

November 16, 2021



# Meeting Materials

Oklahoma State Pension Commission



# Table of Contents

- Executive Summary Tab 1
- Actuarial Presentation Tab 2
- Full Performance Report Tab 3

# OKLAHOMA STATE PENSION COMMISSION

## Q3 2021 EXECUTIVE SUMMARY

### Economic and Capital Market Review

*“I can at most venture a personal judgment [on the time required for inflation expectations to shift], based on some examination of the historical evidence, that the initial effects of a higher and unanticipated rate of inflation last for something like two to five years; that this initial effect then begins to be reversed; and that a full adjustment to the new rate of inflation takes about as long for employment as for interest rates, say, a couple of decades.”<sup>1</sup>*

- Milton Friedman

Capital markets, as a whole, were relatively flat in the third quarter of 2021, as public equity markets were modestly negative, and fixed income sectors were largely flat. Growth-oriented securities continued to outperform value-oriented securities due primarily to healthcare and technology stocks, both of which experienced larger gains in the wake of the COVID-19 pandemic. Private assets tended to fare better than publicly traded securities, with private real estate and private equity posting returns of 6.41% and 12.95%, respectively. Key market index returns for Q3 2021 and year-to-date returns through November 3, 2021 can be observed in **Figure 1** below.

**Figure 1: Key Market Index Returns**  
Period Ending September 30, 2021

Index	Asset Class	QTD	CYTD	1 Year	5 Year	10 Year
S&P 500 Index	US Equity	0.58	15.92	30.00	16.90	16.63
MSCI ACW Ex-US Index (Net)	International Equity	-2.99	5.90	23.92	8.94	7.48
NCREIF ODCE (AWA) (Net)	Core Real Estate	6.41	12.41	13.64	6.56	8.92
Bloomberg US Agg	US Fixed Income	0.05	-1.56	-0.90	2.94	3.01
Cambridge Private Equity <sup>1</sup>	Private Equity	12.95	24.50	53.90	19.57	15.36
HFRX Absolute Return Index	Hedge Funds	-0.62	1.82	4.10	2.28	2.02
Bloomberg Commodity Index	Commodities	6.59	29.13	42.29	4.54	-2.66

<sup>1</sup> Private equity returns are as of June 30, 2021, as returns for September 30, 2021 are not yet available.

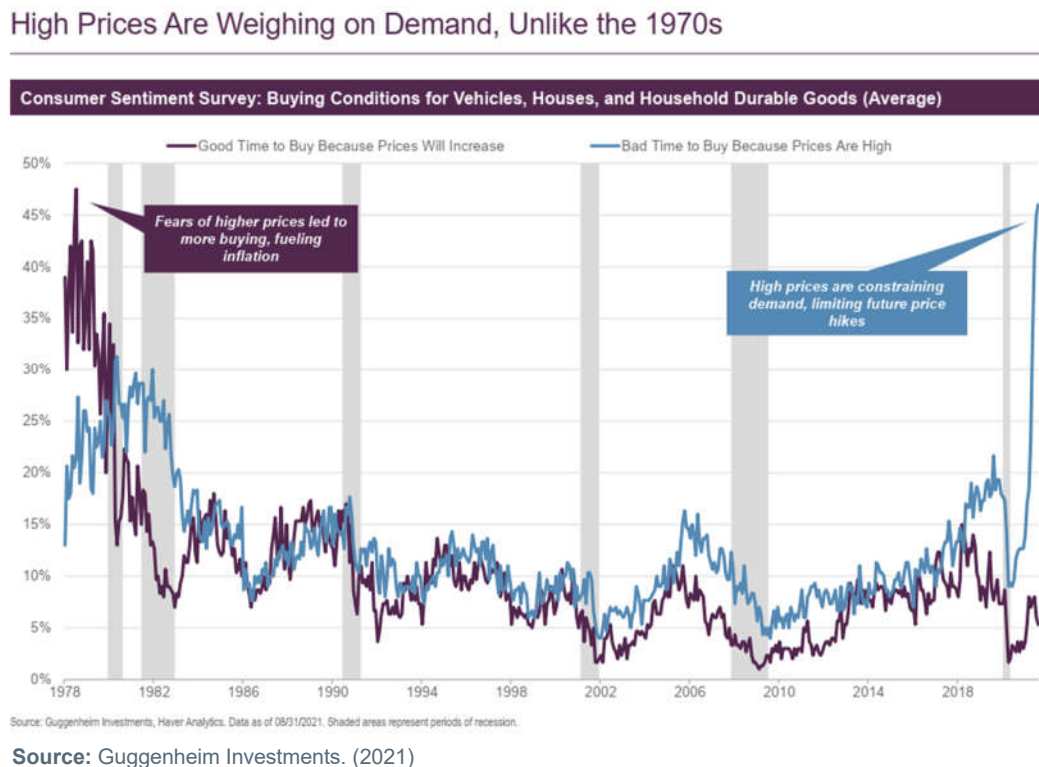
Inflation remains top of mind for investors, as supply chain disruptions and labor shortages continue to place significant upward pressure on prices of commodities, durable goods, and wages. Over the 12-month period ending September 30, 2021, non-seasonally adjusted CPI increased at a rate above 5% for the fifth consecutive month. However, if one subscribes to the well-supported belief that, in the long-term, inflation is a function of excessive expansion of the money supply, the most important issue is how the Federal Reserve will react to shifts in inflation *expectations*, rather than wagering on how long transitory supply shocks will last. In fact, the shift in inflation expectations was among the most important factors driving higher rates of inflation during the 1970s. Once elevated inflation expectations took root in the late 1960s, draconian monetary policies were required to reverse it. This is why it was so difficult for the Federal Reserve to tame inflation during this time. The Federal Reserve leadership simply lacked the fortitude and political cover to raise interest rates to a level that was needed to lower inflation expectations. As a result, inflation expectations persisted for more than a decade until Fed Chairman Paul Volcker (with the support

<sup>1</sup> Friedman, Milton. (March 1968). “The Role of Monetary Policy.” *The American Economic Review*. Volume LVIII: No. 1

of President Ronald Reagan) raised short-term rates to 20% in June 1981.

The good news is that shifts in *inflation expectations* – as opposed to the more volatile monthly CPI readings – tend to take much longer to take hold. Guggenheim Investments, which has navigated the COVID-19 pandemic superbly, recently presented some comforting data with respect to inflation expectations. **Figure 2** shows consumer sentiment with regard to higher prices of durable goods from 1978 to August 2021. In general, when consumers fear that higher inflation is here to stay (i.e., their *expectations* have increased), they tend to buy durable goods more aggressively hoping to avoid the cost of further price increases. On the other hand, when consumers anticipate transitory inflation (i.e., they expect prices to stabilize or even reverse), they tend to delay purchases in anticipation of more attractive prices in the future. As indicated in **Figure 2**, at the current moment, consumers appear to believe that inflation is more likely to be transitory. In other words, they are more likely to delay, rather than accelerate, planned purchases.

**Figure 2: Consumer Sentiment Survey on Purchase of Durable Goods (Average)**  
(Period Ending August 31, 2021)



**Figure 2** is comforting in the sense that inflation expectations do not appear to have shifted materially despite the recent spikes in CPI over the past several months. Nevertheless, this could change if the Federal Reserve is reckless with respect to growth of the money supply. This being the case, a key variable to watch is the messaging and policy shifts of the Federal Reserve. Thus far, both messaging and policy tend to support the case that the Federal Reserve remains committed to price stability. Most recently, on November 3, 2021, the Federal Reserve announced that they will begin tapering asset purchases by the end of the month. These asset purchases were used over the prior 18 months to combat deflationary forces sparked by the COVID-19 pandemic. In isolation, Fed tapering does not eliminate the risk that inflation expectations may shift upwards, but it sends a strong signal that the Federal Reserve is committed to

avoiding such a scenario.

In summary, inflation remains a hot topic for debate. Our current opinion aligns with the consensus in that we believe higher rates of inflation are likely to be transitory. The key factor to watch is the Federal Reserve's response to incoming inflation data, particularly with respect to *inflation expectations*. In the meantime, we do not advise clients to make material shifts in their long-term asset allocation to address inflation-related concerns.

---

## Performance Highlights

---

### **Total Fund Performance and Attribution**

During the 3<sup>rd</sup> Quarter of 2021, the Oklahoma State Pension Funds produced mixed returns, ranging between -0.9% to 1.9% net of fees. In a reversal from the past few quarters, public equities struggled over the quarter, while private assets fared well. Over the trailing year, absolute returns across the seven plans remain exceptionally strong, ranging from 16.3% to 26.5%. Relative to policy benchmarks, performance was similarly strong, as five out of six plans outperformed their respective policy benchmarks net of fees.<sup>2</sup> Detailed comparative performance of the seven plans can be found on **pages 11-14** of the performance report.

In terms of performance attribution, the fundamental drivers have not materially changed over the past year, which is unsurprising given the relatively short time period of analysis. In the case of the Oklahoma State Pension Funds, only a handful of high-level strategic decisions explain most of the strong performance. The more significant drivers are described below.

1. **High Allocation to Equities** – Overall, the Pension Plans have a high allocation to public and private equity. This is a sensible approach given the Plans' extended time horizons, healthy funded statuses, and relatively strong psychological tolerance for risk. The plans benefitted significantly from these decisions over the last year, capturing a substantial portion of the extended bull market in equities.
2. **Bias Toward US Equities** – In general, the Pension Plans are invested more heavily in US equities, which have substantially outperformed international equities for more than 10 years. Relative to peers, this strategic tilt drove higher absolute returns and relative performance.
3. **Avoidance of Dilutive Asset Classes** – Institutional investors are constantly bombarded with marketing pitches on new investment strategies. Many of these strategies add portfolio complexity and higher costs without providing commensurate benefits. In comparison to peers, the Oklahoma Pension Plans have resisted the temptation to invest in these products, which have kept fees low and avoided the unnecessary dilution of returns.
4. **Selective Use of Active Management** – When evaluating the potential benefits and costs of active management, it is often the case that the costs outweigh the benefits. The relative magnitude of these gap varies by asset class and the unique attributes of the investors themselves. In general, the Oklahoma State Pension Plans have employed active management strategies in a manner that extracted benefits that have exceeded the associated costs. This has enhanced absolute returns

---

<sup>2</sup> Net of fees returns are unavailable for the Firefighters plan. All returns shown for the Firefighters plan are gross of fees.

and performance relative to peers.

Overall performance of the Oklahoma State Pension Plans is strong because of thoughtful, high-level strategic decisions, coupled with skillful execution. While there will undoubtedly be future periods of time in which these strategies suffer periods of underperformance, over the long term, they appear well-positioned for success in a manner that aligns with the Plans' objectives, risk tolerance, constraints, and unique competitive advantages.

### **Asset Class Performance – Q3 2021**

Asset class returns varied during the third quarter, with private markets solidly outperforming public markets. Performance highlights for specific asset classes are provided below, and detailed performance numbers can be found on **pages 15-26** of the performance report.

1. **US Equity** – US equity returns were mostly negative for the quarter. Relative to benchmarks, returns varied depending on a combination of style tilts (i.e., small/mid cap and value) and the relative performance of active managers. US equity returns ranged from approximately -1.3% (Firefighters)<sup>5</sup> to 0.3% (Wildlife). Longer term performance over 3-, 5-, 7-, and 10-year periods has mostly lagged broad indexes of US equities.
2. **International Equity** – International equity returns were also negative during the third quarter, and underperformed U.S. equities. Third quarter returns ranged from approximately -3.4% (Public Employees) to -1.2% (Teachers). The use of active management in this asset class yields mixed results over long time periods. Three out of six plans with dedicated international equity buckets outperformed their respective indices over the 10-year trailing period. The Police plan measures total domestic and international equity against a broad, global benchmark of equities, and has outperformed over most trailing periods.
3. **Fixed Income** – Fixed income returns were roughly flat for the third quarter, as yields increased slightly. Returns ranged from approximately -1.1% (Firefighters)<sup>5</sup> to 0.4% (Teachers, Public Employees, and Judges). Relative performance was strong, with five out of seven plans outperforming the Bloomberg US Aggregate Bond Index. Over longer periods of time, as measured by 7- and 10-year periods, most plans are exceeding or roughly flat against the index.
4. **Real Estate** – Real estate returns were generally positive for the quarter and over the trailing year, as prices appreciate from their COVID-19 pandemic lows. As reported by the NFI-ODCE Index, income returns of 1.0% continue to trend in line with historical levels, while price appreciation accounts for 5.6% of return, exceeding both expectations and historical levels.
5. **Hedge Funds** – Hedge funds returns varied considerably by Plan. Returns ranged from a low of approximately -13.6% (Firefighters)<sup>5</sup> to a high of 0.8%. (Law Enforcement). On a relative basis, plans investing in Hedge Funds continued to experience mixed results, with relative performance ranging from approximately -14.6% (Firefighters)<sup>5</sup> to 1.8% (Law Enforcement).
6. **Private Equity** – Private equity produced exceptional returns over the quarter, but the level of performance varied across the different pension plans. This variability is consistent with expectations given that each plan has different exposures by investment strategy and vintage year. Further, performance versus benchmarks varied considerably, but this is primarily due to the fact

that one plan (Teachers) uses a public equity benchmark, while the others use a private benchmark.

### Long-Term Performance

In aggregate, the 5-Year and 10-Year absolute and risk-adjusted returns for the Oklahoma Pension Plans continue to compare favorably relative to indices and peers. Four out of seven plans performed at or above median on both metrics. Performance is more favorable on an asset-weighted basis, with 89.3% outperforming the median plan over the trailing 10-year period. The 5-Year and 10-Year return metrics are provided below in **Figure 3** and **Figure 4**.

**Figure 3: Five and Ten-Year Performance of Oklahoma Pension Plans  
Ordered by Level of 10-Year Net-of-Fees Return as of September 30, 2021**

Plan	Percent of Assets	5-Year Return Net of Fees	10-Year Return Net of Fees	10-Year Rank vs. All Public Plans <sup>3</sup>
Firefighters (Gross of Fees) <sup>4</sup>	8.5%	12.67	11.82	3 <sup>rd</sup>
Teachers	51.1%	11.27	11.37	4 <sup>th</sup>
Public Employees	28.7%	10.55	10.16	36 <sup>th</sup>
Judges	1.0%	10.53	10.07	43 <sup>rd</sup>
Law Enforcement	2.7%	10.06	9.60	57 <sup>th</sup>
Police	7.6%	10.02	9.29	58 <sup>th</sup>
Wildlife	0.3%	9.72	9.16	68 <sup>th</sup>

89.3% of assets

**Figure 4: 10-Year Risk-Adjusted Returns for Oklahoma Pension Plans  
Ranked by Sharpe Ratio as of September 30, 2021**

Plan	Percent of Assets	Sharpe Ratio	10-Year Rank vs. All Public Plans
Police	7.6%	1.17	15 <sup>th</sup>
Firefighters	8.5%	1.16	16 <sup>th</sup>
Teachers	51.1%	1.07	36 <sup>th</sup>
Wildlife	0.3%	1.03	50 <sup>th</sup>
Law Enforcement	2.7%	1.01	57 <sup>th</sup>
Public Employees	28.7%	0.98	69 <sup>th</sup>
Judges	1.0%	0.98	71 <sup>st</sup>

67.6% of assets

<sup>3</sup> Peer ranking are based on gross of fees; therefore, it is possible for a Plan to be ranked higher relative to peers despite having a lower net of fees return.

<sup>4</sup> The Firefighters Pension Plan only reports gross of fees returns.

## Individual Plan Performance Highlights

### Oklahoma Teachers' Retirement System (OTRS)

Detailed performance of the OTRS plan begins on **page 39** of the performance report. As of September 30, 2021, the market value of assets for OTRS was approximately **\$21.97 Billion**. A high-level summary of Total Plan Performance and brief commentary is provided below.

#### OTRS Annualized Net-of-Fees Returns

Period Ending September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>OTRS Total Fund (Net)</b>	<b>0.65</b>	<b>0.65</b>	<b>12.70</b>	<b>26.47</b>	<b>11.25</b>	<b>11.27</b>	<b>8.99</b>	<b>11.37</b>
OTRS Policy Index	-0.15	-0.15	9.93	23.47	11.89	11.44	9.33	11.09
<i>Difference</i>	0.80	0.80	2.77	3.00	-0.64	-0.17	-0.34	0.28
OTRS Actual Allocation Index	-0.35	-0.35	10.42	24.50	11.85	11.33	9.49	11.19
<i>Difference</i>	1.00	1.00	2.28	1.97	-0.60	-0.06	-0.50	0.18
<b>All Public Plans – Total Fund Median</b>	<b>-0.06</b>	<b>-0.06</b>	<b>8.83</b>	<b>20.45</b>	<b>10.48</b>	<b>10.31</b>	<b>8.58</b>	<b>9.94</b>
<i>Rank</i>	18	18	6	3	25	14	20	4

#### Commentary

The OTRS Total Fund returned 0.65% for the quarter, outperforming the policy index by 80 basis points. Over long-term periods, the Plan provided mixed returns relative to its policy index; however, the Plan outperformed its policy index by 28 basis points over the 10-year period. Relative to a broad group of pension plans, the Plan has ranked in the top quartile over all trailing periods up to 10 years. Favorable peer rankings were driven by the higher allocation to public equities (and US equity in particular) relative to other public plans. Returns relative to the policy and actual allocation index have been strong over the last year, boosted by strong active management in US equity. The largest source of underperformance over the quarter were the US Equity and Real Estate allocations, which lagged their benchmarks by 110 and 137 basis points, respectively. International equity returns continue to improve over the past year, outperforming the MSCI ACW Ex-US IM Index by 245 basis points.

In summary, while the OTRS Plan performance trailed its policy index by 17 basis points over the past five years, performance has improved over the last year and remains strong over the 10-year period. The Plan has continued to produce strong returns relative to peers over all trailing periods. On a risk-adjusted basis, the Plan has ranked above median relative to other public plans, as well as other Oklahoma plans, as illustrated in **Figure 4** on the previous page.



## Oklahoma Public Employees Retirement System (OPERS)

Detailed performance of the OPERS plan begins on **page 59** of the performance report. As of September 30, 2021, the market value of assets for OPERS was approximately **\$12.32 Billion**. A high-level summary of Total Plan Performance and brief commentary is provided below.

### OPERS Annualized Net-of-Fees Returns

Period Ending September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>OPERS Total Fund (Net)</b>	<b>-0.86</b>	<b>-0.86</b>	<b>7.72</b>	<b>19.98</b>	<b>10.92</b>	<b>10.55</b>	<b>8.72</b>	<b>10.16</b>
OPERS Policy Index	-0.90	-0.90	7.04	19.14	11.00	10.55	8.77	10.02
<i>Difference</i>	0.04	0.04	0.68	0.84	-0.08	0.00	-0.05	0.14
OPERS Actual Allocation Index	-0.94	-0.94	7.53	19.75	12.04	11.13	9.18	10.30
<i>Difference</i>	0.08	0.08	0.19	0.23	-1.12	-0.58	-0.46	-0.14
<b>All Public Plans – Total Fund Median</b>	<b>-0.06</b>	<b>-0.06</b>	<b>8.83</b>	<b>20.45</b>	<b>10.48</b>	<b>10.31</b>	<b>8.58</b>	<b>9.94</b>
<i>Rank</i>	96	96	74	56	34	38	40	36

### Commentary

The OPERS Total Fund continues to provide returns in line with its policy index over all periods and ranked above median over all periods greater than 1 year relative to a broad peer group of public plans. In aggregate, active management added value on a net of fees basis over the last year. The source of active manager value added varied by asset class. In general, US equity managers contributed to relative performance, while international equity managers detracted. In aggregate, fixed income managers suffered relative to their respective indices over the last year, however long-term performance remains strong relative to the benchmark.

In summary, the OPERS plan has generated strong long-term returns relative to its policy index and peers over the 10-year period. On a risk-adjusted basis, the Plan has ranked below median relative to other public plans and 6<sup>th</sup> among the group of seven Oklahoma plans.

## Oklahoma Firefighters Pension & Retirement System (OFPRS)

Detailed performance of the OFPRS plan begins on **page 76** of the performance report. As noted earlier, net of fees returns for the Firefighters plan are not available. As of September 30, 2021, the market value of assets for OFPRS was approximately **\$3.66 Billion**. A high-level summary of Total Plan Performance and brief commentary is provided below.

### OFPRS Annualized Gross-of-Fees Returns

Period Ending September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>OFPRS Total Fund (Gross)</b>	<b>-0.18</b>	<b>-0.18</b>	<b>9.41</b>	<b>23.21</b>	<b>12.36</b>	<b>12.67</b>	<b>10.69</b>	<b>11.82</b>
OFPRS Policy Index	0.76	0.76	11.37	22.94	12.15	11.97	10.16	11.63
<i>Difference</i>	<b>-0.94</b>	<b>-0.94</b>	<b>-1.96</b>	0.27	0.21	0.70	0.53	0.19
OFPRS Actual Allocation Index	0.30	0.30	9.92	21.76	12.08	12.05	10.06	11.44
<i>Difference</i>	<b>-0.48</b>	<b>-0.48</b>	<b>-0.51</b>	1.45	0.28	0.62	0.63	0.38
<b>All Public Plans – Total Fund Median</b>	<b>-0.06</b>	<b>-0.06</b>	8.83	20.45	10.48	10.31	8.58	9.94
<i>Rank</i>	61	61	37	18	9	3	3	3

### Commentary

The Firefighter's plan generated the strongest long-term return among the seven Oklahoma pension plans on an absolute basis, and second strongest on a risk-adjusted basis. In terms of absolute returns, the Plan exceeded its policy and actual allocation index over virtually all trailing periods and ranked in the top decile relative to a broad peer group of public plans over all trailing periods greater than 1 year. Over the trailing ten years, on a risk-adjusted basis, the Plan ranked in the 16<sup>th</sup> percentile relative to a broad peer group of public pension plans and 2<sup>nd</sup> among the group of seven Oklahoma pension plans. An important caveat is that returns are reported only on a gross of fees basis for this Plan. We are currently working to obtain net of fees data.

Although the most significant drivers of performance relative to the Oklahoma plans were the asset allocation decisions, the plan also benefitted from active management value-added over all trailing periods, although is to some extent overstated given the absence of net of fees reporting. In the US equity portfolio, active manager performance was mixed relative to their respective benchmarks over the last year, with small cap value managers continuing to struggle to keep pace with their benchmark. Over the past year, the portfolio also benefitted from a higher weighting to small cap equity relative to a broad US equity index. International developed equity outperformance was even more substantial, with the composite outperforming the index by 478 basis points over the past year. The fixed income portfolio also added to performance over the past year, providing excess return of 276 basis points. Overall, the Firefighter's plan continues to perform exceptionally well relative to peers, benchmarks, and other Oklahoma plans.

## Oklahoma Police Pension & Retirement System (OPPRS)

Detailed performance of the OPPRS plan begins on **page 93** of the performance report. As of September 30, 2021, the market value of assets for OPPRS was approximately **\$3.26 Billion**. A high-level summary of Total Plan Performance and brief commentary is provided below.

### OPPRS Annualized Net-of-Fees Returns

Period Ending September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>OPPRS Total Fund (Net)</b>	<b>1.87</b>	<b>1.87</b>	<b>12.52</b>	<b>24.02</b>	<b>10.48</b>	<b>10.02</b>	<b>8.19</b>	<b>9.29</b>
OPPRS Policy Index	0.40	0.40	9.11	19.30	10.50	9.92	7.71	9.51
<i>Difference</i>	1.47	1.47	3.41	4.72	-0.02	0.10	0.48	-0.22
OPPRS Actual Allocation Index	0.17	0.17	8.44	18.67	10.04	9.61	7.72	9.34
<i>Difference</i>	1.70	1.70	4.08	5.35	0.44	0.41	0.47	-0.05
<b>All Public Plans – Total Fund Median</b>	<b>-0.06</b>	<b>-0.06</b>	8.83	20.45	10.48	10.31	8.58	9.94
<i>Rank</i>	7	7	6	9	40	45	49	58

### Commentary

The Police Plan provided absolute returns that ranked near median and generally exceeded both the policy index and actual allocation index over all trailing periods. It should be noted, however, that performance is heavily influenced by the intentional decision to reduce downside risk in the portfolio to protect the funded status of the plan. The risk-adjusted returns of the portfolio are more favorable and are consistent with this objective. As illustrated in **Figure 3** on page 5, the OPPRS 10-year Sharpe ratio is ranked 1<sup>st</sup> relative to other Oklahoma Plans and in the 15<sup>th</sup> percentile relative to a broad peer group of public plans. Thus, on a risk-adjusted based, the OPPRS plan has performed relatively well over the long term and in a manner that is consistent with the stated objectives. In terms of return drivers relative to benchmarks, performance has varied, but the plan has performed roughly consistent with benchmarks overall.

In summary, the OPPRS plan has generally lagged the performance of peers and other Oklahoma pension plans in terms of absolute returns but still exceeded its required return of 7.5% over all trailing periods. On the other hand, the Plan has ranked relatively well on a risk-adjusted basis, which is consistent with its stated intention of managing a portfolio with less sensitivity to downside risk.

## Oklahoma Law Enforcement Retirement System (OLERS)

The detailed performance of the OLERS plan begins on **page 108** of the performance report. As of September 30, 2021, the market value of assets for OLERS was approximately **\$1.17 Billion**. A high-level summary of Total Plan Performance and brief commentary is provided below.

### OLERS Annualized Net-of-Fees Returns

Period Ending September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>OLERS Total Fund (Net)</b>	<b>0.51</b>	<b>0.51</b>	<b>10.57</b>	<b>23.62</b>	<b>10.03</b>	<b>10.06</b>	<b>8.08</b>	<b>9.60</b>
OLERS Policy Index	0.19	0.19	9.46	20.51	10.61	10.31	8.90	10.14
<i>Difference</i>	0.32	0.32	1.11	3.11	-0.58	-0.25	-0.82	-0.54
OLERS Actual Allocation Index	-0.42	-0.42	8.99	21.18	10.90	10.40	8.80	10.00
<i>Difference</i>	0.93	0.93	1.58	2.44	-0.87	-0.34	-0.72	-0.40
<b>All Public Plans – Total Fund Median</b>	<b>-0.06</b>	<b>-0.06</b>	<b>8.83</b>	<b>20.45</b>	<b>10.48</b>	<b>10.31</b>	<b>8.58</b>	<b>9.94</b>
<i>Rank</i>	7	7	6	9	40	45	49	58

### Commentary

The Law Enforcement Plan generated a 10-year absolute return that ranked 5<sup>th</sup> relative to other Oklahoma Pension Plans and near or slightly below median relative to a broad peer group of public plans over all trailing periods greater than 3 years. Active management has been a drag on performance over most time periods, but has improved substantially over the last year. Recent outperformance was driven primarily by US equity, which ended the year with a 43.28% return, outperforming the S&P 500 Index by 1,328 basis points. Private equity also provided strong performance, outperforming the S&P 500 Index + 5% by 936 basis points over the last year. The biggest detractor from performance stemmed from the long/short equity allocation, which consists of two hedge funds-of-funds. Over the past year, the combined performance of these two funds underperformed by 1,058 basis points.

In summary, the OLERS Plan has been mixed relative to peers and lagged other Oklahoma plans in terms of absolute returns over various trailing periods, although relative returns have continued to improve over the last year. The Plan has also ranked in line with peers on a risk-adjusted basis, as represented by a Sharpe ratio that ranks in the 57<sup>th</sup> percentile relative to peers.

## Uniform Retirement System for Justices & Judges (URSJJ)

Detailed performance of the URSJJ plan begins on **page 124** of the performance report. As of September 30, 2021, the market value of assets for URSJJ was approximately **\$426.3 Million**. A high-level summary of Total Plan Performance and brief commentary is provided below.

### URSJJ Annualized Net-of-Fees Returns

Period Ending September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>URSJJ Total Fund (Net)</b>	<b>-0.93</b>	<b>-0.93</b>	<b>7.52</b>	<b>19.76</b>	<b>10.91</b>	<b>10.53</b>	<b>8.71</b>	<b>10.07</b>
URSJJ Policy Index	-0.90	-0.90	7.04	19.14	11.02	10.56	8.78	10.03
<i>Difference</i>	-0.03	-0.03	0.48	0.62	-0.11	-0.03	-0.07	0.04
URSJJ Actual Allocation Index	-0.95	-0.95	7.51	19.67	11.96	11.09	9.07	10.18
<i>Difference</i>	0.02	0.02	0.01	0.09	-1.05	-0.56	-0.36	-0.11
<b>All Public Plans – Total Fund Median</b>	<b>-0.06</b>	<b>-0.06</b>	<b>8.83</b>	<b>20.45</b>	<b>10.48</b>	<b>10.31</b>	<b>8.58</b>	<b>9.94</b>
<i>Rank</i>	97	97	78	60	39	42	42	43

### Commentary

The Judges Plan generated a 10-year absolute return that ranked 4<sup>th</sup> relative to other Oklahoma Pension Plans, and in the 43<sup>rd</sup> percentile relative to a broad peer group of public plans over the trailing 10 years. Strong returns relative to peers was aided by a modest tilt toward US equity relative to international equity, as well as a dedicated small cap US equity allocation. The Plan also benefitted from strong relative performance in its fixed income portfolio over the long term, a large portion of which stemmed from its allocation to Hoisington US Long Duration Fixed Income. This strategy is interesting in that it rotates the portfolio between long duration fixed income securities and cash depending upon expectations of interest rate movements. The fund continues to benefit from the substantial decline in yields over the past 10 years, although it has significantly detracted from returns over the past year due to the recent increase in interest rates.

Overall, the URSJJ Plan performed well over the past 10 years relative to a broad peer group of public plans and roughly average relative to other Oklahoma plans. On a risk-adjusted basis, the Plan performed below median over the past 10 years relative to peers (with a Sharpe ratio ranking in the 71<sup>st</sup> percentile) and ranked 7<sup>th</sup> relative to Oklahoma Plans.

## Oklahoma Wildlife Conservation Retirement System (OWCRS)

Detailed performance of the OWCRS plan begins on **page 136** of the performance report. As of September 30, 2021, the market value of assets for OWCRS was approximately **\$139.9 Million**. A high-level summary of Total Plan Performance and brief commentary is provided below.

### OWCRS Annualized Net-of-Fees Returns

Period Ending September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>OWCRS Total Fund (Net)</b>	<b>-0.33</b>	<b>-0.33</b>	<b>7.23</b>	<b>16.28</b>	<b>9.98</b>	<b>10.53</b>	<b>8.16</b>	<b>9.16</b>
<b>OWCRS Policy Index</b>	<b>-0.63</b>	<b>-0.63</b>	6.39	18.46	9.05	10.56	7.23	8.67
<i>Difference</i>	0.30	0.30	0.84	<b>-2.18</b>	0.93	<b>-0.03</b>	0.93	0.49
<b>OWCRS Actual Allocation Index</b>	<b>-0.73</b>	<b>-0.73</b>	6.95	19.44	10.40	11.09	8.65	9.49
<i>Difference</i>	0.40	0.40	0.28	<b>-3.16</b>	<b>-0.42</b>	<b>-0.56</b>	<b>-0.49</b>	<b>-0.33</b>
<b>All Public Plans – Total Fund Median</b>	<b>-0.06</b>	<b>-0.06</b>	8.83	20.45	10.48	10.31	8.58	9.94
<i>Rank</i>	66	66	80	88	57	60	55	68

### Commentary

The Wildlife Plan provided 10-year absolute returns that ranked 7<sup>th</sup> relative to other Oklahoma Pension Plans and near or below median relative to a broad peer group of public plans over all trailing periods of at least three or more years. Strong returns were aided by a heavy allocation to public equity over the long term, however, over the past year, active equity managers tended to lag their respective indices. The fixed income portfolio has generated strong relative returns over the last year, outperforming its benchmark by 228 basis points.

Overall, the OWCRS Plan performed slightly below median relative to a broad peer group of public plans over all periods greater than 3 years. On a risk-adjusted basis, the Plan also performed in line with peers over the past 10 years (with a Sharpe ratio ranking in the 50<sup>th</sup> percentile) and ranking 4<sup>th</sup> relative to the group of seven Oklahoma Plans.

## Overview of Fundamental Investment Performance Drivers

When reviewing the performance of the Oklahoma Pension Plans, it is important to understand the key drivers of investment returns, which we will reference throughout this document. In short, the return of an investment portfolio can be attributed to the following three, fundamental factors.

1. **Strategic Asset Allocation** – The long-term strategic asset allocation of a portfolio is by far the most significant driver of absolute returns in the long term. In other words, the percentages that a plan allocates to various asset classes, such as US equity, international equity, private equity, real estate, etc., tend to dominate. To this end, the most significant decision for pension plan boards is the extent of their exposure to various types of assets – especially equities. To this point, the degree of equity exposure is primarily a function of a plan’s risk tolerance and long-term return requirements; thus, understanding these requirements is the most critical responsibility of pension plan sponsors and their advisors.
2. **Tactical Asset Allocation** – Tactical asset allocation is a term that describes the return impact when a portfolio deviates from its long-term strategic asset allocation targets. In general, use of intentional tactical allocation at the total portfolio level is unlikely to add value, thus most institutional investors wisely avoid it. However, some degree of *unintentional* tactical allocation is inevitable due to the inability of institutional investors to match allocations with desired targets at all times. This is especially true in illiquid asset classes, such as private equity, as investors have limited control over the investment and distribution of capital from underlying funds. Nevertheless, even though some degree of tactical allocation is unavoidable, its overall impact on performance is generally modest.
3. **Active Management** – The third driver of investment performance is active management. Active management involves the construction of a portfolio of securities that differs from the mix in a comparable reference index. Although active management is usually not the most important driver of long-term *absolute returns*, it is an important driver of *relative returns* in comparison to peer organizations with similar allocation strategies. In general, there are three primary ways in which active management is incorporated into an institutional investment strategy.
  - a. **Use of Style Tilts within Asset Classes** – When all securities available for investment are aggregated within an asset class, the resulting portfolio can be categorized into various market segments. For example, the US equity market can be divided into small-, mid-, and large-sized companies, as well as value- and growth-oriented companies. Thus, one form of active management is to deliberately tilt a portfolio toward specific market segments in a manner that differs from the broad universe. For example, investors with a “small cap bias” make an active decision to favor investment in small companies rather than large companies. The degree to which this “style tilt” pays off is measured by evaluating an investor’s asset class performance relative to a broad asset class index. After adjusting for manager performance relative to their individual benchmarks, this reveals whether the style tilt added or detracted value.
  - b. **Use of Active Managers in Traditional Asset Classes with Index Fund Alternatives** – In many traditional asset classes, such as US equity, investors can choose a low-cost index fund or a more expensive, actively managed fund. An actively managed fund holds

securities that differ from a reference index representative of the asset class. For example, an active US equity manager may hold a portfolio of stocks that have different weightings than the S&P 500 Index. If an investor chooses to invest in an actively managed fund, their objective is to outperform the reference index. This can be evaluated on an absolute return basis and/or a risk-adjusted basis (i.e., the manager may provide a lower return but with less risk).

- c. **Use of Alternative Asset Classes that Lack Index Funds** – The final way in which active management is used is by investing in asset classes in which index funds are unavailable. Examples include private equity, hedge funds, private real estate, and several other niche market segments. In these situations, the key to evaluating performance is to gauge absolute and risk-adjusted returns versus a relatively comparable public market index or fundamental economic indicator (e.g., the consumer price index, which may be used as a proxy for inflation). In addition, peer rankings can be useful to gauge whether plans are selecting top tier managers relative to other institutional investors, as superior manager selection is essential in these asset classes. Although there are performance metrics that can be useful in these markets, it is also important to acknowledge that these metrics are considerably less precise than the metrics used in traditional asset classes. In addition, the metrics offer particularly limited value over shorter time periods.

