2.93	6.92	3.00	7.46	4.88	4.30	N/A	10/01/1990
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	N/A	
Difference			1.16	1.16	2.51	3.92	1.84	1.23	1.70	0.30	N/A	
IM International Equity (SA+CF) Median			8.49	8.41	-2.20	7.23	2.26	7.57	4.85	6.00	8.43	
Rank			60	59	53	52	43	52	50	76	N/A	
International Developed Equity	93,986,375	9.16	4.05	4.05	-10.28	-1.69	-0.16	5.19	3.35	3.32	N/A	11/01/1995
MSCI EAFE Index (USD) (Net)			4.80	4.80	-7.09	0.49	0.62	5.26	3.01	4.62	4.69	
Difference			-0.75	-0.75	-3.19	-2.18	-0.78	-0.07	0.34	-1.30	N/A	
IM International Equity Developed Markets (SA+CF) Median			7.81	7.72	-3.02	6.64	2.26	7.12	5.12	6.58	7.41	
Rank			84	84	80	79	71	74	76	94	N/A	
Barings Focused International Equity (SA)	52,184,698	5.08	6.31	6.31	-1.52	6.96	3.45	7.95	5.44	N/A	5.94	02/01/2012
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	4.78	
Difference			0.06	0.06	3.92	3.96	2.29	1.72	2.26	N/A	1.16	
IM All ACWI Ex US (SA+CF) Median			8.08	8.08	-1.01	7.96	3.26	7.38	5.00	6.26	6.91	
Rank			73	73	53	55	48	47	47	N/A	66	
Mondrian International Equity (SA)	41,801,677	4.07	1.37	1.37	-18.69	-10.20	-3.73	2.47	1.62	3.57	3.94	01/01/2005
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	4.63	
Difference			-4.88	-4.88	-13.25	-13.20	-4.89	-3.76	-1.56	-0.43	-0.69	
IM All ACWI Ex US (SA+CF) Median			8.08	8.08	-1.01	7.96	3.26	7.38	5.00	6.26	6.36	
Rank			100	100	99	99	95	94	90	89	90	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Emerging Market Equity	63,216,525	6.16	12.83	12.83	10.35	22.58	8.41	10.75	6.52	N/A	6.47	07/01/2012
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	4.23	
Difference			3.27	3.27	11.51	12.04	5.99	1.78	2.78	N/A	2.24	
IM Emerging Markets Equity (SA+CF) Median			9.91	9.91	-1.12	10.19	2.45	8.85	4.41	4.09	5.61	
Rank			15	15	16	15	13	32	23	N/A	38	
Wasatch:Emg Mkt SC;Inv (WAEMX)	15,637,559	1.52	8.08	8.08	11.40	24.79	8.08	9.21	5.45	N/A	5.56	07/01/2012
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	4.23	
Difference			-1.48	-1.48	12.56	14.25	5.66	0.24	1.71	N/A	1.33	
IM Emerging Markets Equity (SA+CF) Median			9.91	9.91	-1.12	10.19	2.45	8.85	4.41	4.09	5.61	
Rank			72	72	13	12	14	45	39	N/A	51	
William Blair Emerging Markets Leaders (CF)	47,578,966	4.64	14.48	14.48	10.02	21.90	8.53	N/A	N/A	N/A	12.31	09/01/2016
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	7.28	
Difference			4.92	4.92	11.18	11.36	6.11	N/A	N/A	N/A	5.03	
IM Emerging Markets Equity (SA+CF) Median			9.91	9.91	-1.12	10.19	2.45	8.85	4.41	4.09	7.27	
Rank			10	10	16	16	12	N/A	N/A	N/A	12	
Fixed Income	278,816,480	27.16	0.67	0.67	4.37	5.00	3.66	4.06	3.62	3.86	N/A	10/01/1990
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	6.01	
Difference			0.05	0.05	-2.42	-1.98	-1.58	-0.12	-0.35	0.22	N/A	
IM Global Fixed Income (SA+CF) Median			3.50	3.41	2.92	4.77	4.29	4.95	3.89	3.77	N/A	
Rank			97	97	40	48	63	79	55	50	N/A	
NTGI Aggregate Index (SA)	90,246,302	8.79	0.60	0.60	6.84	7.02	5.29	4.20	4.02	3.67	4.34	04/01/2004
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.28	
Difference			-0.02	-0.02	0.05	0.04	0.05	0.02	0.05	0.03	0.06	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			1.11	1.11	7.33	7.55	5.67	4.73	4.44	4.17	4.76	
Rank			89	89	71	74	86	90	86	90	88	
TCW Core Plus Fixed Income (SA)	125,232,809	12.20	1.50	1.50	8.41	8.73	6.43	5.29	5.03	5.34	6.47	03/01/1996
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.26	
Difference			0.88	0.88	1.62	1.75	1.19	1.11	1.06	1.70	1.21	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			1.71	1.71	6.96	7.44	5.72	5.09	4.70	4.65	5.97	
Rank			63	63	10	13	6	41	26	17	25	
Franklin Templeton Global Bonds (SA)	63,337,369	6.17	-0.85	-0.85	-5.63	-4.01	-2.34	1.78	0.99	N/A	0.98	06/01/2013
Bloomberg Gbl Agg Bond Index			2.66	2.66	5.72	6.24	4.10	3.93	2.48	2.36	2.58	
Difference			-3.51	-3.51	-11.35	-10.25	-6.44	-2.15	-1.49	N/A	-1.60	
IM Global Fixed Income (SA+CF) Median			3.50	3.41	2.92	4.77	4.29	4.95	3.89	3.77	3.53	
Rank			100	100	95	97	98	95	95	N/A	93	

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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Long/Short Equity	42,754,521	4.17	2.58	2.58	-0.94	4.27	2.43	3.80	3.96	4.67	N/A	01/01/2008
HFRI FOF: Strategic Index			5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	1.36	
Difference			-3.37	-3.37	-4.49	-3.97	-0.63	0.00	0.54	1.44	N/A	
Grosvenor (CF)	13,256,746	1.29	1.97	1.97	-1.54	3.65	2.23	3.68	3.87	4.61	3.10	01/01/2008
HFRI FOF: Strategic Index			5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	1.36	
Difference			-3.98	-3.98	-5.09	-4.59	-0.83	-0.12	0.45	1.38	1.74	
Mauna Kea	29,497,775	2.87	1.72	1.72	N/A	N/A	N/A	N/A	N/A	N/A	1.72	08/01/2020
HFRI FOF: Strategic Index			5.95	5.95	3.55	8.24	3.06	3.80	3.42	3.23	2.80	
Difference			-4.23	-4.23	N/A	N/A	N/A	N/A	N/A	N/A	-1.08	
Real Estate	106,230,503	10.35	0.12	0.12	-0.55	1.69	3.20	4.45	4.97	7.07	5.82	04/01/1999
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	8.53	
Difference			-0.62	-0.62	-1.00	-0.31	-1.91	-1.83	-3.01	-2.30	-2.71	
JPMCB Strategic Property (CF)	86,109,825	8.39	-0.03	-0.03	-0.51	2.03	4.62	6.20	8.18	N/A	9.23	04/01/2012
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	8.47	
Difference			-0.77	-0.77	-0.96	0.03	-0.49	-0.08	0.20	N/A	0.76	
UBS Trumbull Property (SA)	15,009,780	1.46	-0.18	-0.18	-2.12	-2.07	1.62	4.49	6.05	N/A	6.46	01/01/2013
NCREIF Property Index			0.74	0.74	0.45	2.00	5.11	6.28	7.98	9.37	8.28	
Difference			-0.92	-0.92	-2.57	-4.07	-3.49	-1.79	-1.93	N/A	-1.82	
Colcord Center (CF)	5,110,899	0.50	3.76	3.76	3.80	13.00	5.08	3.53	4.99	3.30	3.56	05/01/2008
Private Equity	45,039,471	4.39	5.56	5.56	0.92	3.90	9.42	6.30	9.07	9.42	N/A	10/01/1990
Cambridge US Prvt Eq Index			0.00	0.00	-0.77	2.97	9.41	10.84	11.14	12.60	13.95	
Difference			5.56	5.56	1.69	0.93	0.01	-4.54	-2.07	-3.18	N/A	
American Private Equity II LP	585,406	0.06	-24.37	-24.37	-30.94	-30.87	-12.10	-8.29	-3.93	0.44	1.66	02/01/2006
Apollo IX LP	1,954,903	0.19	7.53	7.53	6.42	-2.69	N/A	N/A	N/A	N/A	-14.86	03/01/2019
Apollo VIII LP	7,108,177	0.69	9.85	9.85	-6.30	-0.59	5.49	9.32	N/A	N/A	1.33	02/01/2014
Carval CR Value	752,500	0.07	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	0.00	08/01/2020
FirstMark Capital Opportunity III LP	972,705	0.09	-0.77	-0.77	N/A	N/A	N/A	N/A	N/A	N/A	0.00	08/01/2020
FirstMark V LP	273,025	0.03	-14.66	-14.66	N/A	N/A	N/A	N/A	N/A	N/A	-14.66	07/01/2020
Francisco PTRS	243,000	0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10/01/2020
Knightsbridge VI LP	2,621,654	0.26	12.23	12.23	11.45	22.43	14.12	7.01	11.08	11.60	6.79	12/01/2004

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 September 30, 2020

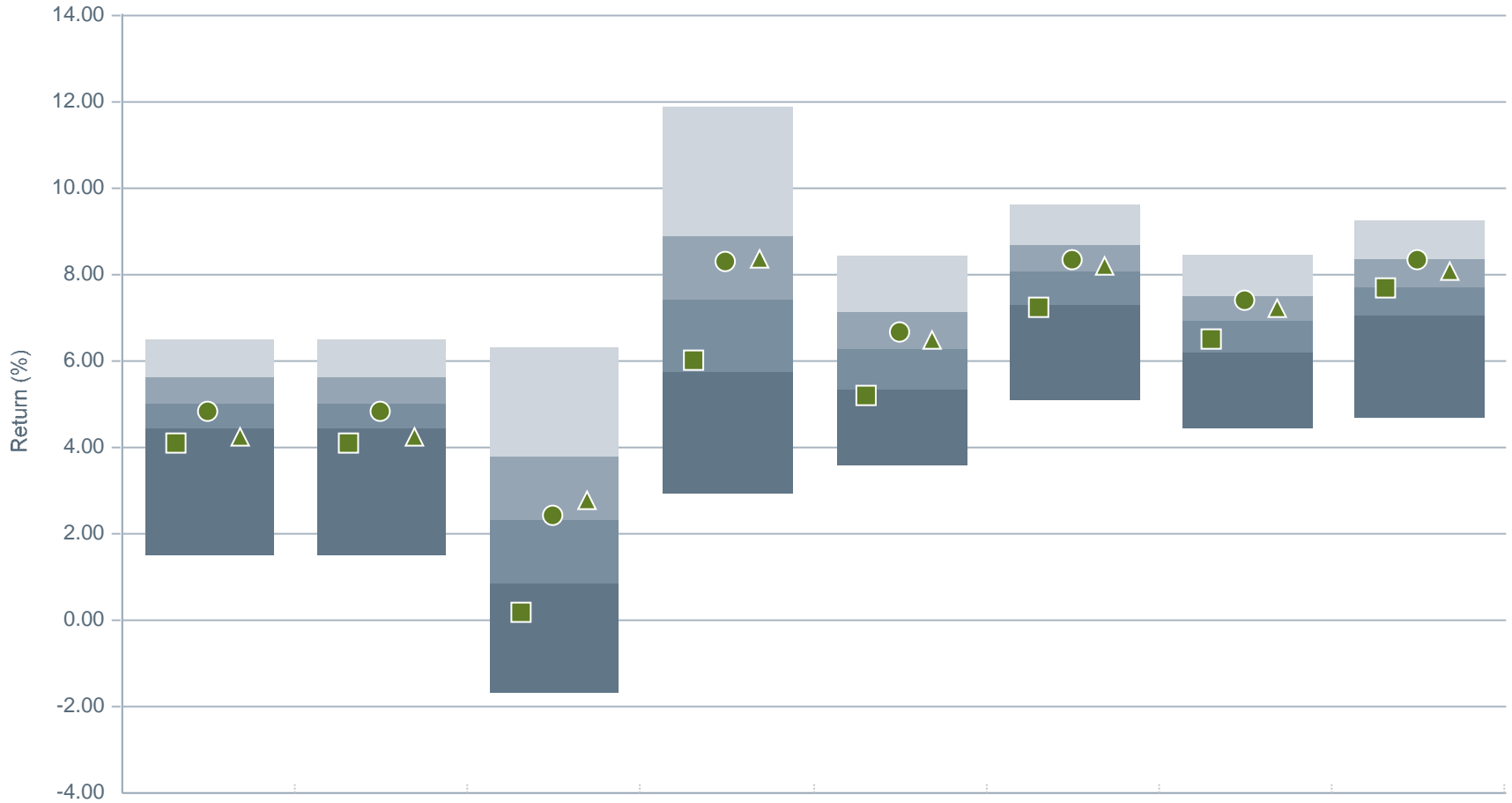
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Knightsbridge VII LP	7,489,150	0.73	18.67	18.67	18.69	19.49	19.82	12.21	15.76	13.31	7.20	09/01/2008
Oaktree Opp XI LP	750,000	0.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	08/01/2020
Warburg Pincus Global Growth LP	11,412,470	1.11	-0.96	-0.96	-7.05	-9.48	N/A	N/A	N/A	N/A	-26.51	03/01/2019
Warburg Pincus XII LP	10,876,481	1.06	2.87	2.87	2.20	6.43	14.56	N/A	N/A	N/A	-2.13	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 September 30, 2020