In summary, it is important for institutional investors to be aware of the three factors that drive absolute and relative performance of institutional investment portfolios. When evaluating the performance of the Oklahoma pension plans, both individually and collectively, we will often refer to these three performance drivers.





# Actuarial Summary Report

## Oklahoma State Pension Commission

*Fiscal Year ending June 30, 2021*



# Table of Contents

	Page
<b>I. Executive Summary</b>	<b>19</b>
a. Overview	20
b. Funded Status Position	22
c. Rates of Return	25
d. Contributions	26
e. GASB 67 Summary	29
<b>II. Public Pension Challenges</b>	<b>30</b>
<b>III. Individual Plan Highlights</b>	<b>34</b>

# Executive Summary



# Executive Summary

## Overview

RVK reviewed the Fiscal Year 2021 actuarial reports for each underlying plan in the Oklahoma State Pension Commission. This presentation summarizes several key plan metrics from FY 2021, as well as historical trends over the prior 20 years. Metrics include funded status levels, as well as changes in assets, liabilities, and contributions. RVK also incorporated data obtained from Public Plans Data, which is an organization that collects data on more than 5,000 public pension plans in the United States.

The information presented in this report is based on Actuarial Valuation reports for the Fiscal Year ending on June 30, 2021. The actuaries for each Plan provided all plan-specific data used in this presentation. RVK is not an actuarial firm and does not provide the actuarial services that generated the plan-specific data. This being the case, the information contained herein does not constitute a statement of actuarial opinion and may not be used in place of valuation results and recommendations provided by the plan actuary.

## Funded Status Highlights

- 1. Increase in Funded Status** – For the fiscal year ending June 30, 2021, The funded status of the plans increased by 4.3% based on the actuarial value of assets and 18.3% based on the market value of asset. Key drivers of funded status are as follows:
  - **Actuarial Value of Asset Increase** – An increase of approximately \$2.7 billion (~7.8%) in the actuarial value of assets was the primary driver of improved funded status of the plans.
  - **Liability Increase Offset** – A moderate increase in liabilities (approximately \$930 million, or ~2.0%) over the last year partially offset the increase in the actuarial value of assets.
- 2. Funded Status is Greater than the Public Plan Average** – After accounting for the increase in the actuarial value of assets, the combined funded status of the Oklahoma Pension Plans is roughly 9.0% higher than the average funded status reported for a broad sample of public plans. The aggregate funded status of the Oklahoma Pension Plans was 81.0% versus 72.0% for the public fund average.<sup>1</sup>
- 3. Positive Impact of Excess Contributions** – Over the past 10 years, pension plan contributions exceeded the actuarially required contributions. This benefitted the funded status in two ways. First, the excess portion of the contribution directly reduced the unfunded liability. Second, the strong investment returns over the past 10 years compounded the impact of these excess contributions.

<sup>1</sup> The public fund average for 2021 is as of March 31, 2021, as June 30, 2021 data is not yet available.

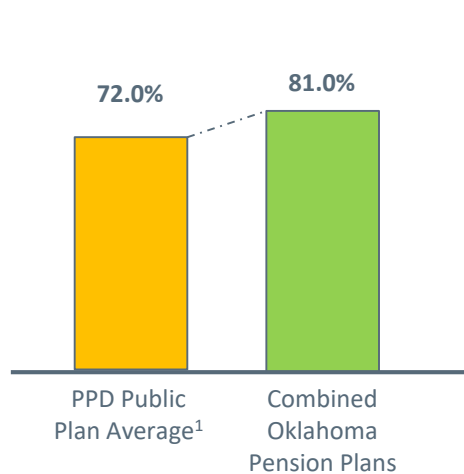
# Executive Summary (continued)

## Contribution Highlights

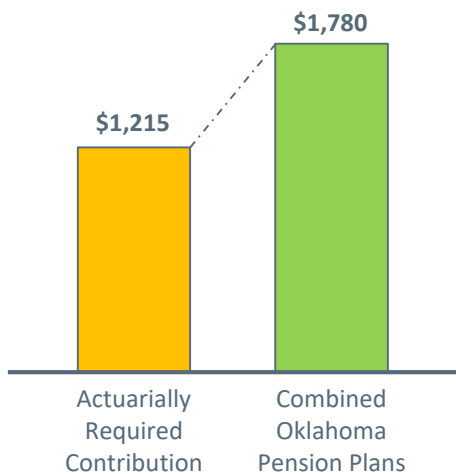
- 1. Annual Contribution Decrease** – Total contributions for the fiscal year were approximately \$1.8 Billion, which was a 3.0% decrease relative to the prior fiscal year. Contributions from employees (-\$116 M) and the State (-\$59 M) were the primary drivers of contribution decreases.
- 2. Actual Contributions Continue to Exceed Required Contributions** – For the past Fiscal Year, the actual contribution exceeded the actuarially required contribution. Since 2011, the plans have contributed at a level that is higher than the actuarial requirement due largely to a shift in the COLA policy.

## Key Metrics for Oklahoma Pension Plans

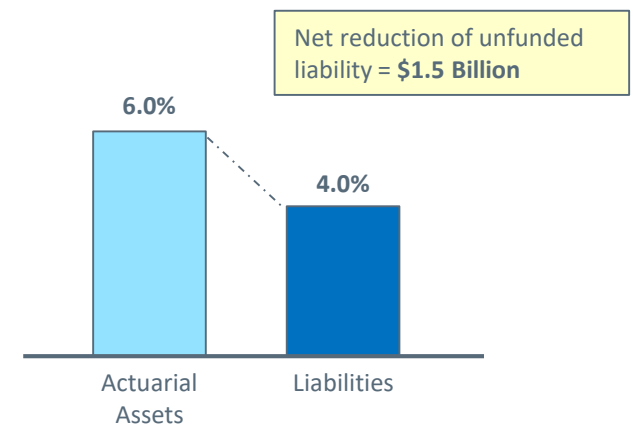
**Funded Status (AV) vs. RVK Survey Median**



**Total Contributions FY 2021 (\$ Millions)**



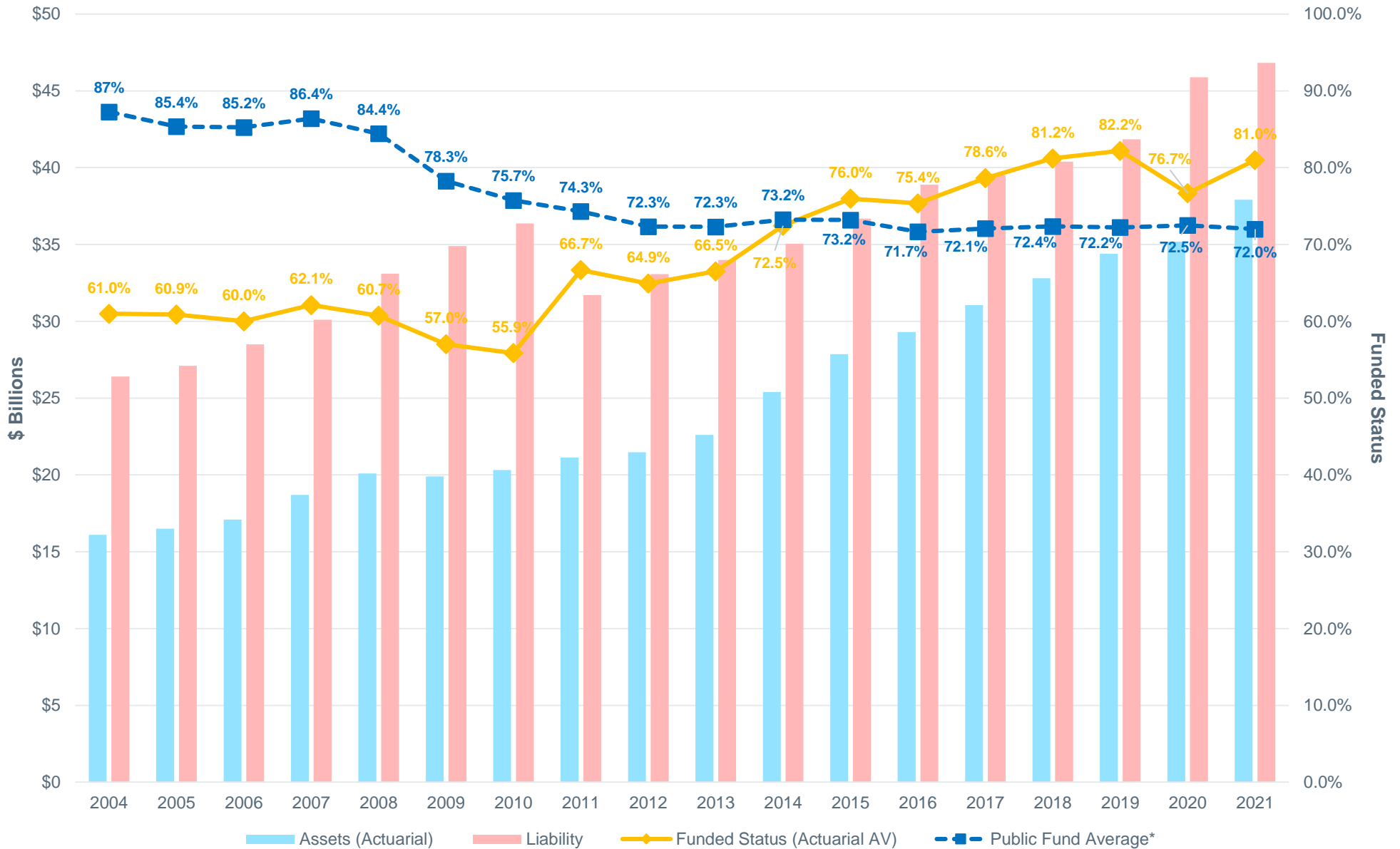
**10-Year Asset vs. Liability Growth Rate (FY 2011 – 2021)**



<sup>1</sup> The public fund average for 2021 is as of March 31, 2021, as June 30, 2021 data is not yet available.

# OKPSC Funded Status

## Aggregate Funded Status (Actuarial Values)

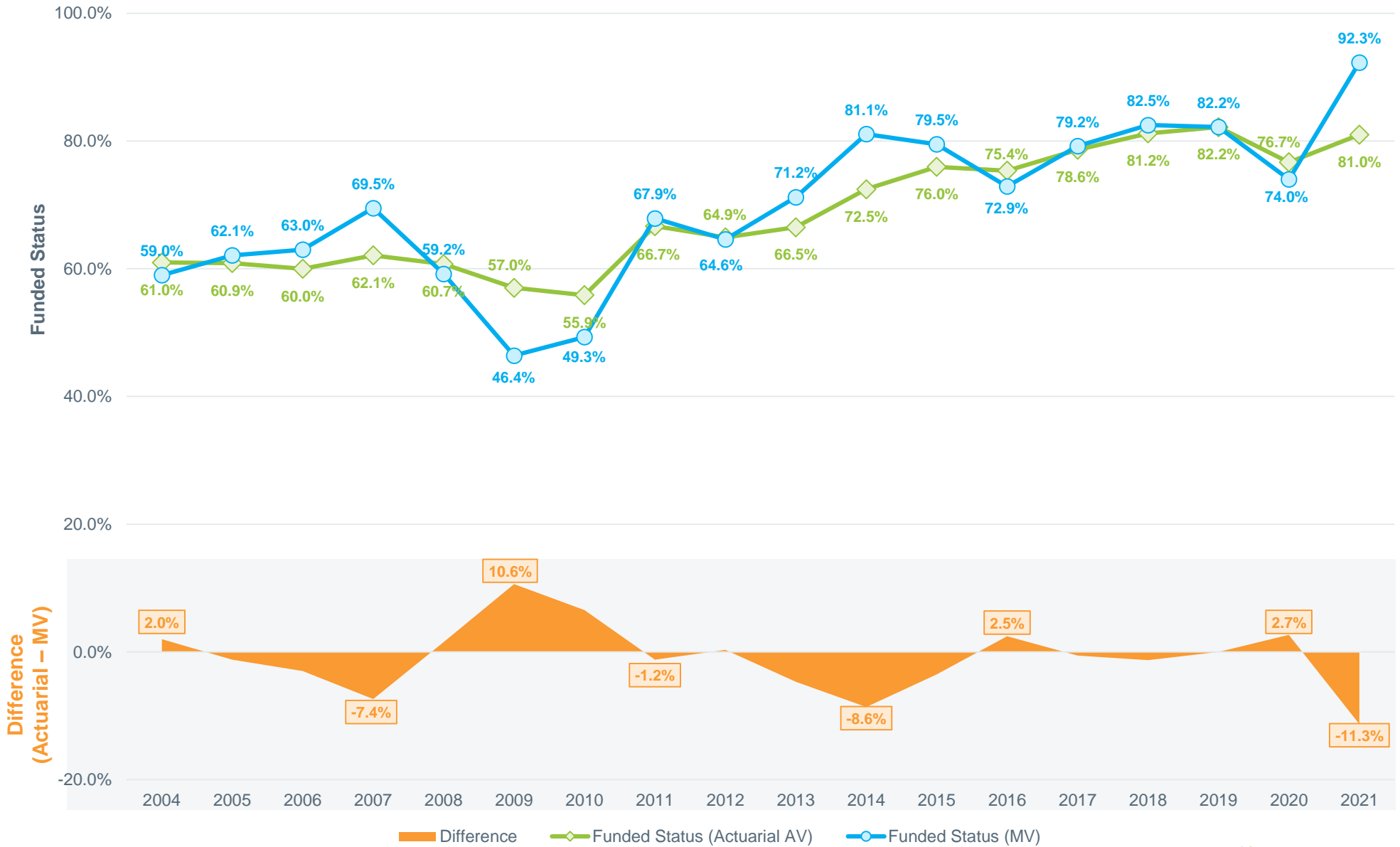


Data as of June 30, 2021.

\*Source: Public Plans Data (2021). 2021 data is as of March 31, 2021, as June 30, 2021 data is currently unavailable.

# OKSPC Funded Status

## Aggregate Funded Status (Actuarial Assets vs Market Values)



# OKSPC Funded Status

## Individual Plan Funded Status Summary

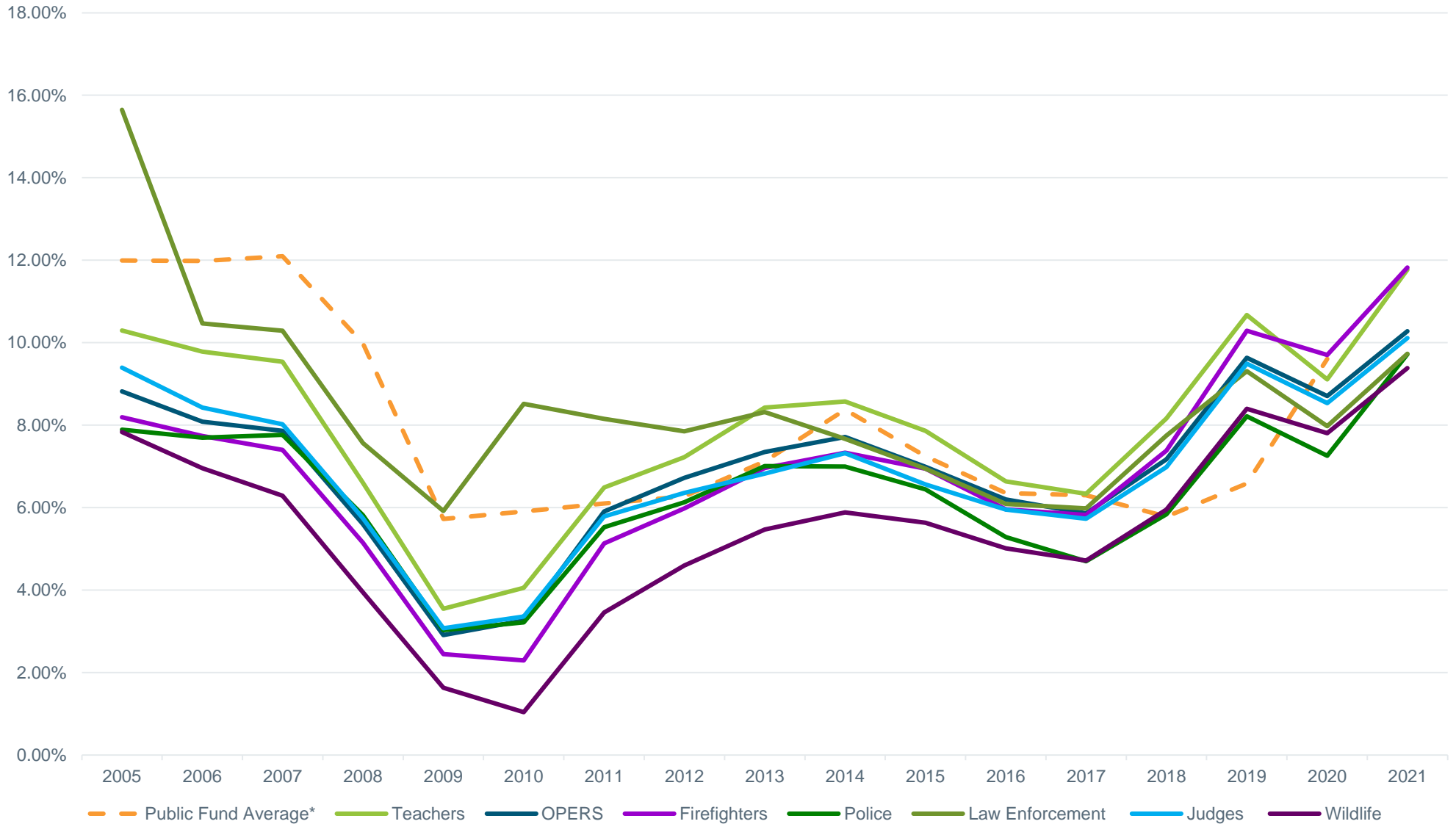
Plan	Actuarial Value of Assets (\$M)	Actuarial Accrued Liability (\$M)	Market Value of Assets (\$M)	Funded Status (per Actuarial Assets)	Funded Status (per MV Assets)	Change YoY (Actuarial)	Change YoY (MV)
Teachers	\$19,330	\$27,034	\$22,052	71.50%	81.57%	4.20%	17.47%
OPERS	\$10,991	\$11,046	\$12,526	99.50%	113.40%	6.20%	21.10%
Firefighters	\$2,997	\$4,179	\$3,521	71.70%	84.24%	1.30%	14.24%
Police	\$2,940	\$2,810	\$3,290	104.62%	117.07%	3.82%	21.27%
Law Enforcement	\$1,152	\$1,272	\$1,247	90.56%	98.08%	2.26%	16.58%
Judges	\$380	\$342	\$434	111.26%	126.79%	4.76%	21.39%
Wildlife	\$128	\$138	\$142	92.89%	102.83%	4.69%	15.13%



# OKSPC Rates of Return

## Individual Plan Rates of Return

### Rolling 10-Year Return

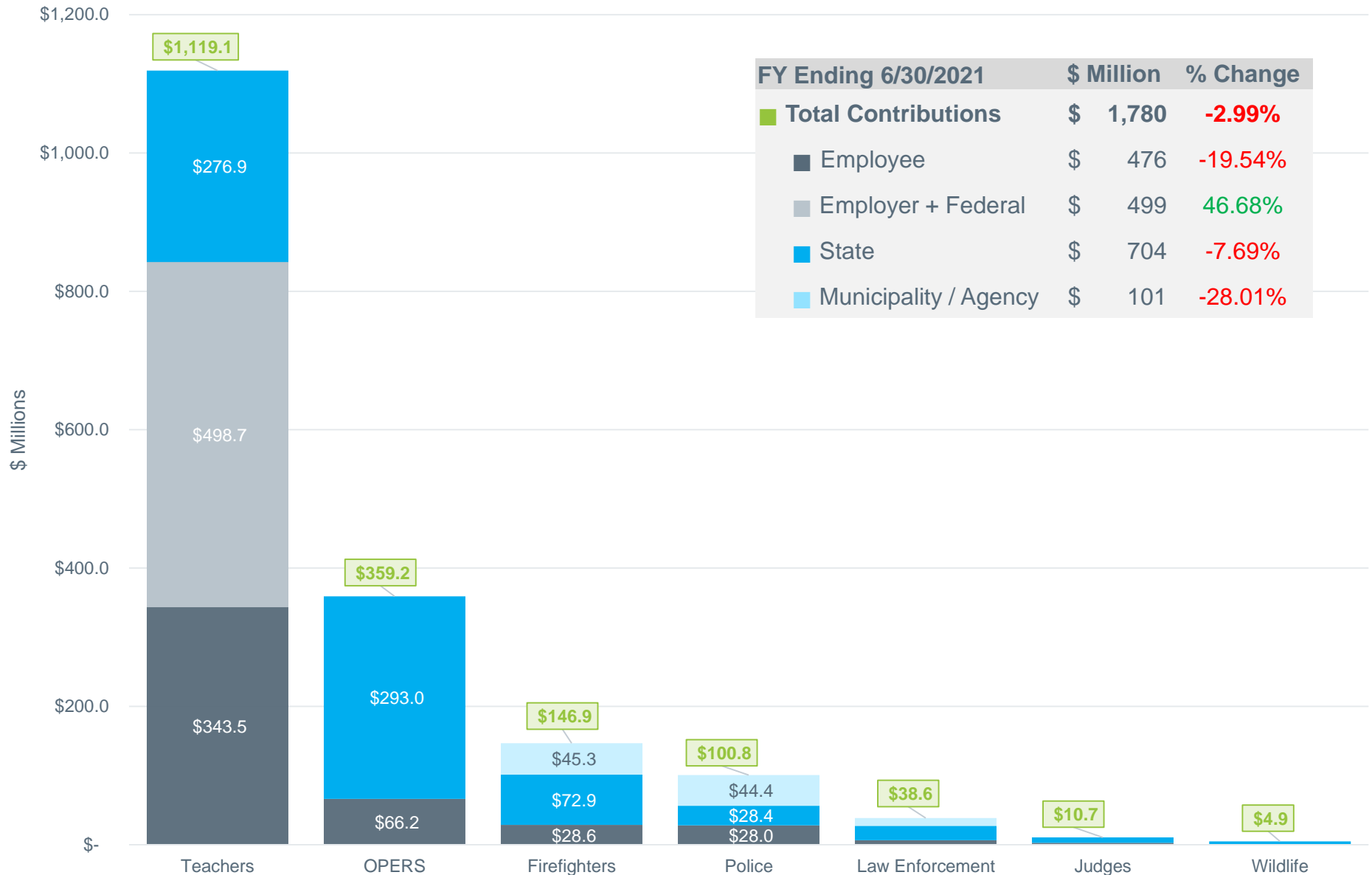


Data as of June 30, 2021.

\*Source: Public Plans Data (2021). 2021 data is currently unavailable.

# OKSPC Contributions

## Individual Plan 2021 Contributions



FY Ending 6/30/2021	\$ Million	% Change
Total Contributions	\$ 1,780	-2.99%
Employee	\$ 476	-19.54%
Employer + Federal	\$ 499	46.68%
State	\$ 704	-7.69%
Municipality / Agency	\$ 101	-28.01%

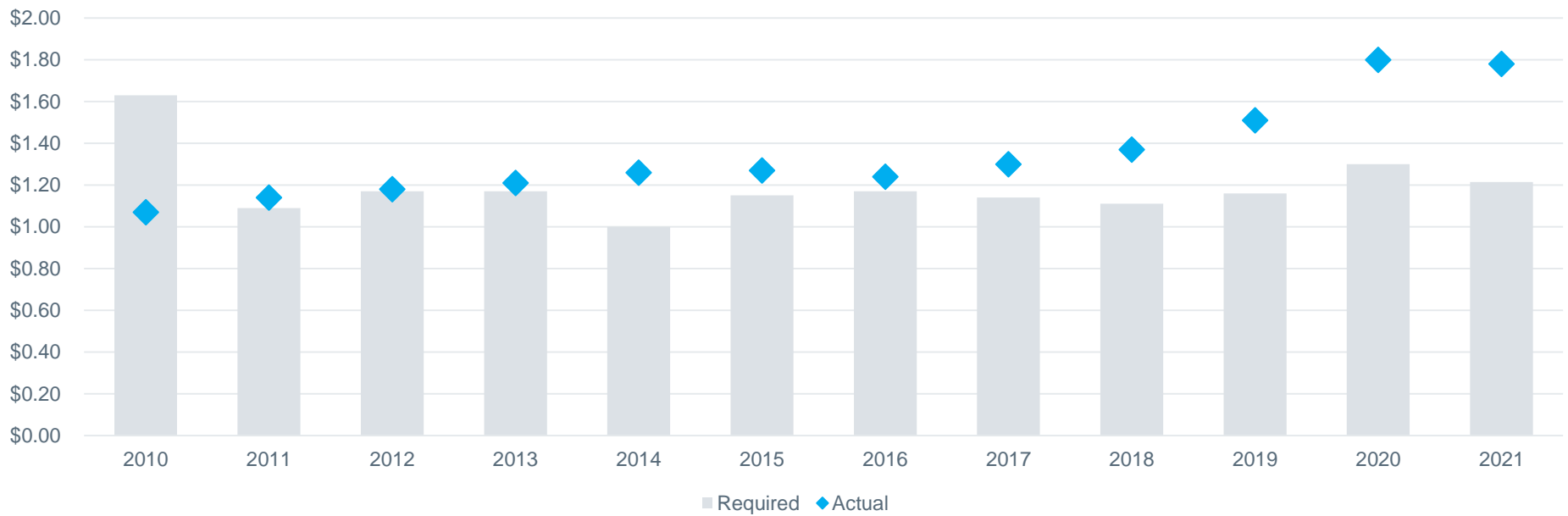
Teachers "Employer + Federal" contribution includes grant matching funds.

# OKSPC Historical Contributions

## Historical Contributions

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Required</b>	\$1.63	\$1.09	\$1.17	\$1.17	\$1.00	\$1.15	\$1.17	\$1.14	\$1.11	\$1.16	\$1.30	\$1.21
<b>Actual</b>	\$1.07	\$1.14	\$1.18	\$1.21	\$1.26	\$1.27	\$1.24	\$1.30	\$1.37	\$1.51	\$1.80	\$1.78
<b>% Actual vs Required</b>	<b>65.6%</b>	<b>104.6%</b>	<b>100.9%</b>	<b>103.4%</b>	<b>126.0%</b>	<b>110.4%</b>	<b>106.0%</b>	<b>114.0%</b>	<b>123.4%</b>	<b>130.2%</b>	<b>138.5%</b>	<b>146.54%</b>

Historical Contributions



# OKSPC Actuarially Determined Contribution Rates

	Teachers	OPERS	Firefighters	Police	Law Enforcement	Judges	Wildlife
Total Normal Cost	10.44%	10.83%	22.04%	20.50%	25.29%	25.85%	12.30%
Expenses	0.10%	0.48%	1.20%	0.70%	1.73%	0.66%	0.00%
Amortization of UAAL	13.66%	0.52%	33.69%	-3.00%	23.26%	-19.67%	11.70%
<b>Total ADC</b>	<b>24.20%</b>	<b>11.83%</b>	<b>56.93%</b>	<b>18.20%</b>	<b>50.28%</b>	<b>6.84%</b>	<b>24.00%</b>
Employee Contribution	7.00%	4.25%	9.00%	8.00%	8.00%	8.00%	5.00%
<b>Total Employer ADC</b>	<b>17.20%</b>	<b>7.58%</b>	<b>47.93%</b>	<b>10.20%</b>	<b>42.28%</b>	<b>-1.16%</b>	<b>19.00%</b>
Employer Contribution	9.30%	16.50%	13.00%	13.00%	11.33%	22.00%	19.00%
<b>Total State ADC</b>	<b>7.90%</b>	<b>16.50%</b>	<b>34.93%</b>	<b>0.00%</b>	<b>30.95%</b>	<b>22.00%</b>	<b>19.00%</b>

# GASB 67 : Funding Position and Contributions

## Funding Position:

	Net Position (\$M)	Total Pension Liability (\$M)	Unfunded Accrued Liability (\$M)	Net Position as % of Total Pension Liability	Discount Rate
Teachers	\$21,499	\$26,608	\$5,109	80.80%	7.00%
OPERS	\$12,068	\$10,726	(\$1,342)	112.51%	6.50%
Firefighters	\$3,521	\$4,179	\$659	84.24%	7.50%
Police	\$3,290	\$2,810	(\$480)	117.07%	7.50%
Law Enforcement	\$1,245	\$1,259	\$13	98.93%	7.50%
Judges	\$429	\$339	(\$90)	126.58%	6.50%
Wildlife	\$142	\$138	(\$4)	102.85%	7.00%
<b>Total</b>	<b>\$42,193</b>	<b>\$46,058</b>	<b>\$3,865</b>	<b>91.61%</b>	

## Contributions:

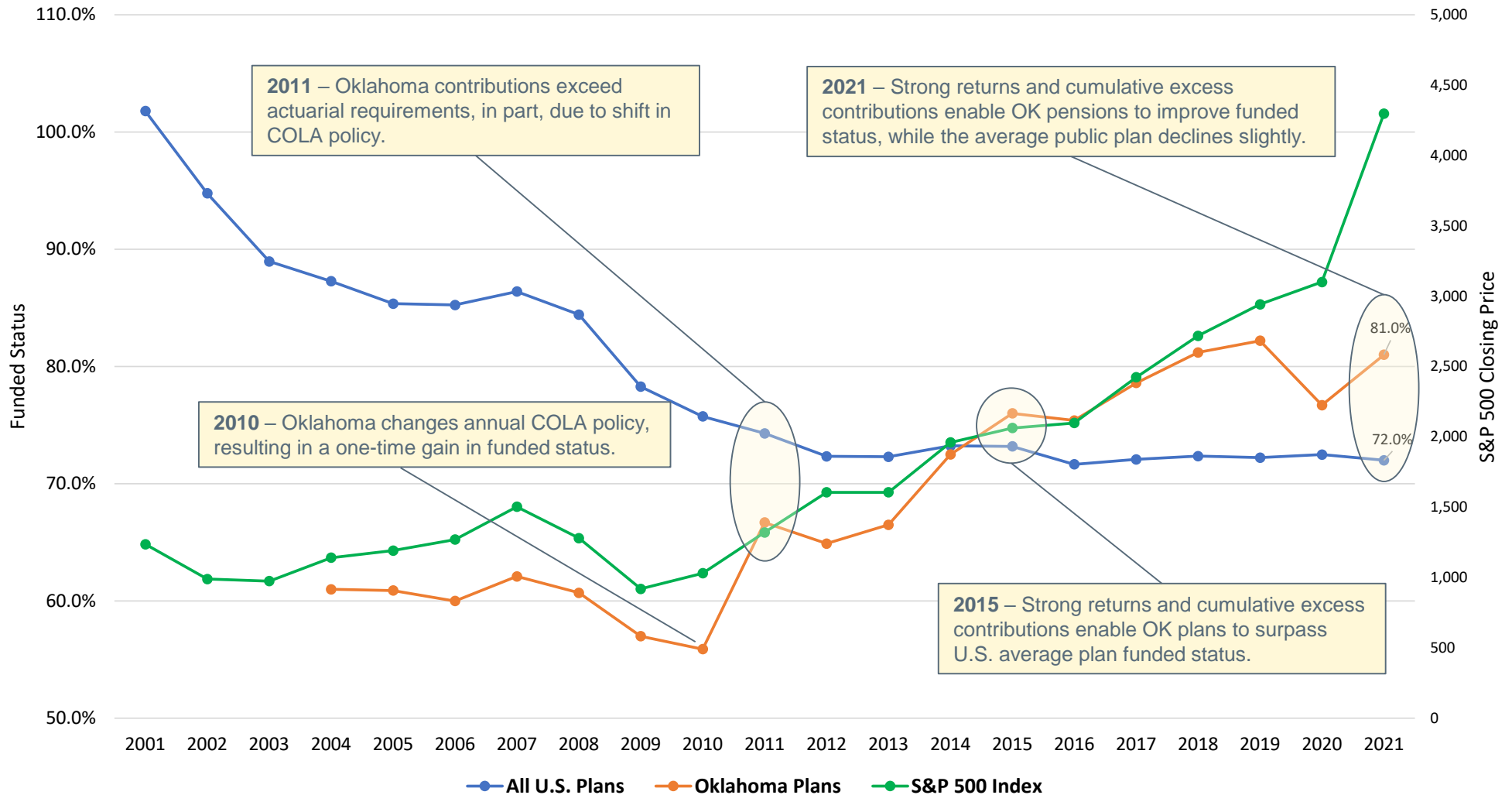
	ADEC	Actual Contributions	Contribution Deficiency/Excess	Covered Payroll	ADEC % Payroll	Actual % Payroll
Teachers	\$830	\$770	(\$60)	\$4,823	17.20%	15.96%
OPERS	\$225	\$275	\$51	\$1,572	14.30%	17.52%
Firefighters	\$152	\$110	(\$41)	\$313	48.36%	35.15%
Police	\$45	\$73	\$28	\$342	13.08%	21.31%
Law Enforcement	\$37	\$31	(\$7)	\$85	43.87%	36.05%
Judges	\$3	\$8	\$4	\$35	9.20%	21.53%
Wildlife	\$3	\$4	\$2	\$11	24.05%	38.26%

# Public Pension Plan Challenges



# A Twenty-Year History of U.S. Pension Funding

## Comparative Funded Status and S&P 500 Index Level (June 30, 2001 – June 30, 2021)

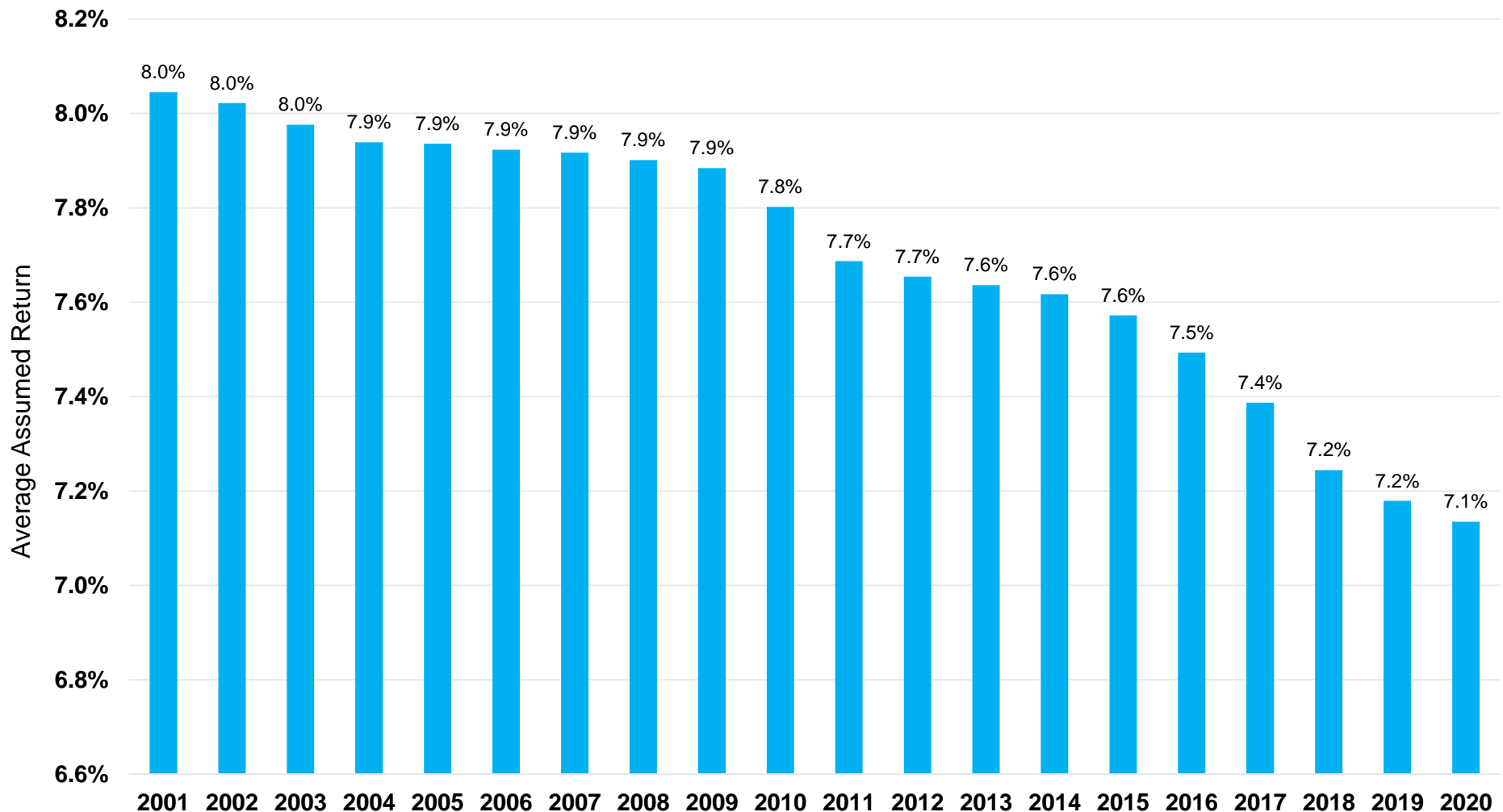


<sup>1</sup> The public fund average for 2021 is as of March 31, 2021, as June 30, 2021 data is not yet available.