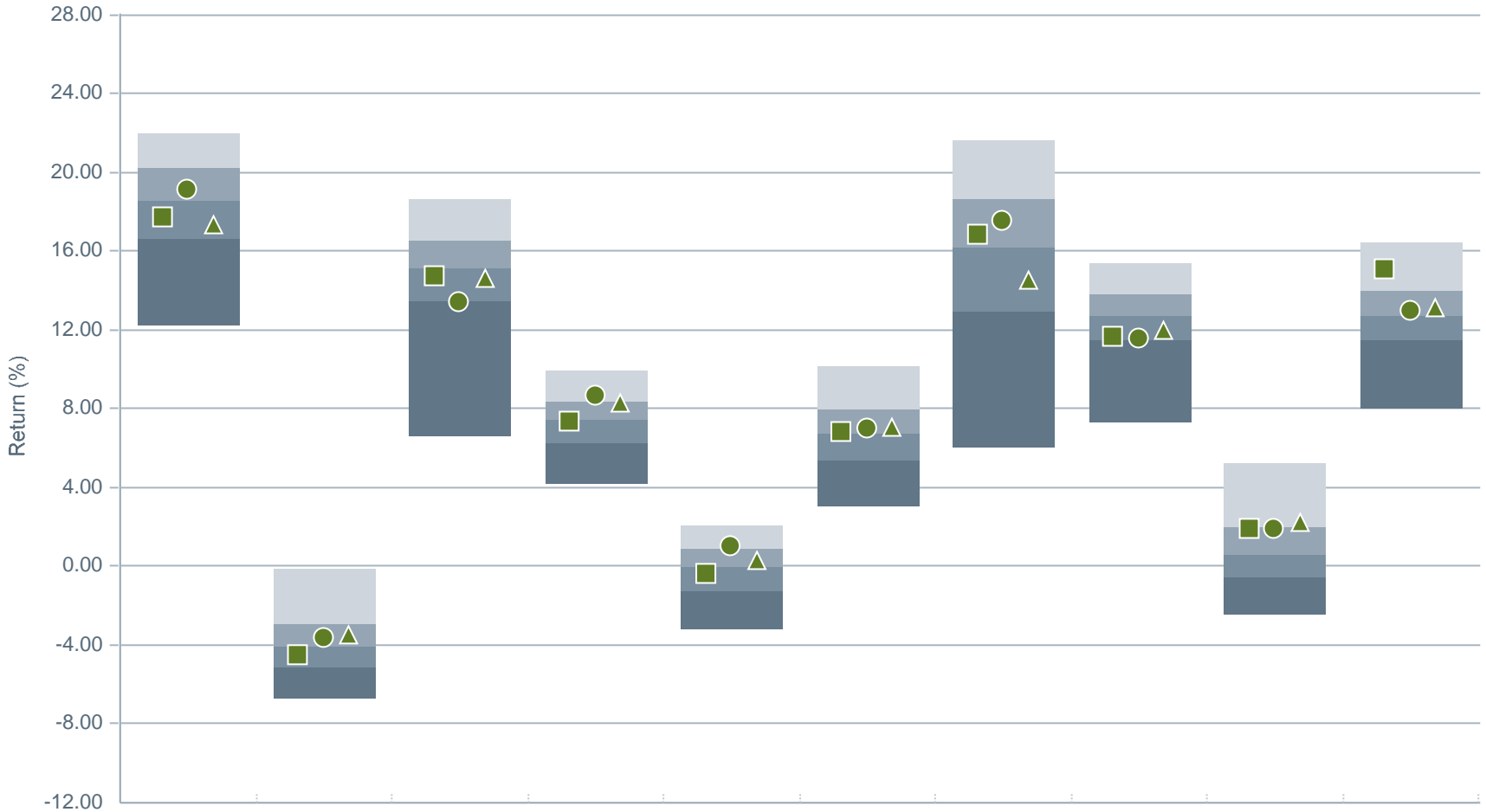
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OLERS Total Fund	4.07 (84)	4.07 (84)	0.16 (87)	6.02 (72)	5.17 (80)	7.22 (77)	6.47 (67)	7.66 (53)
● OLERS Policy Index	4.80 (63)	4.80 (63)	2.43 (49)	8.29 (37)	6.67 (40)	8.32 (36)	7.38 (30)	8.33 (28)
▲ OLERS Allocation Index	4.25 (80)	4.25 (80)	2.77 (42)	8.36 (35)	6.48 (44)	8.21 (43)	7.24 (38)	8.07 (38)
5th Percentile	6.48	6.48	6.32	11.88	8.45	9.65	8.46	9.28
1st Quartile	5.64	5.64	3.78	8.91	7.13	8.68	7.51	8.39
Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70
3rd Quartile	4.45	4.45	0.84	5.74	5.35	7.29	6.20	7.07
95th Percentile	1.51	1.51	-1.66	2.93	3.59	5.12	4.45	4.69

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

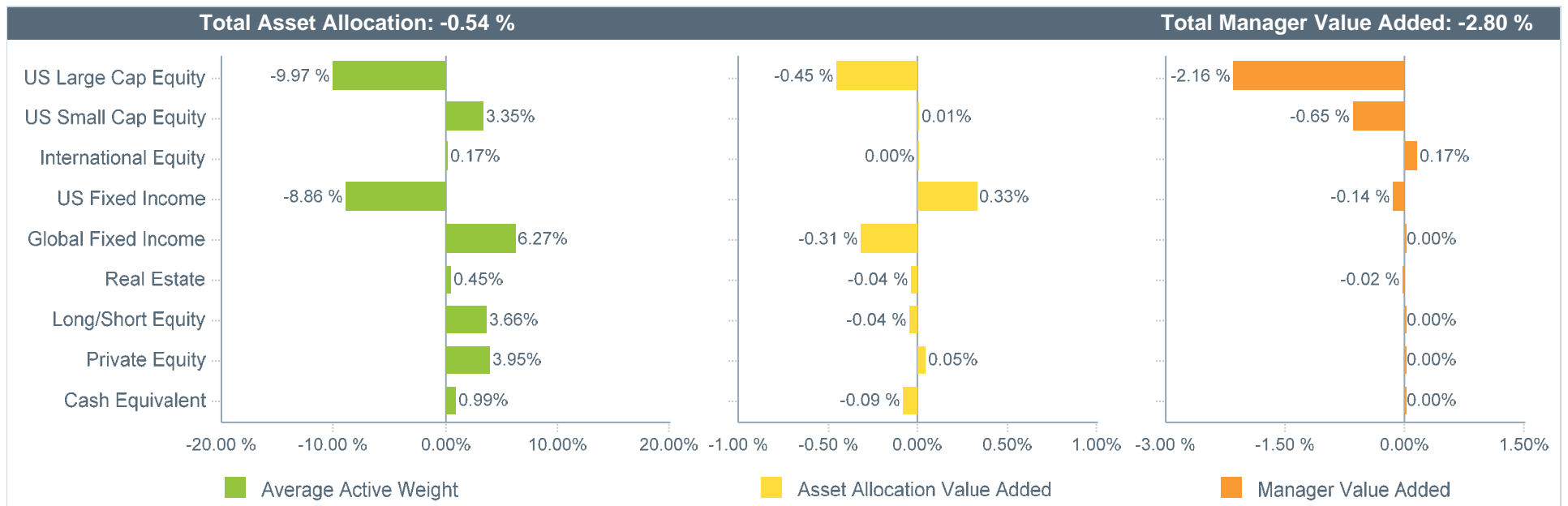
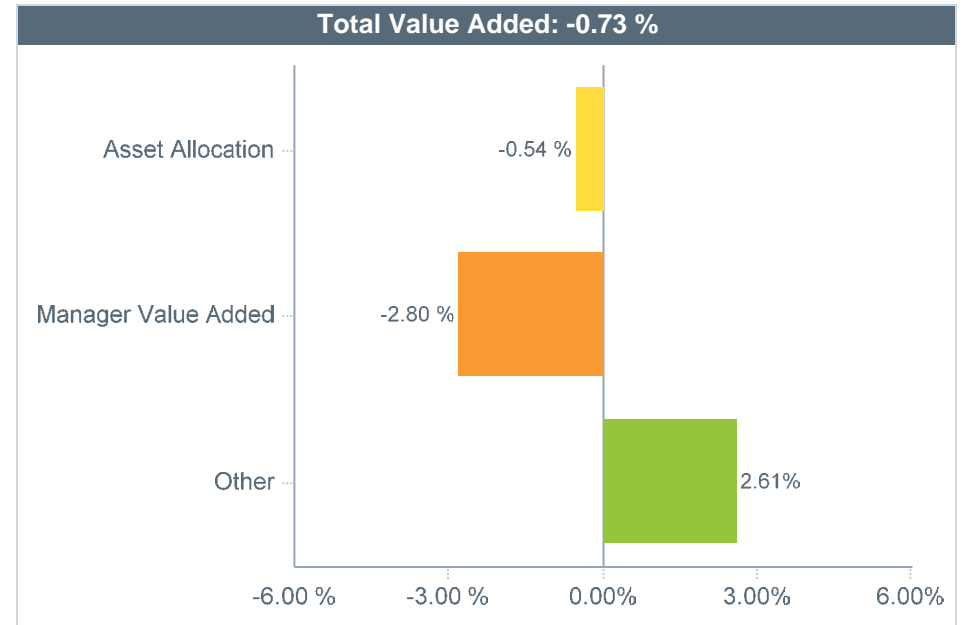
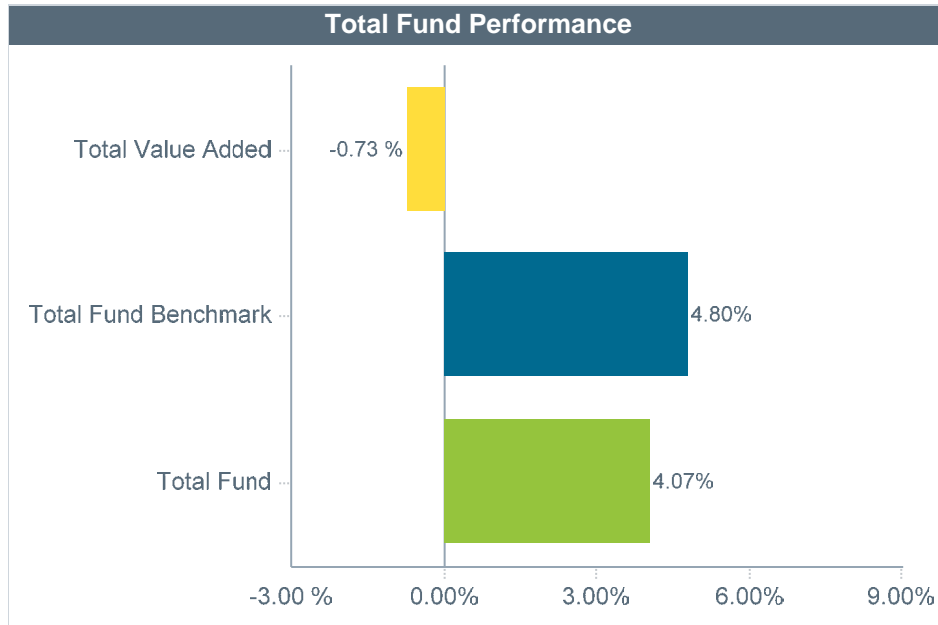
As of September 30, 2020



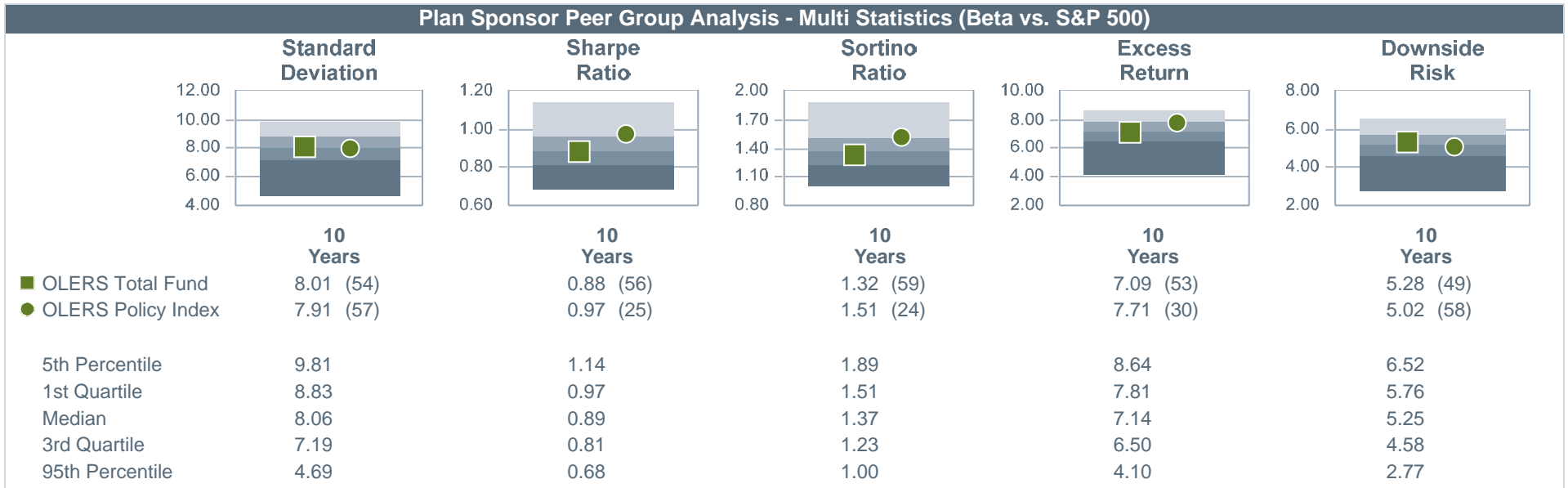
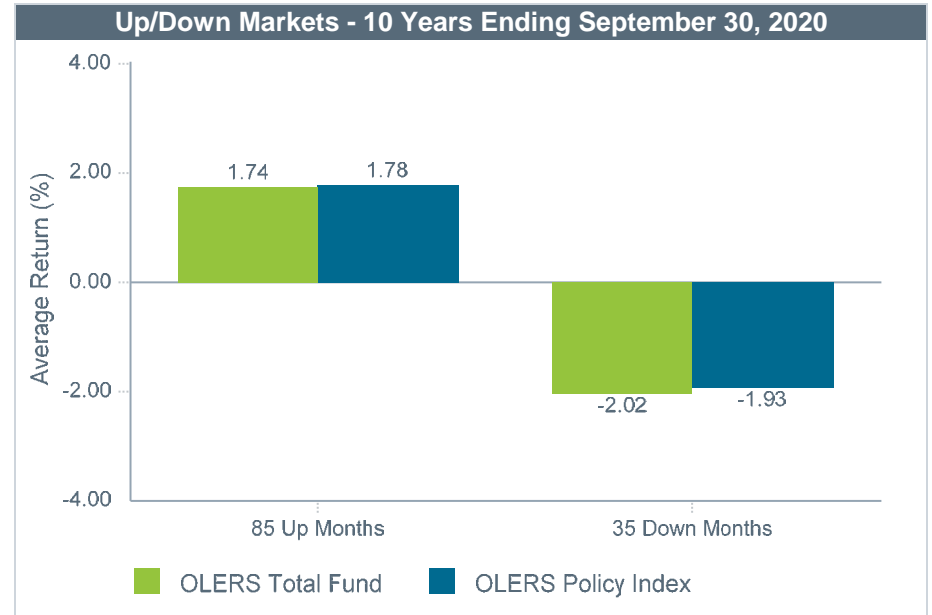
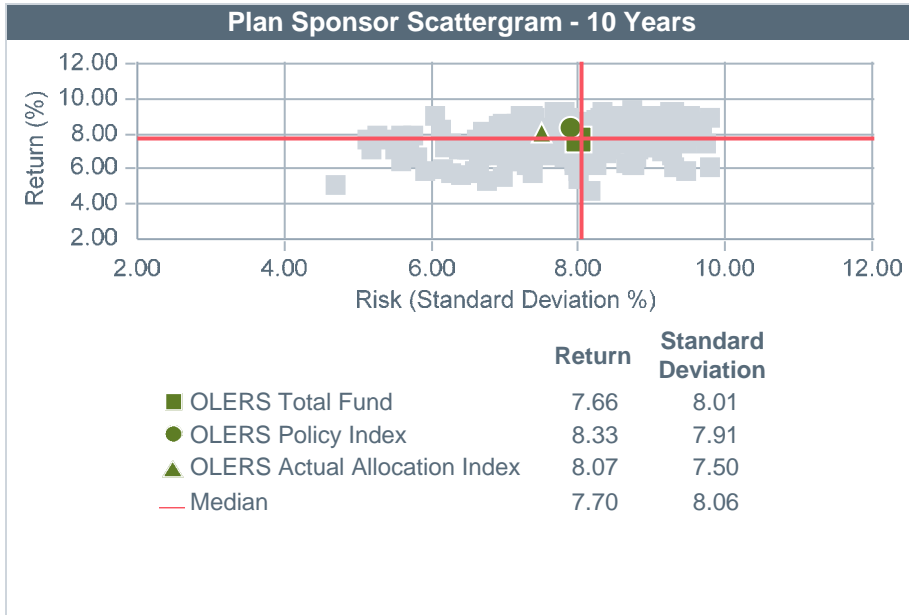
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OLERS Total Fund	17.70 (61)	-4.55 (59)	14.71 (59)	7.32 (53)	-0.37 (58)	6.83 (48)	16.80 (46)	11.69 (73)	1.93 (26)	15.06 (12)
● OLERS Policy Index	19.12 (42)	-3.67 (42)	13.36 (77)	8.64 (20)	1.00 (21)	7.01 (42)	17.53 (37)	11.57 (74)	1.93 (26)	12.99 (43)
▲ OLERS Allocation Index	17.33 (66)	-3.47 (36)	14.63 (60)	8.27 (29)	0.33 (40)	7.07 (41)	14.59 (67)	12.03 (64)	2.22 (24)	13.14 (40)
5th Percentile	22.04	-0.14	18.72	9.98	2.05	10.13	21.67	15.42	5.21	16.51
1st Quartile	20.27	-2.96	16.57	8.41	0.92	7.93	18.70	13.81	1.97	14.06
Median	18.56	-4.13	15.20	7.42	-0.09	6.74	16.20	12.73	0.54	12.71
3rd Quartile	16.66	-5.14	13.46	6.27	-1.24	5.44	12.94	11.49	-0.56	11.49
95th Percentile	12.30	-6.76	6.67	4.14	-3.17	3.06	6.01	7.33	-2.40	8.04

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

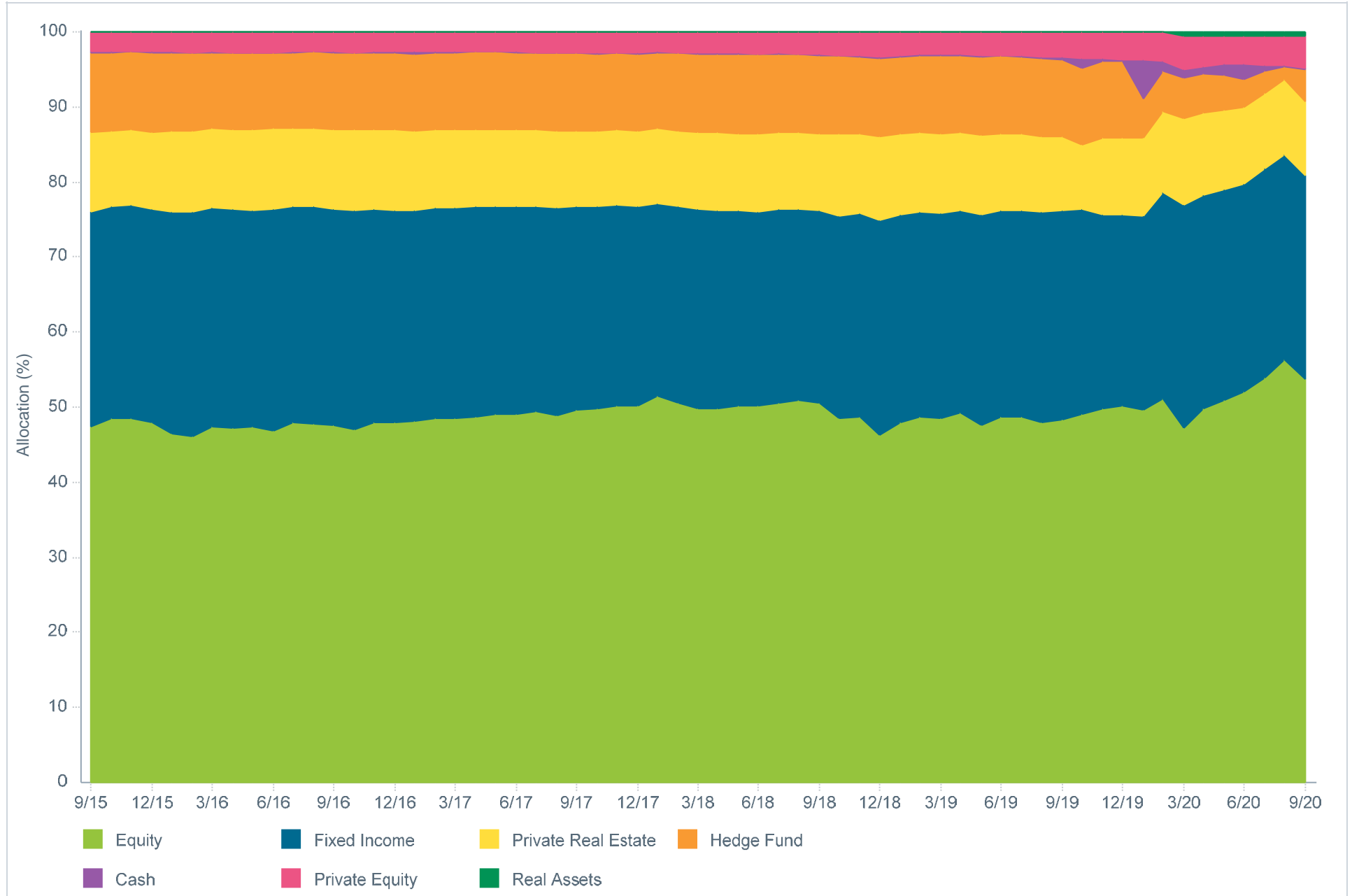




Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation.



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.

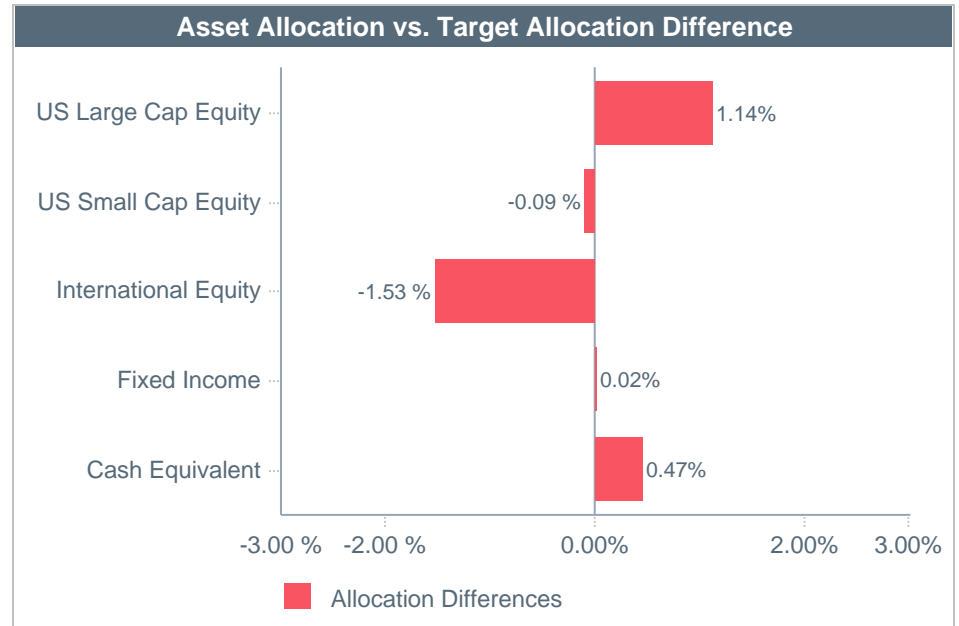


Oklahoma Uniform Retirement System for Justices & Judges (OURSJJ)



	Performance (%)												
	Trailing							Calendar Year					
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OURSJJ Total Fund (Net)	5.57	5.57	3.29	9.54	6.91	8.86	7.41	8.13	21.36	-6.43	16.85	8.05	-1.11
OURSJJ Policy Index	5.56	5.56	3.39	9.70	7.08	9.02	7.53	8.16	21.51	-6.09	16.86	8.12	-0.89
Difference	0.01	0.01	-0.10	-0.16	-0.17	-0.16	-0.12	-0.03	-0.15	-0.34	-0.01	-0.07	-0.22
OURSJJ Actual Allocation Index	5.47	5.47	2.85	9.06	6.59	8.60	7.19	7.88	21.01	-6.52	16.63	7.90	-1.19
Difference	0.10	0.10	0.44	0.48	0.32	0.26	0.22	0.25	0.35	0.09	0.22	0.15	0.08
Actuarial Discount Rate (6.5%)	1.59	1.59	4.84	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Difference	3.98	3.98	-1.55	3.04	0.41	2.36	0.91	1.63	14.86	-12.93	10.35	1.55	-7.61
OURSJJ Total Fund (Gross)	5.58	5.58	3.32	9.58	6.95	8.90	7.45	8.18	21.40	-6.38	16.89	8.09	-1.07
OURSJJ Policy Index	5.56	5.56	3.39	9.70	7.08	9.02	7.53	8.16	21.51	-6.09	16.86	8.12	-0.89
Difference	0.02	0.02	-0.07	-0.12	-0.13	-0.12	-0.08	0.02	-0.11	-0.29	0.03	-0.03	-0.18
OURSJJ Actual Allocation Index	5.47	5.47	2.85	9.06	6.59	8.60	7.19	7.88	21.01	-6.52	16.63	7.90	-1.19
Difference	0.11	0.11	0.47	0.52	0.36	0.30	0.26	0.30	0.39	0.14	0.26	0.19	0.12
All Public Plans-Total Fund Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	18.56	-4.13	15.20	7.42	-0.09
Rank	28	28	32	18	32	19	28	33	11	92	20	34	73

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OURSJJ (Judges)	367,321,761	100.00	100.00
US Large Cap Equity	129,060,632	35.14	34.00
US Small Cap Equity	21,702,003	5.91	6.00
International Equity	97,226,390	26.47	28.00
Fixed Income	117,615,737	32.02	32.00
Cash Equivalent	1,716,998	0.47	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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OURSJJ Total Fund	367,321,761	100.00	5.57	5.57	3.29	9.54	6.91	8.86	7.41	8.13	N/A	06/01/1986
OURSJJ Policy Index			5.56	5.56	3.39	9.70	7.08	9.02	7.53	8.16	8.79	
Difference			0.01	0.01	-0.10	-0.16	-0.17	-0.16	-0.12	-0.03	N/A	
OURSJJ Actual Allocation Index			5.47	5.47	2.85	9.06	6.59	8.60	7.19	7.88	8.22	
Difference			0.10	0.10	0.44	0.48	0.32	0.26	0.22	0.25	N/A	
Actuarial Discount Rate (6.5%)			1.59	1.59	4.84	6.50	6.50	6.50	6.50	6.50	6.50	
Difference			3.98	3.98	-1.55	3.04	0.41	2.36	0.91	1.63	N/A	
US Equity	150,762,635	41.04	8.77	8.77	4.04	13.59	10.69	13.17	11.64	13.18	N/A	10/01/1989
OURSJJ US Equity Custom Index			8.79	8.79	4.07	13.62	10.77	13.21	11.69	13.23	N/A	
Difference			-0.02	-0.02	-0.03	-0.03	-0.08	-0.04	-0.05	-0.05	N/A	
BlackRock Russell 1000 Index (SA)	129,060,632	35.14	9.45	9.45	6.41	16.02	12.39	14.12	12.56	13.78	13.96	07/01/2009
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	14.67	
Difference			-0.02	-0.02	0.01	0.01	0.01	0.03	0.02	0.02	-0.71	
BlackRock Russell 2000 Index (CF)	21,702,003	5.91	4.99	4.99	-8.69	0.43	1.89	8.20	6.62	10.03	11.83	07/01/2009
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	11.67	
Difference			0.06	0.06	0.00	0.04	0.12	0.20	0.20	0.18	0.16	
International Equity	97,226,390	26.47	6.25	6.25	-5.28	3.21	1.40	6.50	3.42	4.25	N/A	05/01/1994
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	N/A	
Difference			0.00	0.00	0.16	0.21	0.24	0.27	0.24	0.25	N/A	
BlackRock MSCI ACWI Ex US (SA)	97,226,390	26.47	6.25	6.25	-5.28	3.21	1.40	6.50	3.42	4.25	4.69	10/01/2009
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	4.32	
Difference			0.00	0.00	0.16	0.21	0.24	0.27	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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income	117,615,737	32.02	1.16	1.16	9.99	9.64	6.75	5.17	4.87	4.53	N/A	10/01/1989
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	6.06	
Difference			0.54	0.54	3.20	2.66	1.51	0.99	0.90	0.89	N/A	
BlackRock US Fixed Income (SA)	55,930,100	15.23	0.96	0.96	7.68	7.97	5.65	4.53	4.25	3.92	N/A	06/01/2000
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.19	
Difference			0.34	0.34	0.89	0.99	0.41	0.35	0.28	0.28	N/A	
MetWest US Fixed Income (SA)	35,152,509	9.57	1.11	1.11	8.09	8.35	6.03	4.72	4.39	4.39	N/A	09/01/2001
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.66	
Difference			0.49	0.49	1.30	1.37	0.79	0.54	0.42	0.75	N/A	
Hoisington US Long Duration Fixed Income (SA)	14,285,146	3.89	0.43	0.43	24.29	18.28	13.58	9.14	10.10	8.13	N/A	10/01/1991
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.69	
Difference			-0.19	-0.19	17.50	11.30	8.34	4.96	6.13	4.49	N/A	
BlackRock TIPS (SA)	12,247,982	3.33	3.09	3.09	9.40	10.30	5.94	4.78	3.52	3.69	4.04	03/01/2010
Bloomberg US Trsy US TIPS Index			3.03	3.03	9.22	10.08	5.79	4.61	3.38	3.57	4.00	
Difference			0.06	0.06	0.18	0.22	0.15	0.17	0.14	0.12	0.04	

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 Uniform Retirement System for Justices & Judges
Asset Allocation & Performance - Gross of Fees

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OURSJJ Total Fund	367,321,761	100.00	5.58	5.58	3.32	9.58	6.95	8.90	7.45	8.18	8.47	06/01/1986
OURSJJ Policy Index			5.56	5.56	3.39	9.70	7.08	9.02	7.53	8.16	8.79	
Difference			0.02	0.02	-0.07	-0.12	-0.13	-0.12	-0.08	0.02	-0.32	
OURSJJ Actual Allocation Index			5.47	5.47	2.85	9.06	6.59	8.60	7.19	7.88	8.22	
Difference			0.11	0.11	0.47	0.52	0.36	0.30	0.26	0.30	0.25	
Actuarial Discount Rate (7.0%)			1.71	1.71	5.21	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			3.87	3.87	-1.89	2.58	-0.05	1.90	0.45	1.18	1.47	
All Public Plans-Total Fund Median			5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	8.08	
Rank			28	28	32	18	32	19	28	33	18	
US Equity	150,762,635	41.04	8.77	8.77	4.04	13.59	10.70	13.18	11.65	13.19	9.51	10/01/1989
OURSJJ US Equity Custom Index			8.79	8.79	4.07	13.62	10.77	13.21	11.69	13.23	N/A	
Difference			-0.02	-0.02	-0.03	-0.03	-0.07	-0.03	-0.04	-0.04	N/A	
All Public Plans-US Equity Segment Median			8.25	8.25	3.03	12.12	9.95	12.34	11.00	12.77	N/A	
Rank			30	30	34	32	38	32	27	33	N/A	
BlackRock Russell 1000 Index (SA)	129,060,632	35.14	9.45	9.45	6.41	16.02	12.39	14.12	12.57	13.79	13.97	07/01/2009
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	14.67	
Difference			-0.02	-0.02	0.01	0.01	0.01	0.03	0.03	0.03	-0.70	
IM U.S. Large Cap Core Equity (SA+CF) Median			8.06	8.06	3.33	12.87	10.68	13.14	12.16	13.55	14.40	
Rank			23	23	32	31	29	27	41	43	63	
BlackRock Russell 2000 Index (CF)	21,702,003	5.91	5.00	5.00	-8.69	0.43	1.92	8.23	6.65	10.06	11.86	07/01/2009
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	11.67	
Difference			0.07	0.07	0.00	0.04	0.15	0.23	0.23	0.21	0.19	
IM U.S. Small Cap Core Equity (SA+CF) Median			4.78	4.78	-10.03	-2.30	1.96	8.28	7.68	11.08	12.90	
Rank			46	46	45	42	51	53	66	74	75	