Source: Public Plans Data (2021).

# Future Return Expectations Have Declined

Average Public Pension Plan Expected Return by Fiscal Year  
(June 30, 2001 – June 30, 2020)





# Current Challenges for Oklahoma Pension Plans

## Market Reflexivity

Securities markets are reflexive, meaning that, all else being equal, periods of exceptional returns tend to dampen future returns (and vice versa). The Oklahoma Pension Plans acknowledge this tendency by reducing the actuarial return assumption.

## Short vs. Long Term Valuation

Market reflexivity can have a material impact on intermediate term returns, but as the time horizon extends the impact of reflexivity declines.

## Liability Management

A common error of defined benefit plan sponsors is to assume that the recent past will continue indefinitely. The most common example of is when plan sponsors assume exceptional past returns will continue indefinitely, which may lead to changes to benefits and/or contributions that are more costly than presumed.

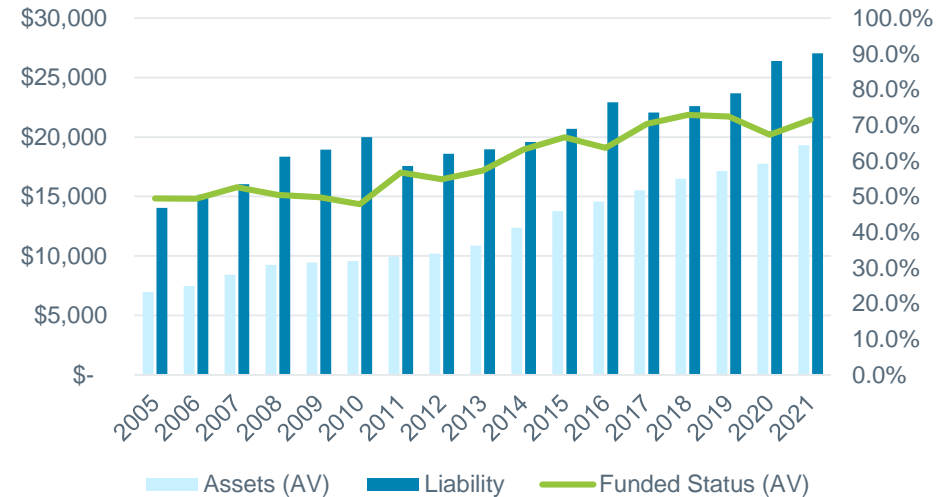
# Individual Plan Highlights



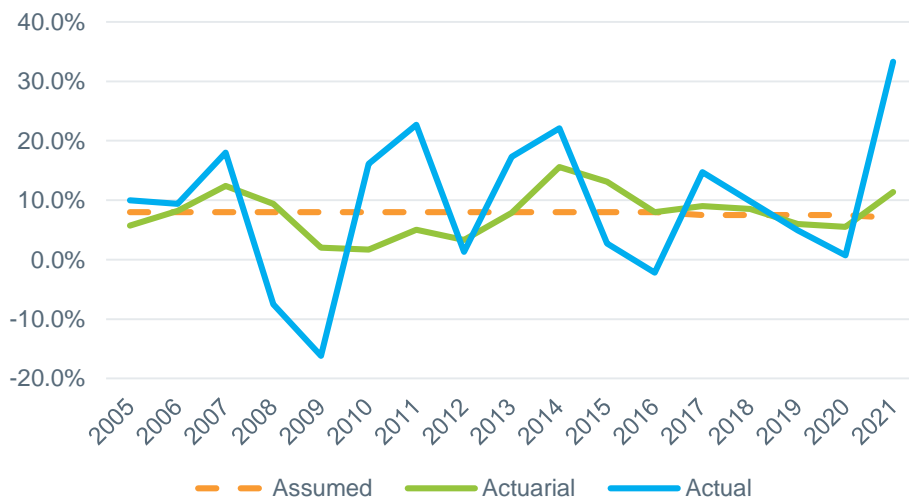
# Teachers

	2021	2020	Change
<b>Assets (AV)</b>	\$19,330 M	\$17,769 M	+ \$1,561 M
<b>Liability</b>	\$27,034 M	\$26,410 M	+ \$624 M
<b>Funded Status (AV)</b>	71.5%	67.3%	+ 4.2%
<b>Assets (MV)</b>	\$22,052 M	\$16,930 M	+ \$5,122 M
<b>Funded Status (MV)</b>	81.6%	64.1%	+ 17.5%

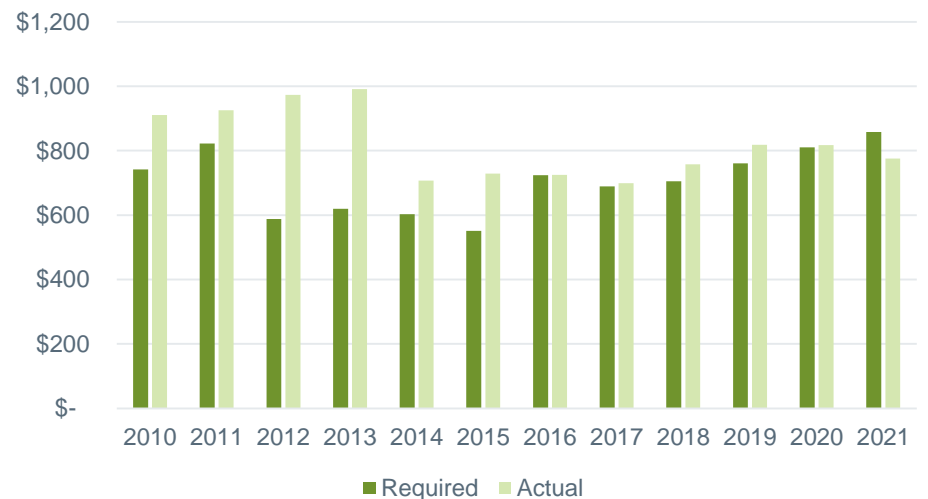
### Historical Funded Status



### Rate of Return (Annual)



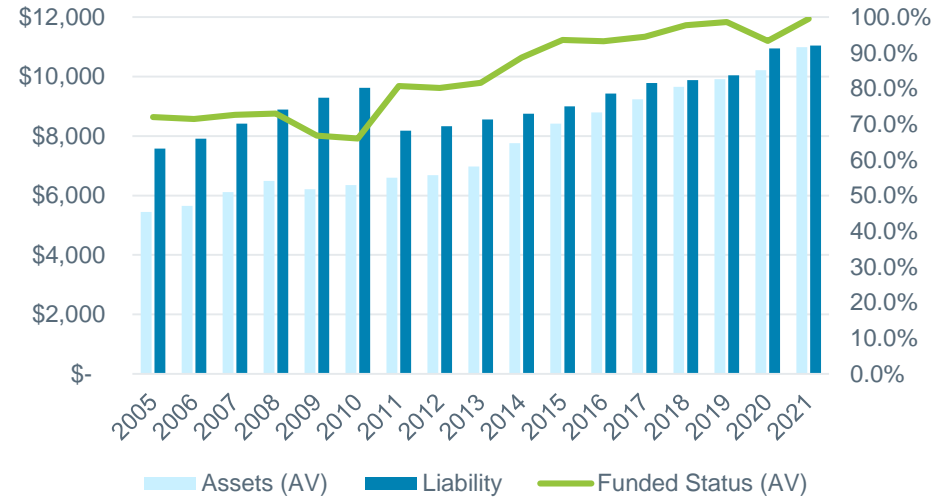
### Historical Contributions



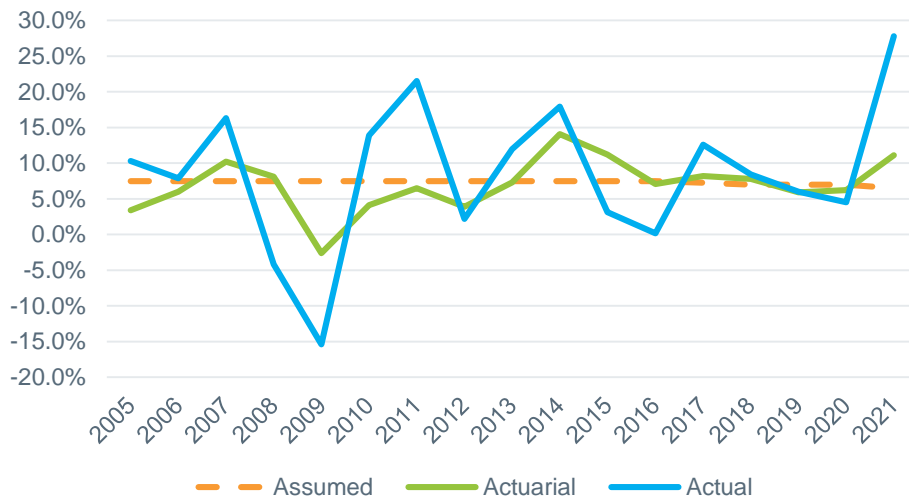
# OPERS

	2021	2020	Change
<b>Assets (AV)</b>	\$10,991 M	\$10,212 M	+ \$779 M
<b>Liability</b>	\$11,046 M	\$10,943 M	+ \$103 M
<b>Funded Status (AV)</b>	99.5%	93.3%	+ 6.2%
<b>Assets (MV)</b>	\$12,526 M	\$10,098 M	+ \$2,428 M
<b>Funded Status (MV)</b>	113.4%	92.3%	+ 21.1%

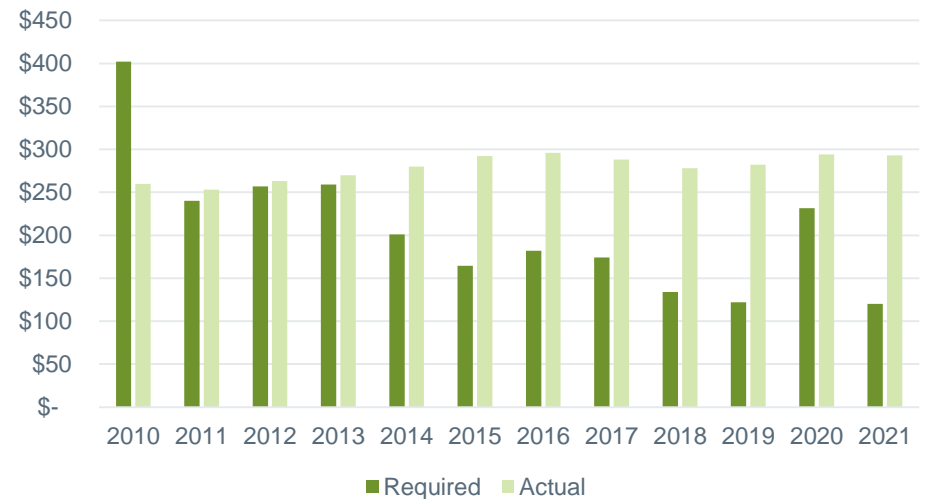
### Historical Funded Status



### Rate of Return (Annual)



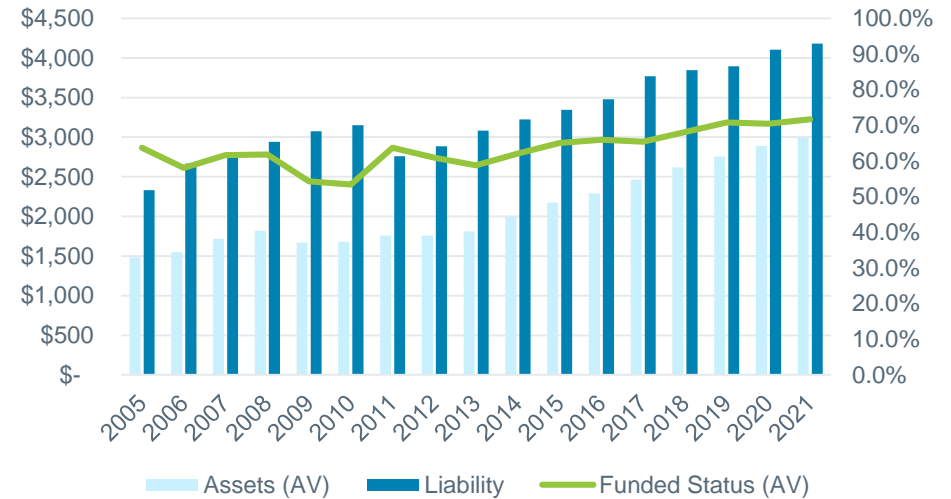
### Historical Contributions



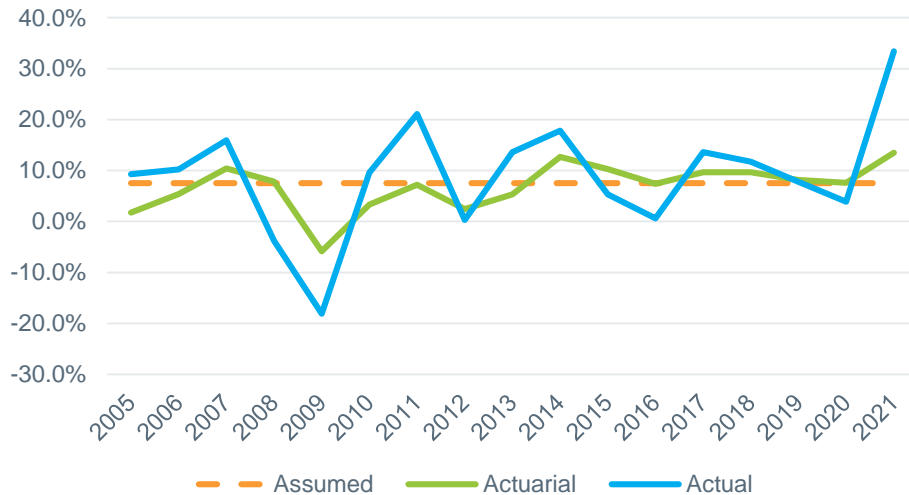
# Firefighters

	2021	2020	Change
<b>Assets (AV)</b>	\$2,997 M	\$2,888 M	+ \$108 M
<b>Liability</b>	\$4,179 M	\$4,103 M	+ \$76 M
<b>Funded Status (AV)</b>	71.7%	70.4%	+ 1.3%
<b>Assets (MV)</b>	\$3,521 M	\$2,871 M	+ \$650 M
<b>Funded Status (MV)</b>	84.2%	70.0%	+ 14.3%

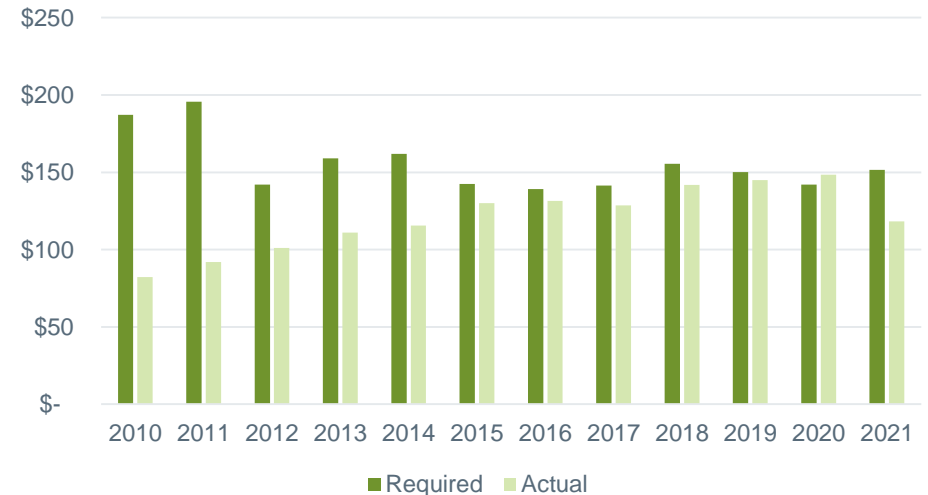
### Historical Funded Status



### Rate of Return (Annual)



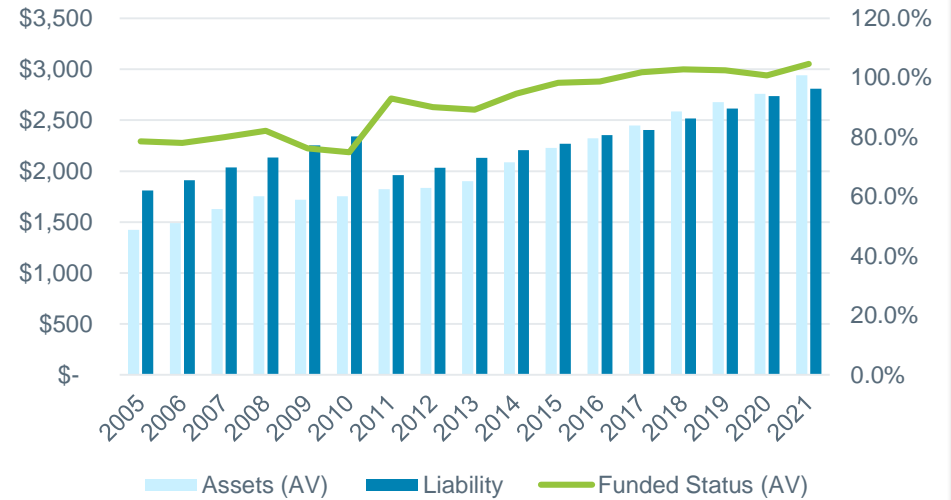
### Historical Contributions



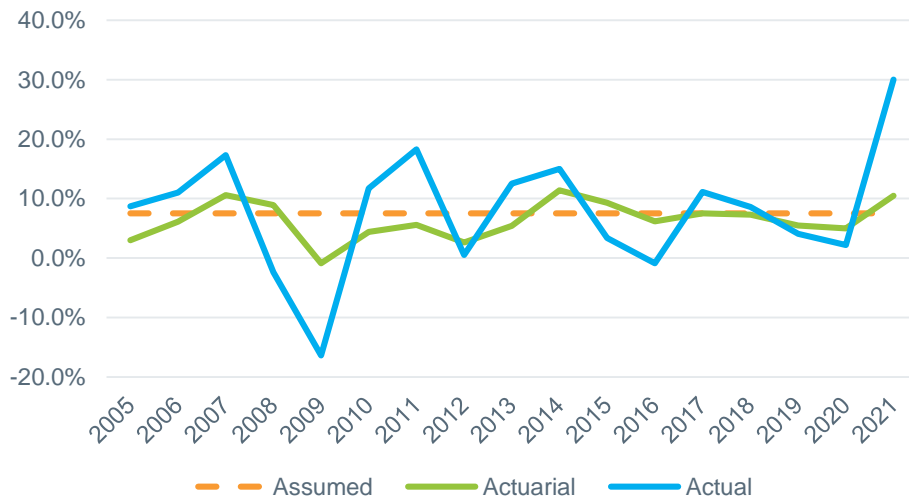
# Police

	2021	2020	Change
<b>Assets (AV)</b>	\$2,940 M	\$2,757 M	+ \$183 M
<b>Liability</b>	\$2,810 M	\$2,736 M	+ \$74 M
<b>Funded Status (AV)</b>	104.6%	100.8%	+ 3.9%
<b>Assets (MV)</b>	\$3,290 M	\$2,621 M	+ \$669 M
<b>Funded Status (MV)</b>	117.1%	95.8%	+ 21.3%

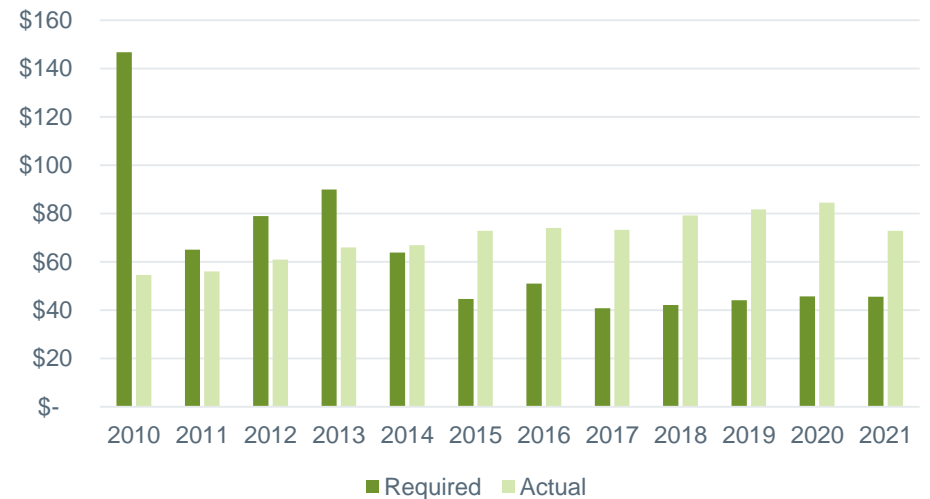
### Historical Funded Status



### Rate of Return (Annual)



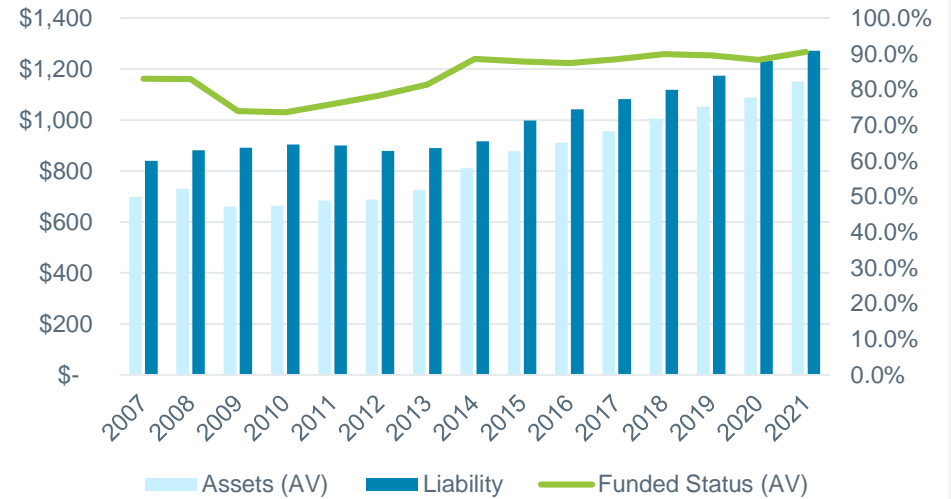
### Historical Contributions



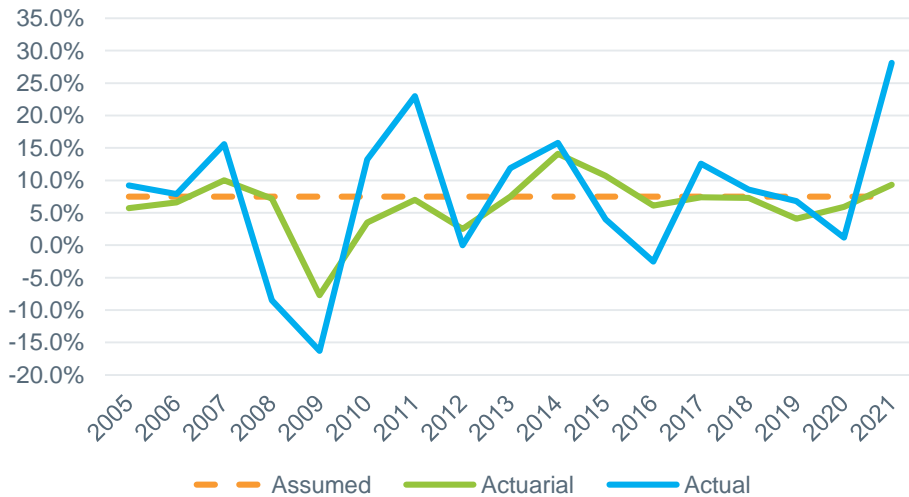
# Law Enforcement

	2021	2020	Change
<b>Assets (AV)</b>	\$1,152 M	\$1,088 M	+ \$64 M
<b>Liability</b>	\$1,272 M	\$1,232 M	+ \$39 M
<b>Funded Status (AV)</b>	90.6%	88.3%	+ 2.3%
<b>Assets (MV)</b>	\$1,247 M	\$1,005 M	+ \$242 M
<b>Funded Status (MV)</b>	98.1%	81.5%	+ 16.5%

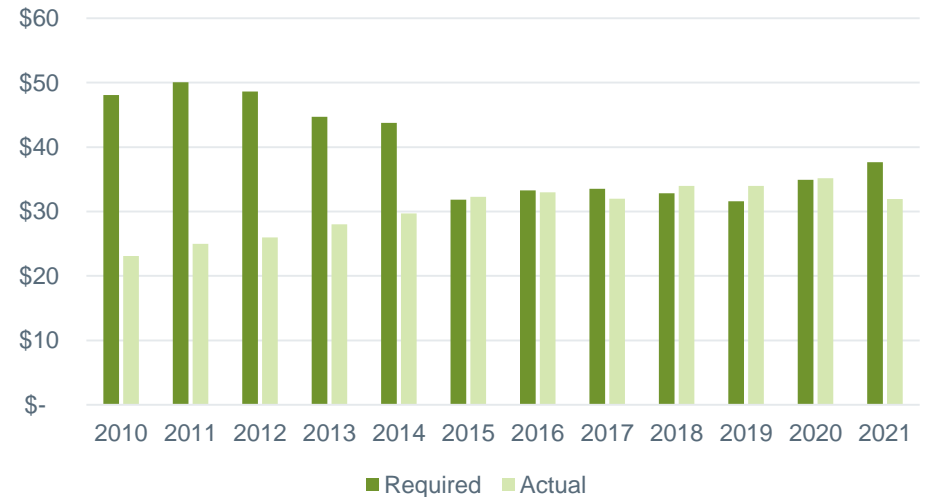
### Historical Funded Status



### Rate of Return (Annual)



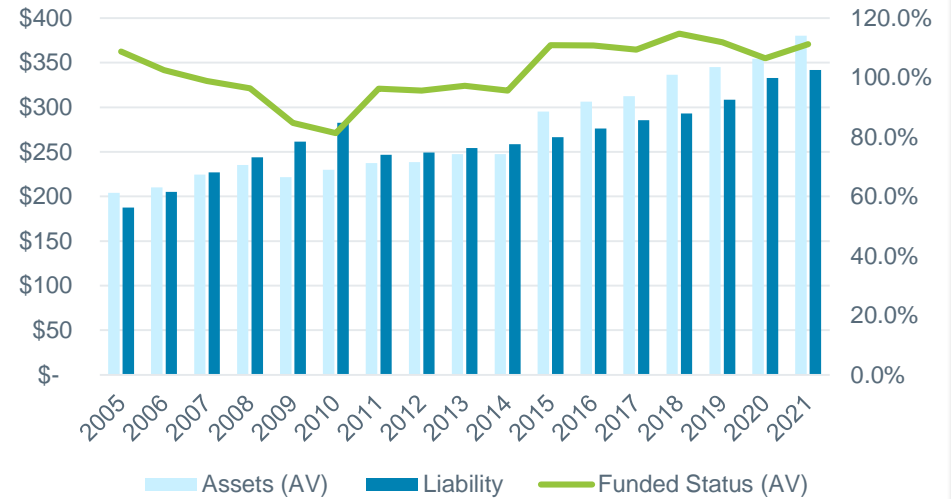
### Historical Contributions



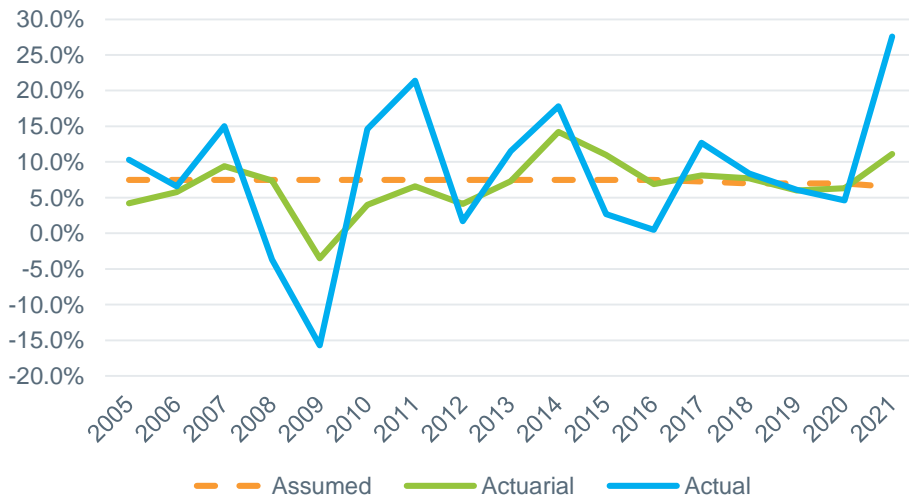
# Judges

	2021	2020	Change
<b>Assets (AV)</b>	\$380 M	\$355 M	+ \$26 M
<b>Liability</b>	\$342 M	\$333 M	+ \$9 M
<b>Funded Status (AV)</b>	111.3%	106.4%	+ 4.8%
<b>Assets (MV)</b>	\$434 M	\$351 M	+ \$83 M
<b>Funded Status (MV)</b>	126.8%	105.4%	+ 21.4%

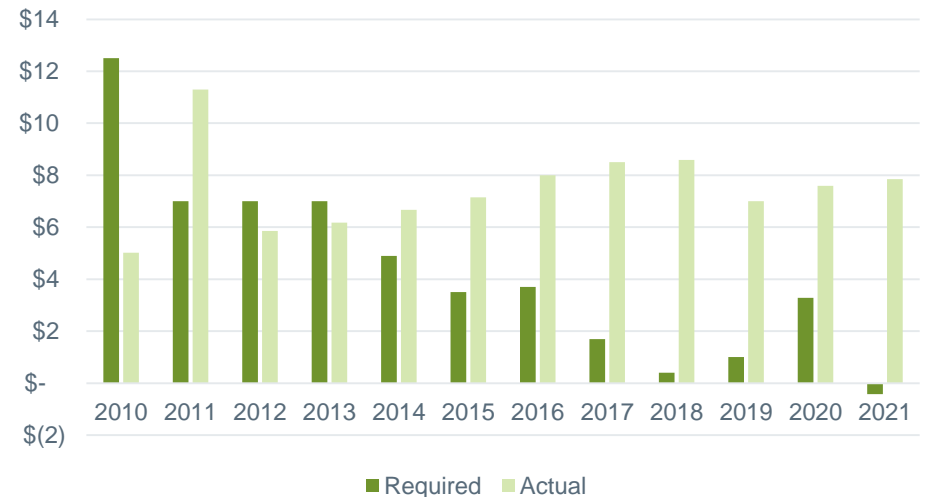
### Historical Funded Status



### Rate of Return (Annual)



### Historical Contributions







# Quarterly Investment Performance Analysis

Oklahoma State Pension Commission

Period Ended: September 30, 2021



# Table of Contents

- Capital Markets Metrics
- Oklahoma State Pension Commission
- Oklahoma Teachers' Retirement System
- Oklahoma Public Employees Retirement System
- Oklahoma Firefighters Pension and Retirement System
- Oklahoma Police Pension and Retirement System
- Oklahoma Law Enforcement Retirement System
- Uniform Retirement System for Justices and Judges
- Oklahoma Wildlife Conservation Retirement System
- Addendum & Glossary

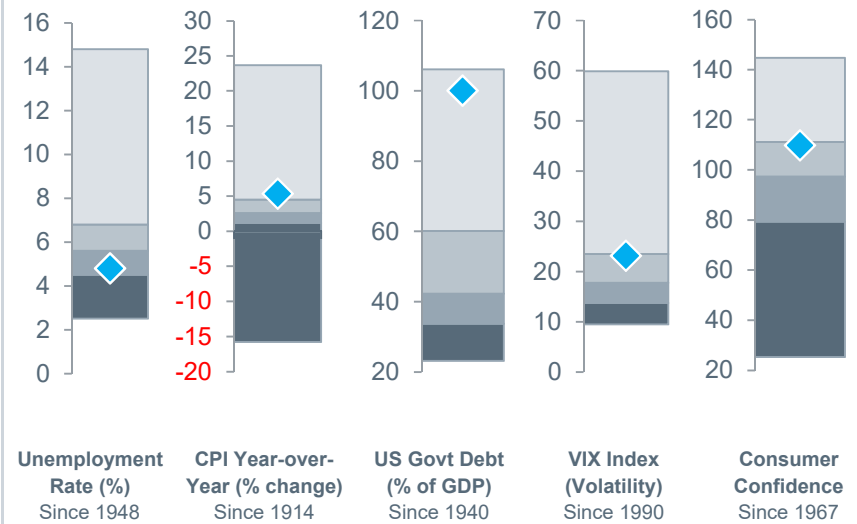
# Capital Markets Metrics



**Third Quarter Economic Environment**

Persistent inflationary pressures, disrupted supply chains, stalled fiscal negotiations, and the continued spread of the delta variant, all contributed to a quarter of mixed results for risk assets. In addition, heightened concerns over an increasingly stringent regulatory regime in China, combined with the debt restructuring of its second-largest property developer, led to a down quarter for emerging markets with volatility spreading to other regions as well. US markets outperformed on average, though were roughly flat. Investor sentiment was aided by a strong corporate earnings environment amid continued support from the Federal Reserve, along with improvement in some economic fundamentals. Globally, an uneven economic recovery continued, evidenced by labor market conditions and inflation readings showing mixed indications of progress. The September US non-farm payrolls report indicated a weaker than anticipated 194,000 added jobs, although past months were revised higher. The unemployment rate dropped to 4.8%, compared to 5.9% at the start of the quarter, but this decrease was largely driven by a declining labor force participation rate. The core PCE price index, the Federal Reserve's preferred measure for inflation, ran at a 30 year high based on the reading in August. Wage growth similarly rose higher in September with average hourly pay increasing 4.6% year-over-year. Overall, global growth forecasts remained relatively consistent with recent quarters.

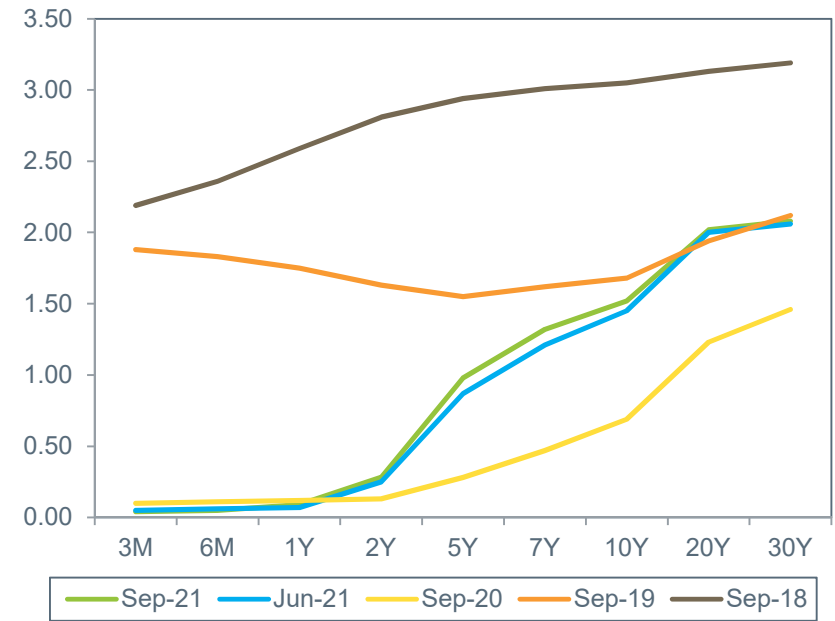
**Key Economic Indicators**



Economic Indicators	Sep-21	Jun-21	Sep-20	Sep-18	20 Yr
Federal Funds Rate (%)	0.06 ▼	0.08	0.09	2.18	1.33
Breakeven Infl. - 5 Yr (%)	2.53 ▲	2.50	1.49	2.03	1.84
Breakeven Infl. - 10 Yr (%)	2.38 ▲	2.34	1.63	2.14	2.03
CPI YoY (Headline) (%)	5.4 =	5.4	1.4	2.3	2.1
Unemployment Rate (%)	4.8 ▼	5.9	7.8	3.7	6.1
Real GDP YoY (%)	4.9 ▼	12.2	-2.9	3.1	1.9
PMI - Manufacturing	61.1 ▲	60.6	55.7	59.5	53.3
USD Total Wtd Idx	114.99 ▲	112.85	117.26	113.81	103.15
WTI Crude Oil per Barrel (\$)	75.0 ▲	73.5	40.2	73.3	63.7
Gold Spot per Oz (\$)	1,757 ▼	1,770	1,886	1,191	1,067

Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	0.58	15.92	30.00	16.90	16.63
Russell 2000	-4.36	12.41	47.68	13.45	14.63
MSCI EAFE (Net)	-0.45	8.35	25.73	8.81	8.10
MSCI EAFE SC (Net)	0.90	10.02	29.02	10.38	10.73
MSCI Emg Mkts (Net)	-8.09	-1.25	18.20	9.23	6.09
Bloomberg US Agg Bond	0.05	-1.56	-0.90	2.94	3.01
ICE BofAML 3 Mo US T-Bill	0.02	0.04	0.07	1.16	0.63
NCREIF ODCE (Gross)	6.63	13.15	14.63	7.51	9.92
FTSE NAREIT Eq REIT (TR)	0.98	23.15	37.39	6.83	11.27
HFRI FOF Comp	0.68	5.67	14.24	5.79	4.46
Bloomberg Cmdty (TR)	6.59	29.13	42.29	4.54	-2.66

**Treasury Yield Curve (%)**



Third Quarter Review

Broad Market

US equity markets cooled off in Q3, compared to recent quarters, as the S&P 500 finished relatively flat. The spread of the Delta variant throughout the country slowed consumer spending, although the overall recovery remained on course. Concerns over inflation, due to continued stimulus from the Fed and supply chain disruptions, continue to be a major theme in the US contributing to moderated investor sentiment.

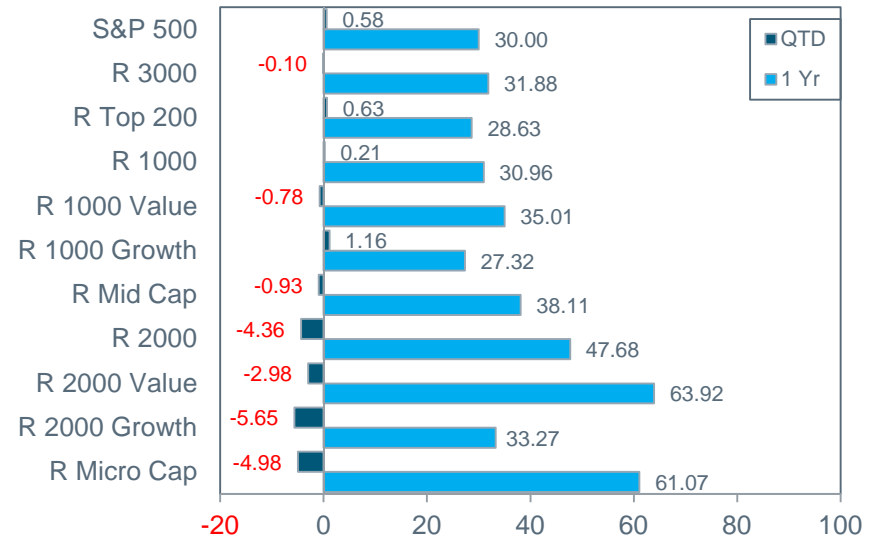
Market Cap

Large-cap stocks significantly outperformed their smaller-cap counterparts. The Russell 2000 Index returned -4.4% compared to 0.6% for the S&P 500.

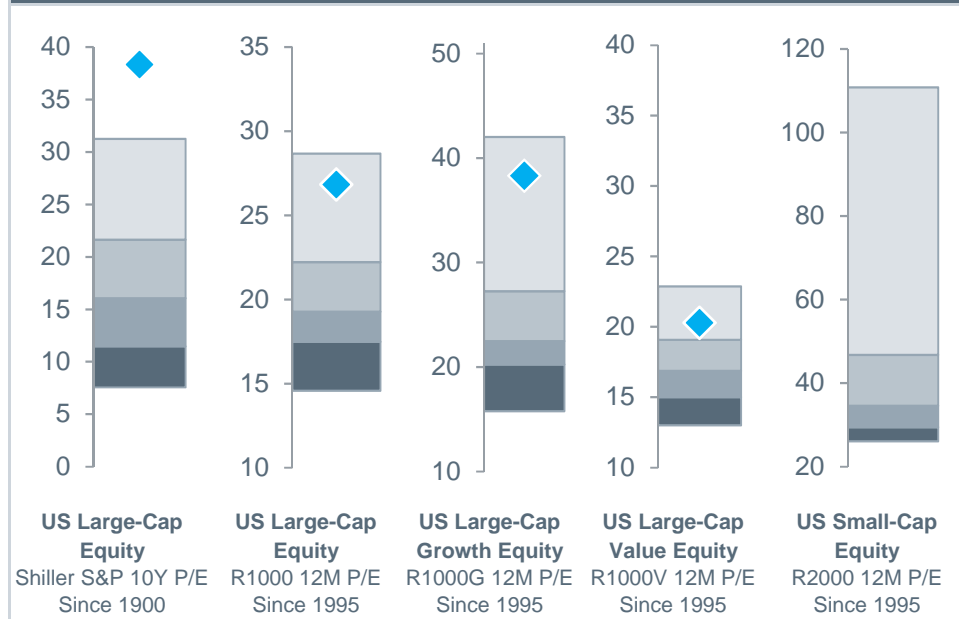
Style and Sector

Large-cap growth turned in modestly positive returns in Q3 while small-cap and value stocks generally struggled. The Russell 1000 Growth Index returned 1.2% vs. -0.8% for the Russell 1000 Value Index. The Russell 2000 Value Index returned -3.0% vs. -5.7% for the Russell 2000 Growth Index.

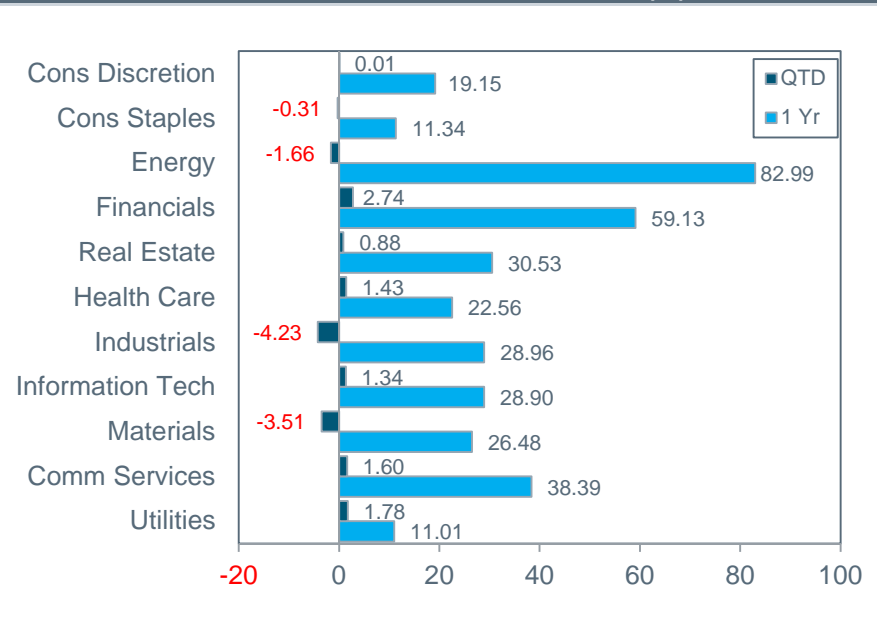
Style and Capitalization Market Performance (%)



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 due to negative earnings per share as of 9/30/2021.



Third Quarter Review

Developed Markets

In similar fashion to the US equity market, developed international market returns were muted. The MSCI EAFE Index was slightly negative for Q3 with growth stocks outperforming value, although value stocks are still ahead year-to-date. Small cap stocks outperformed their larger counterparts.

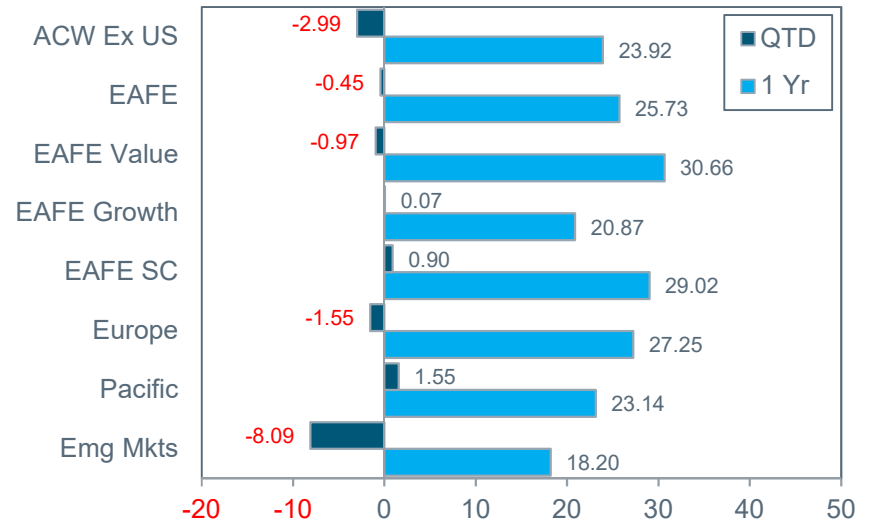
Emerging Markets

Unlike developed markets, emerging markets experienced significant negative absolute returns in Q3 driven by market volatility in China. Subsequently, value stocks outperformed growth and small cap stocks outperformed large.

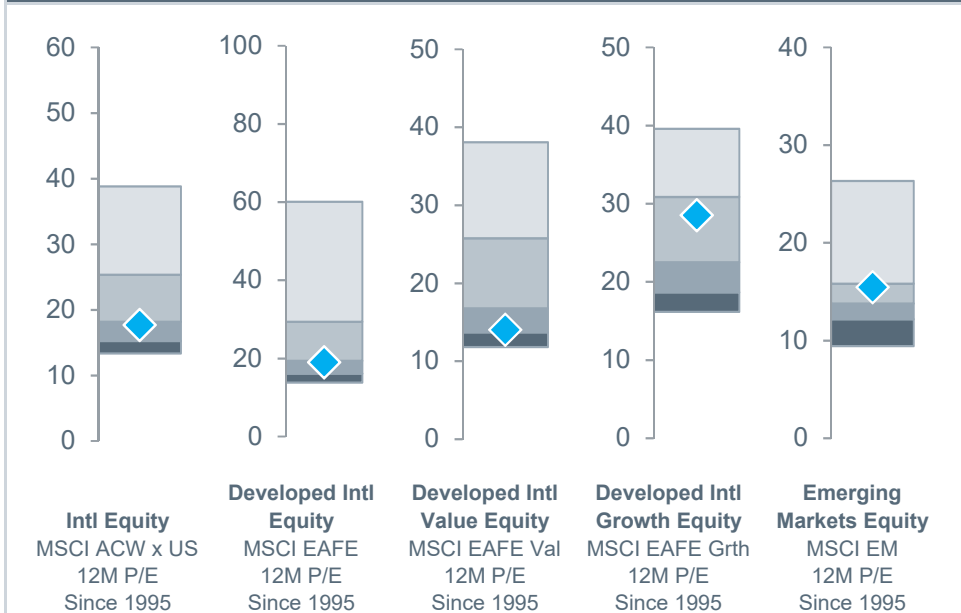
Market Cap & Style

In international markets, growth stocks outperformed value, while small-cap stocks outperformed large-cap. In emerging markets, value stocks outperformed growth, while small-cap stocks outperformed large-cap.

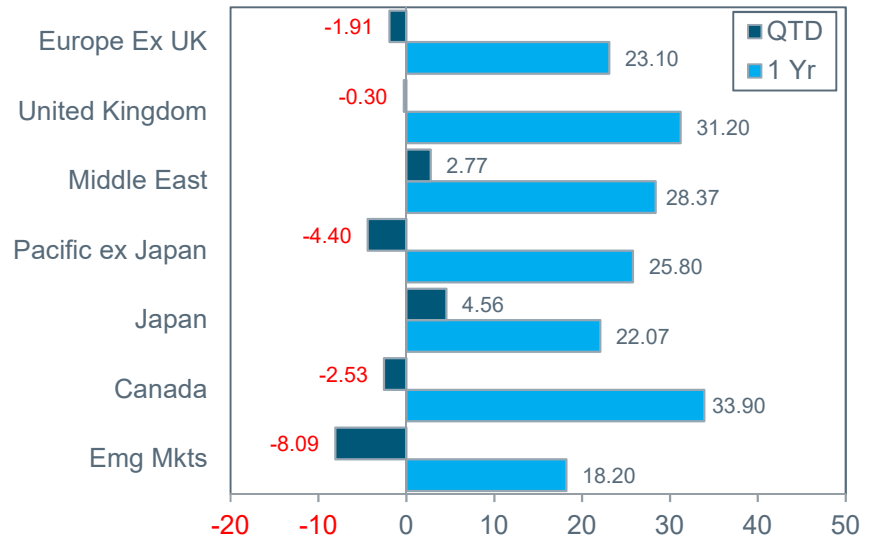
MSCI Style and Capitalization Market Performance (%)



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 was flat, finishing with returns of 0.1% in Q3, while remaining down -1.6% year-to-date. Treasury yields rose in Q3 in light of inflation concerns sparked by supply chain constraints and sustained economic growth. Speculation over the timing of Federal Reserve tapering was also a contributing factor to the slight move in rates.

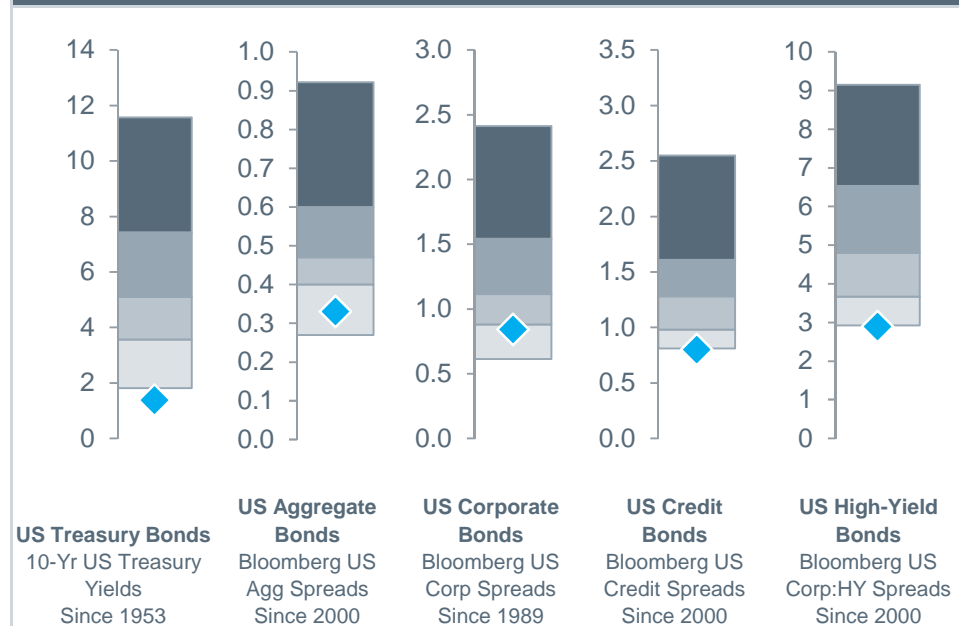
**Credit Market**

Low-rated debt remained a source of outperformance in a market starved for yield. The Bloomberg US Credit Index was flat, returning 0.0% QTD with BBB-rated debt marginally outperforming higher-rated debt. In contrast, the Bloomberg US High Yield Index returned 0.9% in Q3 with the Credit Suisse Leveraged Loan Index returned 1.1%.

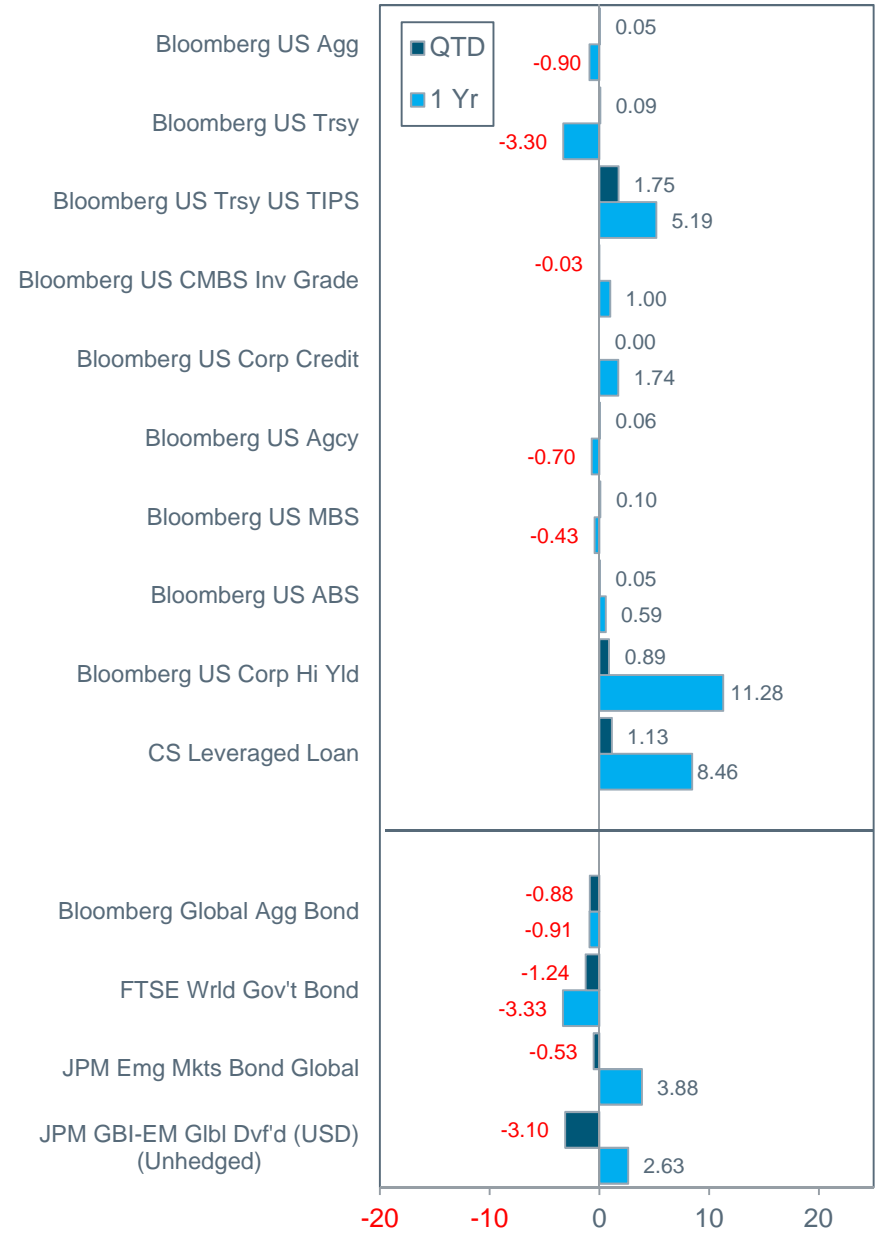
**Emerging Market Debt**

Emerging markets corporate debt continued to outpace local currency and hard currency sovereign debt, with local currency being a laggard in part due to a strengthening US dollar.

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**

After a strong first half of the year, hedge fund returns moderated during Q3, with the HFRI Fund Weighted Composite Index finishing the quarter roughly flat. The Asset Weighted composite, which relies far less heavily on directional long/short equity strategies, produced a modest gain of 0.6% in Q3. Hedged equity strategies, which had led the way in the first half of 2021, captured some of the downside, finishing the quarter with a -0.4% return according to the HFRI Equity Hedge Index.

**General Market - Global Tactical Asset Allocation (GTAA)**

Global Tactical Asset Allocation strategies that RVK follows closely generated disparate results in Q3. The top performing long-biased GTAA strategies incorporated inflation protection subcomponents, particularly in energy commodities, which continued to reward investors. These long-biased strategies also produced differentiated results compared to the modest performance of a less diversified blended benchmark of 60% US equity and 40% US fixed income.

**Third Quarter Review - Real Assets**

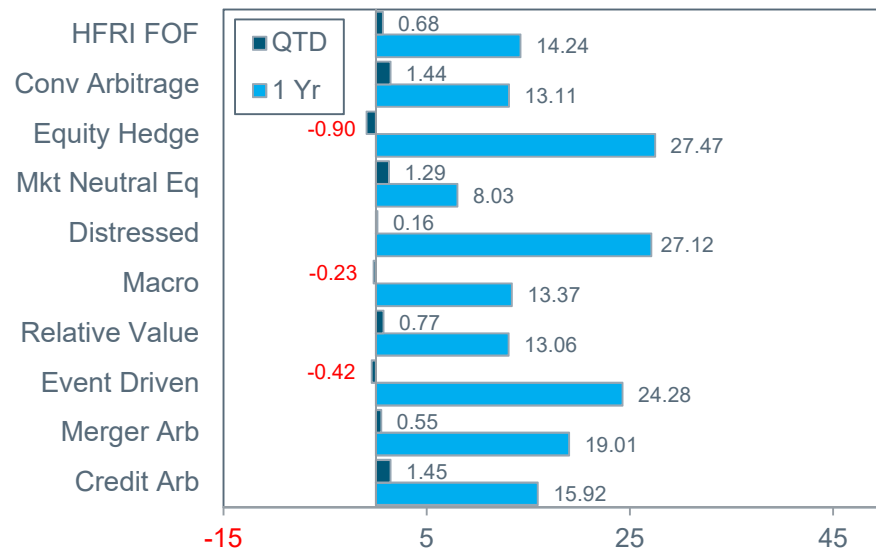
**General Market - Diversified Inflation Strategies (DIS)**

Diversified Inflation Strategies that RVK follows closely continued to generate strong positive absolute performance. Managers with higher commodities and TIPS exposures posted the strongest positive absolute returns. Commodities led the way, with the Bloomberg Commodity Index posting a 6.6% return, largely driven by gains in energy. Inflation, as measured by the year-over-year change in Headline CPI, was reported as 5.4% for September, a significant increase from 2.6% at the end of Q1.

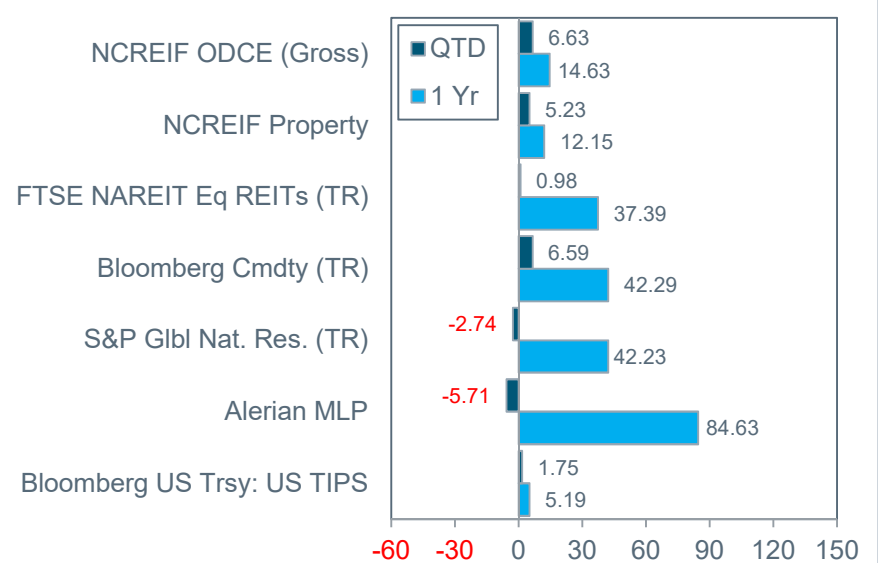
**General Market - Real Estate**

Core private real estate generated a positive 6.6% return in Q3, as reported by the NFI-ODCE Index, with the total return comprising of 1.0% income and 5.6% price appreciation. While the income return continues to trend in line with historical levels, price appreciation exceeded expectations and previous levels, such as the 2.6% return recorded in Q2. Investors in publicly traded real estate underperformed their private market counterparts.

**HFRI Hedge Fund Performance (%)**



**Real Asset Performance (%)**





Annual Asset Class Performance

As of September 30, 2021

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD
Best	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	19.96	29.13
	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	18.40	23.15
	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	18.31	15.92
	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	16.12	13.15
	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	12.34	12.41
	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	10.99	10.02
	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	10.88	8.35
	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	7.82	5.67
	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	7.51	4.53
	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	7.11	3.51
	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	1.19	0.04
	1.45	-43.38	1.92	6.31	-13.32	4.21	-8.61	-4.30	-4.47	1.00	3.01	-13.79	7.69	0.67	-1.25
	-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	-3.12	-1.56
Worst	-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	-8.00	-4.57
	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, 2021

	Allocation		Performance (%)											
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017
<b>Oklahoma State Pension Commission</b>	<b>39,284,248,544</b>	<b>100.00</b>												
<b>OTRS (Teachers) Total Fund</b>	<b>21,967,242,569</b>	<b>55.92</b>	<b>0.65</b>	<b>0.65</b>	<b>12.70</b>	<b>26.47</b>	<b>11.25</b>	<b>11.27</b>	<b>8.99</b>	<b>11.37</b>	<b>13.22</b>	<b>19.48</b>	<b>-8.29</b>	<b>15.83</b>
OTRS Policy Index			-0.15	-0.15	9.93	23.47	11.89	11.44	9.33	11.09	15.24	21.72	-4.75	15.16
Difference			0.80	0.80	2.77	3.00	-0.64	-0.17	-0.34	0.28	-2.02	-2.24	-0.54	0.67
OTRS Actual Allocation Index			-0.35	-0.35	10.42	24.50	11.85	11.33	9.49	11.19	16.98	18.94	-4.70	14.35
Difference			1.00	1.00	2.28	1.97	-0.60	-0.06	-0.50	0.18	-3.76	0.54	-0.59	1.48
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			-1.06	-1.06	7.49	19.47	4.25	4.27	1.99	4.37	6.22	12.48	-12.29	8.83
<b>OPERS (Public Employees) Total Fund</b>	<b>12,323,438,408</b>	<b>31.37</b>	<b>-0.86</b>	<b>-0.86</b>	<b>7.72</b>	<b>19.98</b>	<b>10.92</b>	<b>10.55</b>	<b>8.72</b>	<b>10.16</b>	<b>15.18</b>	<b>21.23</b>	<b>-6.57</b>	<b>17.01</b>
OPERS Policy Index			-0.90	-0.90	7.04	19.14	11.00	10.55	8.77	10.02	15.19	21.46	-6.09	16.86
Difference			0.04	0.04	0.68	0.84	-0.08	0.00	-0.05	0.14	-0.01	-0.23	-0.48	0.15
OPERS Actual Allocation Index			-0.94	-0.94	7.53	19.75	12.04	11.13	9.18	10.30	18.93	20.87	-6.49	16.51
Difference			0.08	0.08	0.19	0.23	-1.12	-0.58	-0.46	-0.14	-3.75	0.36	-0.08	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			-2.45	-2.45	2.88	13.48	4.42	4.05	2.22	3.66	8.68	14.73	-13.07	10.51
<b>OPPRS (Police) Total Fund</b>	<b>3,255,900,485</b>	<b>8.29</b>	<b>1.87</b>	<b>1.87</b>	<b>12.52</b>	<b>24.02</b>	<b>10.48</b>	<b>10.02</b>	<b>8.19</b>	<b>9.29</b>	<b>12.17</b>	<b>15.22</b>	<b>-2.85</b>	<b>12.91</b>
OPPRS Policy Index			0.40	0.40	9.11	19.30	10.50	9.92	7.71	9.51	12.66	19.13	-5.34	15.45
Difference			1.47	1.47	3.41	4.72	-0.02	0.10	0.48	-0.22	-0.49	-3.91	2.49	-2.54
OPPRS Actual Allocation Index			0.17	0.17	8.44	18.67	10.04	9.61	7.72	9.34	14.67	15.02	-3.70	13.78
Difference			1.70	1.70	4.08	5.35	0.44	0.41	0.47	-0.05	-2.50	0.20	0.85	-0.87
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			0.05	0.05	6.95	16.52	2.98	2.52	0.69	1.79	4.67	7.72	-10.35	5.41
<b>OLERS (Law Enforcement) Total Fund</b>	<b>1,171,526,787</b>	<b>2.98</b>	<b>0.51</b>	<b>0.51</b>	<b>10.57</b>	<b>23.62</b>	<b>10.03</b>	<b>10.06</b>	<b>8.08</b>	<b>9.60</b>	<b>11.83</b>	<b>17.49</b>	<b>-4.75</b>	<b>14.53</b>
OLERS Policy Index			0.19	0.19	9.46	20.51	10.61	10.31	8.90	10.14	12.77	19.12	-3.67	13.36
Difference			0.32	0.32	1.11	3.11	-0.58	-0.25	-0.82	-0.54	-0.94	-1.63	-1.08	1.17
OLERS Actual Allocation Index			-0.42	-0.42	8.99	21.18	10.90	10.40	8.80	10.00	14.73	17.33	-3.47	14.63
Difference			0.93	0.93	1.58	2.44	-0.87	-0.34	-0.72	-0.40	-2.90	0.16	-1.28	-0.10
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			-1.31	-1.31	5.00	16.12	2.53	2.56	0.58	2.10	4.33	9.99	-12.25	7.03

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. Net of fees returns for the Firefighters plan are not available.



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	2020	2019	2018	2017
<b>URSJJ (Judges) Total Fund</b>	<b>426,277,741</b>	<b>1.09</b>	<b>-0.93</b>	<b>-0.93</b>	<b>7.52</b>	<b>19.76</b>	<b>10.91</b>	<b>10.53</b>	<b>8.71</b>	<b>10.07</b>	<b>15.06</b>	<b>21.36</b>	<b>-6.43</b>	<b>16.85</b>
URSJJ Policy Index			-0.90	-0.90	7.04	19.14	11.02	10.56	8.78	10.03	15.19	21.51	-6.09	16.86
Difference			-0.03	-0.03	0.48	0.62	-0.11	-0.03	-0.07	0.04	-0.13	-0.15	-0.34	-0.01
URSJJ Actual Allocation Index			-0.95	-0.95	7.51	19.67	11.96	11.09	9.07	10.18	18.70	21.01	-6.52	16.63
Difference			0.02	0.02	0.01	0.09	-1.05	-0.56	-0.36	-0.11	-3.64	0.35	0.09	0.22
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			-2.52	-2.52	2.68	13.26	4.41	4.03	2.21	3.57	8.56	14.86	-12.93	10.35
<b>OWCRS (Wildlife) Total Fund</b>	<b>139,862,555</b>	<b>0.36</b>	<b>-0.33</b>	<b>-0.33</b>	<b>7.23</b>	<b>16.28</b>	<b>9.98</b>	<b>9.72</b>	<b>8.16</b>	<b>9.16</b>	<b>13.00</b>	<b>19.21</b>	<b>-3.85</b>	<b>13.93</b>
OWCRS Policy Index			-0.63	-0.63	6.39	18.46	9.05	8.60	7.23	8.67	12.67	17.53	-4.95	12.96
Difference			0.30	0.30	0.84	-2.18	0.93	1.12	0.93	0.49	0.33	1.68	1.10	0.97
OWCRS Actual Allocation Index			-0.73	-0.73	6.95	19.44	10.40	10.16	8.65	9.49	13.21	20.53	-3.71	14.38
Difference			0.40	0.40	0.28	-3.16	-0.42	-0.44	-0.49	-0.33	-0.21	-1.32	-0.14	-0.45
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			-2.04	-2.04	2.02	9.28	2.98	2.72	1.16	2.16	6.00	12.21	-10.85	6.93

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. Net of fees returns for the Firefighters plan are not available.