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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity	97,226,390	26.47	6.25	6.25	-5.27	3.21	1.43	6.54	3.46	4.29	5.37	05/01/1994
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	N/A	
Difference			0.00	0.00	0.17	0.21	0.27	0.31	0.28	0.29	N/A	
All Public Plans-Intl. Equity Segment Median			7.51	7.51	-3.41	5.94	2.41	7.38	4.57	5.66	N/A	
Rank			78	78	72	70	78	70	93	92	N/A	
BlackRock MSCI ACWI Ex US (SA)	97,226,390	26.47	6.25	6.25	-5.27	3.21	1.43	6.54	3.46	4.29	4.76	11/01/2009
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	4.48	
Difference			0.00	0.00	0.17	0.21	0.27	0.31	0.28	0.29	0.28	
IM All ACWI Ex US (SA+CF) Median			8.08	8.08	-1.01	7.96	3.26	7.38	5.00	6.26	6.93	
Rank			73	73	66	65	64	59	73	86	86	
Fixed Income	117,615,737	32.02	1.19	1.19	10.08	9.74	6.84	5.26	4.95	4.63	6.83	10/01/1989
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	6.06	
Difference			0.57	0.57	3.29	2.76	1.60	1.08	0.98	0.99	0.77	
BlackRock US Fixed Income (SA)	55,930,100	15.23	0.96	0.96	7.75	8.06	5.73	4.61	4.33	4.01	5.47	06/01/2000
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.19	
Difference			0.34	0.34	0.96	1.08	0.49	0.43	0.36	0.37	0.28	
IM U.S. Broad Market Fixed Income (SA+CF) Median			1.32	1.32	7.31	7.55	5.72	4.87	4.56	4.40	5.81	
Rank			73	73	34	37	50	68	70	76	79	
MetWest US Fixed Income (SA)	35,152,509	9.57	1.21	1.21	8.23	8.50	6.14	4.81	4.48	4.53	5.65	09/01/2001
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.66	
Difference			0.59	0.59	1.44	1.52	0.90	0.63	0.51	0.89	0.99	
IM U.S. Broad Market Fixed Income (SA+CF) Median			1.32	1.32	7.31	7.55	5.72	4.87	4.56	4.40	5.32	
Rank			57	57	18	20	16	55	56	41	23	
Hoisington US Long Duration Fixed Income (SA)	14,285,146	3.89	0.46	0.46	24.40	18.42	13.73	9.29	10.25	8.28	9.00	10/01/1991
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.69	
Difference			-0.16	-0.16	17.61	11.44	8.49	5.11	6.28	4.64	3.31	
IM U.S. Long Duration (SA+CF) Median			1.69	1.69	13.77	12.56	10.34	9.25	8.84	7.92	N/A	
Rank			100	100	1	1	1	48	3	29	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 Uniform Retirement System for Justices & Judges
Asset Allocation & Performance - Gross of Fees

As of September 30, 2020

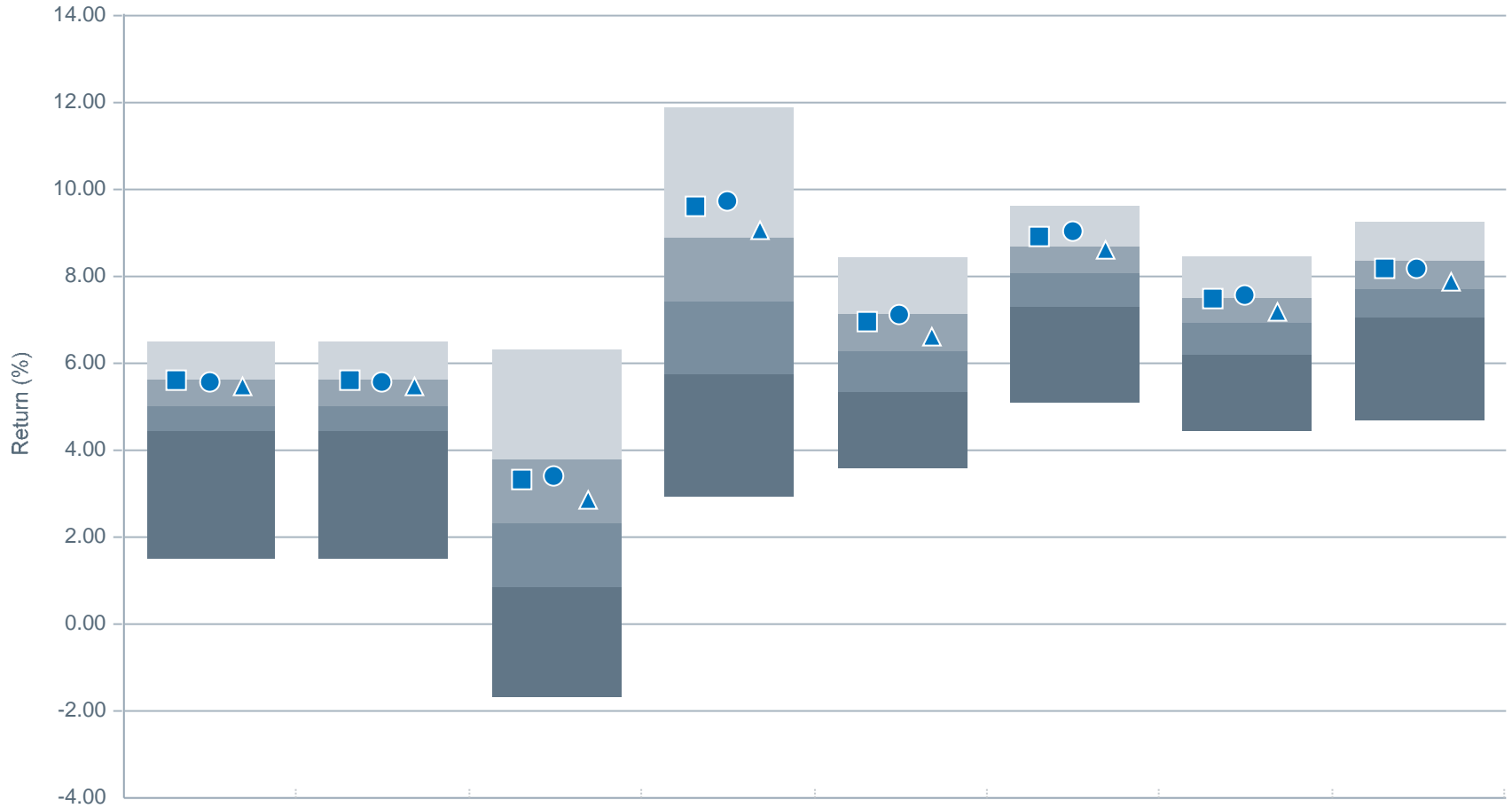
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
BlackRock TIPS (SA)	12,247,982	3.33	3.10	3.10	9.40	10.31	5.95	4.79	3.53	3.70	4.05	03/01/2010
Bloomberg US Trsy US TIPS Index			3.03	3.03	9.22	10.08	5.79	4.61	3.38	3.57	4.00	
Difference			0.07	0.07	0.18	0.23	0.16	0.18	0.15	0.13	0.05	
IM U.S. TIPS (SA+CF) Median			3.01	3.01	9.22	10.07	5.80	4.61	3.38	3.57	3.99	
Rank			39	39	22	21	28	24	22	25	31	

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 September 30, 2020



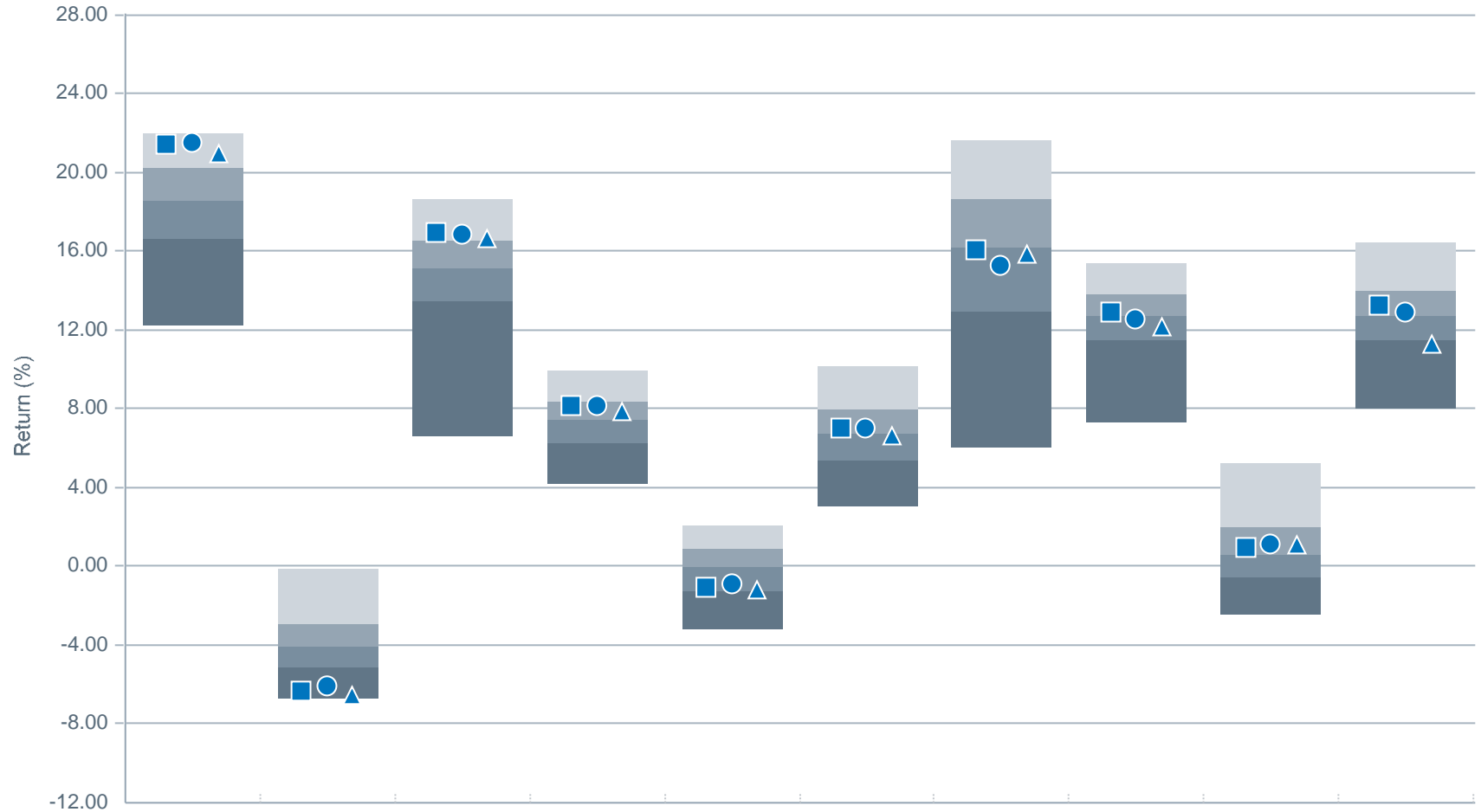
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ Oursjj Total Fund	5.58 (28)	5.58 (28)	3.32 (32)	9.58 (18)	6.95 (32)	8.90 (19)	7.45 (28)	8.18 (33)
● Oursjj Policy Index	5.56 (28)	5.56 (28)	3.39 (31)	9.70 (17)	7.08 (28)	9.02 (16)	7.53 (25)	8.16 (34)
▲ Oursjj Allocation Index	5.47 (34)	5.47 (34)	2.85 (40)	9.06 (24)	6.59 (42)	8.60 (28)	7.19 (38)	7.88 (45)
5th Percentile	6.48	6.48	6.32	11.88	8.45	9.65	8.46	9.28
1st Quartile	5.64	5.64	3.78	8.91	7.13	8.68	7.51	8.39
Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70
3rd Quartile	4.45	4.45	0.84	5.74	5.35	7.29	6.20	7.07
95th Percentile	1.51	1.51	-1.66	2.93	3.59	5.12	4.45	4.69

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

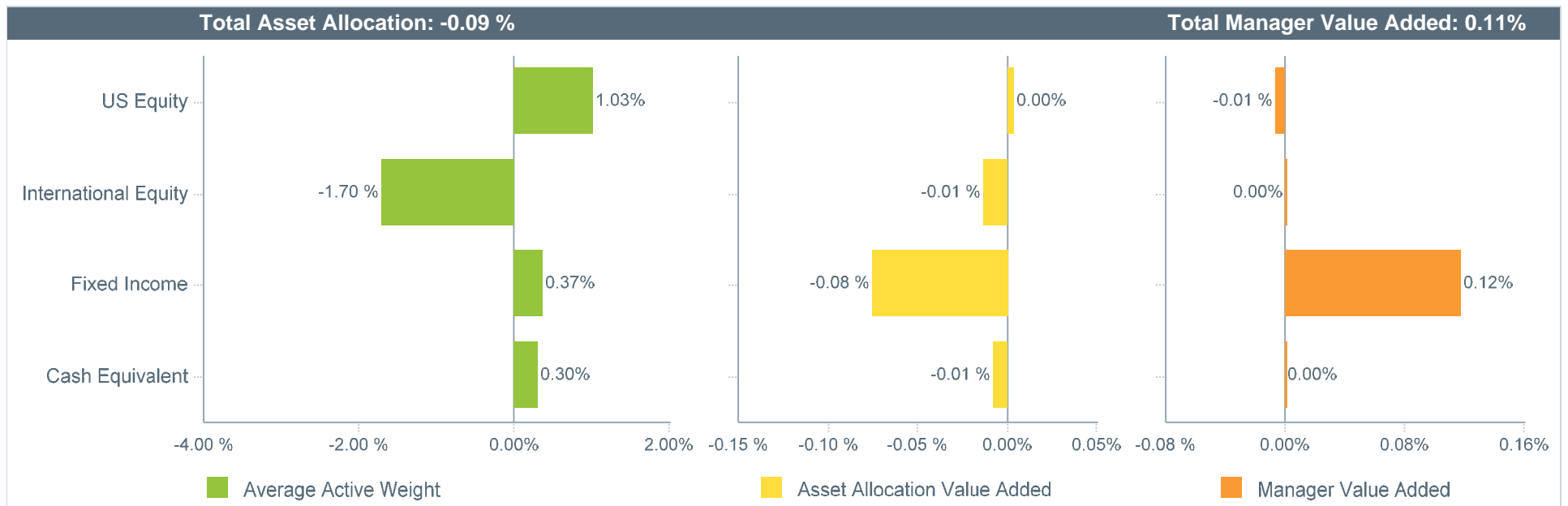
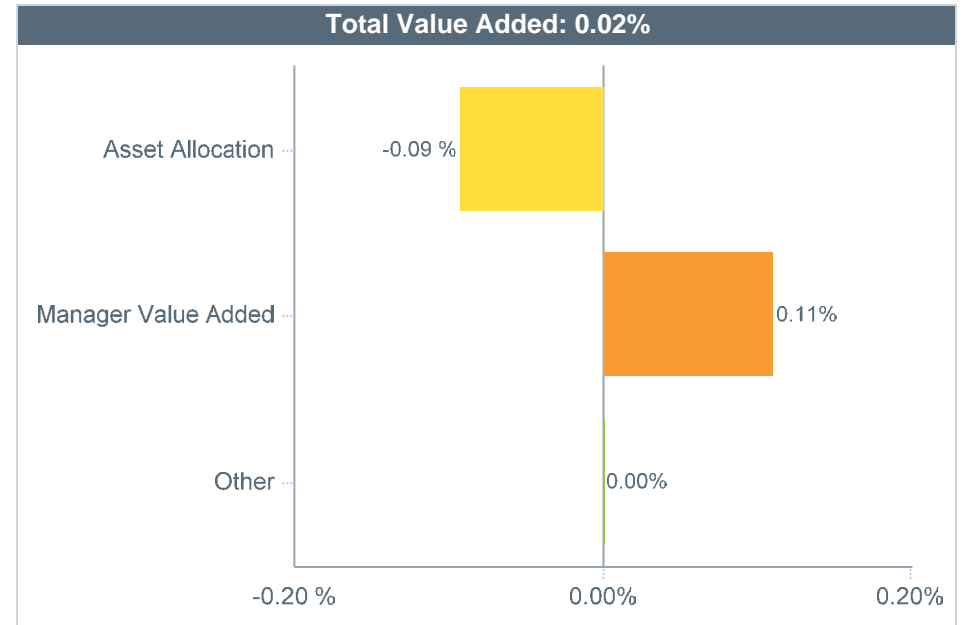
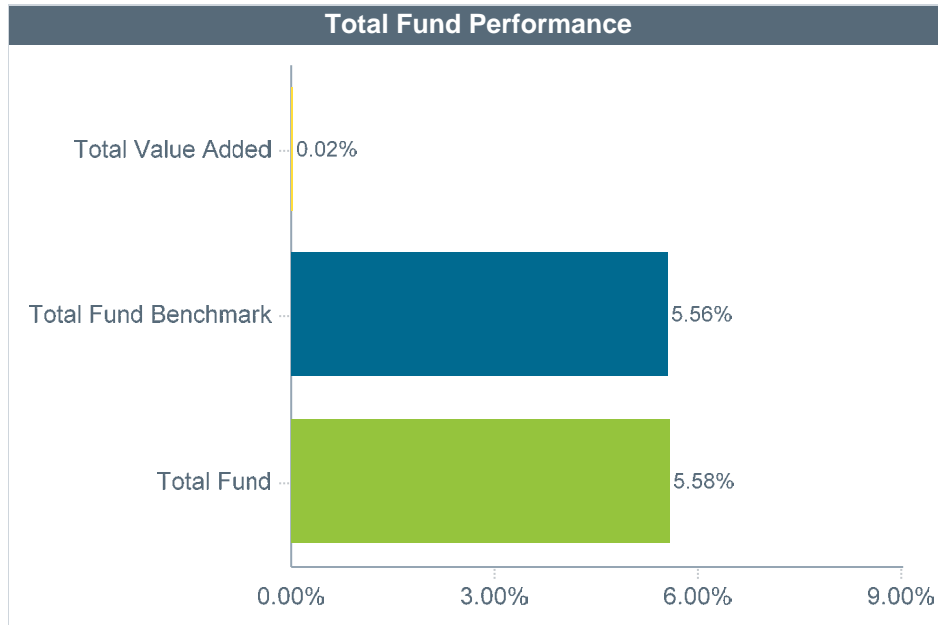
As of September 30, 2020



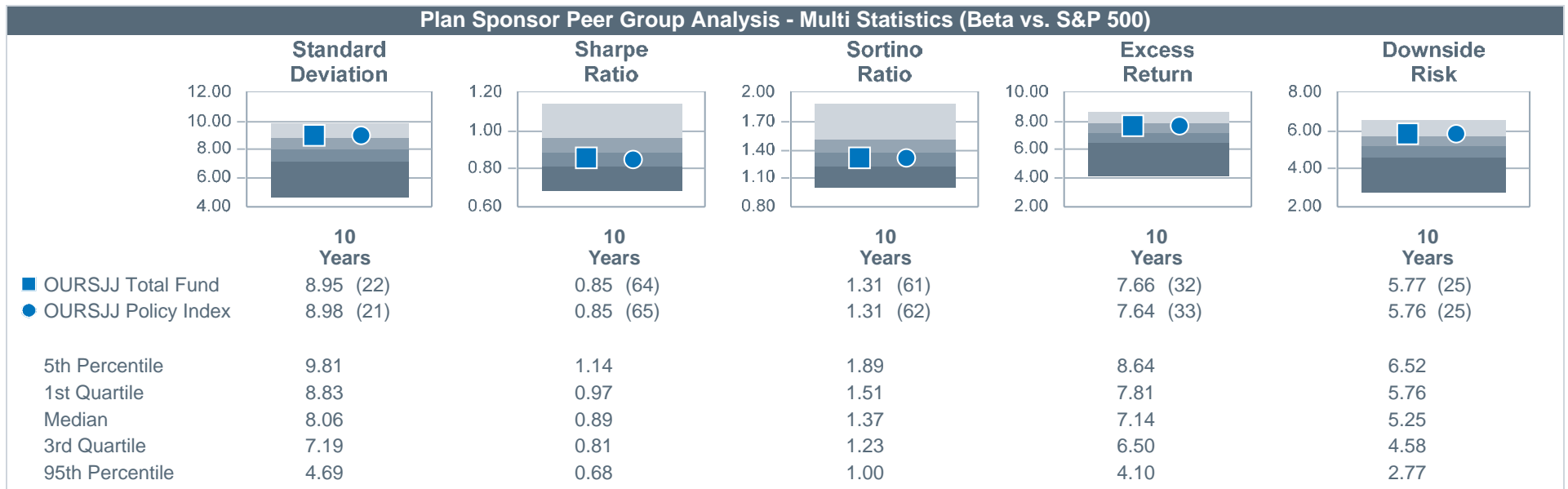
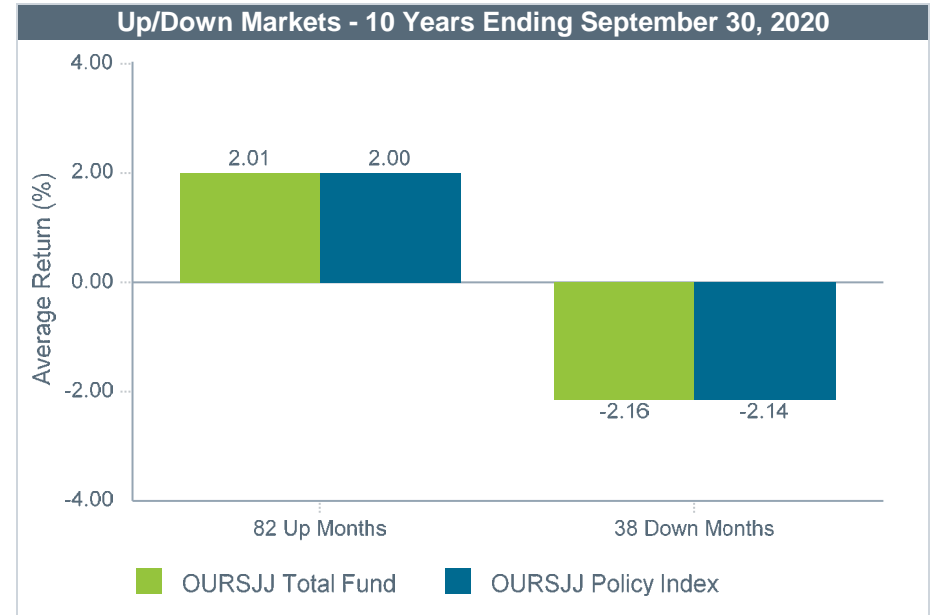
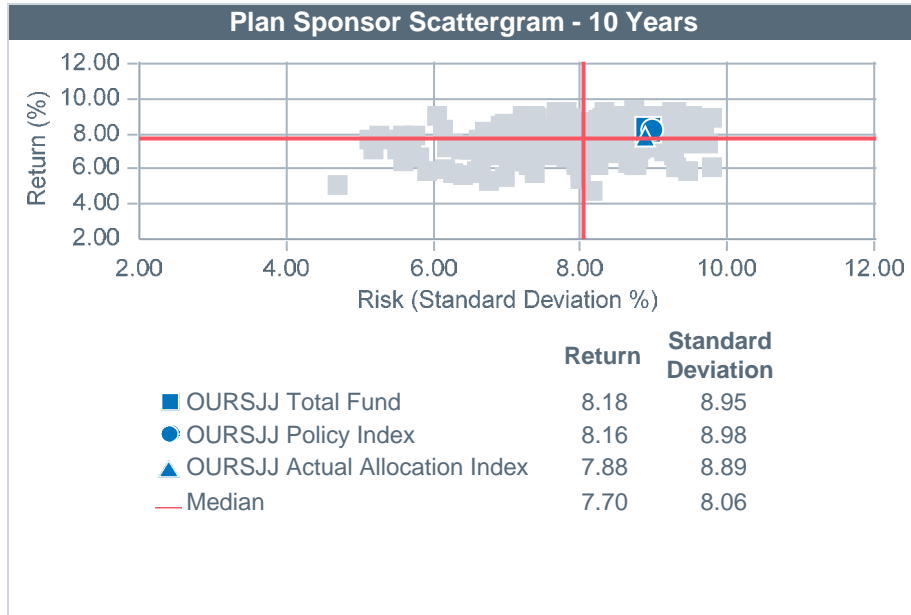
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OURSJJ Total Fund	21.40 (11)	-6.38 (92)	16.89 (20)	8.09 (34)	-1.07 (73)	7.00 (42)	16.01 (53)	12.91 (46)	0.88 (42)	13.20 (40)
● OURSJJ Policy Index	21.51 (10)	-6.09 (90)	16.86 (20)	8.12 (33)	-0.89 (70)	7.00 (42)	15.27 (61)	12.52 (54)	1.10 (39)	12.86 (46)
▲ OURSJJ Allocation Index	21.01 (16)	-6.52 (93)	16.63 (25)	7.90 (38)	-1.19 (75)	6.67 (52)	15.87 (56)	12.14 (63)	1.07 (39)	11.27 (79)
5th Percentile	22.04	-0.14	18.72	9.98	2.05	10.13	21.67	15.42	5.21	16.51
1st Quartile	20.27	-2.96	16.57	8.41	0.92	7.93	18.70	13.81	1.97	14.06
Median	18.56	-4.13	15.20	7.42	-0.09	6.74	16.20	12.73	0.54	12.71
3rd Quartile	16.66	-5.14	13.46	6.27	-1.24	5.44	12.94	11.49	-0.56	11.49
95th Percentile	12.30	-6.76	6.67	4.14	-3.17	3.06	6.01	7.33	-2.40	8.04

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

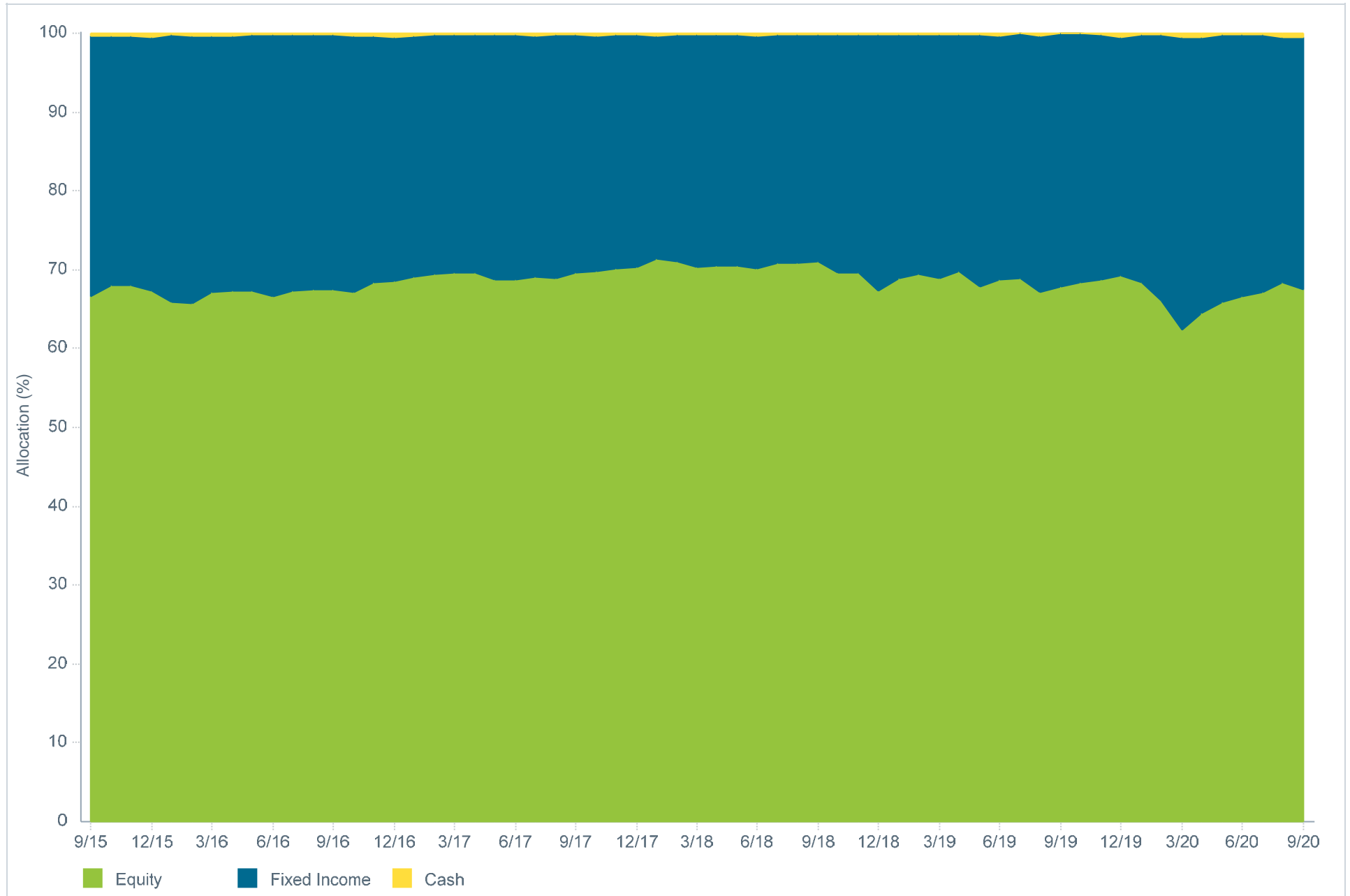




Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation.



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.

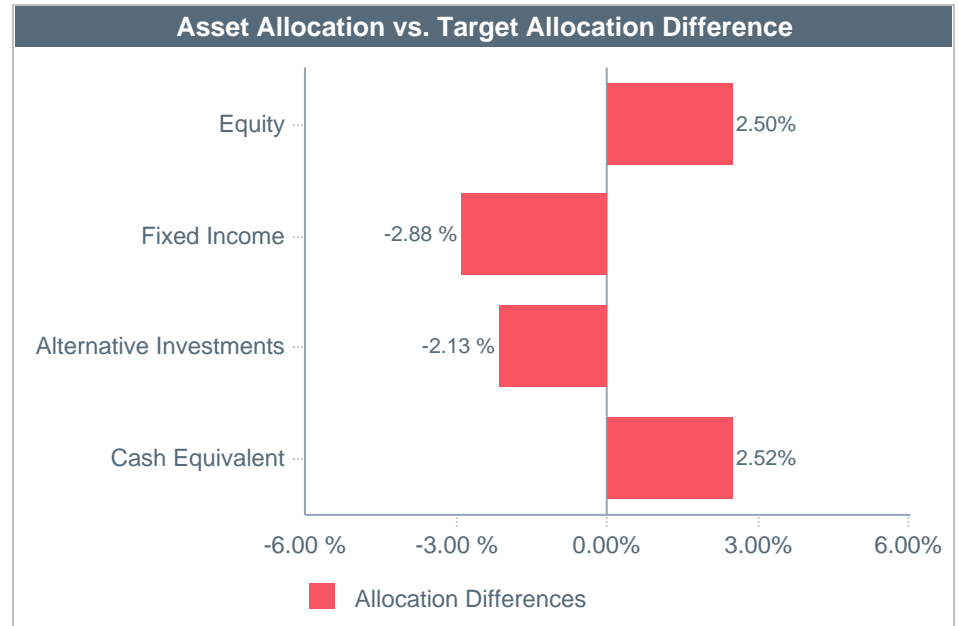


Oklahoma Wildlife Conservation Retirement System (OWCRS)