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	2020	2019	2018	2017
<b>Oklahoma State Pension Commission</b>	<b>42,946,967,646</b>	<b>100.00</b>												
<b>All Public Plans-Total Fund Median</b>			<b>-0.06</b>	<b>-0.06</b>	<b>8.83</b>	<b>20.45</b>	<b>10.48</b>	<b>10.31</b>	<b>8.58</b>	<b>9.94</b>	<b>12.61</b>	<b>18.52</b>	<b>-4.13</b>	<b>15.30</b>
<b>OTRS (Teachers) Total Fund</b>	<b>21,967,242,569</b>	<b>51.15</b>	<b>0.70</b>	<b>0.70</b>	<b>12.87</b>	<b>26.72</b>	<b>11.52</b>	<b>11.59</b>	<b>9.35</b>	<b>11.77</b>	<b>13.45</b>	<b>19.83</b>	<b>-4.98</b>	<b>16.20</b>
OTRS Policy Index			-0.15	-0.15	9.93	23.47	11.89	11.44	9.33	11.09	15.24	21.72	-4.75	15.16
Difference			0.85	0.85	2.94	3.25	-0.37	0.15	0.02	0.68	-1.79	-1.89	-0.23	1.04
OTRS Actual Allocation Index			-0.35	-0.35	10.42	24.50	11.85	11.33	9.49	11.19	16.98	18.94	-4.70	14.35
Difference			1.05	1.05	2.45	2.22	-0.33	0.26	-0.14	0.58	-3.53	0.89	-0.28	1.85
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			-1.01	-1.01	7.66	19.72	4.52	4.59	2.35	4.77	6.45	12.83	-11.98	9.20
Rank			18	18	6	3	25	14	20	4	40	32	72	33
<b>OPERS (Public Employees) Total Fund</b>	<b>12,323,438,408</b>	<b>28.69</b>	<b>-0.84</b>	<b>-0.84</b>	<b>7.78</b>	<b>20.08</b>	<b>11.05</b>	<b>10.67</b>	<b>8.84</b>	<b>10.28</b>	<b>15.34</b>	<b>21.38</b>	<b>-6.48</b>	<b>17.13</b>
OPERS Policy Index			-0.90	-0.90	7.04	19.14	11.00	10.55	8.77	10.02	15.19	21.46	-6.09	16.86
Difference			0.06	0.06	0.74	0.94	0.05	0.12	0.07	0.26	0.15	-0.08	-0.39	0.27
OPERS Actual Allocation Index			-0.94	-0.94	7.53	19.75	12.04	11.13	9.18	10.30	18.93	20.87	-6.49	16.51
Difference			0.10	0.10	0.25	0.33	-0.99	-0.46	-0.34	-0.02	-3.59	0.51	0.01	0.62
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			-2.43	-2.43	2.94	13.58	4.55	4.17	2.34	3.78	8.84	14.88	-12.98	10.63
Rank			96	96	74	56	34	38	40	36	20	12	93	17
<b>OFPRS (Firefighters) Total Fund</b>	<b>3,662,719,102</b>	<b>8.53</b>	<b>-0.18</b>	<b>-0.18</b>	<b>9.41</b>	<b>23.21</b>	<b>12.36</b>	<b>12.67</b>	<b>10.69</b>	<b>11.82</b>	<b>18.44</b>	<b>20.15</b>	<b>-2.46</b>	<b>18.67</b>
OFPRS Policy Index			0.76	0.76	11.37	22.94	12.15	11.97	10.16	11.63	13.85	21.76	-3.80	16.41
Difference			-0.94	-0.94	-1.96	0.27	0.21	0.70	0.53	0.19	4.59	-1.61	1.34	2.26
OFPRS Actual Allocation Index			0.30	0.30	9.92	21.76	12.08	12.05	10.06	11.44	17.79	20.30	-3.93	15.64
Difference			-0.48	-0.48	-0.51	1.45	0.28	0.62	0.63	0.38	0.65	-0.15	1.47	3.03
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			-2.00	-2.00	3.84	15.71	4.86	5.17	3.19	4.32	10.94	12.65	-9.96	11.17
Rank			61	61	37	18	9	3	3	3	6	28	19	5

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	2020	2019	2018	2017
<b>OPPRS (Police) Total Fund</b>	<b>3,255,900,485</b>	<b>7.58</b>	<b>1.97</b>	<b>1.97</b>	<b>12.81</b>	<b>24.44</b>	<b>10.88</b>	<b>10.44</b>	<b>8.62</b>	<b>9.72</b>	<b>12.54</b>	<b>15.68</b>	<b>-2.46</b>	<b>13.40</b>
OPPRS Policy Index			0.40	0.40	9.11	19.30	10.50	9.92	7.71	9.51	12.66	19.13	-5.34	15.45
Difference			1.57	1.57	3.70	5.14	0.38	0.52	0.91	0.21	-0.12	-3.45	2.88	-2.05
OPPRS Actual Allocation Index			0.17	0.17	8.44	18.67	10.04	9.61	7.72	9.34	14.67	15.02	-3.70	13.78
Difference			1.80	1.80	4.37	5.77	0.84	0.83	0.90	0.38	-2.13	0.66	1.24	-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			0.15	0.15	7.24	16.94	3.38	2.94	1.12	2.22	5.04	8.18	-9.96	5.90
Rank			7	7	6	9	40	45	49	58	52	84	19	82
<b>OLERS (Law Enforcement) Total Fund</b>	<b>1,171,526,787</b>	<b>2.73</b>	<b>0.55</b>	<b>0.55</b>	<b>10.70</b>	<b>23.82</b>	<b>10.22</b>	<b>10.26</b>	<b>8.27</b>	<b>9.73</b>	<b>12.03</b>	<b>17.70</b>	<b>-4.55</b>	<b>14.71</b>
OLERS Policy Index			0.19	0.19	9.46	20.51	10.61	10.31	8.90	10.14	12.77	19.12	-3.67	13.36
Difference			0.36	0.36	1.24	3.31	-0.39	-0.05	-0.63	-0.41	-0.74	-1.42	-0.88	1.35
OLERS Actual Allocation Index			-0.42	-0.42	8.99	21.18	10.90	10.40	8.80	10.00	14.73	17.33	-3.47	14.63
Difference			0.97	0.97	1.71	2.64	-0.68	-0.14	-0.53	-0.27	-2.70	0.37	-1.08	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	7.50	7.50	7.50
Difference			-1.27	-1.27	5.13	16.32	2.72	2.76	0.77	2.23	4.53	10.20	-12.05	7.21
Rank			20	20	19	12	59	51	59	57	59	61	60	61
<b>URSJJ (Judges) Total Fund</b>	<b>426,277,741</b>	<b>0.99</b>	<b>-0.93</b>	<b>-0.93</b>	<b>7.54</b>	<b>19.80</b>	<b>10.94</b>	<b>10.57</b>	<b>8.75</b>	<b>10.11</b>	<b>15.10</b>	<b>21.40</b>	<b>-6.38</b>	<b>16.89</b>
URSJJ Policy Index			-0.90	-0.90	7.04	19.14	11.02	10.56	8.78	10.03	15.19	21.51	-6.09	16.86
Difference			-0.03	-0.03	0.50	0.66	-0.08	0.01	-0.03	0.08	-0.09	-0.11	-0.29	0.03
URSJJ Actual Allocation Index			-0.95	-0.95	7.51	19.67	11.96	11.09	9.07	10.18	18.70	21.01	-6.52	16.63
Difference			0.02	0.02	0.03	0.13	-1.02	-0.52	-0.32	-0.07	-3.60	0.39	0.14	0.26
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			-2.52	-2.52	2.70	13.30	4.44	4.07	2.25	3.61	8.60	14.90	-12.88	10.39
Rank			97	97	78	60	39	42	42	43	23	11	92	21
<b>OWCRS (Wildlife) Total Fund</b>	<b>139,862,555</b>	<b>0.33</b>	<b>-0.25</b>	<b>-0.25</b>	<b>7.50</b>	<b>16.66</b>	<b>10.27</b>	<b>9.98</b>	<b>8.40</b>	<b>9.38</b>	<b>13.34</b>	<b>19.46</b>	<b>-3.68</b>	<b>14.13</b>
OWCRS Policy Index			-0.63	-0.63	6.39	18.46	9.05	8.60	7.23	8.67	12.67	17.53	-4.95	12.96
Difference			0.38	0.38	1.11	-1.80	1.22	1.38	1.17	0.71	0.67	1.93	1.27	1.17
OWCRS Actual Allocation Index			-0.73	-0.73	6.95	19.44	10.40	10.16	8.65	9.49	13.21	20.53	-3.71	14.38
Difference			0.48	0.48	0.55	-2.78	-0.13	-0.18	-0.25	-0.11	0.13	-1.07	0.03	-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	7.00	7.00	7.00
Difference			-1.96	-1.96	2.29	9.66	3.27	2.98	1.40	2.38	6.34	12.46	-10.68	7.13
Rank			66	66	80	88	57	60	55	68	41	37	42	71

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, 2021

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017
<b>US Equity</b>												
<b>OTRS US Equity</b>	-1.20	-1.20	15.10	36.40	12.21	14.68	11.93	15.49	15.40	27.64	-8.27	20.72
Russell 3000 Index	-0.10	-0.10	14.99	31.88	16.00	16.85	13.93	16.60	20.89	31.02	-5.24	21.13
Difference	-1.10	-1.10	0.11	4.52	-3.79	-2.17	-2.00	-1.11	-5.49	-3.38	-3.03	-0.41
<b>OPERS US Equity</b>	-0.03	-0.03	15.65	34.34	15.10	16.48	13.47	16.45	20.37	29.26	-6.45	21.27
OPERS US Equity Custom Index	-0.47	-0.47	14.84	33.49	15.61	16.63	13.81	16.49	20.97	30.56	-5.70	20.71
Difference	0.44	0.44	0.81	0.85	-0.51	-0.15	-0.34	-0.04	-0.60	-1.30	-0.75	0.56
<b>OLERS US Equity</b>	-0.02	-0.02	17.81	43.28	15.62	17.22	13.73	16.54	19.60	32.84	-8.58	21.40
S&P 500 Index (Cap Wtd)	0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	18.40	31.49	-4.38	21.83
Difference	-0.60	-0.60	1.89	13.28	-0.37	0.32	-0.28	-0.09	1.20	1.35	-4.20	-0.43
<b>URSJJ US Equity</b>	-0.48	-0.48	14.79	33.53	15.55	16.58	13.79	16.45	21.02	30.49	-5.83	20.57
URSJJ US Equity Custom Index	-0.47	-0.47	14.84	33.49	15.61	16.63	13.81	16.49	20.97	30.56	-5.70	20.71
Difference	-0.01	-0.01	-0.05	0.04	-0.06	-0.05	-0.02	-0.04	0.05	-0.07	-0.13	-0.14
<b>OWCRS US Equity</b>	0.26	0.26	15.52	30.04	14.75	16.21	13.39	16.17	18.87	28.92	-5.64	22.16
Russell 3000 Index	-0.10	-0.10	14.99	31.88	16.00	16.85	13.93	16.60	20.89	31.02	-5.24	21.13
Difference	0.36	0.36	0.53	-1.84	-1.25	-0.64	-0.54	-0.43	-2.02	-2.10	-0.40	1.03

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, 2021

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017
<b>International Equity</b>												
<b>OTRS International Equity</b>	-1.23	-1.23	9.67	28.13	8.64	9.76	6.86	9.07	12.13	21.38	-16.32	31.43
MSCI ACW Ex US IM Index (USD) (Net)	-2.56	-2.56	6.77	25.16	8.34	9.13	6.02	7.74	11.12	21.63	-14.76	27.81
Difference	1.33	1.33	2.90	2.97	0.30	0.63	0.84	1.33	1.01	-0.25	-1.56	3.62
<b>OPERS International Equity</b>	-3.38	-3.38	5.45	23.53	8.88	9.30	6.38	7.96	12.30	23.21	-13.81	27.32
MSCI ACW Ex US Index (USD) (Gross)	-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	11.13	22.13	-13.78	27.77
Difference	-0.50	-0.50	-0.84	-0.92	0.36	-0.14	0.21	-0.01	1.17	1.08	-0.03	-0.45
<b>OLERS International Equity</b>	-2.23	-2.23	6.72	24.16	10.02	9.65	6.76	7.13	12.57	23.97	-14.43	30.46
MSCI ACW Ex US Index (USD) (Net)	-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	10.65	21.51	-14.20	27.19
Difference	0.76	0.76	0.82	0.24	1.99	0.71	1.08	-0.35	1.92	2.46	-0.23	3.27
<b>URSJJ International Equity</b>	-2.97	-2.97	6.08	24.16	8.26	9.20	5.94	7.73	10.86	21.83	-13.97	27.54
MSCI ACW Ex US Index (USD) (Gross)	-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	11.13	22.13	-13.78	27.77
Difference	-0.09	-0.09	-0.21	-0.29	-0.26	-0.24	-0.23	-0.24	-0.27	-0.30	-0.19	-0.23
<b>OWCRS International Equity</b>	-3.26	-3.26	4.96	24.08	8.05	8.90	5.94	8.05	10.17	23.05	-13.82	29.05
MSCI ACW Ex US Index (USD) (Net)	-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	10.65	21.51	-14.20	27.19
Difference	-0.27	-0.27	-0.94	0.16	0.02	-0.04	0.26	0.57	-0.48	1.54	0.38	1.86
<b>Total Equity</b>												
<b>OPPRS Total Equity</b>	1.92	1.92	17.56	35.93	14.78	14.14	11.38	12.48	18.46	21.98	-5.24	18.31
MSCI ACW Index (USD) (Gross)	-0.95	-0.95	11.49	27.98	13.14	13.77	10.52	12.50	16.82	27.30	-8.93	24.62
Difference	2.87	2.87	6.07	7.95	1.64	0.37	0.86	-0.02	1.64	-5.32	3.69	-6.31

Performance shown is net of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01. OPPER 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, 2021

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017
<b>Fixed Income</b>												
<b>OTRS Fixed Income</b>	0.36	0.36	-0.66	1.43	7.44	4.90	4.82	5.27	11.91	11.84	-1.44	6.44
Bloomberg US Unv Bond Index	0.07	0.07	-1.07	0.20	5.57	3.30	3.56	3.46	7.58	9.29	-0.25	4.09
Difference	0.29	0.29	0.41	1.23	1.87	1.60	1.26	1.81	4.33	2.55	-1.19	2.35
<b>OPERS Fixed Income</b>	0.36	0.36	-1.39	-0.81	6.83	3.71	4.04	3.77	10.54	10.12	-0.33	4.42
OPERS Fixed Income Custom Index	0.25	0.25	-1.69	-1.33	6.07	3.18	3.63	3.23	9.08	9.43	-0.33	4.08
Difference	0.11	0.11	0.30	0.52	0.76	0.53	0.41	0.54	1.46	0.69	0.00	0.34
<b>OPPRS Fixed Income</b>	0.19	0.19	1.43	4.17	4.76	3.66	3.09	N/A	6.63	7.24	-0.21	5.37
Bloomberg US Agg Bond Index	0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	7.51	8.72	0.01	3.54
Difference	0.14	0.14	2.99	5.07	-0.59	0.72	-0.17	N/A	-0.88	-1.48	-0.22	1.83
<b>OLERS Fixed Income</b>	-0.69	-0.69	-1.87	-0.62	3.82	2.82	2.70	3.26	5.62	6.12	0.30	4.37
Bloomberg US Agg Bond Index	0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	7.51	8.72	0.01	3.54
Difference	-0.74	-0.74	-0.31	0.28	-1.53	-0.12	-0.56	0.25	-1.89	-2.60	0.29	0.83
<b>URSJJ Fixed Income</b>	0.35	0.35	-1.50	-0.97	6.80	3.66	3.99	3.72	10.58	10.06	-0.32	4.37
URSJJ Fixed Income Custom Index	0.25	0.25	-1.69	-1.33	6.07	3.18	3.63	3.23	9.08	9.43	-0.33	4.08
Difference	0.10	0.10	0.19	0.36	0.73	0.48	0.36	0.49	1.50	0.63	0.01	0.29
<b>OWCRS Fixed Income</b>	0.11	0.11	-0.27	1.38	5.87	3.18	3.22	2.97	8.29	7.94	0.76	3.02
Bloomberg US Agg Bond Index	0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	7.51	8.72	0.01	3.54
Difference	0.06	0.06	1.29	2.28	0.52	0.24	-0.04	-0.04	0.78	-0.78	0.75	-0.52

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, 2021

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017
<b>Real Estate</b>												
<b>OTRS Real Estate</b>	<b>3.86</b>	<b>3.86</b>	<b>6.01</b>	<b>7.09</b>	<b>3.55</b>	<b>4.83</b>	<b>N/A</b>	<b>N/A</b>	<b>-2.40</b>	<b>5.59</b>	<b>7.43</b>	<b>6.47</b>
NCREIF Property Index	5.23	5.23	10.88	12.15	6.72	6.84	8.10	8.99	1.60	6.42	6.72	6.96
Difference	-1.37	-1.37	-4.87	-5.06	-3.17	-2.01	N/A	N/A	-4.08	-0.83	0.71	-0.49
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	0.34	4.39	7.36	6.66
Difference	-2.55	-2.55	-6.40	-6.55	-2.58	-1.73	N/A	N/A	-2.82	1.20	0.07	-0.19
<b>OPERS Real Estate</b>	<b>-1.25</b>	<b>-1.25</b>	<b>-8.38</b>	<b>-6.79</b>	<b>-4.28</b>	<b>-2.99</b>	<b>-0.69</b>	<b>N/A</b>	<b>-8.51</b>	<b>2.90</b>	<b>1.12</b>	<b>-2.11</b>
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	0.34	4.39	7.36	6.66
Difference	-7.66	-7.66	-20.79	-20.43	-10.41	-9.55	-8.62	N/A	-8.85	-1.49	-6.24	-8.77
<b>OLERS Real Estate</b>	<b>5.23</b>	<b>5.23</b>	<b>9.50</b>	<b>10.69</b>	<b>3.63</b>	<b>4.58</b>	<b>4.22</b>	<b>5.66</b>	<b>-0.12</b>	<b>2.76</b>	<b>3.23</b>	<b>5.55</b>
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	0.34	4.39	7.36	6.66
Difference	-1.18	-1.18	-2.91	-2.95	-2.50	-1.98	-3.71	-3.26	-0.46	-1.63	-4.13	-1.11
<b>Real Assets</b>												
<b>OPPRS Real Assets</b>	<b>4.79</b>	<b>4.79</b>	<b>9.79</b>	<b>11.11</b>	<b>3.53</b>	<b>4.89</b>	<b>4.33</b>	<b>5.54</b>	<b>-1.07</b>	<b>3.52</b>	<b>3.55</b>	<b>5.71</b>
OPPRS Real Assets Blended Benchmark	6.41	6.41	12.41	13.64	4.85	5.00	2.78	4.72	0.34	4.43	0.98	5.05
Difference	-1.62	-1.62	-2.62	-2.53	-1.32	-0.11	1.55	0.82	-1.41	-0.91	2.57	0.66

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, 2021

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017
<b>Hedge Funds</b>												
<b>OPPRS Long/Short Equity</b>	<b>-2.45</b>	<b>-2.45</b>	<b>2.01</b>	<b>15.89</b>	<b>9.88</b>	<b>9.16</b>	<b>7.37</b>	<b>7.94</b>	<b>22.33</b>	<b>16.34</b>	<b>-4.94</b>	<b>11.59</b>
MSCI ACW Index (USD) (Net)	-1.05	-1.05	11.12	27.44	12.58	13.20	9.95	11.90	16.25	26.60	-9.42	23.97
Difference	-1.40	-1.40	-9.11	-11.55	-2.70	-4.04	-2.58	-3.96	6.08	-10.26	4.48	-12.38
HFRI FOF: Strategic Index	0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	14.62	10.52	-6.67	11.22
Difference	-2.53	-2.53	-3.65	-1.17	2.10	2.31	2.51	2.75	7.71	5.82	1.73	0.37
<b>OLERS Long/Short Equity</b>	<b>0.76</b>	<b>0.76</b>	<b>7.10</b>	<b>16.86</b>	<b>5.72</b>	<b>6.66</b>	<b>5.44</b>	<b>6.70</b>	<b>8.08</b>	<b>12.36</b>	<b>-5.53</b>	<b>11.66</b>
MSCI ACW Index (USD) (Net)	-1.05	-1.05	11.12	27.44	12.58	13.20	9.95	11.90	16.25	26.60	-9.42	23.97
Difference	1.81	1.81	-4.02	-10.58	-6.86	-6.54	-4.51	-5.20	-8.17	-14.24	3.89	-12.31
HFRI FOF: Strategic Index	0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	14.62	10.52	-6.67	11.22
Difference	0.68	0.68	1.44	-0.20	-2.06	-0.19	0.58	1.51	-6.54	1.84	1.14	0.44

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. OPPER 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, 2021

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017
<b>Private Equity</b>												
<b>OTRS Private Equity</b>	14.79	14.79	50.60	60.18	29.27	25.15	21.21	19.89	17.27	17.73	23.03	13.89
R 2000 Index+4%	-3.42	-3.42	15.77	53.58	14.96	17.99	16.38	19.22	24.76	30.55	-7.45	19.23
Difference	18.21	18.21	34.83	6.60	14.31	7.16	4.83	0.67	-7.49	-12.82	30.48	-5.34
<b>OPPRS Private Equity</b>	17.61	17.61	54.45	71.44	26.51	20.61	17.17	15.35	15.87	10.51	15.22	9.65
MSCI ACW Index (USD) (Net)	-1.05	-1.05	11.12	27.44	12.58	13.20	9.95	11.90	16.25	26.60	-9.42	23.97
Difference	18.66	18.66	43.33	44.00	13.93	7.41	7.22	3.45	-0.38	-16.09	24.64	-14.32
Cambridge US Prvt Eq Index	0.00	0.00	24.50	39.06	19.19	18.64	15.33	15.85	21.77	13.86	10.24	18.01
Difference	17.61	17.61	29.95	32.38	7.32	1.97	1.84	-0.50	-5.90	-3.35	4.98	-8.36
<b>OLERS Private Equity</b>	9.21	9.21	35.17	45.87	17.86	14.92	11.81	11.79	8.91	6.84	15.45	7.59
S&P 500 Index+5%	1.82	1.82	20.24	36.51	21.79	22.74	19.71	22.47	24.32	38.06	0.40	27.92
Difference	7.39	7.39	14.93	9.36	-3.93	-7.82	-7.90	-10.68	-15.41	-31.22	15.05	-20.33
Cambridge US Prvt Eq Index	0.00	0.00	24.50	39.06	19.19	18.64	15.33	15.85	21.77	13.86	10.24	18.01
Difference	9.21	9.21	10.67	6.81	-1.33	-3.72	-3.52	-4.06	-12.86	-7.02	5.21	-10.42
<b>Other Alternatives</b>												
<b>OWCRS Alternative Investments</b>	-0.65	-0.65	5.79	13.17	4.94	5.35	3.84	4.05	2.14	15.31	-6.07	9.36
OWCRS Alternatives Custom Index	0.74	0.74	5.73	14.31	6.49	5.53	3.75	N/A	10.88	8.38	-4.02	7.06
Difference	-1.39	-1.39	0.06	-1.14	-1.55	-0.18	0.09	N/A	-8.74	6.93	-2.05	2.30

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, 2021

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017
<b>US Equity</b>												
<b>OTRS US Equity</b>	<b>-1.15</b>	<b>-1.16</b>	<b>15.24</b>	<b>36.63</b>	<b>12.48</b>	<b>15.02</b>	<b>12.25</b>	<b>15.72</b>	<b>15.62</b>	<b>28.03</b>	<b>-7.94</b>	<b>21.17</b>
Russell 3000 Index	-0.10	-0.10	14.99	31.88	16.00	16.85	13.93	16.60	20.89	31.02	-5.24	21.13
Difference	-1.06	-1.06	0.25	4.75	-3.52	-1.83	-1.68	-0.88	-5.27	-2.99	-2.70	0.04
<b>OPERS US Equity</b>	<b>-0.01</b>	<b>-0.01</b>	<b>15.71</b>	<b>34.42</b>	<b>15.25</b>	<b>16.61</b>	<b>13.59</b>	<b>16.57</b>	<b>20.53</b>	<b>29.50</b>	<b>-6.38</b>	<b>21.39</b>
OPERS US Equity Custom Index	-0.47	-0.47	14.84	33.49	15.61	16.63	13.81	16.49	20.97	30.56	-5.70	20.71
Difference	0.46	0.46	0.87	0.93	-0.36	-0.02	-0.22	0.08	-0.44	-1.06	-0.68	0.68
<b>OPPRS US Equity</b>	<b>-1.34</b>	<b>-1.34</b>	<b>13.06</b>	<b>33.14</b>	<b>16.67</b>	<b>17.73</b>	<b>14.46</b>	<b>16.58</b>	<b>25.89</b>	<b>31.43</b>	<b>-4.96</b>	<b>22.96</b>
Russell 3000 Index	-0.10	-0.10	14.99	31.88	16.00	16.85	13.93	16.60	20.89	31.02	-5.24	21.13
Difference	-1.24	-1.24	-1.93	1.26	0.67	0.88	0.53	-0.02	5.00	0.41	0.28	1.83
<b>OLERS US Equity</b>	<b>-0.02</b>	<b>-0.02</b>	<b>17.81</b>	<b>43.29</b>	<b>15.63</b>	<b>17.22</b>	<b>13.74</b>	<b>16.54</b>	<b>19.61</b>	<b>32.84</b>	<b>-8.56</b>	<b>21.40</b>
S&P 500 Index (Cap Wtd)	0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	18.40	31.49	-4.38	21.83
Difference	-0.60	-0.60	1.89	13.29	-0.36	0.32	-0.27	-0.09	1.21	1.35	-4.18	-0.43
<b>URSJJ US Equity</b>	<b>-0.48</b>	<b>-0.48</b>	<b>14.80</b>	<b>33.54</b>	<b>15.56</b>	<b>16.59</b>	<b>13.80</b>	<b>16.46</b>	<b>21.03</b>	<b>30.51</b>	<b>-5.81</b>	<b>20.58</b>
URSJJ US Equity Custom Index	-0.47	-0.47	14.84	33.49	15.61	16.63	13.81	16.49	20.97	30.56	-5.70	20.71
Difference	-0.01	-0.01	-0.04	0.05	-0.05	-0.04	-0.01	-0.03	0.06	-0.05	-0.11	-0.13
<b>OWCRS US Equity</b>	<b>0.30</b>	<b>0.30</b>	<b>15.66</b>	<b>30.27</b>	<b>15.00</b>	<b>16.48</b>	<b>13.64</b>	<b>16.38</b>	<b>19.18</b>	<b>29.17</b>	<b>-5.38</b>	<b>22.45</b>
Russell 3000 Index	-0.10	-0.10	14.99	31.88	16.00	16.85	13.93	16.60	20.89	31.02	-5.24	21.13
Difference	0.40	0.40	0.67	-1.61	-1.00	-0.37	-0.29	-0.22	-1.71	-1.85	-0.14	1.32

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. OPRRS 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, 2021

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017
<b>International Equity</b>												
<b>OTRS International Equity</b>	<b>-1.13</b>	<b>-1.13</b>	<b>10.00</b>	<b>28.65</b>	<b>9.12</b>	<b>10.27</b>	<b>7.33</b>	<b>9.57</b>	<b>12.61</b>	<b>21.95</b>	<b>-15.88</b>	<b>32.00</b>
MSCI ACW Ex US IM Index (USD) (Net)	-2.56	-2.56	6.77	25.16	8.34	9.13	6.02	7.74	11.12	21.63	-14.76	27.81
Difference	1.43	1.43	3.23	3.49	0.78	1.14	1.31	1.83	1.49	0.32	-1.12	4.19
<b>OPERS International Equity</b>	<b>-3.35</b>	<b>-3.35</b>	<b>5.55</b>	<b>23.68</b>	<b>9.03</b>	<b>9.47</b>	<b>6.55</b>	<b>8.13</b>	<b>12.53</b>	<b>23.34</b>	<b>-13.69</b>	<b>27.54</b>
MSCI ACW Ex US Index (USD) (Gross)	-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	11.13	22.13	-13.78	27.77
Difference	-0.47	-0.47	-0.74	-0.77	0.51	0.03	0.38	0.16	1.40	1.21	0.09	-0.23
<b>OFPRS International Equity</b>	<b>-1.74</b>	<b>-1.74</b>	<b>5.97</b>	<b>25.34</b>	<b>15.63</b>	<b>14.51</b>	<b>11.14</b>	<b>10.87</b>	<b>32.50</b>	<b>27.22</b>	<b>-13.23</b>	<b>36.00</b>
MSCI ACW Ex US Index (USD) (Net)	-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	10.65	21.51	-14.20	27.19
Difference	1.25	1.25	0.07	1.42	7.60	5.57	5.46	3.39	21.85	5.71	0.97	8.81
<b>OLERS International Equity</b>	<b>-2.15</b>	<b>-2.15</b>	<b>6.97</b>	<b>24.54</b>	<b>10.41</b>	<b>10.09</b>	<b>7.22</b>	<b>7.84</b>	<b>13.02</b>	<b>24.39</b>	<b>-14.03</b>	<b>31.05</b>
MSCI ACW Ex US Index (USD) (Net)	-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	10.65	21.51	-14.20	27.19
Difference	0.84	0.84	1.07	0.62	2.38	1.15	1.54	0.36	2.37	2.88	0.17	3.86
<b>URSJJ International Equity</b>	<b>-2.96</b>	<b>-2.96</b>	<b>6.11</b>	<b>24.19</b>	<b>8.28</b>	<b>9.23</b>	<b>5.98</b>	<b>7.77</b>	<b>10.87</b>	<b>21.86</b>	<b>-13.93</b>	<b>27.58</b>
MSCI ACW Ex US Index (USD) (Gross)	-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	11.13	22.13	-13.78	27.77
Difference	-0.08	-0.08	-0.18	-0.26	-0.24	-0.21	-0.19	-0.20	-0.26	-0.27	-0.15	-0.19
<b>OWCRS International Equity</b>	<b>-3.13</b>	<b>-3.13</b>	<b>5.39</b>	<b>24.78</b>	<b>8.71</b>	<b>9.66</b>	<b>6.64</b>	<b>8.56</b>	<b>10.82</b>	<b>23.86</b>	<b>-13.14</b>	<b>30.11</b>
MSCI ACW Ex US Index (USD) (Net)	-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	10.65	21.51	-14.20	27.19
Difference	-0.14	-0.14	-0.51	0.86	0.68	0.72	0.96	1.08	0.17	2.35	1.06	2.92
<b>Total Equity</b>												
<b>OPPRS Total Equity</b>	<b>1.98</b>	<b>1.98</b>	<b>17.80</b>	<b>36.29</b>	<b>15.12</b>	<b>14.51</b>	<b>11.74</b>	<b>12.85</b>	<b>18.81</b>	<b>22.38</b>	<b>-4.91</b>	<b>18.72</b>
MSCI ACW Index (USD) (Gross)	-0.95	-0.95	11.49	27.98	13.14	13.77	10.52	12.50	16.82	27.30	-8.93	24.62
Difference	2.93	2.93	6.31	8.31	1.98	0.74	1.22	0.35	1.99	-4.92	4.02	-5.90

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. OPPER 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, 2021

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017
<b>Fixed Income</b>												
<b>OTRS Fixed Income</b>	0.40	0.40	-0.54	1.61	7.64	5.12	5.04	5.50	12.11	12.05	-1.23	6.68
Bloomberg US Unv Bond Index	0.07	0.07	-1.07	0.20	5.57	3.30	3.56	3.46	7.58	9.29	-0.25	4.09
Difference	0.33	0.33	0.53	1.41	2.07	1.82	1.48	2.04	4.53	2.76	-0.98	2.59
<b>OPERS Fixed Income</b>	0.36	0.36	-1.35	-0.74	6.92	3.79	4.12	3.86	10.65	10.19	-0.24	4.49
Fixed Income Custom Index	0.25	0.25	-1.69	-1.33	6.07	3.18	3.63	3.23	9.08	9.43	-0.33	4.08
Difference	0.11	0.11	0.34	0.59	0.85	0.61	0.49	0.63	1.57	0.76	0.09	0.41
<b>OFPRS Fixed Income</b>	-1.13	-1.13	-2.41	1.86	4.24	2.81	3.01	3.27	8.41	7.22	-2.41	7.10
Bloomberg US Agg Bond Index	0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	7.51	8.72	0.01	3.54
Difference	-1.18	-1.18	-0.85	2.76	-1.11	-0.13	-0.25	0.26	0.90	-1.50	-2.42	3.56
<b>OPPRS Fixed Income</b>	0.27	0.27	1.66	4.48	5.16	4.08	3.55	4.42	6.98	7.74	0.24	5.84
Bloomberg US Agg Bond Index	0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	7.51	8.72	0.01	3.54
Difference	0.22	0.22	3.22	5.38	-0.19	1.14	0.29	1.41	-0.53	-0.98	0.23	2.30
<b>OLERS Fixed Income</b>	-0.65	-0.65	-1.78	-0.50	3.95	2.92	2.77	3.31	5.73	6.27	0.44	4.38
Bloomberg US Agg Bond Index	0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	7.51	8.72	0.01	3.54
Difference	-0.70	-0.70	-0.22	0.40	-1.40	-0.02	-0.49	0.30	-1.78	-2.45	0.43	0.84
<b>URSJJ Fixed Income</b>	0.36	0.36	-1.46	-0.90	6.89	3.74	4.07	3.81	10.70	10.14	-0.23	4.45
Fixed Income Custom Index	0.25	0.25	-1.69	-1.33	6.07	3.18	3.63	3.23	9.08	9.43	-0.33	4.08
Difference	0.11	0.11	0.23	0.43	0.82	0.56	0.44	0.58	1.62	0.71	0.10	0.37
<b>OWCRS Fixed Income</b>	0.19	0.19	-0.03	1.70	6.04	3.28	3.29	3.02	8.56	7.94	0.76	3.02
Bloomberg US Agg Bond Index	0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	7.51	8.72	0.01	3.54
Difference	0.14	0.14	1.53	2.60	0.69	0.34	0.03	0.01	1.05	-0.78	0.75	-0.52

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, 2021

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017
<b>Real Estate</b>												
<b>OTRS Real Estate</b>	3.92	3.92	6.20	7.34	3.75	5.03	N/A	N/A	-2.37	5.77	7.60	6.65
NCREIF Property Index	5.23	5.23	10.88	12.15	6.72	6.84	8.10	8.99	1.60	6.42	6.72	6.96
Difference	-1.31	-1.31	-4.68	-4.81	-2.97	-1.81	N/A	N/A	-3.87	-0.65	0.88	-0.31
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	0.34	4.39	7.36	6.66
Difference	-2.49	-2.49	-6.21	-6.30	-2.38	-1.53	N/A	N/A	-2.61	1.38	0.24	-0.01
<b>OPERS Real Estate</b>	-1.25	-1.25	-8.38	-6.79	-4.28	-2.99	-0.69	N/A	-8.51	2.90	1.12	-2.11
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	0.34	4.39	7.36	6.66
Difference	-7.66	-7.66	-20.79	-20.43	-10.41	-9.55	-8.62	N/A	-8.85	-1.49	-6.24	-8.77
<b>OFPRS Real Estate</b>	5.17	5.17	8.66	10.19	5.14	6.52	8.47	8.77	0.18	4.69	9.39	8.02
NCREIF Property Index	5.23	5.23	10.88	12.15	6.72	6.84	8.10	8.99	1.60	6.42	6.72	6.96
Difference	-0.06	-0.06	-2.22	-1.96	-1.58	-0.32	0.37	-0.22	-1.42	-1.73	2.67	1.06
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	0.34	4.39	7.36	6.66
Difference	-1.24	-1.24	-3.75	-3.45	-0.99	-0.04	0.54	-0.15	-0.16	0.30	2.03	1.36
<b>OLERS Real Estate</b>	5.42	5.42	10.19	11.64	4.49	5.42	5.05	6.83	0.76	3.58	4.02	6.38
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	0.34	4.39	7.36	6.66
Difference	-0.99	-0.99	-2.22	-2.00	-1.64	-1.14	-2.88	-2.09	0.42	-0.81	-3.34	-0.28
<b>Real Assets</b>												
<b>OPPRS Real Assets</b>	5.13	5.13	10.59	12.13	4.27	5.68	5.05	6.34	-0.51	4.21	4.30	6.68
OPPRS Real Assets Blended Benchmark	6.41	6.41	12.41	13.64	4.85	5.00	2.78	4.72	0.34	4.43	0.98	5.05
Difference	-1.28	-1.28	-1.82	-1.51	-0.58	0.68	2.27	1.62	-0.85	-0.22	3.32	1.63

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, 2021

	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017
<b>Hedge Funds</b>												
<b>OFPRS Hedge Fund</b>	-13.55	-13.55	-11.23	-6.49	-5.95	-1.09	-1.23	0.87	-4.62	3.52	-2.86	10.18
HFRI FOF: Cnsvt Index	1.08	1.08	6.99	13.23	5.42	4.90	3.60	4.00	6.47	6.30	-0.87	4.12
Difference	-14.63	-14.63	-18.22	-19.72	-11.37	-5.99	-4.83	-3.13	-11.09	-2.78	-1.99	6.06
<b>OPPRS Long/Short Equity</b>	-2.45	-2.45	2.04	15.96	10.20	9.54	7.77	8.39	22.68	16.85	-4.52	12.10
HFRI FOF: Strategic Index	0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	14.62	10.52	-6.67	11.22
Difference	-2.53	-2.53	-3.62	-1.10	2.42	2.69	2.91	3.20	8.06	6.33	2.15	0.88
<b>OLERS Long/Short Equity</b>	0.76	0.76	7.10	16.86	5.72	6.66	5.44	6.70	8.08	12.36	-5.53	11.66
HFRI FOF: Strategic Index	0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	14.62	10.52	-6.67	11.22
Difference	0.68	0.68	1.44	-0.20	-2.06	-0.19	0.58	1.51	-6.54	1.84	1.14	0.44

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, 2021

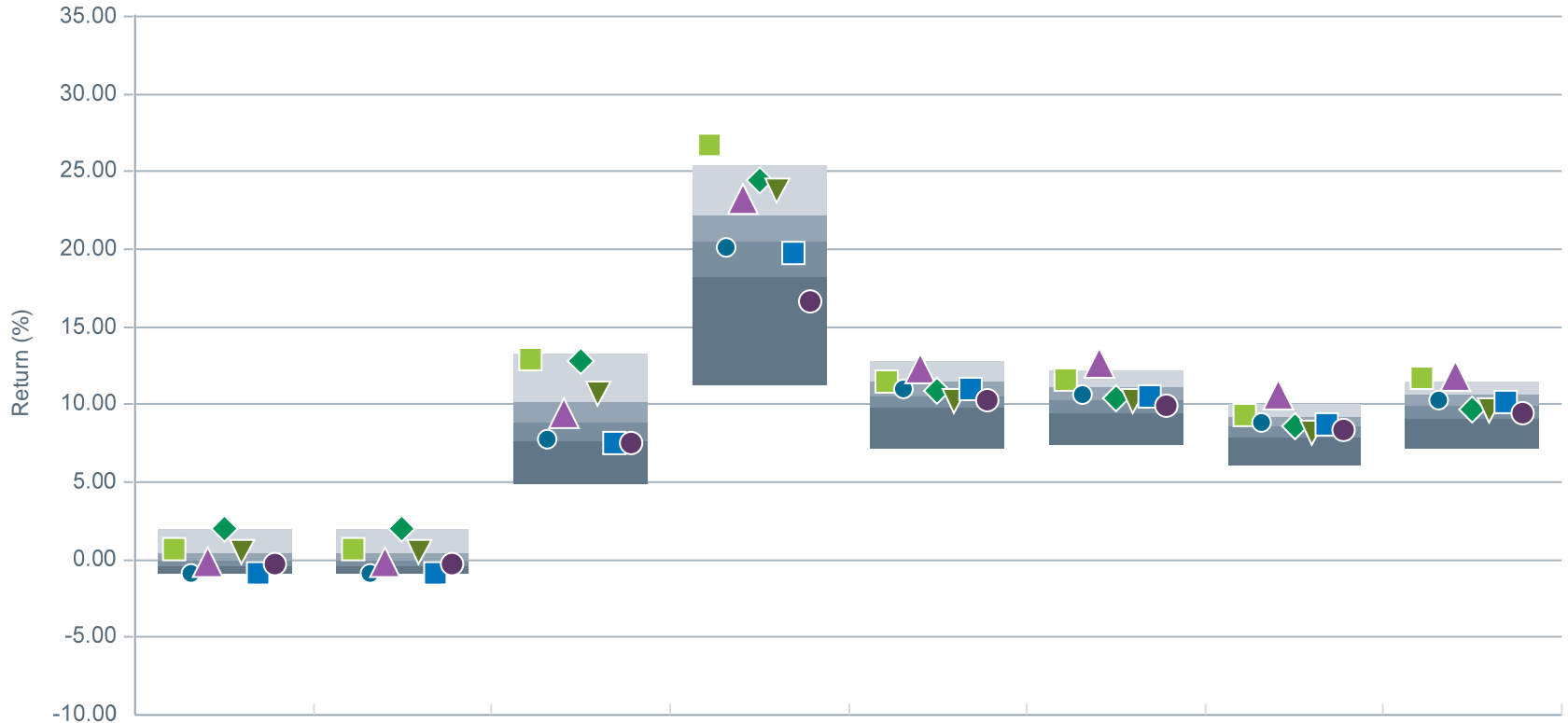
	Performance (%)											
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017
<b>Private Equity</b>												
<b>OTRS Private Equity</b>	14.79	14.79	50.60	60.18	29.27	25.15	21.21	19.89	17.27	17.73	23.03	13.89
R 2000 Index+4%	-3.42	-3.42	15.77	53.58	14.96	17.99	16.38	19.22	24.76	30.55	-7.45	19.23
Difference	18.21	18.21	34.83	6.60	14.31	7.16	4.83	0.67	-7.49	-12.82	30.48	-5.34
<b>OFPRS Private Equity</b>	10.16	10.16	42.36	50.61	19.69	18.65	17.06	N/A	7.49	6.45	18.91	19.03
Cambridge US Prvt Eq Index	0.00	0.00	24.50	39.06	19.19	18.64	15.33	15.85	21.77	13.86	10.24	18.01
Difference	10.16	10.16	17.86	11.55	0.50	0.01	1.73	N/A	-14.28	-7.41	8.67	1.02
<b>OPPRS Private Equity</b>	17.61	17.61	54.45	71.44	26.51	20.61	17.17	15.35	15.87	10.51	15.22	9.65
Cambridge US Prvt Eq Index	0.00	0.00	24.50	39.06	19.19	18.64	15.33	15.85	21.77	13.86	10.24	18.01
Difference	17.61	17.61	29.95	32.38	7.32	1.97	1.84	-0.50	-5.90	-3.35	4.98	-8.36
<b>OLERS Private Equity</b>	9.21	9.21	35.15	45.86	17.86	14.92	11.80	11.79	8.91	6.84	15.45	7.59
Cambridge US Prvt Eq Index	0.00	0.00	24.50	39.06	19.19	18.64	15.33	15.85	21.77	13.86	10.24	18.01
Difference	9.21	9.21	10.65	6.80	-1.33	-3.72	-3.53	-4.06	-12.86	-7.02	5.21	-10.42
<b>Other Alternatives</b>												
<b>OWCRS Alternative Investments</b>	-0.43	-0.43	6.50	14.14	5.37	5.61	4.03	4.18	2.74	15.31	-6.07	9.36
OWCRS Alternatives Custom Index	0.74	0.74	5.73	14.31	6.49	5.53	3.75	N/A	10.88	8.38	-4.02	7.06
Difference	-1.17	-1.17	0.77	-0.17	-1.12	0.08	0.28	N/A	-8.14	6.93	-2.05	2.30

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, 2021



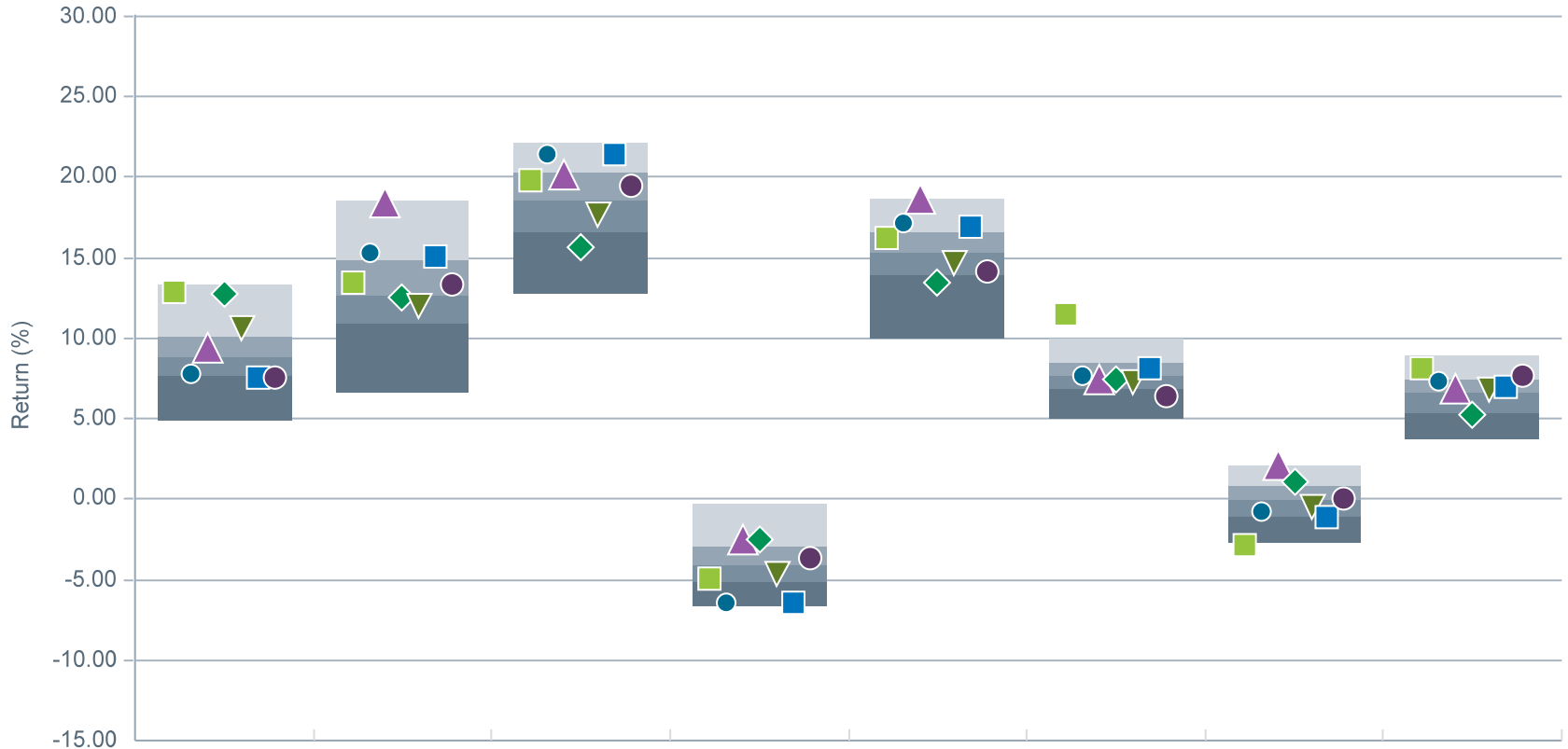
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OTRS (Teachers)	0.70 (18)	0.70 (18)	12.87 (6)	26.72 (3)	11.52 (25)	11.59 (14)	9.35 (20)	11.77 (4)
● OPERS (Public Employees)	-0.84 (96)	-0.84 (96)	7.78 (74)	20.08 (56)	11.05 (34)	10.67 (38)	8.84 (40)	10.28 (36)
▲ OFPRS (Firefighters)	-0.18 (61)	-0.18 (61)	9.41 (37)	23.21 (18)	12.36 (9)	12.67 (3)	10.69 (3)	11.82 (3)
◆ OPPRS (Police)	1.97 (7)	1.97 (7)	12.81 (6)	24.44 (9)	10.88 (40)	10.44 (45)	8.62 (49)	9.72 (58)
▼ OLERS (Law Enforcement)	0.55 (20)	0.55 (20)	10.70 (19)	23.82 (12)	10.22 (59)	10.26 (51)	8.27 (59)	9.73 (57)
■ URSJJ (Judges)	-0.93 (97)	-0.93 (97)	7.54 (78)	19.80 (60)	10.94 (39)	10.57 (42)	8.75 (42)	10.11 (43)
● OWCRS (Wildlife)	-0.25 (66)	-0.25 (66)	7.50 (80)	16.66 (88)	10.27 (57)	9.98 (60)	8.40 (55)	9.38 (68)
5th Percentile	2.04	2.04	13.29	25.43	12.81	12.16	10.09	11.51
1st Quartile	0.40	0.40	10.11	22.20	11.49	11.07	9.21	10.60
Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94
3rd Quartile	-0.41	-0.41	7.68	18.19	9.76	9.47	7.89	9.08
95th Percentile	-0.83	-0.83	4.87	11.26	7.17	7.39	6.10	7.15

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, 2021



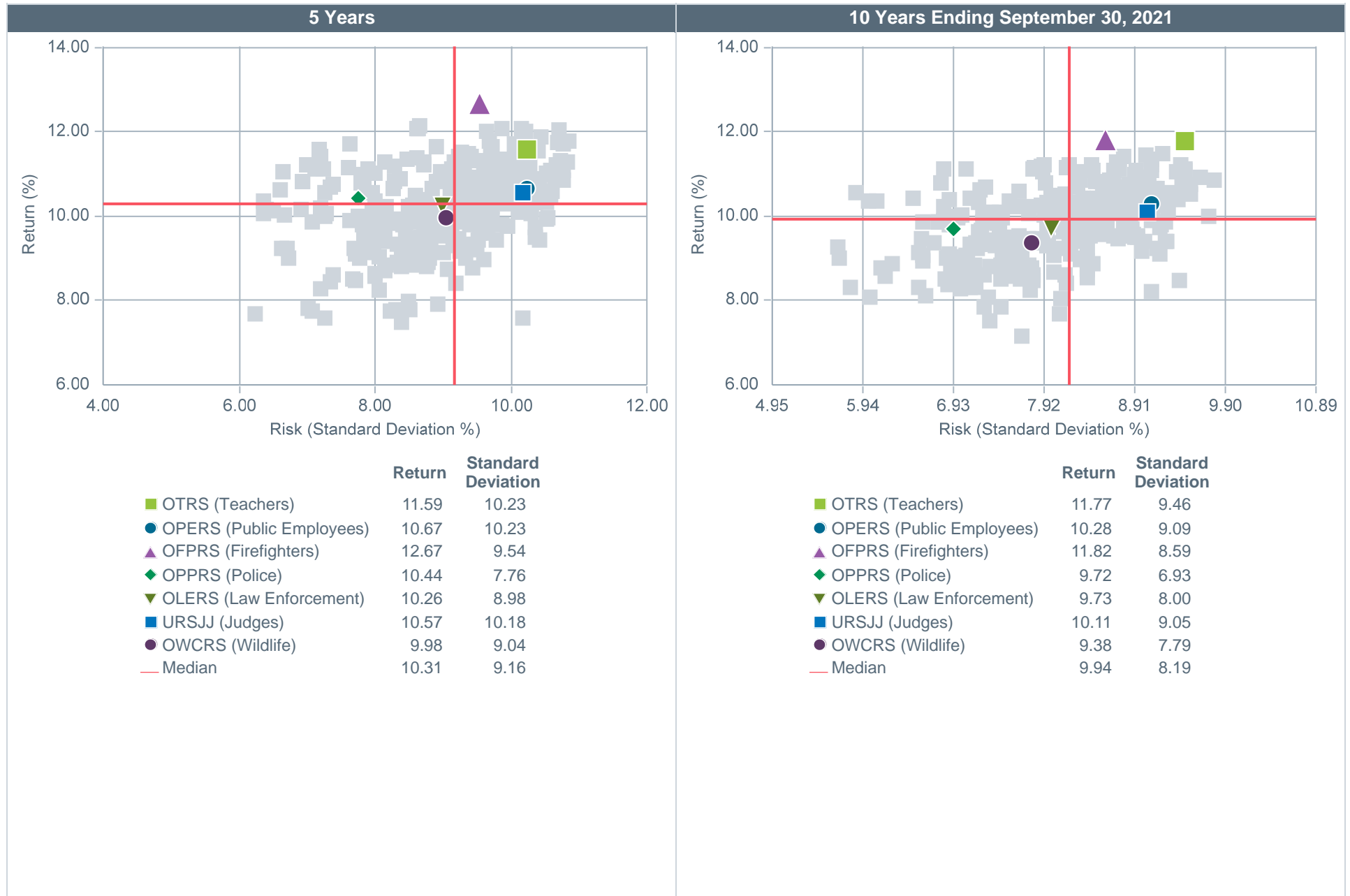
	CYTD	2020	2019	2018	2017	2016	2015	2014
OTRS (Teachers)	12.87 (6)	13.45 (40)	19.83 (32)	-4.98 (72)	16.20 (33)	11.54 (1)	-2.90 (96)	8.16 (12)
OPERS (Public Employees)	7.78 (74)	15.34 (20)	21.38 (12)	-6.48 (93)	17.13 (17)	7.69 (49)	-0.77 (65)	7.37 (28)
OFPRS (Firefighters)	9.41 (37)	18.44 (6)	20.15 (28)	-2.46 (19)	18.67 (5)	7.42 (58)	2.12 (6)	6.91 (41)
OPPRS (Police)	12.81 (6)	12.54 (52)	15.68 (84)	-2.46 (19)	13.40 (82)	7.47 (56)	1.05 (19)	5.20 (80)
OLERS (Law Enforcement)	10.70 (19)	12.03 (59)	17.70 (61)	-4.55 (60)	14.71 (61)	7.32 (61)	-0.37 (58)	6.83 (45)
URSJJ (Judges)	7.54 (78)	15.10 (23)	21.40 (11)	-6.38 (92)	16.89 (21)	8.09 (37)	-1.07 (75)	7.00 (37)
OWCRS (Wildlife)	7.50 (80)	13.34 (41)	19.46 (37)	-3.68 (42)	14.13 (71)	6.39 (85)	0.05 (47)	7.71 (19)
5th Percentile	13.29	18.53	22.15	-0.35	18.65	9.96	2.13	8.98
1st Quartile	10.11	14.87	20.27	-2.95	16.63	8.44	0.90	7.43
Median	8.83	12.61	18.52	-4.13	15.30	7.64	-0.07	6.59
3rd Quartile	7.68	10.95	16.62	-5.13	13.91	6.81	-1.10	5.35
95th Percentile	4.87	6.68	12.74	-6.71	10.03	5.01	-2.75	3.73

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



All Plans

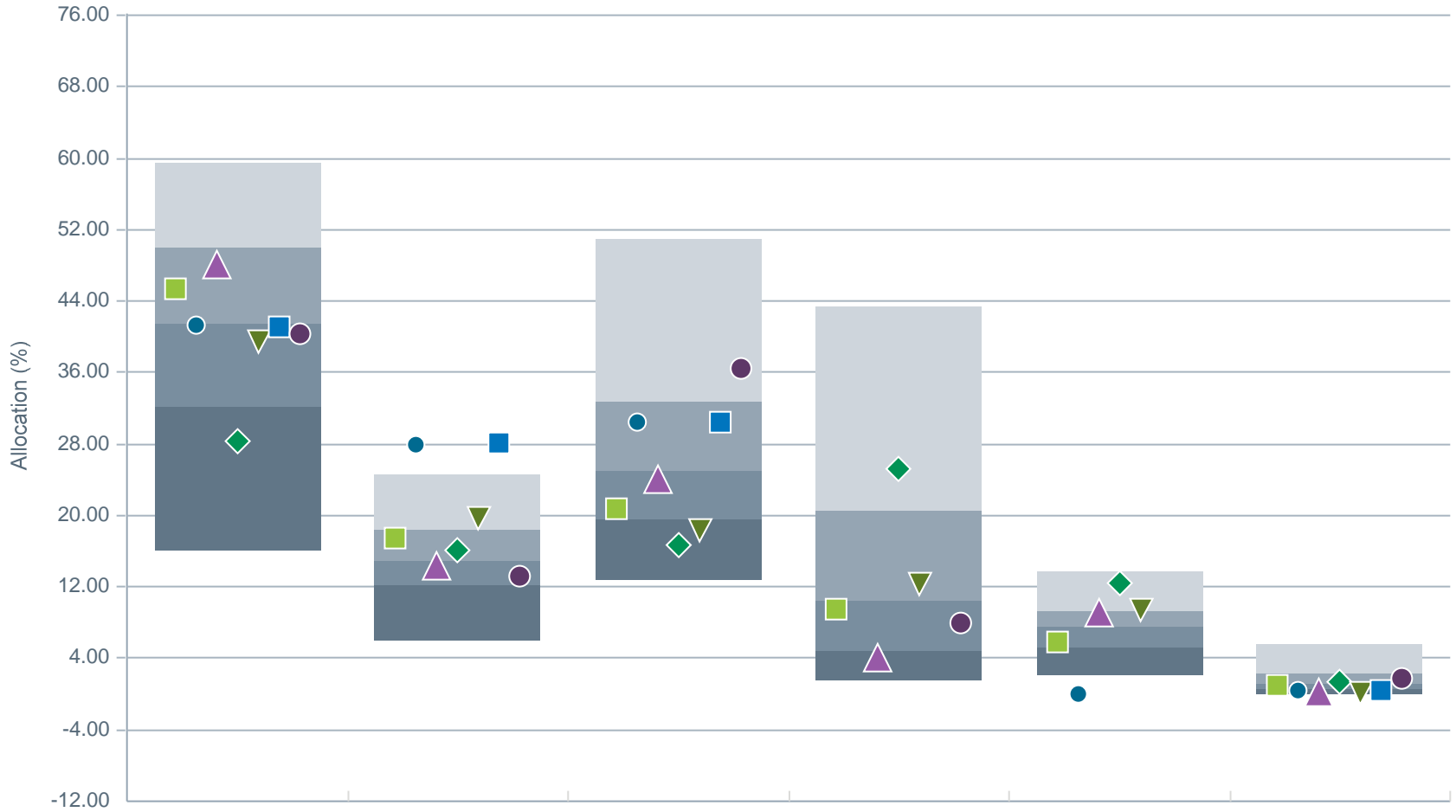
Total Fund Risk & Return vs. All Public Plans-Total Fund



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

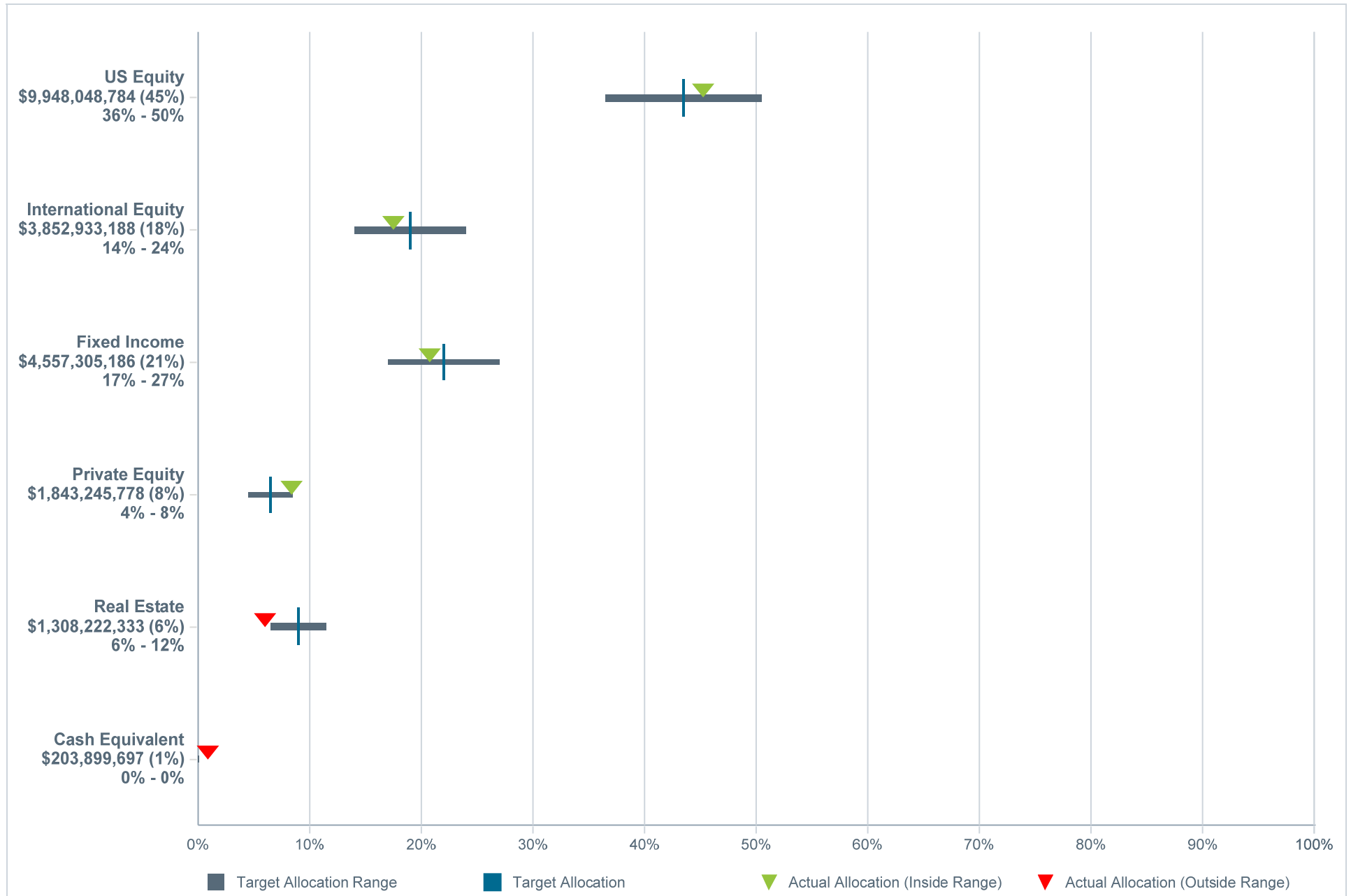
Oklahoma State Pension Commission  
 All Plans Total Fund vs. All Public Plans-Total Fund  
 Plan Sponsor TF Asset Allocation

As of September 30, 2021

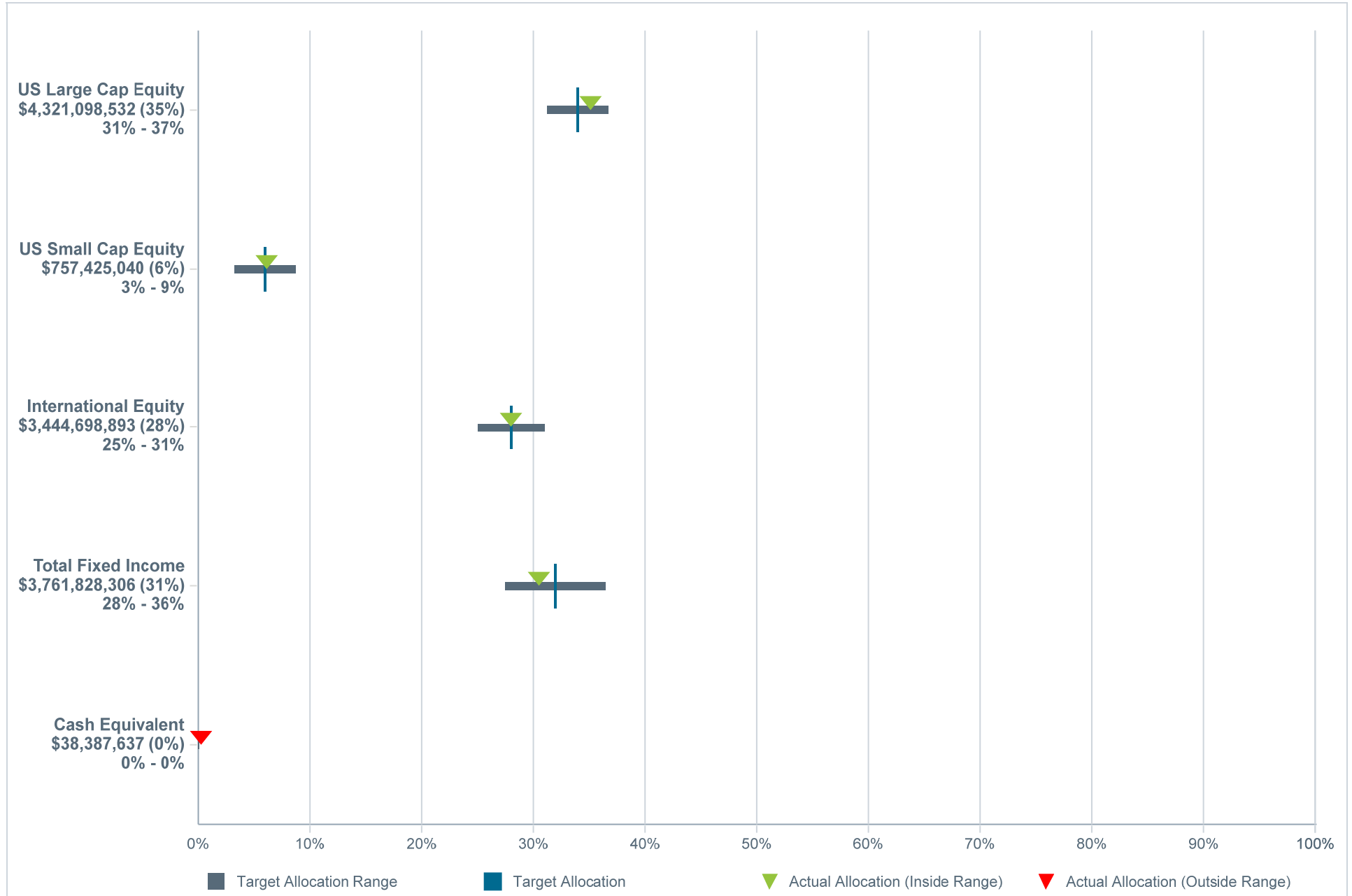


	US Equity	Global ex-US Equity	Total Fixed Income	Alternatives	Total Real Estate	Cash & Equivalents
OTRS (Teachers)	45.29	17.54	20.75	9.54	5.81	0.93
OPERS (Public Employees)	41.21	27.95	30.45	N/A	0.08	0.31
OFPRS (Firefighters)	48.16	14.40	24.06	4.10	9.08	0.21
OPPRS (Police)	28.29	16.09	16.74	25.16	12.42	1.31
OLERS (Law Enforcement)	39.60	19.75	18.44	12.36	9.60	0.26
URSJJ (Judges)	41.11	28.04	30.42	N/A	N/A	0.42
OWCRS (Wildlife)	40.43	13.20	36.52	8.06	N/A	1.79
Median	41.47	14.86	25.03	10.46	7.66	1.13

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.

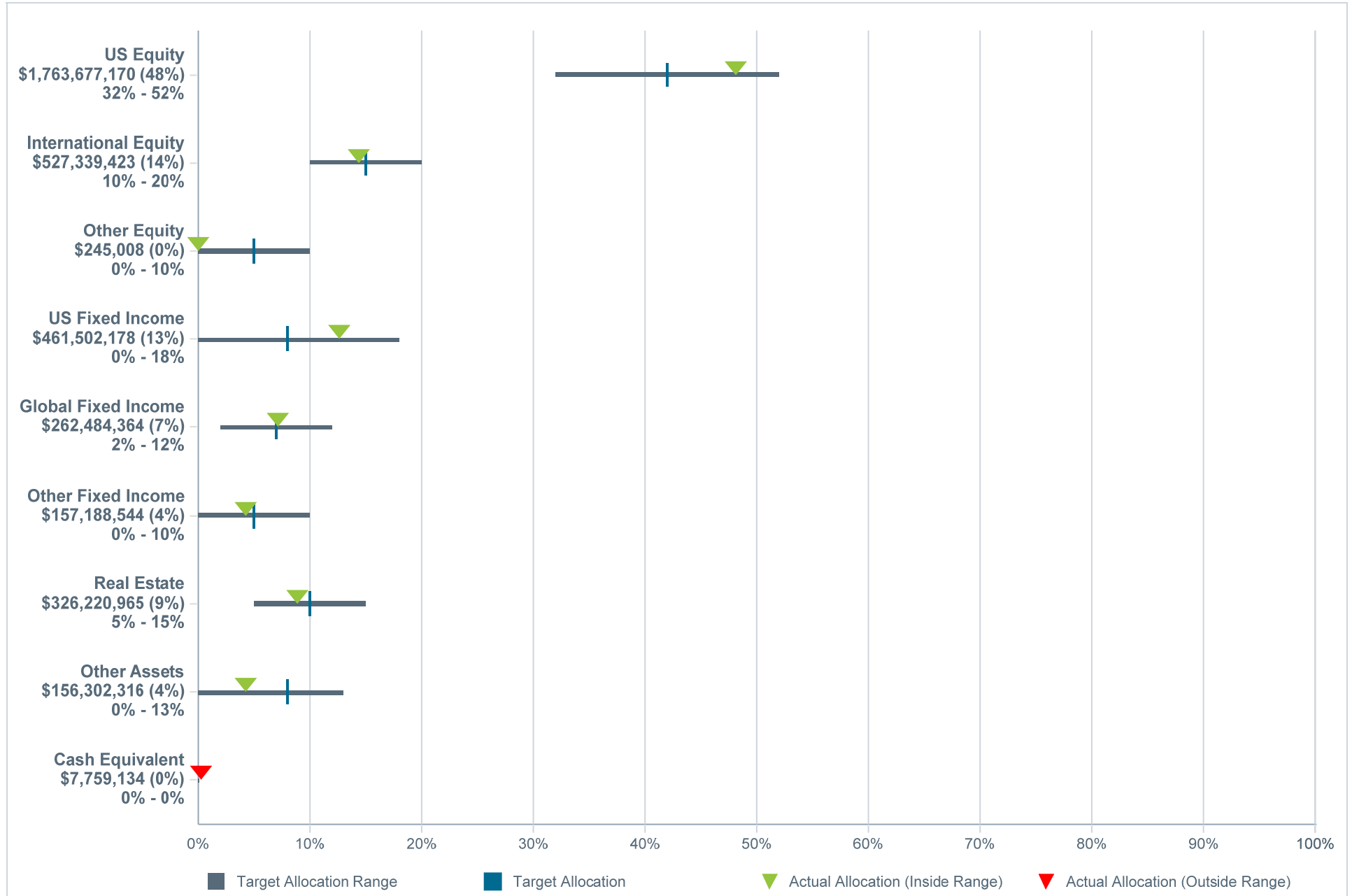


Allocations shown may not sum up to 100% exactly due to rounding. Cash held in short-term investments with the Master Custodian and direct real estate holdings shall be considered as U.S. fixed income for rebalancing purposes.