	Performance (%)												
	Trailing								Calendar Year				
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
OWCRS Total Fund (Net)	5.28	5.28	4.25	9.17	7.45	8.23	7.21	7.67	19.21	-3.85	13.93	6.18	-0.13
OWCRS Policy Index	3.63	3.63	1.19	5.86	5.17	7.01	6.06	7.12	17.53	-4.95	12.96	7.34	-1.27
Difference	1.65	1.65	3.06	3.31	2.28	1.22	1.15	0.55	1.68	1.10	0.97	-1.16	1.14
OWCRS Actual Allocation Index	4.28	4.28	1.37	6.76	6.81	8.42	7.32	7.75	20.53	-3.71	14.38	8.04	-0.28
Difference	1.00	1.00	2.88	2.41	0.64	-0.19	-0.11	-0.08	-1.32	-0.14	-0.45	-1.86	0.15
Actuarial Discount Rate (7.0%)	1.71	1.71	5.21	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Difference	3.57	3.57	-0.96	2.17	0.45	1.23	0.21	0.67	12.21	-10.85	6.93	-0.82	-7.13
OWCRS Total Fund (Gross)	5.32	5.32	4.39	9.37	7.66	8.43	7.41	7.87	19.46	-3.68	14.13	6.39	0.05
OWCRS Policy Index	3.63	3.63	1.19	5.86	5.17	7.01	6.06	7.12	17.53	-4.95	12.96	7.34	-1.27
Difference	1.69	1.69	3.20	3.51	2.49	1.42	1.35	0.75	1.93	1.27	1.17	-0.95	1.32
OWCRS Actual Allocation Index	4.28	4.28	1.37	6.76	6.81	8.42	7.32	7.75	20.53	-3.71	14.38	8.04	-0.28
Difference	1.04	1.04	3.02	2.61	0.85	0.01	0.09	0.12	-1.07	0.03	-0.25	-1.65	0.33
All Public Plans-Total Fund Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	18.56	-4.13	15.20	7.42	-0.09
Rank	40	40	17	21	14	32	30	45	37	42	67	73	48

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
OWCRS (Wildlife)	124,293,977	100.00	100.00
Equity	65,250,877	52.50	50.00
Fixed Income	46,134,173	37.12	40.00
Alternative Investments	9,781,325	7.87	10.00
Cash Equivalent	3,127,602	2.52	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 Wildlife Conservation Retirement System
Asset Allocation & Performance - Net of Fees

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OWCRS Total Fund	124,293,977	100.00	5.28	5.28	4.25	9.17	7.45	8.23	7.21	7.67	5.96	01/01/2006
OWCRS Policy Index			3.63	3.63	1.19	5.86	5.17	7.01	6.06	7.12	6.04	
Difference			1.65	1.65	3.06	3.31	2.28	1.22	1.15	0.55	-0.08	
OWCRS Actual Allocation Index			4.28	4.28	1.37	6.76	6.81	8.42	7.32	7.75	6.39	
Difference			1.00	1.00	2.88	2.41	0.64	-0.19	-0.11	-0.08	-0.43	
Actuarial Discount Rate (7.0%)			1.71	1.71	5.21	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			3.57	3.57	-0.96	2.17	0.45	1.23	0.21	0.67	-1.04	
Equity	65,250,877	52.50	7.55	7.55	-0.37	7.90	8.70	11.42	10.21	11.63	8.05	01/01/2006
OWCRS Equity Custom Index			5.86	5.86	-4.70	3.46	4.44	8.96	N/A	N/A	N/A	
Difference			1.69	1.69	4.33	4.44	4.26	2.46	N/A	N/A	N/A	
iShares:Russ 1000 ETF (IWB)	7,341,707	5.91	9.45	9.45	6.25	15.81	12.22	13.94	12.40	13.60	15.60	03/01/2020
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	15.74	
Difference			-0.02	-0.02	-0.15	-0.20	-0.16	-0.15	-0.14	-0.16	-0.14	
DFA US Small Cap Val;I (DFSVX)	1,413,056	1.14	3.37	3.37	-22.94	-15.86	-7.29	1.60	1.79	6.80	0.20	01/01/2014
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	2.04	
Difference			0.81	0.81	-1.40	-0.98	-2.16	-2.51	-1.48	-0.29	-1.84	
Vanguard S-C Id;Inst (VSCIX)	1,487,192	1.20	5.80	5.80	-6.28	1.35	4.40	8.96	7.69	10.96	8.18	12/01/2005
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	7.00	
Difference			0.87	0.87	2.41	0.96	2.63	0.96	1.27	1.11	1.18	
T Rowe Price NH;I (PRJIX)	1,581,416	1.27	12.63	12.63	35.92	48.14	26.88	23.88	18.83	20.96	18.12	01/01/2014
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	8.31	
Difference			5.47	5.47	32.04	32.43	18.70	12.46	9.61	8.62	9.81	
Bank of Oklahoma Managed Equity (SA)	38,421,348	30.91	7.77	7.77	N/A	N/A	N/A	N/A	N/A	N/A	29.00	04/01/2020
Russell 3000 Index			9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	33.26	
Difference			-1.44	-1.44	N/A	N/A	N/A	N/A	N/A	N/A	-4.26	
Vanguard Dev Mkt;Adm (VTMGX)	3,936,268	3.17	5.67	5.67	-5.79	2.09	0.91	5.77	3.43	4.95	3.83	09/01/1999
MSCI Wrld Ex US Index (USD) (Net)			4.92	4.92	-7.13	0.16	0.62	5.32	2.90	4.37	3.75	
Difference			0.75	0.75	1.34	1.93	0.29	0.45	0.53	0.58	0.08	

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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Dodge & Cox Intl Stock (DODFX)	3,784,326	3.04	0.39	0.39	-18.12	-9.43	-5.85	2.21	0.81	3.13	-0.50	03/01/2014
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	2.62	
Difference			-5.86	-5.86	-12.68	-12.43	-7.01	-4.02	-2.37	-0.87	-3.12	
MFS Intl New Discv;R6 (MIDLX)	3,996,253	3.22	9.11	9.11	-2.27	7.19	4.77	8.43	5.99	7.81	5.59	03/01/2014
MSCI ACW Ex US Grth Index (USD) (Net)			10.16	10.16	7.27	17.54	7.33	10.16	6.50	6.38	6.16	
Difference			-1.05	-1.05	-9.54	-10.35	-2.56	-1.73	-0.51	1.43	-0.57	
Invesco Dev Mkt;R6 (ODVIX)	3,289,311	2.65	8.28	8.28	-1.15	10.59	4.51	10.56	4.39	4.40	4.73	06/01/2013
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	3.43	
Difference			-1.28	-1.28	0.01	0.05	2.09	1.59	0.65	1.89	1.30	
Fixed Income	46,134,173	37.12	1.43	1.43	6.91	6.75	5.31	3.75	3.47	3.47	3.71	01/01/2006
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.52	
Difference			0.81	0.81	0.12	-0.23	0.07	-0.43	-0.50	-0.17	-0.81	
Bank of Oklahoma Managed Fixed Income (SA)	23,745,141	19.10	1.90	1.90	7.34	7.09	5.28	3.61	3.29	3.23	3.65	12/01/2005
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.56	
Difference			1.28	1.28	0.55	0.11	0.04	-0.57	-0.68	-0.41	-0.91	
MetWest:Total Rtn;I (MWTIX)	5,171,760	4.16	1.24	1.24	7.80	8.01	5.74	4.45	4.21	4.60	5.58	08/01/2017
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.10	
Difference			0.62	0.62	1.01	1.03	0.50	0.27	0.24	0.96	0.48	
PIMCO:Income;Inst (PIMIX)	7,683,676	6.18	3.04	3.04	1.79	4.36	3.80	5.60	5.54	7.09	4.07	08/01/2017
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.10	
Difference			2.42	2.42	-5.00	-2.62	-1.44	1.42	1.57	3.45	-1.03	
PIMCO:Intl Bd (DH);Inst (PFORX)	4,351,359	3.50	2.14	2.14	4.12	3.49	5.03	5.05	5.33	5.26	2.26	03/01/2020
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	2.92	
Difference			1.52	1.52	-2.67	-3.49	-0.21	0.87	1.36	1.62	-0.66	

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 September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Alternative Investments	9,781,325	7.87	3.56	3.56	-4.59	-1.95	2.03	4.92	2.40	N/A	2.59	12/01/2010
OWCRS Alternatives Custom Index			4.24	4.24	2.54	5.70	2.87	3.23	N/A	N/A	N/A	
Difference			-0.68	-0.68	-7.13	-7.65	-0.84	1.69	N/A	N/A	N/A	
Vanguard RE Idx;Adm (VGSLX)	1,748,676	1.41	1.32	1.32	-12.76	-12.21	2.37	5.21	6.90	8.50	5.36	07/01/2015
Vanguard Spl Real Estate Index			1.35	1.35	-12.66	-12.10	2.46	5.32	7.01	8.59	5.47	
Difference			-0.03	-0.03	-0.10	-0.11	-0.09	-0.11	-0.11	-0.09	-0.11	
First Eagle:Global;I (SGIIX)	3,979,526	3.20	5.70	5.70	-2.25	2.31	3.72	7.35	5.63	7.15	4.02	08/01/2017
MSCI Wrld Index (USD) (Net)			7.93	7.93	1.70	10.41	7.74	10.48	8.34	9.37	8.12	
Difference			-2.23	-2.23	-3.95	-8.10	-4.02	-3.13	-2.71	-2.22	-4.10	
Calamos:Mkt Neut Inc;I (CMNIX)	4,053,124	3.26	2.25	2.25	3.32	4.52	4.31	4.72	3.97	4.31	4.19	08/01/2017
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.10	
Difference			1.63	1.63	-3.47	-2.46	-0.93	0.54	0.00	0.67	-0.91	

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 - Gross of Fees

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
OWCRS Total Fund	124,293,977	100.00	5.32	5.32	4.39	9.37	7.66	8.43	7.41	7.87	6.16	01/01/2006
OWCRS Policy Index			3.63	3.63	1.19	5.86	5.17	7.01	6.06	7.12	6.04	
Difference			1.69	1.69	3.20	3.51	2.49	1.42	1.35	0.75	0.12	
OWCRS Actual Allocation Index			4.28	4.28	1.37	6.76	6.81	8.42	7.32	7.75	6.39	
Difference			1.04	1.04	3.02	2.61	0.85	0.01	0.09	0.12	-0.23	
Actuarial Discount Rate (7.0%)			1.71	1.71	5.21	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			3.61	3.61	-0.82	2.37	0.66	1.43	0.41	0.87	-0.84	
All Public Plans-Total Fund Median			5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70	6.35	
Rank			40	40	17	21	14	32	30	45	61	
Equity	65,250,877	52.50	7.57	7.57	-0.35	7.91	8.71	11.42	10.21	11.63	8.05	01/01/2006
OWCRS Equity Custom Index			5.86	5.86	-4.70	3.46	4.44	8.96	N/A	N/A	N/A	
Difference			1.71	1.71	4.35	4.45	4.27	2.46	N/A	N/A	N/A	
iShares:Russ 1000 ETF (IWB)	7,341,707	5.91	9.50	9.50	6.38	16.00	12.39	14.11	12.57	13.77	15.72	03/01/2020
Russell 1000 Index			9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	15.74	
Difference			0.03	0.03	-0.02	-0.01	0.01	0.02	0.03	0.01	-0.02	
IM U.S. Large Cap Equity (MF) Median			8.90	8.90	5.21	14.43	11.39	12.86	11.53	12.51	14.28	
Rank			42	42	46	45	45	41	41	37	46	
DFA US Small Cap Val;I (DFSVX)	1,413,056	1.14	3.51	3.51	-22.62	-15.42	-6.81	2.12	2.31	7.34	0.71	01/01/2014
Russell 2000 Val Index			2.56	2.56	-21.54	-14.88	-5.13	4.11	3.27	7.09	2.04	
Difference			0.95	0.95	-1.08	-0.54	-1.68	-1.99	-0.96	0.25	-1.33	
IM U.S. Small Cap Value Equity (SA+CF) Median			2.39	2.39	-19.54	-13.35	-3.72	4.39	4.27	8.57	3.03	
Rank			39	39	75	66	88	85	92	86	91	
Vanguard S-C Id;Inst (VSCIX)	1,487,192	1.20	5.81	5.81	-6.26	1.39	4.44	9.00	7.73	11.00	8.22	12/01/2005
Russell 2000 Index			4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	7.00	
Difference			0.88	0.88	2.43	1.00	2.67	1.00	1.31	1.15	1.22	
IM U.S. Small Cap Core Equity (SA+CF) Median			4.78	4.78	-10.03	-2.30	1.96	8.28	7.68	11.08	8.17	
Rank			34	34	30	39	28	40	48	51	50	
T Rowe Price NH;I (PRJIX)	1,581,416	1.27	12.81	12.81	36.58	49.09	27.70	24.68	19.63	21.80	18.91	01/01/2014
Russell 2000 Grth Index			7.16	7.16	3.88	15.71	8.18	11.42	9.22	12.34	8.31	
Difference			5.65	5.65	32.70	33.38	19.52	13.26	10.41	9.46	10.60	
IM U.S. Small Cap Growth Equity (MF) Median			8.49	8.49	8.36	18.09	10.59	12.44	9.70	12.75	9.01	
Rank			15	15	3	4	3	1	1	1	1	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Bank of Oklahoma Managed Equity (SA)	38,421,348	30.91	7.81	7.81	N/A	N/A	N/A	N/A	N/A	N/A	29.05	04/01/2020
Russell 3000 Index			9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	33.26	
Difference			-1.40	-1.40	N/A	N/A	N/A	N/A	N/A	N/A	-4.21	
Vanguard Dev Mkt;Adm (VTMGX)	3,936,268	3.17	5.69	5.69	-5.74	2.15	0.98	5.85	3.50	5.02	3.90	09/01/1999
MSCI Wrld Ex US Index (USD) (Net)			4.92	4.92	-7.13	0.16	0.62	5.32	2.90	4.37	3.75	
Difference			0.77	0.77	1.39	1.99	0.36	0.53	0.60	0.65	0.15	
IM All ACWI Ex US (MF) Median			8.49	8.49	0.41	10.17	2.96	6.69	4.29	5.11	4.79	
Rank			77	77	73	75	69	65	63	53	69	
Dodge & Cox Intl Stock (DODFX)	3,784,326	3.04	0.56	0.56	-17.72	-8.85	-5.25	2.86	1.45	3.78	0.13	03/01/2014
MSCI ACW Ex US Index (USD) (Net)			6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	2.62	
Difference			-5.69	-5.69	-12.28	-11.85	-6.41	-3.37	-1.73	-0.22	-2.49	
IM ACWI Ex US Core (MF) Median			7.12	7.12	-3.58	6.37	1.35	5.98	3.45	4.44	2.72	
Rank			100	100	100	100	100	96	92	72	97	
MFS Intl New Discv;R6 (MIDLX)	3,996,253	3.22	9.36	9.36	-1.57	8.19	5.74	9.44	6.98	8.83	6.57	03/01/2014
MSCI ACW Ex US Grth Index (USD) (Net)			10.16	10.16	7.27	17.54	7.33	10.16	6.50	6.38	6.16	
Difference			-0.80	-0.80	-8.84	-9.35	-1.59	-0.72	0.48	2.45	0.41	
IM ACWI Ex US Growth (MF) Median			10.58	10.58	8.21	17.75	7.59	9.68	6.41	6.59	5.87	
Rank			74	74	99	96	68	54	35	12	31	
Invesco Dev Mkt;R6 (ODVIX)	3,289,311	2.65	8.50	8.50	-0.52	11.52	5.38	11.48	5.26	5.32	5.60	06/01/2013
MSCI Emg Mkts Index (USD) (Net)			9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	3.43	
Difference			-1.06	-1.06	0.64	0.98	2.96	2.51	1.52	2.81	2.17	
IM Emerging Markets Equity (MF) Median			9.39	9.39	-1.07	10.12	2.02	8.12	3.69	2.42	3.17	
Rank			63	63	47	42	22	18	27	10	18	