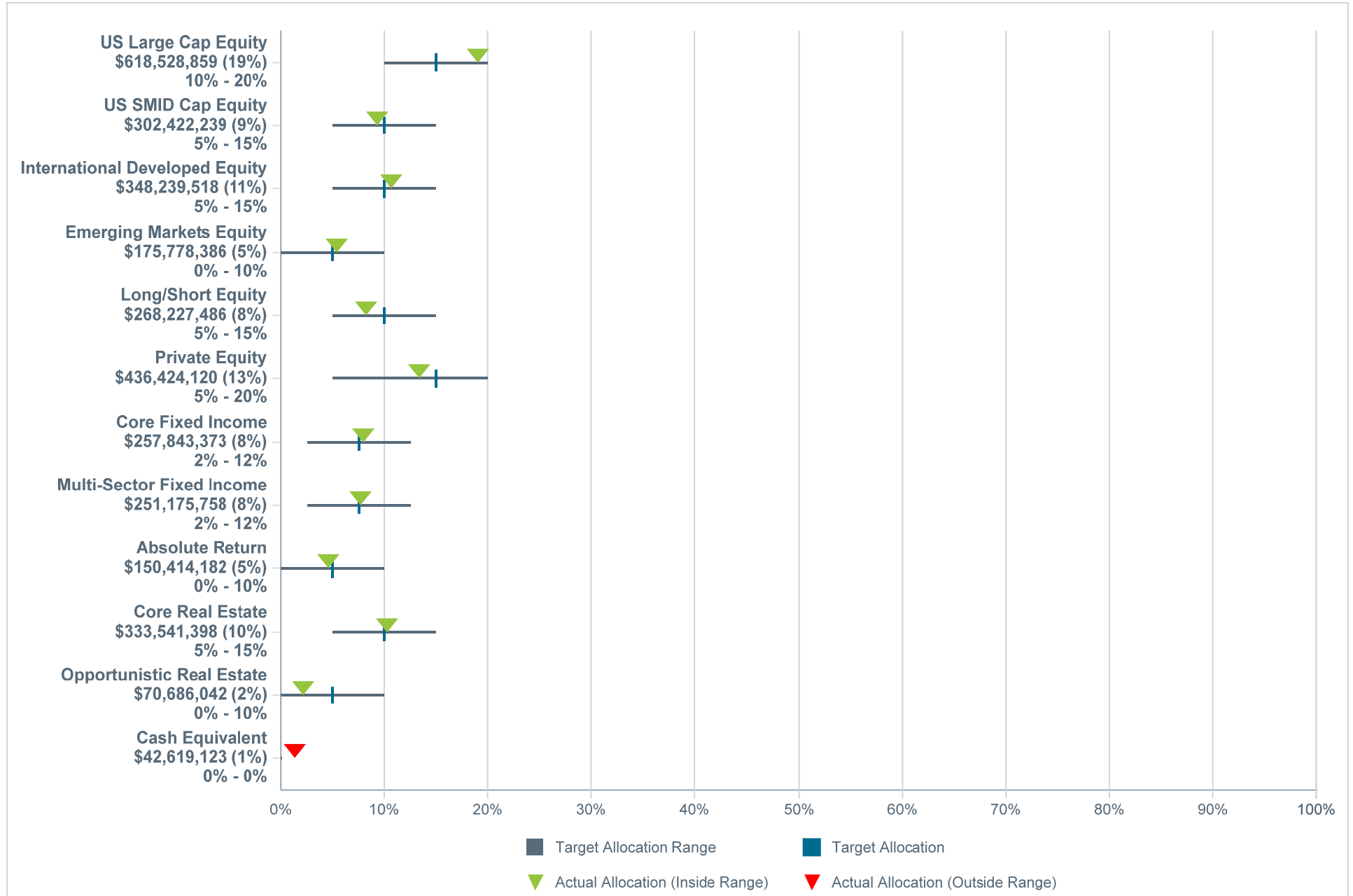
Oklahoma State Pension Commission  
 Oklahoma Firefighters Pension & Retirement System  
 Asset Allocation vs. Target Allocation

As of September 30, 2021

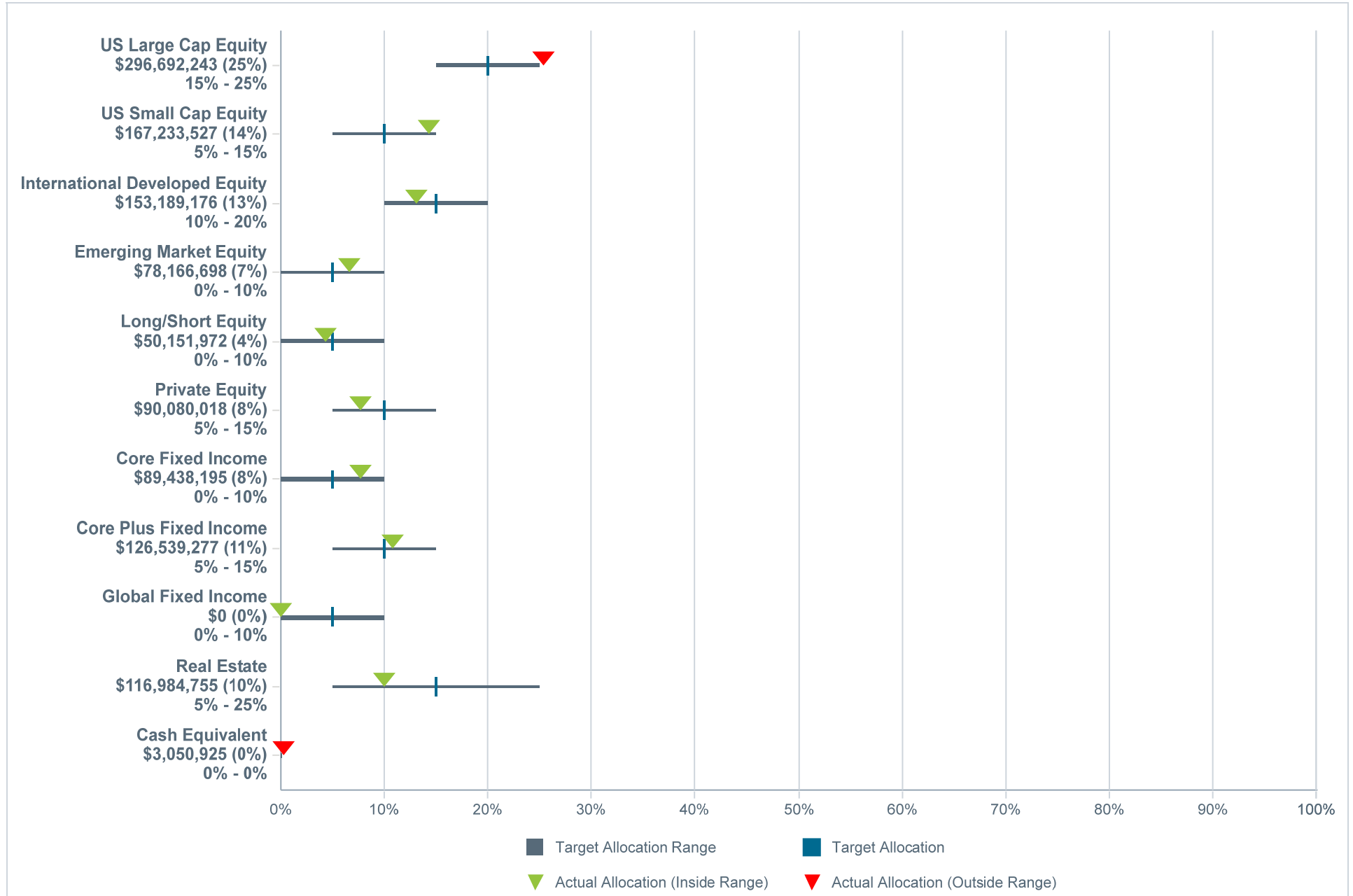


Allocations shown may not sum up to 100% exactly due to rounding. Allocation to Other Equity includes opportunistic equity; Other Fixed Income includes non-core Fixed Income; and Other Assets include Hedge Funds and Private Equity.





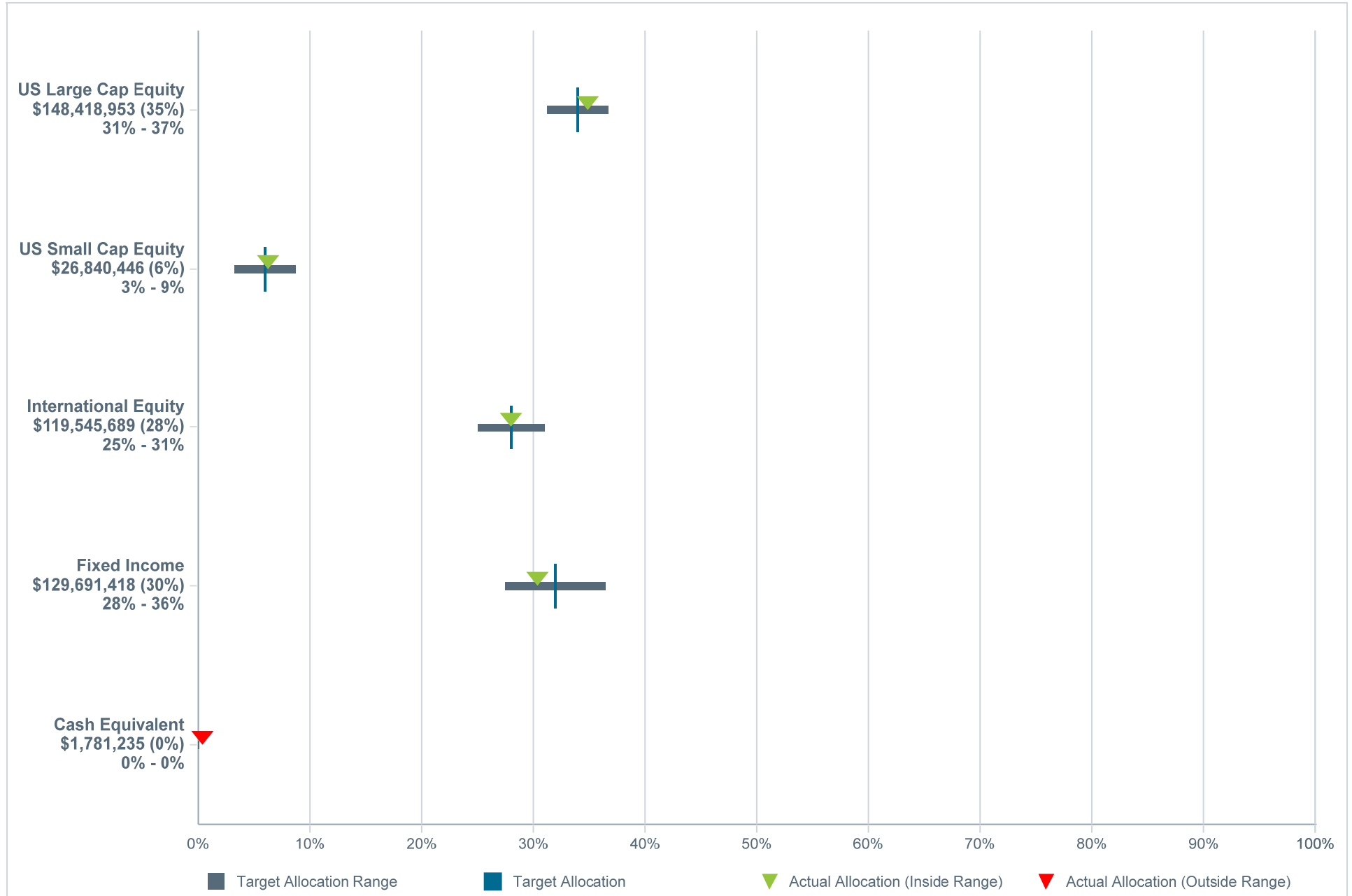
Allocations shown may not sum up to 100% exactly due to rounding. Allocation to Multi-Sector Fixed Income includes Private Credit.



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.

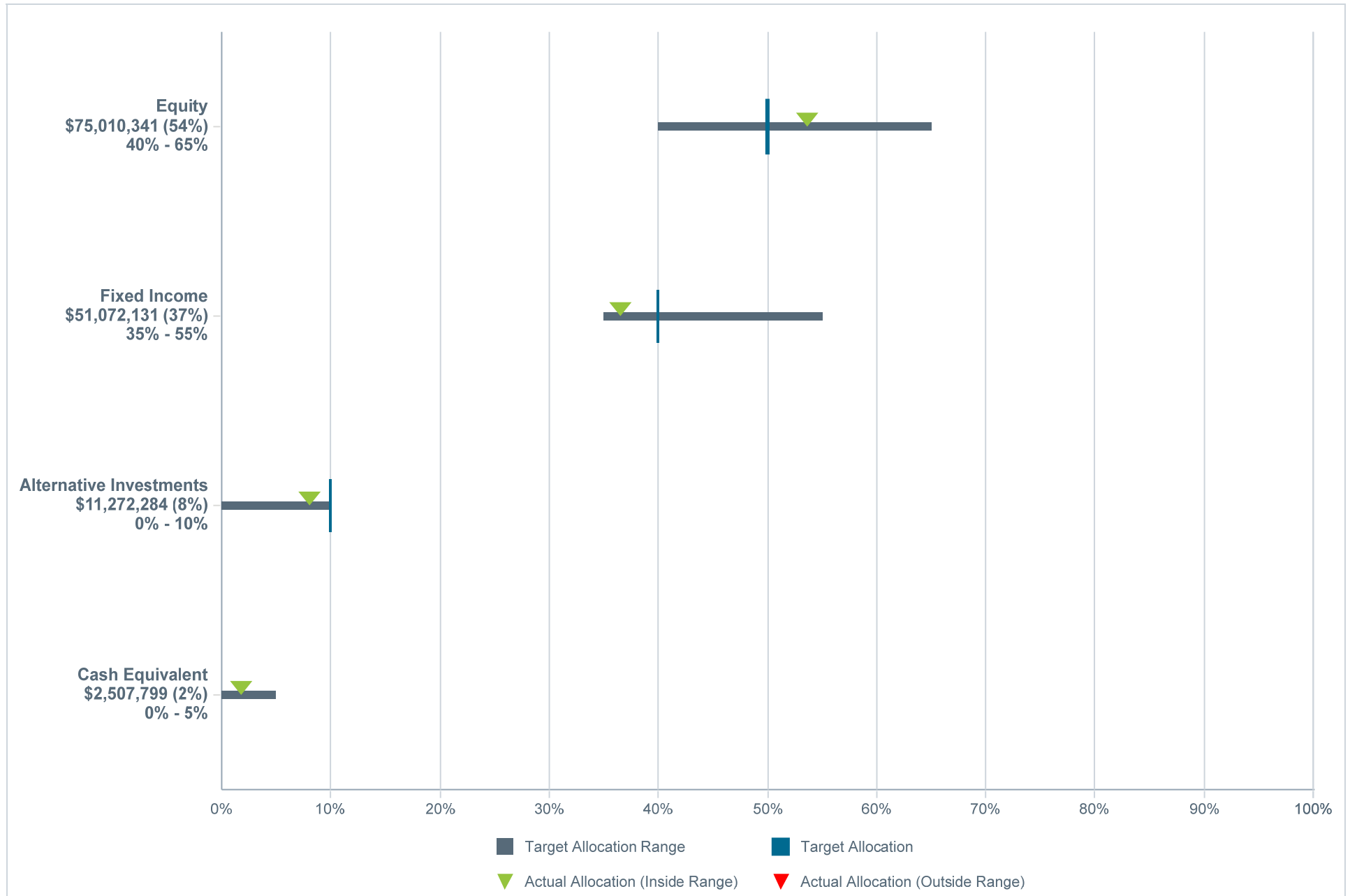
Oklahoma State Pension Commission  
 Uniform Retirement System for Justices & Judges  
 Asset Allocation vs. Target Allocation

As of September 30, 2021



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.





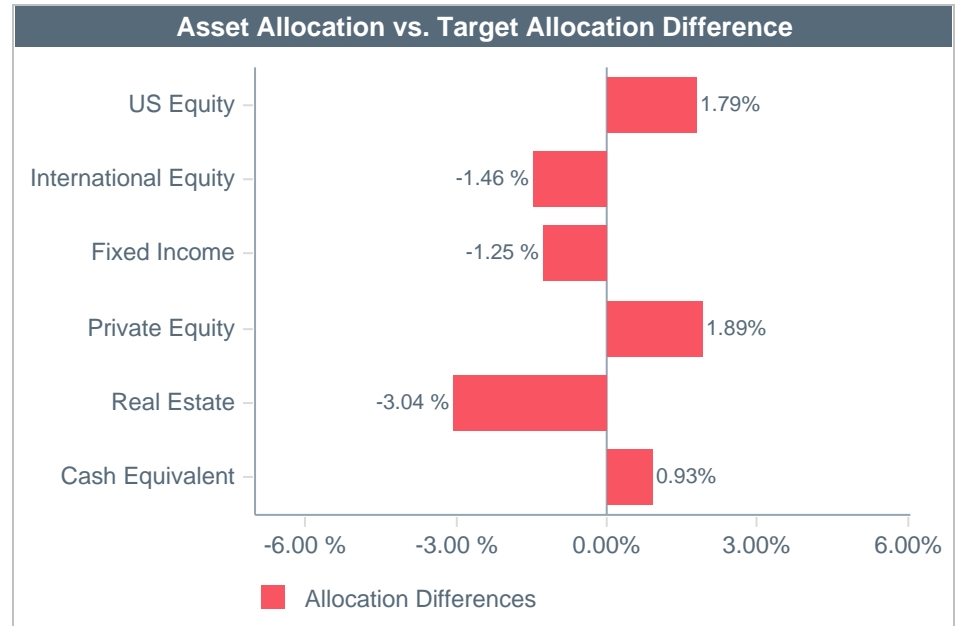
Allocations shown may not sum up to 100% exactly due to rounding.

# Oklahoma Teachers' Retirement System (OTRS)



	Performance (%)												
	Trailing							Calendar Year					
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
<b>OTRS Total Fund (Net)</b>	<b>0.65</b>	<b>0.65</b>	<b>12.70</b>	<b>26.47</b>	<b>11.25</b>	<b>11.27</b>	<b>8.99</b>	<b>11.37</b>	<b>13.22</b>	<b>19.48</b>	<b>-5.29</b>	<b>15.83</b>	<b>11.02</b>
OTRS Policy Index	-0.15	-0.15	9.93	23.47	11.89	11.44	9.33	11.09	15.24	21.72	-4.75	15.16	10.65
Difference	0.80	0.80	2.77	3.00	-0.64	-0.17	-0.34	0.28	-2.02	-2.24	-0.54	0.67	0.37
OTRS Actual Allocation Index	-0.35	-0.35	10.42	24.50	11.85	11.33	9.49	11.19	16.98	18.94	-4.70	14.35	10.93
Difference	1.00	1.00	2.28	1.97	-0.60	-0.06	-0.50	0.18	-3.76	0.54	-0.59	1.48	0.09
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	-1.06	-1.06	7.49	19.47	4.25	4.27	1.99	4.37	6.22	12.48	-12.29	8.83	4.02
<b>OTRS Total Fund (Gross)</b>	<b>0.70</b>	<b>0.70</b>	<b>12.87</b>	<b>26.72</b>	<b>11.52</b>	<b>11.59</b>	<b>9.35</b>	<b>11.77</b>	<b>13.45</b>	<b>19.83</b>	<b>-4.98</b>	<b>16.20</b>	<b>11.54</b>
OTRS Policy Index	-0.15	-0.15	9.93	23.47	11.89	11.44	9.33	11.09	15.24	21.72	-4.75	15.16	10.65
Difference	0.85	0.85	2.94	3.25	-0.37	0.15	0.02	0.68	-1.79	-1.89	-0.23	1.04	0.89
OTRS Actual Allocation Index	-0.35	-0.35	10.42	24.50	11.85	11.33	9.49	11.19	16.98	18.94	-4.70	14.35	10.93
Difference	1.05	1.05	2.45	2.22	-0.33	0.26	-0.14	0.58	-3.53	0.89	-0.28	1.85	0.61
All Public Plans-Total Fund Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	12.61	18.52	-4.13	15.30	7.64
Rank	18	18	6	3	25	14	20	4	40	32	72	33	1

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
<b>OTRS (Teachers)</b>	<b>21,967,242,569</b>	<b>100.00</b>	<b>100.00</b>
US Equity	9,948,048,784	45.29	43.50
International Equity	3,852,933,188	17.54	19.00
Fixed Income	4,557,305,186	20.75	22.00
Private Equity	1,843,245,778	8.39	6.50
Real Estate	1,308,222,333	5.96	9.00
Cash Equivalent	203,899,697	0.93	0.00



Parentheses contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding. Opportunistic Fixed Income accounts for 1.24% of the Total Fund. Please refer to 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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>OTRS Total Fund</b>	<b>21,967,242,569</b>	<b>100.00</b>	<b>0.65</b>	<b>0.65</b>	<b>12.70</b>	<b>26.47</b>	<b>11.25</b>	<b>11.27</b>	<b>8.99</b>	<b>11.37</b>	<b>9.35</b>	<b>12/01/1991</b>
OTRS Policy Index			-0.15	-0.15	9.93	23.47	11.89	11.44	9.33	11.09	9.40	
Difference			0.80	0.80	2.77	3.00	-0.64	-0.17	-0.34	0.28	-0.05	
OTRS Actual Allocation Index			-0.35	-0.35	10.42	24.50	11.85	11.33	9.49	11.19	N/A	
Difference			1.00	1.00	2.28	1.97	-0.60	-0.06	-0.50	0.18	N/A	
Actuarial Discount Rate (7.0%)			1.71	1.71	5.21	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			-1.06	-1.06	7.49	19.47	4.25	4.27	1.99	4.37	2.35	
<b>US Equity</b>	<b>9,948,048,784</b>	<b>45.29</b>	<b>-1.20</b>	<b>-1.20</b>	<b>15.10</b>	<b>36.40</b>	<b>12.21</b>	<b>14.68</b>	<b>11.93</b>	<b>15.49</b>	<b>11.17</b>	<b>04/01/1990</b>
Russell 3000 Index			-0.10	-0.10	14.99	31.88	16.00	16.85	13.93	16.60	10.79	
Difference			-1.10	-1.10	0.11	4.52	-3.79	-2.17	-2.00	-1.11	0.38	
<b>US Active Equity</b>	<b>3,361,368,307</b>	<b>15.30</b>	<b>-2.41</b>	<b>-2.41</b>	<b>16.05</b>	<b>47.55</b>	<b>13.16</b>	<b>15.39</b>	<b>12.42</b>	<b>15.68</b>	<b>9.43</b>	<b>12/01/1998</b>
Russell 3000 Index			-0.10	-0.10	14.99	31.88	16.00	16.85	13.93	16.60	8.29	
Difference			-2.31	-2.31	1.06	15.67	-2.84	-1.46	-1.51	-0.92	1.14	
<b>Hotchkis &amp; Wiley Mid Cap Value Equity (SA)</b>	<b>506,599,334</b>	<b>2.31</b>	<b>-2.34</b>	<b>-2.34</b>	<b>28.48</b>	<b>81.35</b>	<b>2.95</b>	<b>7.79</b>	<b>5.54</b>	<b>13.51</b>	<b>10.82</b>	<b>08/01/2002</b>
Russell Mid Cap Val Index			-1.01	-1.01	18.24	42.40	10.28	10.59	9.60	13.93	10.96	
Difference			-1.33	-1.33	10.24	38.95	-7.33	-2.80	-4.06	-0.42	-0.14	
<b>Wellington Mid Cap Growth (SA)</b>	<b>595,004,159</b>	<b>2.71</b>	<b>-0.22</b>	<b>-0.22</b>	<b>10.41</b>	<b>30.21</b>	<b>18.63</b>	<b>21.45</b>	<b>15.79</b>	<b>17.48</b>	<b>11.71</b>	<b>09/01/1998</b>
Russell Mid Cap Grth Index			-0.76	-0.76	9.61	30.45	19.14	19.27	15.39	17.54	10.94	
Difference			0.54	0.54	0.80	-0.24	-0.51	2.18	0.40	-0.06	0.77	
<b>Frontier Small Cap Value Equity (SA)</b>	<b>289,462,927</b>	<b>1.32</b>	<b>-1.98</b>	<b>-1.98</b>	<b>24.51</b>	<b>67.88</b>	<b>8.46</b>	<b>10.71</b>	<b>10.54</b>	<b>N/A</b>	<b>10.60</b>	<b>06/01/2013</b>
Russell 2000 Val Index			-2.98	-2.98	22.92	63.92	8.58	11.03	10.19	13.22	9.93	
Difference			1.00	1.00	1.59	3.96	-0.12	-0.32	0.35	N/A	0.67	
<b>Neumeier Poma Small Cap Equity (SA)</b>	<b>334,940,015</b>	<b>1.52</b>	<b>-1.05</b>	<b>-1.05</b>	<b>13.72</b>	<b>37.01</b>	<b>9.65</b>	<b>13.42</b>	<b>12.81</b>	<b>N/A</b>	<b>13.25</b>	<b>06/01/2013</b>
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	11.64	
Difference			3.31	3.31	1.31	-10.67	-0.89	-0.03	0.91	N/A	1.61	
<b>Shapiro Enhanced Small Cap Equity (SA)</b>	<b>992,497,936</b>	<b>4.52</b>	<b>-5.37</b>	<b>-5.37</b>	<b>18.55</b>	<b>55.07</b>	<b>8.84</b>	<b>12.89</b>	<b>10.70</b>	<b>14.76</b>	<b>10.06</b>	<b>02/01/1998</b>
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	8.57	
Difference			-1.01	-1.01	6.14	7.39	-1.70	-0.56	-1.20	0.13	1.49	
<b>Geneva US Small Cap Growth Equity (SA)</b>	<b>316,740,902</b>	<b>1.44</b>	<b>-1.95</b>	<b>-1.95</b>	<b>6.10</b>	<b>32.65</b>	<b>13.33</b>	<b>18.20</b>	<b>16.62</b>	<b>N/A</b>	<b>15.70</b>	<b>06/01/2013</b>
Russell 2000 Grth Index			-5.65	-5.65	2.82	33.27	11.70	15.34	13.19	15.74	13.01	
Difference			3.70	3.70	3.28	-0.62	1.63	2.86	3.43	N/A	2.69	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Wasatch Small Cap Core Growth (SA)</b>	<b>326,123,034</b>	<b>1.48</b>	<b>0.13</b>	<b>0.13</b>	<b>15.01</b>	<b>45.56</b>	<b>21.23</b>	<b>22.64</b>	<b>19.13</b>	<b>N/A</b>	<b>17.06</b>	<b>06/01/2013</b>
Russell 2000 Grth Index			-5.65	-5.65	2.82	33.27	11.70	15.34	13.19	15.74	13.01	
Difference			5.78	5.78	12.19	12.29	9.53	7.30	5.94	N/A	4.05	
<b>US Passive Equity (Cap Wgt)</b>	<b>3,482,754,222</b>	<b>15.85</b>	<b>-0.18</b>	<b>-0.18</b>	<b>15.25</b>	<b>33.40</b>	<b>15.88</b>	<b>16.47</b>	<b>13.67</b>	<b>N/A</b>	<b>14.61</b>	<b>04/01/2012</b>
<b>Northern Trust Russell 1000 Index (SA)</b>	<b>2,148,064,865</b>	<b>9.78</b>	<b>0.28</b>	<b>0.28</b>	<b>15.39</b>	<b>31.18</b>	<b>16.41</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>15.93</b>	<b>12/01/2017</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	15.94	
Difference			0.07	0.07	0.20	0.22	-0.02	N/A	N/A	N/A	-0.01	
<b>Northern Trust Russell Mid Cap Index (CF)</b>	<b>1,334,689,357</b>	<b>6.08</b>	<b>-0.93</b>	<b>-0.93</b>	<b>15.18</b>	<b>38.13</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>28.62</b>	<b>03/01/2020</b>
Russell Mid Cap Index			-0.93	-0.93	15.17	38.11	14.22	14.39	12.15	15.52	28.58	
Difference			0.00	0.00	0.01	0.02	N/A	N/A	N/A	N/A	0.04	
<b>US Passive Equity (Non-Cap Wgt)</b>	<b>3,103,926,246</b>	<b>14.13</b>	<b>-1.02</b>	<b>-1.02</b>	<b>13.70</b>	<b>28.05</b>	<b>11.44</b>	<b>13.63</b>	<b>11.66</b>	<b>N/A</b>	<b>13.61</b>	<b>04/01/2012</b>
NTGI SciBetUS HF Ex MulBeEW Gr			-1.02	-1.02	13.74	28.08	11.49	N/A	N/A	N/A	N/A	
Difference			0.00	0.00	-0.04	-0.03	-0.05	N/A	N/A	N/A	N/A	
<b>SciBeta US High FactorExposure Index (SA)</b>	<b>3,103,926,246</b>	<b>14.13</b>	<b>-1.02</b>	<b>-1.02</b>	<b>13.70</b>	<b>28.05</b>	<b>11.44</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>11.05</b>	<b>12/01/2017</b>
NTGI SciBetUS HF Ex MulBeEW Gr			-1.02	-1.02	13.74	28.08	11.49	N/A	N/A	N/A	11.07	
Difference			0.00	0.00	-0.04	-0.03	-0.05	N/A	N/A	N/A	-0.02	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>International Equity</b>	<b>3,852,933,188</b>	<b>17.54</b>	<b>-1.23</b>	<b>-1.23</b>	<b>9.67</b>	<b>28.13</b>	<b>8.64</b>	<b>9.76</b>	<b>6.86</b>	<b>9.07</b>	<b>8.11</b>	<b>02/01/1996</b>
MSCI ACW Ex US IM Index (USD) (Gross)			-2.45	-2.45	7.16	25.68	8.83	9.62	6.49	8.22	5.93	
Difference			1.22	1.22	2.51	2.45	-0.19	0.14	0.37	0.85	2.18	
<b>Causeway Intl Opportunities (SA)</b>	<b>630,252,990</b>	<b>2.87</b>	<b>-1.84</b>	<b>-1.84</b>	<b>7.47</b>	<b>32.31</b>	<b>6.75</b>	<b>8.72</b>	<b>5.09</b>	<b>8.48</b>	<b>8.43</b>	<b>05/01/2003</b>
MSCI ACW Ex US Val Index (USD) (Gross)			-2.14	-2.14	9.66	32.15	4.43	7.06	3.54	6.11	8.00	
Difference			0.30	0.30	-2.19	0.16	2.32	1.66	1.55	2.37	0.43	
<b>Allianz Best Styles AC Intl Equity (SA)</b>	<b>1,282,349,463</b>	<b>5.84</b>	<b>-3.31</b>	<b>-3.31</b>	<b>7.28</b>	<b>24.51</b>	<b>6.23</b>	<b>8.27</b>	<b>N/A</b>	<b>N/A</b>	<b>9.34</b>	<b>07/01/2016</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	10.39	
Difference			-0.43	-0.43	0.99	0.06	-2.29	-1.17	N/A	N/A	-1.05	
<b>Wellington Intl Quality Growth (SA)</b>	<b>740,039,727</b>	<b>3.37</b>	<b>-1.98</b>	<b>-1.98</b>	<b>8.22</b>	<b>21.93</b>	<b>13.89</b>	<b>13.86</b>	<b>N/A</b>	<b>N/A</b>	<b>14.32</b>	<b>07/01/2016</b>
MSCI ACW Ex US Grth Index (USD) (Gross)			-3.58	-3.58	2.90	17.27	12.30	11.59	8.64	9.69	12.27	
Difference			1.60	1.60	5.32	4.66	1.59	2.27	N/A	N/A	2.05	
<b>Wasatch International Small Cap Growth (SA)</b>	<b>474,673,426</b>	<b>2.16</b>	<b>5.59</b>	<b>5.59</b>	<b>12.93</b>	<b>27.64</b>	<b>13.22</b>	<b>13.35</b>	<b>12.14</b>	<b>N/A</b>	<b>13.65</b>	<b>12/01/2011</b>
MSCI ACW Ex US Sm Cap Index (USD) (Gross)			0.09	0.09	12.57	33.54	10.76	10.69	8.55	9.84	9.76	
Difference			5.50	5.50	0.36	-5.90	2.46	2.66	3.59	N/A	3.89	
<b>Wellington International Small Cap Equity (CF)</b>	<b>344,062,797</b>	<b>1.57</b>	<b>0.49</b>	<b>0.49</b>	<b>11.61</b>	<b>36.22</b>	<b>6.11</b>	<b>7.69</b>	<b>6.21</b>	<b>N/A</b>	<b>9.61</b>	<b>12/01/2011</b>
MSCI EAFE Sm Cap Index (USD) (Gross)			0.96	0.96	10.35	29.46	9.45	10.79	9.55	11.12	11.16	
Difference			-0.47	-0.47	1.26	6.76	-3.34	-3.10	-3.34	N/A	-1.55	
<b>SSGA Emerging Market Small Cap (CF)</b>	<b>381,554,786</b>	<b>1.74</b>	<b>-1.08</b>	<b>-1.08</b>	<b>19.56</b>	<b>41.69</b>	<b>11.63</b>	<b>10.15</b>	<b>N/A</b>	<b>N/A</b>	<b>9.78</b>	<b>09/01/2016</b>
MSCI Emg Mkts Sm Cap Index (USD) (Gross)			-2.00	-2.00	17.56	43.79	13.53	10.14	6.52	7.55	10.25	
Difference			0.92	0.92	2.00	-2.10	-1.90	0.01	N/A	N/A	-0.47	
<b>Fixed Income</b>	<b>4,557,305,186</b>	<b>20.75</b>	<b>0.36</b>	<b>0.36</b>	<b>-0.66</b>	<b>1.43</b>	<b>7.44</b>	<b>4.90</b>	<b>4.82</b>	<b>5.27</b>	<b>6.88</b>	<b>04/01/1990</b>
OTRS Fixed Income Blended Benchmark			0.32	0.32	0.28	2.68	5.82	4.01	4.06	4.33	N/A	
Difference			0.04	0.04	-0.94	-1.25	1.62	0.89	0.76	0.94	N/A	
<b>Loomis Sayles Multisector Full Discretion (SA)</b>	<b>1,229,536,410</b>	<b>5.60</b>	<b>0.16</b>	<b>0.16</b>	<b>1.30</b>	<b>6.65</b>	<b>8.05</b>	<b>5.30</b>	<b>4.75</b>	<b>5.35</b>	<b>6.23</b>	<b>07/01/1999</b>
OTRS Fixed Income Blended Benchmark			0.32	0.32	0.28	2.68	5.82	4.01	4.06	4.33	5.50	
Difference			-0.16	-0.16	1.02	3.97	2.23	1.29	0.69	1.02	0.73	
<b>Mackay Shields Core+ Extended Discretion (SA)</b>	<b>1,190,963,438</b>	<b>5.42</b>	<b>0.61</b>	<b>0.61</b>	<b>2.04</b>	<b>5.30</b>	<b>7.35</b>	<b>4.63</b>	<b>3.99</b>	<b>4.54</b>	<b>5.22</b>	<b>11/01/2004</b>
OTRS Fixed Income Blended Benchmark			0.32	0.32	0.28	2.68	5.82	4.01	4.06	4.33	5.03	
Difference			0.29	0.29	1.76	2.62	1.53	0.62	-0.07	0.21	0.19	
<b>Lord Abbett Core Plus Full Discretion (SA)</b>	<b>1,157,500,759</b>	<b>5.27</b>	<b>0.26</b>	<b>0.26</b>	<b>1.19</b>	<b>3.94</b>	<b>6.22</b>	<b>3.80</b>	<b>3.88</b>	<b>4.18</b>	<b>5.09</b>	<b>11/01/2004</b>
OTRS Fixed Income Blended Benchmark			0.32	0.32	0.28	2.68	5.82	4.01	4.06	4.33	5.03	
Difference			-0.06	-0.06	0.91	1.26	0.40	-0.21	-0.18	-0.15	0.06	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Hoisington Active Duration Long Bonds (SA)</b>	<b>979,304,579</b>	<b>4.46</b>	<b>0.43</b>	<b>0.43</b>	<b>-8.65</b>	<b>-11.59</b>	<b>10.58</b>	<b>3.63</b>	<b>6.07</b>	<b>4.82</b>	<b>7.17</b>	<b>11/01/2004</b>
Bloomberg US Trsy Index			0.09	0.09	-2.50	-3.30	4.89	2.23	2.71	2.21	3.57	
Difference			0.34	0.34	-6.15	-8.29	5.69	1.40	3.36	2.61	3.60	
<b>Private Equity</b>	<b>1,843,245,778</b>	<b>8.39</b>	<b>14.79</b>	<b>14.79</b>	<b>50.60</b>	<b>60.18</b>	<b>29.27</b>	<b>25.15</b>	<b>21.21</b>	<b>19.89</b>	<b>21.79</b>	<b>07/01/2015</b>
R 2000 Index+4%			-3.42	-3.42	15.77	53.58	14.96	17.99	16.38	19.22	15.36	
Difference			18.21	18.21	34.83	6.60	14.31	7.16	4.83	0.67	6.43	
<b>Franklin Park Private Equity LP</b>	<b>1,831,094,941</b>	<b>8.34</b>	<b>14.90</b>	<b>14.90</b>	<b>50.79</b>	<b>60.40</b>	<b>29.55</b>	<b>25.55</b>	<b>21.52</b>	<b>13.19</b>	<b>21.91</b>	<b>07/01/2015</b>
<b>Legacy Private Equity LP</b>	<b>12,150,837</b>	<b>0.06</b>	<b>1.03</b>	<b>1.03</b>	<b>27.34</b>	<b>33.83</b>	<b>5.32</b>	<b>4.17</b>	<b>4.69</b>	<b>7.63</b>	<b>4.12</b>	<b>10/01/2008</b>
<b>Special Opportunities</b>	<b>252,322,460</b>	<b>1.15</b>	<b>4.04</b>	<b>4.04</b>	<b>14.79</b>	<b>19.39</b>	<b>5.53</b>	<b>7.99</b>	<b>N/A</b>	<b>N/A</b>	<b>7.55</b>	<b>07/01/2015</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.38	
Difference			3.99	3.99	16.35	20.29	0.18	5.05	N/A	N/A	4.17	
<b>PIMCO Bravo LP</b>	<b>81,057</b>	<b>0.00</b>	<b>-2.21</b>	<b>-2.21</b>	<b>-28.23</b>	<b>-34.54</b>	<b>-47.93</b>	<b>-23.75</b>	<b>-132.11</b>	<b>-148.45</b>	<b>-150.60</b>	<b>03/01/2011</b>
<b>PIMCO Bravo II LP</b>	<b>37,916,226</b>	<b>0.17</b>	<b>5.40</b>	<b>5.40</b>	<b>29.01</b>	<b>29.65</b>	<b>3.23</b>	<b>5.73</b>	<b>6.42</b>	<b>N/A</b>	<b>8.26</b>	<b>03/01/2013</b>
<b>PIMCO Bravo III LP</b>	<b>170,530,497</b>	<b>0.78</b>	<b>3.27</b>	<b>3.27</b>	<b>11.50</b>	<b>16.38</b>	<b>6.97</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.88</b>	<b>04/01/2017</b>
<b>PIMCO COF II LP</b>	<b>43,794,680</b>	<b>0.20</b>	<b>5.69</b>	<b>5.69</b>	<b>16.11</b>	<b>22.72</b>	<b>7.37</b>	<b>10.69</b>	<b>N/A</b>	<b>N/A</b>	<b>10.69</b>	<b>10/01/2016</b>
Bloomberg US Unv Bond Index			0.07	0.07	-1.07	0.20	5.57	3.30	3.56	3.46	3.30	
Difference			5.62	5.62	17.18	22.52	1.80	7.39	N/A	N/A	7.39	
<b>Real Estate</b>	<b>1,308,222,333</b>	<b>5.96</b>	<b>3.86</b>	<b>3.86</b>	<b>6.01</b>	<b>7.09</b>	<b>3.55</b>	<b>4.83</b>	<b>N/A</b>	<b>N/A</b>	<b>6.39</b>	<b>07/01/2015</b>
NCREIF Property Index			5.23	5.23	10.88	12.15	6.72	6.84	8.10	8.99	7.46	
Difference			-1.37	-1.37	-4.87	-5.06	-3.17	-2.01	N/A	N/A	-1.07	
<b>AEW Core Property Trust (CF)</b>	<b>351,304,486</b>	<b>1.60</b>	<b>3.27</b>	<b>3.27</b>	<b>7.04</b>	<b>7.24</b>	<b>4.86</b>	<b>5.74</b>	<b>6.95</b>	<b>7.52</b>	<b>7.31</b>	<b>07/01/2011</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	9.04	
Difference			-3.14	-3.14	-5.37	-6.40	-1.27	-0.82	-0.98	-1.40	-1.73	
<b>Heitman America Real Estate (CF)</b>	<b>342,205,979</b>	<b>1.56</b>	<b>3.95</b>	<b>3.95</b>	<b>7.50</b>	<b>8.68</b>	<b>2.93</b>	<b>4.74</b>	<b>6.68</b>	<b>8.03</b>	<b>7.76</b>	<b>05/01/2011</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	9.34	
Difference			-2.46	-2.46	-4.91	-4.96	-3.20	-1.82	-1.25	-0.89	-1.58	
<b>L&amp;B Core Income Partners LP</b>	<b>68,346,676</b>	<b>0.31</b>	<b>0.10</b>	<b>0.10</b>	<b>-3.51</b>	<b>-2.12</b>	<b>-5.82</b>	<b>-0.68</b>	<b>3.26</b>	<b>4.42</b>	<b>4.19</b>	<b>04/01/2011</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	9.26	
Difference			-6.31	-6.31	-15.92	-15.76	-11.95	-7.24	-4.67	-4.50	-5.07	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>American Strategic Value Realty (CF)</b>	<b>84,842,718</b>	<b>0.39</b>	<b>4.10</b>	<b>4.10</b>	<b>7.42</b>	<b>8.05</b>	<b>6.95</b>	<b>7.88</b>	<b>N/A</b>	<b>N/A</b>	<b>8.59</b>	<b>12/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.13	
Difference			-2.31	-2.31	-4.99	-5.59	0.82	1.32	N/A	N/A	0.46	
<b>Angelo Gordon Value X LP</b>	<b>32,437,036</b>	<b>0.15</b>	<b>9.91</b>	<b>9.91</b>	<b>20.35</b>	<b>24.64</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1.82</b>	<b>07/01/2019</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.60	
Difference			3.50	3.50	7.94	11.00	N/A	N/A	N/A	N/A	-4.78	
<b>Artemis Real Estate III LP</b>	<b>25,124,224</b>	<b>0.11</b>	<b>17.52</b>	<b>17.52</b>	<b>22.62</b>	<b>44.07</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>02/01/2019</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.32	
Difference			11.11	11.11	10.21	30.43	N/A	N/A	N/A	N/A	N/A	
<b>Dune Real Estate III LP</b>	<b>40,691,015</b>	<b>0.19</b>	<b>5.63</b>	<b>5.63</b>	<b>7.38</b>	<b>6.68</b>	<b>-2.38</b>	<b>2.96</b>	<b>N/A</b>	<b>N/A</b>	<b>4.48</b>	<b>11/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.03	
Difference			-0.78	-0.78	-5.03	-6.96	-8.51	-3.60	N/A	N/A	-3.55	
<b>Dune Real Estate IV LP</b>	<b>18,043,627</b>	<b>0.08</b>	<b>19.37</b>	<b>19.37</b>	<b>-9.34</b>	<b>-5.54</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-20.81</b>	<b>09/01/2019</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	7.15	
Difference			12.96	12.96	-21.75	-19.18	N/A	N/A	N/A	N/A	-27.96	
<b>FCP Realty IV LP</b>	<b>30,171,509</b>	<b>0.14</b>	<b>4.17</b>	<b>4.17</b>	<b>14.82</b>	<b>17.75</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-9.56</b>	<b>12/01/2018</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.50	
Difference			-2.24	-2.24	2.41	4.11	N/A	N/A	N/A	N/A	-16.06	
<b>FCP Realty V LP</b>	<b>4,419,192</b>	<b>0.02</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>09/01/2021</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.41	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>GreenOak US II LP</b>	<b>21,074,199</b>	<b>0.10</b>	<b>-6.96</b>	<b>-6.96</b>	<b>-31.35</b>	<b>-31.65</b>	<b>-16.94</b>	<b>-7.27</b>	<b>-5.78</b>	<b>N/A</b>	<b>-5.78</b>	<b>10/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	7.93	
Difference			-13.37	-13.37	-43.76	-45.29	-23.07	-13.83	-13.71	N/A	-13.71	
<b>GreenOak US III LP</b>	<b>37,095,512</b>	<b>0.17</b>	<b>13.87</b>	<b>13.87</b>	<b>0.27</b>	<b>-0.79</b>	<b>-5.25</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-13.22</b>	<b>06/01/2018</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.66	
Difference			7.46	7.46	-12.14	-14.43	-11.38	N/A	N/A	N/A	-19.88	
<b>Harbert European Real Estate V LP</b>	<b>32,734,749</b>	<b>0.15</b>	<b>4.91</b>	<b>4.91</b>	<b>8.74</b>	<b>15.57</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-4.14</b>	<b>12/01/2018</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.50	
Difference			-1.50	-1.50	-3.67	1.93	N/A	N/A	N/A	N/A	-10.64	
<b>Invesco Strategic Opportunity (CF)</b>	<b>16,832,269</b>	<b>0.08</b>	<b>17.42</b>	<b>17.42</b>	<b>28.52</b>	<b>30.68</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>63.91</b>	<b>10/01/2019</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.88	
Difference			11.01	11.01	16.11	17.04	N/A	N/A	N/A	N/A	57.03	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>L&amp;B Gloden Driller (SA)</b>	<b>74,080,904</b>	<b>0.34</b>	<b>-1.56</b>	<b>-1.56</b>	<b>-4.08</b>	<b>-4.08</b>	<b>9.56</b>	<b>6.77</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>07/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.09	
Difference			-7.97	-7.97	-16.49	-17.72	3.43	0.21	N/A	N/A	N/A	
<b>Landmark Real Estate VII LP</b>	<b>9,115,873</b>	<b>0.04</b>	<b>0.96</b>	<b>0.96</b>	<b>0.00</b>	<b>0.42</b>	<b>-2.53</b>	<b>1.22</b>	<b>N/A</b>	<b>N/A</b>	<b>8.38</b>	<b>12/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.13	
Difference			-5.45	-5.45	-12.41	-13.22	-8.66	-5.34	N/A	N/A	0.25	
<b>Lyrical-OTRS Realty Partner IV LP</b>	<b>61,308,564</b>	<b>0.28</b>	<b>-0.32</b>	<b>-0.32</b>	<b>3.04</b>	<b>7.13</b>	<b>21.41</b>	<b>9.04</b>	<b>N/A</b>	<b>N/A</b>	<b>4.28</b>	<b>11/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.03	
Difference			-6.73	-6.73	-9.37	-6.51	15.28	2.48	N/A	N/A	-3.75	
<b>Starwood Opportunity X LP</b>	<b>11,675,364</b>	<b>0.05</b>	<b>14.95</b>	<b>14.95</b>	<b>31.01</b>	<b>32.56</b>	<b>9.81</b>	<b>12.55</b>	<b>N/A</b>	<b>N/A</b>	<b>12.12</b>	<b>07/01/2015</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	7.26	
Difference			8.54	8.54	18.60	18.92	3.68	5.99	N/A	N/A	4.86	
<b>Starwood Opportunity XI LP</b>	<b>36,638,437</b>	<b>0.17</b>	<b>5.48</b>	<b>5.48</b>	<b>24.05</b>	<b>21.63</b>	<b>19.53</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>22.57</b>	<b>08/01/2018</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.42	
Difference			-0.93	-0.93	11.64	7.99	13.40	N/A	N/A	N/A	16.15	
<b>Property ACQ Fund</b>	<b>10,080,000</b>	<b>0.05</b>	<b>-0.02</b>	<b>-0.02</b>	<b>38.05</b>	<b>38.05</b>	<b>-7.92</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-12.26</b>	<b>08/01/2017</b>