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

As of September 30, 2020

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income	46,134,173	37.12	1.43	1.43	6.91	6.75	5.31	3.75	3.47	3.47	3.71	01/01/2006
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.52	
Difference			0.81	0.81	0.12	-0.23	0.07	-0.43	-0.50	-0.17	-0.81	
Bank of Oklahoma Managed Fixed Income (SA)	23,745,141	19.10	1.10	1.10	6.60	6.39	5.21	3.67	3.39	3.35	3.79	12/01/2005
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.56	
Difference			0.48	0.48	-0.19	-0.59	-0.03	-0.51	-0.58	-0.29	-0.77	
IM U.S. Broad Market Fixed Income (SA+CF) Median			1.32	1.32	7.31	7.55	5.72	4.87	4.56	4.40	5.24	
Rank			67	67	70	84	84	98	98	98	99	
MetWest:Total Rtn;I (MWTIX)	5,171,760	4.16	1.34	1.34	8.14	8.47	6.20	4.91	4.66	5.06	6.04	08/01/2017
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.10	
Difference			0.72	0.72	1.35	1.49	0.96	0.73	0.69	1.42	0.94	
IM U.S. Broad Market Core+ Fixed Income (MF) Median			1.67	1.67	6.59	7.13	5.21	4.74	4.36	4.26	5.10	
Rank			83	83	11	12	5	39	27	13	5	
PIMCO:Income;Inst (PIMIX)	7,683,676	6.18	3.15	3.15	2.29	5.13	4.81	6.65	6.60	8.18	5.08	08/01/2017
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.10	
Difference			2.53	2.53	-4.50	-1.85	-0.43	2.47	2.63	4.54	-0.02	
IM Multi-Sector General Bond (MF) Median			2.87	2.87	2.43	3.75	3.58	4.54	3.82	4.35	3.60	
Rank			38	38	53	31	20	5	3	1	15	
PIMCO:Intl Bd (DH);Inst (PFORX)	4,351,359	3.50	2.28	2.28	4.54	4.06	5.61	5.63	5.90	5.84	2.58	03/01/2020
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	2.92	
Difference			1.66	1.66	-2.25	-2.92	0.37	1.45	1.93	2.20	-0.34	
IM International Fixed Income (MF) Median			2.56	2.56	2.65	3.12	1.98	2.84	1.23	1.59	1.99	
Rank			54	54	12	29	6	1	1	1	39	
Alternative Investments	9,781,325	7.87	3.70	3.70	-4.46	-1.82	2.08	4.94	2.42	N/A	2.61	12/01/2010
OWCRS Alternatives Custom Index			4.24	4.24	2.54	5.70	2.87	3.23	N/A	N/A	N/A	
Difference			-0.54	-0.54	-7.00	-7.52	-0.79	1.71	N/A	N/A	N/A	
Vanguard RE Idx;Adm (VGSLX)	1,748,676	1.41	1.35	1.35	-12.67	-12.10	2.49	5.34	7.03	8.63	5.49	07/01/2015
Vanguard Spl Real Estate Index			1.35	1.35	-12.66	-12.10	2.46	5.32	7.01	8.59	5.47	
Difference			0.00	0.00	-0.01	0.00	0.03	0.02	0.02	0.04	0.02	
IM Real Estate Sector (MF) Median			2.11	2.11	-12.70	-12.54	2.34	4.66	6.38	7.87	4.85	
Rank			71	71	49	44	46	29	31	28	31	

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

As of September 30, 2020

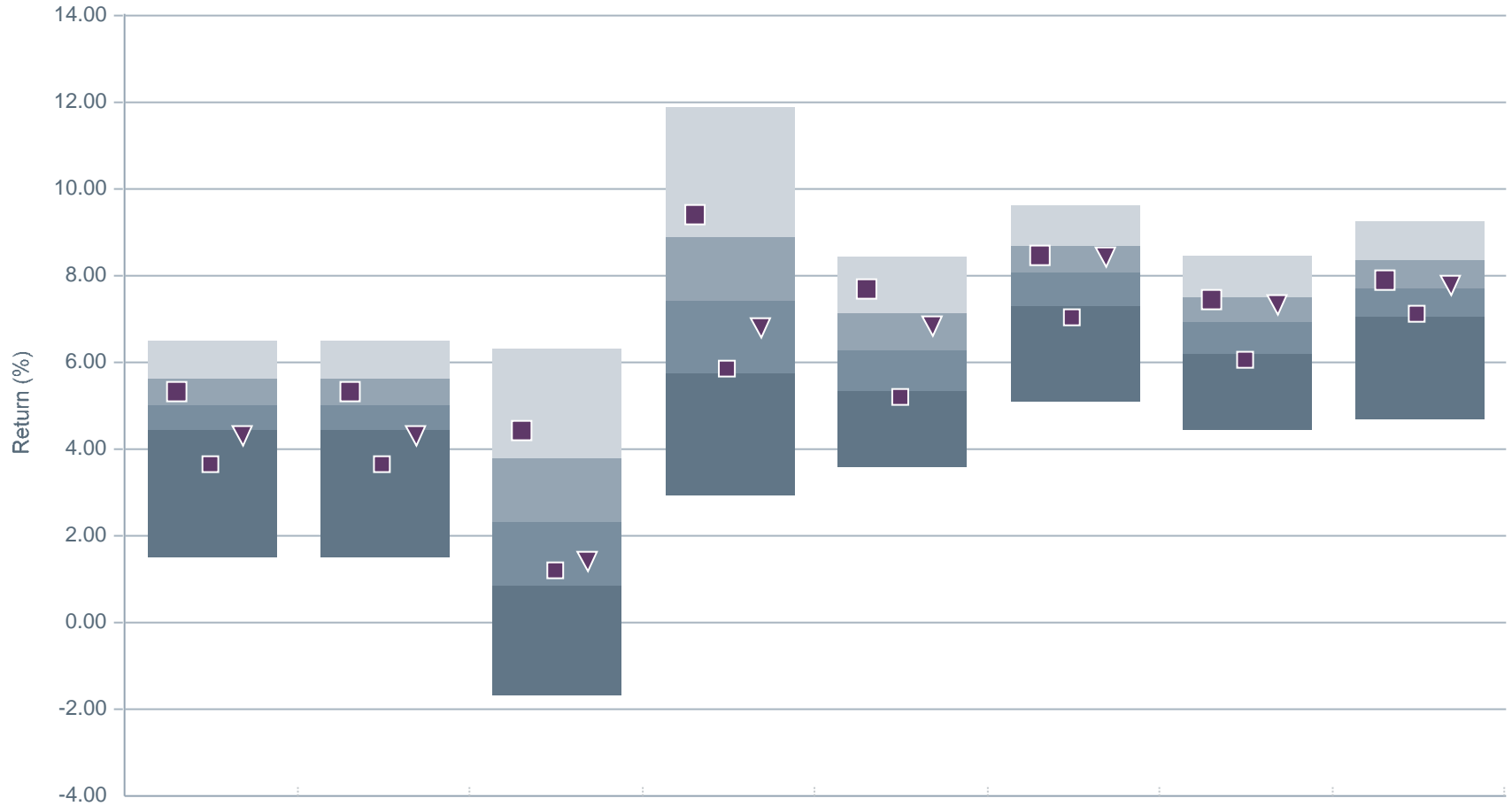
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
First Eagle:Global;I (SGIIX)	3,979,526	3.20	5.92	5.92	-1.62	3.19	4.61	8.26	6.53	8.06	4.91	08/01/2017
MSCI Wrld Index (USD) (Net)			7.93	7.93	1.70	10.41	7.74	10.48	8.34	9.37	8.12	
Difference			-2.01	-2.01	-3.32	-7.22	-3.13	-2.22	-1.81	-1.31	-3.21	
Calamos:Mkt Neut Inc;I (CMNIX)	4,053,124	3.26	2.50	2.50	4.11	5.57	5.36	5.78	5.02	5.37	5.25	08/01/2017
Bloomberg US Agg Bond Index			0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	5.10	
Difference			1.88	1.88	-2.68	-1.41	0.12	1.60	1.05	1.73	0.15	

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 September 30, 2020



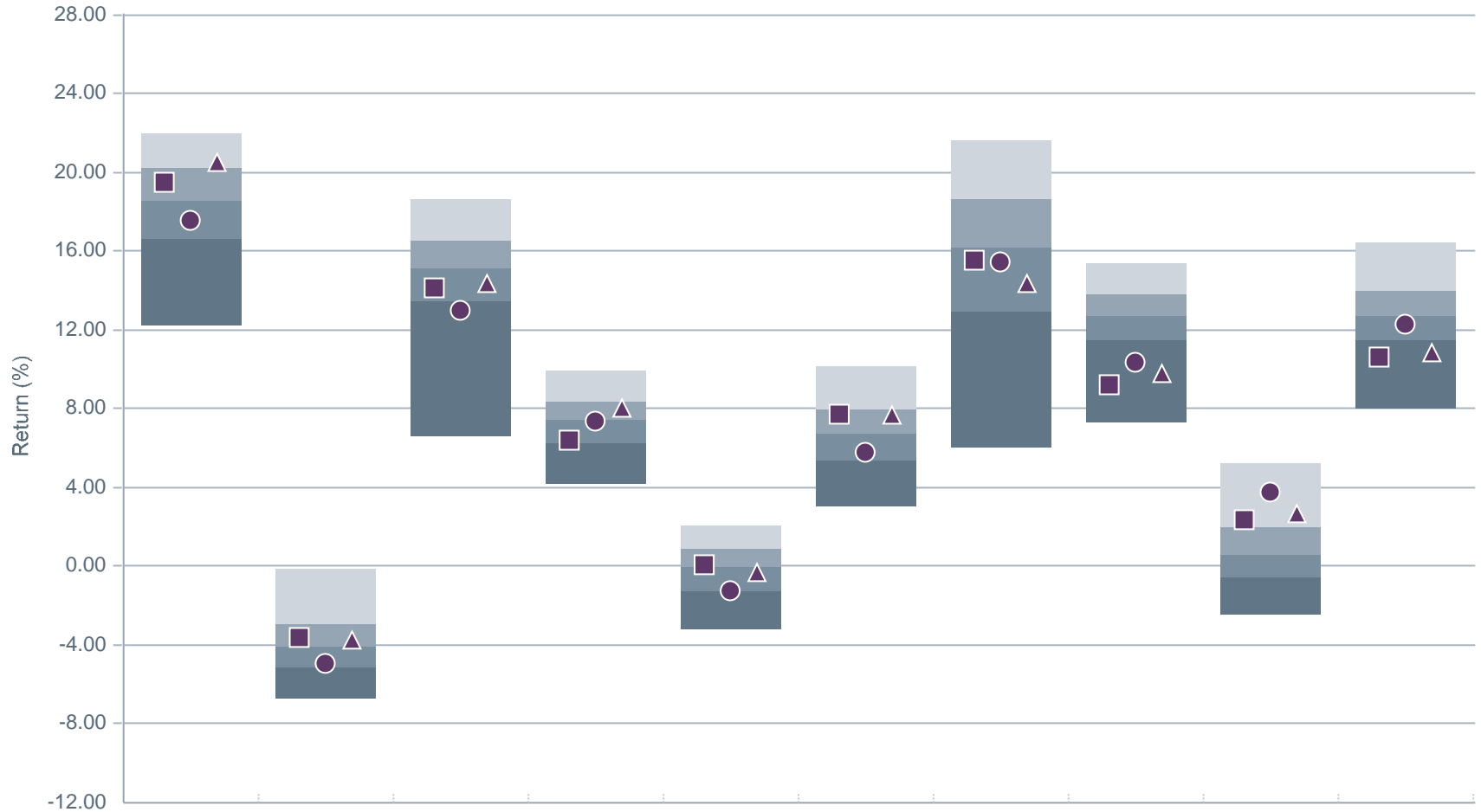
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OWCERS Total Fund	5.32 (40)	5.32 (40)	4.39 (17)	9.37 (21)	7.66 (14)	8.43 (32)	7.41 (30)	7.87 (45)
■ OWCERS Policy Index	3.63 (90)	3.63 (90)	1.19 (70)	5.86 (74)	5.17 (80)	7.01 (81)	6.06 (80)	7.12 (72)
▼ OWCERS Allocation Index	4.28 (80)	4.28 (80)	1.37 (67)	6.76 (61)	6.81 (37)	8.42 (32)	7.32 (34)	7.75 (49)
5th Percentile	6.48	6.48	6.32	11.88	8.45	9.65	8.46	9.28
1st Quartile	5.64	5.64	3.78	8.91	7.13	8.68	7.51	8.39
Median	5.04	5.04	2.32	7.45	6.27	8.07	6.92	7.70
3rd Quartile	4.45	4.45	0.84	5.74	5.35	7.29	6.20	7.07
95th Percentile	1.51	1.51	-1.66	2.93	3.59	5.12	4.45	4.69

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

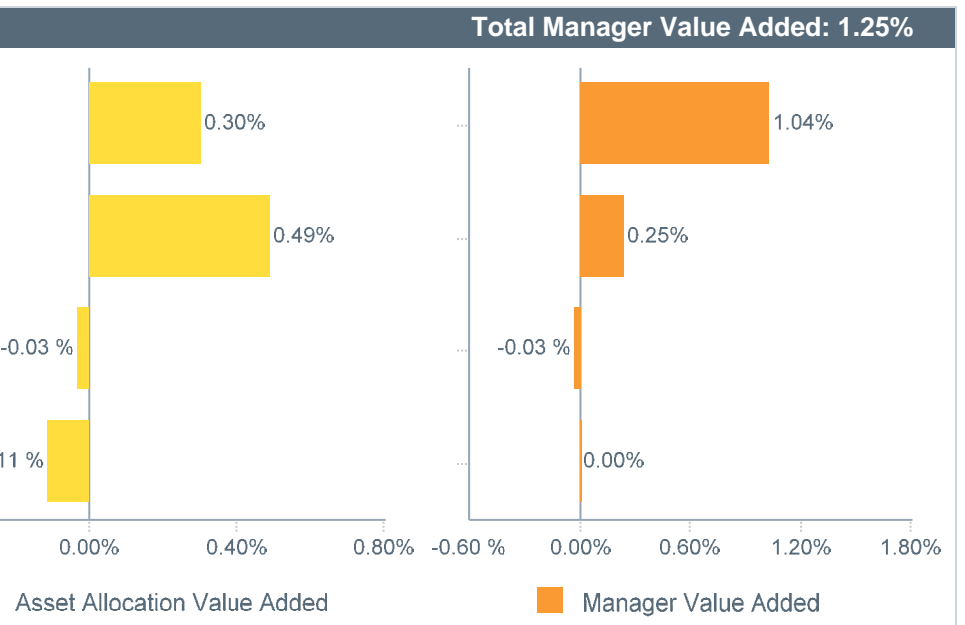
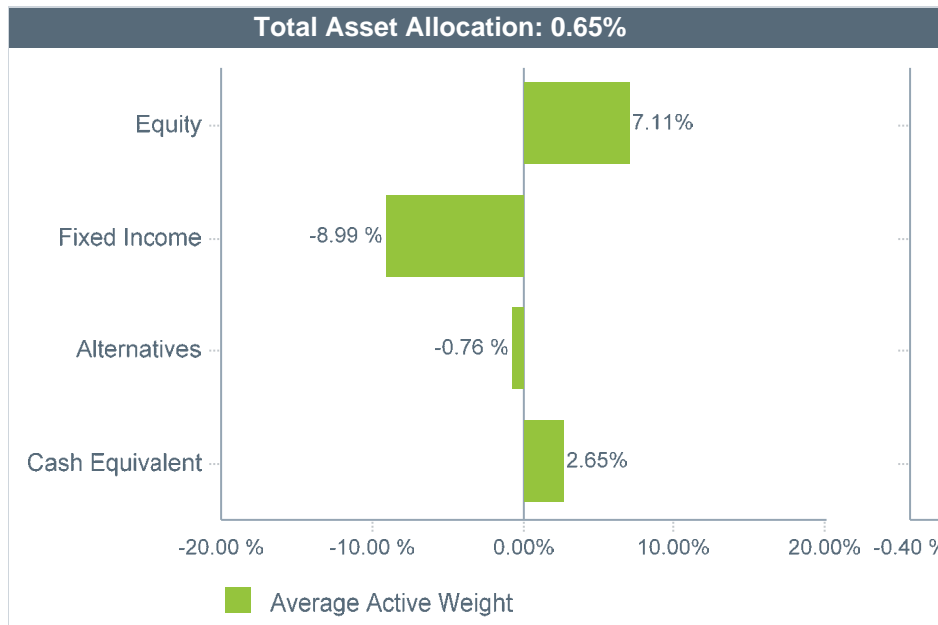
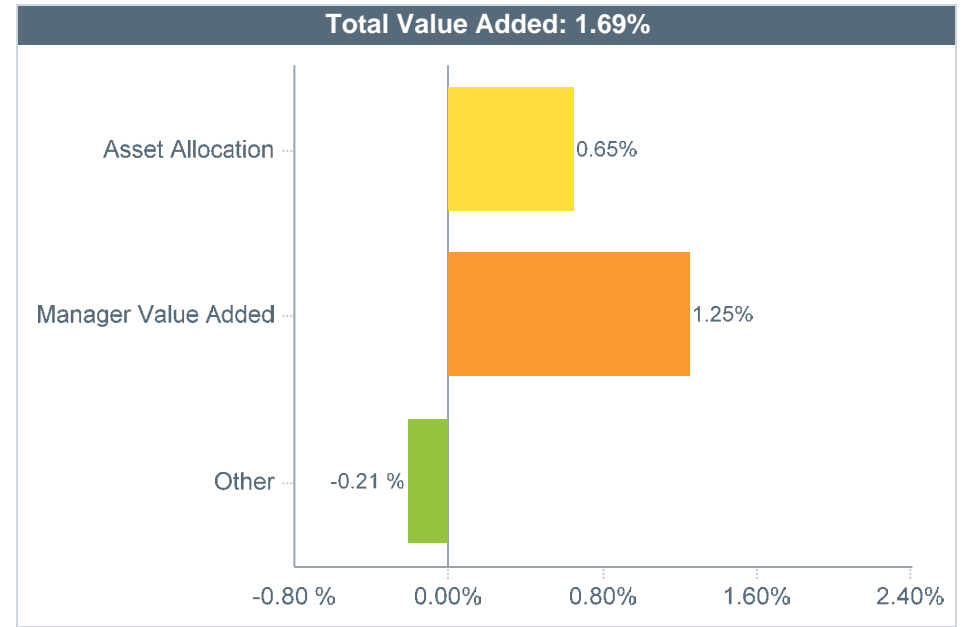
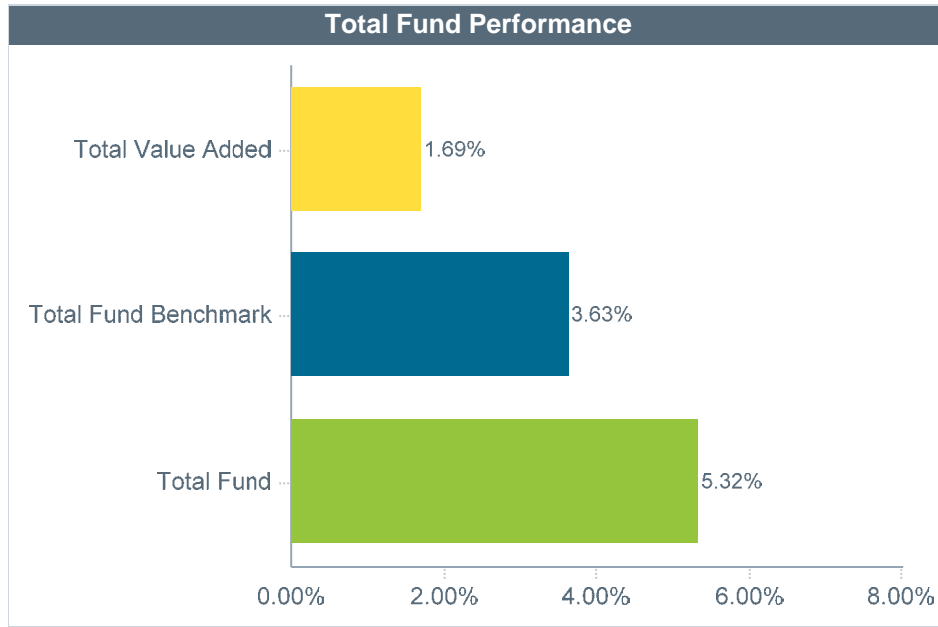
As of September 30, 2020



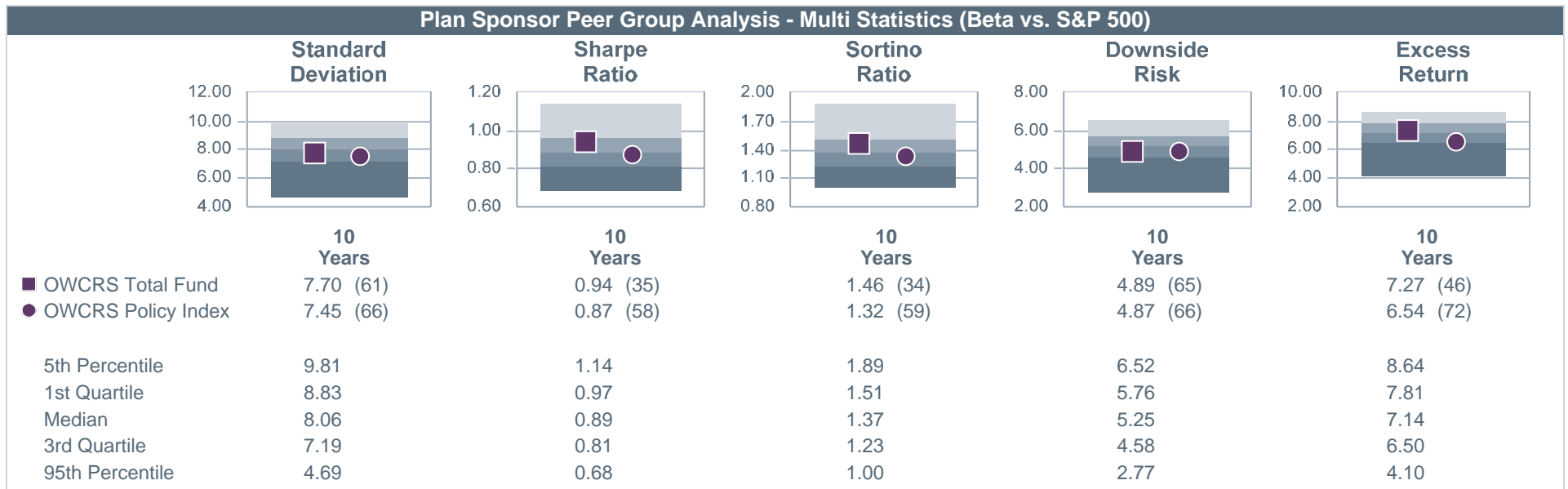
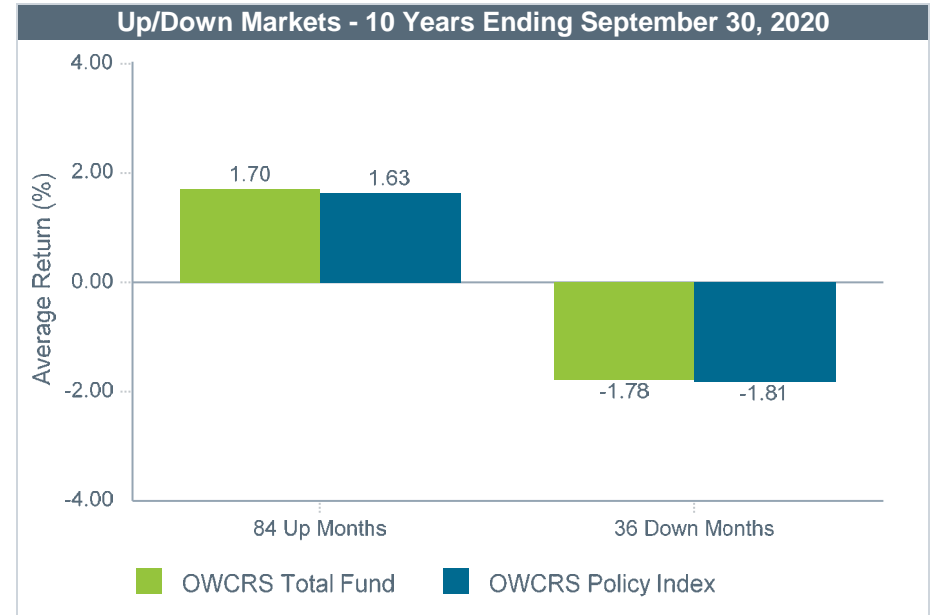
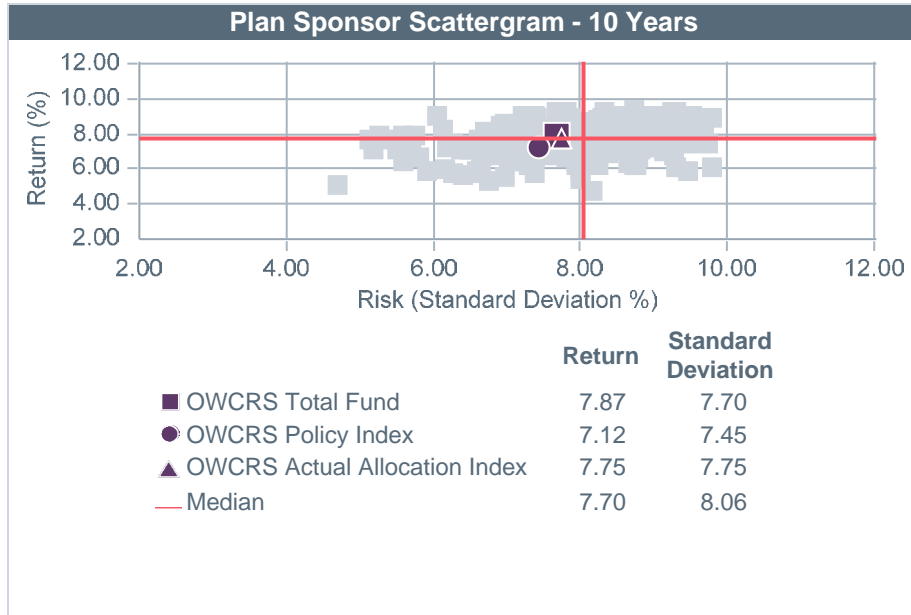
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
■ OWCERS Total Fund	19.46 (37)	-3.68 (42)	14.13 (67)	6.39 (73)	0.05 (48)	7.71 (27)	15.51 (59)	9.15 (92)	2.34 (22)	10.57 (87)
● OWCERS Policy Index	17.53 (63)	-4.95 (71)	12.96 (79)	7.34 (53)	-1.27 (76)	5.80 (71)	15.43 (60)	10.29 (86)	3.69 (12)	12.31 (62)
▲ OWCERS Allocation Index	20.53 (21)	-3.71 (43)	14.38 (63)	8.04 (35)	-0.28 (56)	7.68 (28)	14.39 (69)	9.78 (90)	2.68 (19)	10.83 (84)
5th Percentile	22.04	-0.14	18.72	9.98	2.05	10.13	21.67	15.42	5.21	16.51
1st Quartile	20.27	-2.96	16.57	8.41	0.92	7.93	18.70	13.81	1.97	14.06
Median	18.56	-4.13	15.20	7.42	-0.09	6.74	16.20	12.73	0.54	12.71
3rd Quartile	16.66	-5.14	13.46	6.27	-1.24	5.44	12.94	11.49	-0.56	11.49
95th Percentile	12.30	-6.76	6.67	4.14	-3.17	3.06	6.01	7.33	-2.40	8.04

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

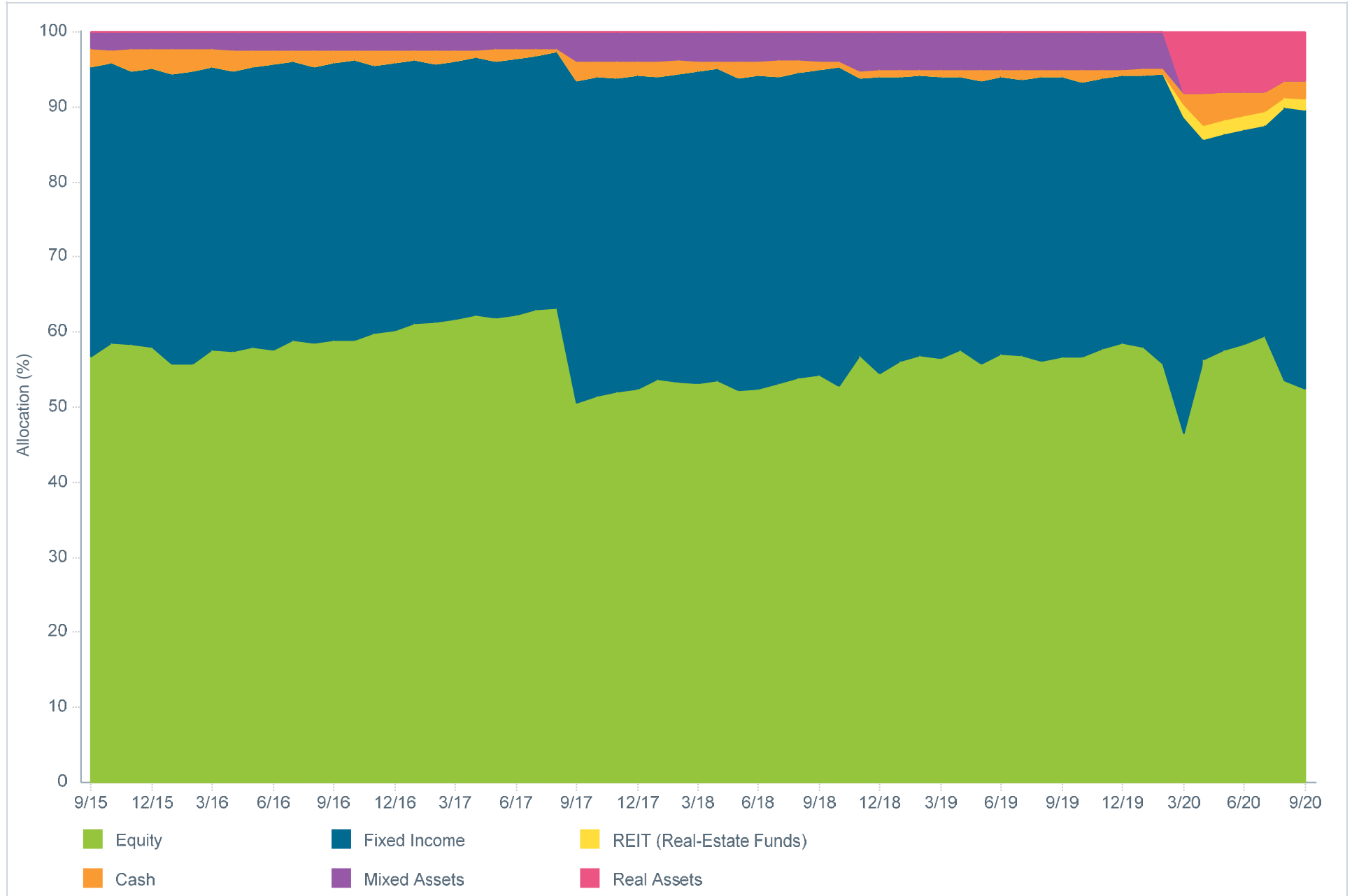




Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation.



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 on market values and performance was provided by the prior investment consultant and/or custodian bank.
- 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.
- Net of fees performance show N/A for since inception returns when the fund contains more gross of fees performance history.

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, 9% NCREIF Property Index (Monthly), and 6.5% 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, and 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.

Glossary

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.

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.

Unemployment Rate - The percentage of the total labor force that is unemployed but actively seeking employment.

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.

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 that 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

Glossary

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.

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 valuing a company's current share price relative to its trailing 12-month per-share earnings (EPS).

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 portfolio's 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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