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 - Gross of Fees

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>OTRS Total Fund</b>	<b>21,967,242,569</b>	<b>100.00</b>	<b>0.70</b>	<b>0.70</b>	<b>12.87</b>	<b>26.72</b>	<b>11.52</b>	<b>11.59</b>	<b>9.35</b>	<b>11.77</b>	<b>9.69</b>	<b>12/01/1991</b>
OTRS Policy Index			-0.15	-0.15	9.93	23.47	11.89	11.44	9.33	11.09	9.40	
Difference			0.85	0.85	2.94	3.25	-0.37	0.15	0.02	0.68	0.29	
OTRS Actual Allocation Index			-0.35	-0.35	10.42	24.50	11.85	11.33	9.49	11.19	N/A	
Difference			1.05	1.05	2.45	2.22	-0.33	0.26	-0.14	0.58	N/A	
Actuarial Discount Rate (7.0%)			1.71	1.71	5.21	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			-1.01	-1.01	7.66	19.72	4.52	4.59	2.35	4.77	2.69	
All Public Plans-Total Fund Median			-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	8.29	
Rank			18	18	6	3	25	14	20	4	1	
<b>US Equity</b>	<b>9,948,048,784</b>	<b>45.29</b>	<b>-1.16</b>	<b>-1.16</b>	<b>15.24</b>	<b>36.63</b>	<b>12.48</b>	<b>15.02</b>	<b>12.25</b>	<b>15.72</b>	<b>11.24</b>	<b>04/01/1990</b>
Russell 3000 Index			-0.10	-0.10	14.99	31.88	16.00	16.85	13.93	16.60	10.79	
Difference			-1.06	-1.06	0.25	4.75	-3.52	-1.83	-1.68	-0.88	0.45	
IM U.S. Equity (SA+CF) Median			-0.41	-0.41	15.93	36.99	13.72	15.36	12.93	16.03	11.75	
Rank			64	64	58	51	59	53	57	55	66	
<b>US Active Equity</b>	<b>3,361,368,307</b>	<b>15.30</b>	<b>-2.30</b>	<b>-2.30</b>	<b>16.40</b>	<b>48.16</b>	<b>13.68</b>	<b>15.91</b>	<b>12.85</b>	<b>16.15</b>	<b>9.90</b>	<b>12/01/1998</b>
Russell 3000 Index			-0.10	-0.10	14.99	31.88	16.00	16.85	13.93	16.60	8.29	
Difference			-2.20	-2.20	1.41	16.28	-2.32	-0.94	-1.08	-0.45	1.61	
IM U.S. Equity (SA+CF) Median			-0.41	-0.41	15.93	36.99	13.72	15.36	12.93	16.03	10.31	
Rank			81	81	46	26	51	47	51	49	56	
<b>Hotchkis &amp; Wiley Mid Cap Value Equity (SA)</b>	<b>506,599,334</b>	<b>2.31</b>	<b>-2.29</b>	<b>-2.29</b>	<b>28.65</b>	<b>81.66</b>	<b>3.23</b>	<b>8.20</b>	<b>5.97</b>	<b>14.02</b>	<b>11.35</b>	<b>08/01/2002</b>
Russell Mid Cap Val Index			-1.01	-1.01	18.24	42.40	10.28	10.59	9.60	13.93	10.96	
Difference			-1.28	-1.28	10.41	39.26	-7.05	-2.39	-3.63	0.09	0.39	
IM U.S. Mid Cap Value Equity (SA+CF) Median			-0.53	-0.53	19.23	45.55	10.99	11.95	10.52	14.69	12.04	
Rank			82	82	2	1	100	98	100	79	77	
<b>Wellington Mid Cap Growth (SA)</b>	<b>595,004,159</b>	<b>2.71</b>	<b>-0.15</b>	<b>-0.15</b>	<b>10.64</b>	<b>30.56</b>	<b>18.92</b>	<b>21.75</b>	<b>16.12</b>	<b>17.86</b>	<b>12.15</b>	<b>09/01/1998</b>
Russell Mid Cap Grth Index			-0.76	-0.76	9.61	30.45	19.14	19.27	15.39	17.54	10.94	
Difference			0.61	0.61	1.03	0.11	-0.22	2.48	0.73	0.32	1.21	
IM U.S. Mid Cap Growth Equity (SA+CF) Median			0.71	0.71	11.25	31.42	19.66	20.39	16.61	18.12	12.21	
Rank			69	69	52	59	61	37	56	52	61	
<b>Frontier Small Cap Value Equity (SA)</b>	<b>289,462,927</b>	<b>1.32</b>	<b>-1.83</b>	<b>-1.83</b>	<b>25.03</b>	<b>68.83</b>	<b>9.26</b>	<b>11.60</b>	<b>11.47</b>	<b>N/A</b>	<b>11.54</b>	<b>06/01/2013</b>
Russell 2000 Val Index			-2.98	-2.98	22.92	63.92	8.58	11.03	10.19	13.22	9.93	
Difference			1.15	1.15	2.11	4.91	0.68	0.57	1.28	N/A	1.61	
IM U.S. Small Cap Value Equity (SA+CF) Median			-1.48	-1.48	22.10	58.79	9.59	11.89	10.60	14.24	10.81	
Rank			56	56	32	19	54	53	32	N/A	37	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Neumeier Poma Small Cap Equity (SA)</b>	<b>334,940,015</b>	<b>1.52</b>	<b>-0.91</b>	<b>-0.91</b>	<b>14.19</b>	<b>37.76</b>	<b>10.29</b>	<b>14.11</b>	<b>13.51</b>	<b>N/A</b>	<b>13.96</b>	<b>06/01/2013</b>
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	11.64	
Difference			3.45	3.45	1.78	-9.92	-0.25	0.66	1.61	N/A	2.32	
IM U.S. Small Cap Equity (SA+CF) Median			-1.78	-1.78	17.01	50.29	11.68	14.42	12.75	15.77	12.73	
Rank			33	33	64	84	66	52	42	N/A	35	
<b>Shapiro Enhanced Small Cap Equity (SA)</b>	<b>992,497,936</b>	<b>4.52</b>	<b>-5.27</b>	<b>-5.27</b>	<b>18.88</b>	<b>55.64</b>	<b>9.43</b>	<b>13.55</b>	<b>11.42</b>	<b>15.56</b>	<b>10.94</b>	<b>02/01/1998</b>
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	8.57	
Difference			-0.91	-0.91	6.47	7.96	-1.11	0.10	-0.48	0.93	2.37	
IM U.S. Small Cap Equity (SA+CF) Median			-1.78	-1.78	17.01	50.29	11.68	14.42	12.75	15.77	11.13	
Rank			95	95	42	38	74	59	68	55	53	
<b>Geneva US Small Cap Growth Equity (SA)</b>	<b>316,740,902</b>	<b>1.44</b>	<b>-1.79</b>	<b>-1.79</b>	<b>6.60</b>	<b>33.47</b>	<b>14.08</b>	<b>19.01</b>	<b>17.34</b>	<b>N/A</b>	<b>16.30</b>	<b>06/01/2013</b>
Russell 2000 Grth Index			-5.65	-5.65	2.82	33.27	11.70	15.34	13.19	15.74	13.01	
Difference			3.86	3.86	3.78	0.20	2.38	3.67	4.15	N/A	3.29	
IM U.S. Small Cap Growth Equity (SA+CF) Median			-1.90	-1.90	10.84	40.43	17.12	19.68	16.83	18.69	16.38	
Rank			50	50	77	77	71	57	41	N/A	52	
<b>Wasatch Small Cap Core Growth (SA)</b>	<b>326,123,034</b>	<b>1.48</b>	<b>0.31</b>	<b>0.31</b>	<b>15.62</b>	<b>46.66</b>	<b>22.15</b>	<b>23.63</b>	<b>20.12</b>	<b>N/A</b>	<b>18.04</b>	<b>06/01/2013</b>
Russell 2000 Grth Index			-5.65	-5.65	2.82	33.27	11.70	15.34	13.19	15.74	13.01	
Difference			5.96	5.96	12.80	13.39	10.45	8.29	6.93	N/A	5.03	
IM U.S. Small Cap Growth Equity (SA+CF) Median			-1.90	-1.90	10.84	40.43	17.12	19.68	16.83	18.69	16.38	
Rank			23	23	24	30	24	29	19	N/A	27	
<b>US Passive Equity (Cap Wgt)</b>	<b>3,482,754,222</b>	<b>15.85</b>	<b>-0.18</b>	<b>-0.18</b>	<b>15.25</b>	<b>33.41</b>	<b>15.89</b>	<b>16.48</b>	<b>13.68</b>	<b>N/A</b>	<b>14.62</b>	<b>04/01/2012</b>
<b>Northern Trust Russell 1000 Index (SA)</b>	<b>2,148,064,865</b>	<b>9.78</b>	<b>0.29</b>	<b>0.29</b>	<b>15.40</b>	<b>31.19</b>	<b>16.42</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>15.94</b>	<b>12/01/2017</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	15.94	
Difference			0.08	0.08	0.21	0.23	-0.01	N/A	N/A	N/A	0.00	
IM U.S. Large Cap Index Equity (SA+CF) Median			0.21	0.21	15.52	30.97	16.00	16.89	13.99	16.63	15.62	
Rank			46	46	52	41	27	N/A	N/A	N/A	26	
<b>Northern Trust Russell Mid Cap Index (CF)</b>	<b>1,334,689,357</b>	<b>6.08</b>	<b>-0.93</b>	<b>-0.93</b>	<b>15.19</b>	<b>38.14</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>28.63</b>	<b>03/01/2020</b>
Russell Mid Cap Index			-0.93	-0.93	15.17	38.11	14.22	14.39	12.15	15.52	28.58	
Difference			0.00	0.00	0.02	0.03	N/A	N/A	N/A	N/A	0.05	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>US Passive Equity (Non-Cap Wgt)</b>	<b>3,103,926,246</b>	<b>14.13</b>	<b>-1.00</b>	<b>-1.00</b>	<b>13.76</b>	<b>28.13</b>	<b>11.51</b>	<b>13.69</b>	<b>11.70</b>	<b>N/A</b>	<b>13.65</b>	<b>04/01/2012</b>
NTGI SciBetUS HF Ex MulBeEW Gr			-1.02	-1.02	13.74	28.08	11.49	N/A	N/A	N/A	N/A	
Difference			0.02	0.02	0.02	0.05	0.02	N/A	N/A	N/A	N/A	
<b>SciBeta US High FactorExposure Index (SA)</b>	<b>3,103,926,246</b>	<b>14.13</b>	<b>-1.00</b>	<b>-1.00</b>	<b>13.76</b>	<b>28.13</b>	<b>11.51</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>11.12</b>	<b>12/01/2017</b>
NTGI SciBetUS HF Ex MulBeEW Gr			-1.02	-1.02	13.74	28.08	11.49	N/A	N/A	N/A	11.07	
Difference			0.02	0.02	0.02	0.05	0.02	N/A	N/A	N/A	0.05	
IM U.S. Large Cap Index Equity (SA+CF) Median			0.21	0.21	15.52	30.97	16.00	16.89	13.99	16.63	15.62	
Rank			95	95	92	89	86	N/A	N/A	N/A	86	
<b>International Equity</b>	<b>3,852,933,188</b>	<b>17.54</b>	<b>-1.13</b>	<b>-1.13</b>	<b>10.00</b>	<b>28.65</b>	<b>9.12</b>	<b>10.27</b>	<b>7.33</b>	<b>9.57</b>	<b>8.55</b>	<b>02/01/1996</b>
MSCI ACW Ex US IM Index (USD) (Gross)			-2.45	-2.45	7.16	25.68	8.83	9.62	6.49	8.22	5.93	
Difference			1.32	1.32	2.84	2.97	0.29	0.65	0.84	1.35	2.62	
IM International Equity (SA+CF) Median			-1.60	-1.56	8.26	25.93	9.59	10.17	7.37	9.40	8.06	
Rank			43	44	39	39	54	50	51	48	34	
<b>Causeway Intl Opportunities (SA)</b>	<b>630,252,990</b>	<b>2.87</b>	<b>-1.77</b>	<b>-1.77</b>	<b>7.71</b>	<b>32.70</b>	<b>7.10</b>	<b>9.09</b>	<b>5.41</b>	<b>8.71</b>	<b>8.56</b>	<b>05/01/2003</b>
MSCI ACW Ex US Val Index (USD) (Gross)			-2.14	-2.14	9.66	32.15	4.43	7.06	3.54	6.11	8.00	
Difference			0.37	0.37	-1.95	0.55	2.67	2.03	1.87	2.60	0.56	
IM ACWI Ex US Value (SA+CF) Median			-2.21	-2.21	8.26	28.76	7.38	9.10	6.31	8.75	9.13	
Rank			38	38	58	30	53	51	72	51	68	
<b>Allianz Best Styles AC Intl Equity (SA)</b>	<b>1,282,349,463</b>	<b>5.84</b>	<b>-3.25</b>	<b>-3.25</b>	<b>7.48</b>	<b>24.82</b>	<b>6.51</b>	<b>8.56</b>	<b>N/A</b>	<b>N/A</b>	<b>9.63</b>	<b>07/01/2016</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	10.39	
Difference			-0.37	-0.37	1.19	0.37	-2.01	-0.88	N/A	N/A	-0.76	
IM ACWI Ex US Core (SA+CF) Median			-1.92	-1.92	6.87	24.59	9.90	10.22	7.09	9.20	11.12	
Rank			89	89	45	49	80	69	N/A	N/A	68	
<b>Wellington Intl Quality Growth (SA)</b>	<b>740,039,727</b>	<b>3.37</b>	<b>-1.85</b>	<b>-1.85</b>	<b>8.64</b>	<b>22.57</b>	<b>14.50</b>	<b>14.50</b>	<b>N/A</b>	<b>N/A</b>	<b>14.95</b>	<b>07/01/2016</b>
MSCI ACW Ex US Grth Index (USD) (Gross)			-3.58	-3.58	2.90	17.27	12.30	11.59	8.64	9.69	12.27	
Difference			1.73	1.73	5.74	5.30	2.20	2.91	N/A	N/A	2.68	
IM ACWI Ex US Growth (SA+CF) Median			-1.50	-1.50	6.33	21.85	12.93	12.81	9.73	11.34	13.59	
Rank			58	58	33	46	35	27	N/A	N/A	28	
<b>Wasatch International Small Cap Growth (SA)</b>	<b>474,673,426</b>	<b>2.16</b>	<b>5.77</b>	<b>5.77</b>	<b>13.51</b>	<b>28.46</b>	<b>14.03</b>	<b>14.21</b>	<b>13.02</b>	<b>N/A</b>	<b>14.59</b>	<b>12/01/2011</b>
MSCI ACW Ex US Sm Cap Index (USD) (Gross)			0.09	0.09	12.57	33.54	10.76	10.69	8.55	9.84	9.76	
Difference			5.68	5.68	0.94	-5.08	3.27	3.52	4.47	N/A	4.83	
IM International Small Cap Equity (SA+CF) Median			0.24	0.31	12.53	31.68	10.36	11.52	9.45	11.95	11.84	
Rank			4	4	43	74	19	21	15	N/A	8	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Wellington International Small Cap Equity (CF)</b>	<b>344,062,797</b>	<b>1.57</b>	<b>0.59</b>	<b>0.59</b>	<b>11.92</b>	<b>36.75</b>	<b>6.64</b>	<b>8.32</b>	<b>6.87</b>	<b>N/A</b>	<b>10.34</b>	<b>12/01/2011</b>
MSCI EAFE Sm Cap Index (USD) (Gross)			0.96	0.96	10.35	29.46	9.45	10.79	9.55	11.12	11.16	
Difference			-0.37	-0.37	1.57	7.29	-2.81	-2.47	-2.68	N/A	-0.82	
IM EAFE Core (SA+CF) Median			-0.59	-0.59	9.18	25.74	7.96	9.28	6.78	9.44	8.93	
Rank			9	9	6	1	66	65	45	N/A	13	
<b>SSGA Emerging Market Small Cap (CF)</b>	<b>381,554,786</b>	<b>1.74</b>	<b>-0.91</b>	<b>-0.91</b>	<b>20.11</b>	<b>42.56</b>	<b>12.37</b>	<b>10.84</b>	<b>N/A</b>	<b>N/A</b>	<b>10.45</b>	<b>09/01/2016</b>
MSCI Emg Mkts Sm Cap Index (USD) (Gross)			-2.00	-2.00	17.56	43.79	13.53	10.14	6.52	7.55	10.25	
Difference			1.09	1.09	2.55	-1.23	-1.16	0.70	N/A	N/A	0.20	
IM Emerging Markets Equity (SA+CF) Median			-6.31	-6.31	2.49	22.74	10.86	10.14	6.63	7.67	10.21	
Rank			10	10	8	9	37	40	N/A	N/A	48	
<b>Fixed Income</b>	<b>4,557,305,186</b>	<b>20.75</b>	<b>0.40</b>	<b>0.40</b>	<b>-0.54</b>	<b>1.61</b>	<b>7.64</b>	<b>5.12</b>	<b>5.04</b>	<b>5.50</b>	<b>7.06</b>	<b>04/01/1990</b>
OTRS Fixed Income Blended Benchmark			0.32	0.32	0.28	2.68	5.82	4.01	4.06	4.33	N/A	
Difference			0.08	0.08	-0.82	-1.07	1.82	1.11	0.98	1.17	N/A	
IM U.S. Fixed Income (SA+CF) Median			0.15	0.15	0.11	1.41	5.64	3.75	3.83	3.89	6.12	
Rank			28	28	69	47	19	27	27	28	21	
<b>Loomis Sayles Multisector Full Discretion (SA)</b>	<b>1,229,536,410</b>	<b>5.60</b>	<b>0.21</b>	<b>0.21</b>	<b>1.46</b>	<b>6.89</b>	<b>8.30</b>	<b>5.51</b>	<b>4.94</b>	<b>5.53</b>	<b>6.43</b>	<b>07/01/1999</b>
OTRS Fixed Income Blended Benchmark			0.32	0.32	0.28	2.68	5.82	4.01	4.06	4.33	5.50	
Difference			-0.11	-0.11	1.18	4.21	2.48	1.50	0.88	1.20	0.93	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			0.22	0.22	-0.21	1.94	6.58	4.13	4.20	4.38	5.74	
Rank			51	51	15	8	3	9	14	14	13	
<b>Mackay Shields Core+ Extended Discretion (SA)</b>	<b>1,190,963,438</b>	<b>5.42</b>	<b>0.65</b>	<b>0.65</b>	<b>2.19</b>	<b>5.51</b>	<b>7.59</b>	<b>4.86</b>	<b>4.21</b>	<b>4.77</b>	<b>5.46</b>	<b>11/01/2004</b>
OTRS Fixed Income Blended Benchmark			0.32	0.32	0.28	2.68	5.82	4.01	4.06	4.33	5.03	
Difference			0.33	0.33	1.91	2.83	1.77	0.85	0.15	0.44	0.43	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			0.22	0.22	-0.21	1.94	6.58	4.13	4.20	4.38	5.07	
Rank			5	5	9	12	9	21	48	29	27	
<b>Lord Abbett Core Plus Full Discretion (SA)</b>	<b>1,157,500,759</b>	<b>5.27</b>	<b>0.30</b>	<b>0.30</b>	<b>1.31</b>	<b>4.11</b>	<b>6.41</b>	<b>3.98</b>	<b>4.06</b>	<b>4.35</b>	<b>5.26</b>	<b>11/01/2004</b>
OTRS Fixed Income Blended Benchmark			0.32	0.32	0.28	2.68	5.82	4.01	4.06	4.33	5.03	
Difference			-0.02	-0.02	1.03	1.43	0.59	-0.03	0.00	0.02	0.23	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			0.22	0.22	-0.21	1.94	6.58	4.13	4.20	4.38	5.07	
Rank			32	32	16	18	56	60	59	53	35	
<b>Hoisington Active Duration Long Bonds (SA)</b>	<b>979,304,579</b>	<b>4.46</b>	<b>0.45</b>	<b>0.45</b>	<b>-8.59</b>	<b>-11.52</b>	<b>10.67</b>	<b>3.74</b>	<b>6.19</b>	<b>4.95</b>	<b>7.31</b>	<b>11/01/2004</b>
Bloomberg US Trsy Index			0.09	0.09	-2.50	-3.30	4.89	2.23	2.71	2.21	3.57	
Difference			0.36	0.36	-6.09	-8.22	5.78	1.51	3.48	2.74	3.74	
IM U.S. Long Duration (SA+CF) Median			0.10	0.10	-3.44	-0.39	10.89	6.06	6.88	6.71	7.57	
Rank			6	6	100	100	67	100	91	100	66	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Private Equity</b>	<b>1,843,245,778</b>	<b>8.39</b>	<b>14.79</b>	<b>14.79</b>	<b>50.60</b>	<b>60.18</b>	<b>29.27</b>	<b>25.15</b>	<b>21.21</b>	<b>19.89</b>	<b>21.79</b>	<b>07/01/2015</b>
R 2000 Index+4%			-3.42	-3.42	15.77	53.58	14.96	17.99	16.38	19.22	15.36	
Difference			18.21	18.21	34.83	6.60	14.31	7.16	4.83	0.67	6.43	
<b>Franklin Park Private Equity LP</b>	<b>1,831,094,941</b>	<b>8.34</b>	<b>14.90</b>	<b>14.90</b>	<b>50.79</b>	<b>60.40</b>	<b>29.55</b>	<b>25.55</b>	<b>21.70</b>	<b>13.30</b>	<b>22.11</b>	<b>07/01/2015</b>
<b>Legacy Private Equity LP</b>	<b>12,150,837</b>	<b>0.06</b>	<b>1.03</b>	<b>1.03</b>	<b>27.34</b>	<b>33.83</b>	<b>5.32</b>	<b>4.17</b>	<b>4.74</b>	<b>7.67</b>	<b>4.15</b>	<b>10/01/2008</b>
<b>Special Opportunities</b>	<b>252,322,460</b>	<b>1.15</b>	<b>4.04</b>	<b>4.04</b>	<b>14.79</b>	<b>19.39</b>	<b>5.53</b>	<b>7.99</b>	<b>N/A</b>	<b>N/A</b>	<b>7.55</b>	<b>07/01/2015</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.38	
Difference			3.99	3.99	16.35	20.29	0.18	5.05	N/A	N/A	4.17	
<b>PIMCO Bravo LP</b>	<b>81,057</b>	<b>0.00</b>	<b>-2.21</b>	<b>-2.21</b>	<b>-28.23</b>	<b>-34.54</b>	<b>-47.93</b>	<b>-23.73</b>	<b>-15.96</b>	<b>-4.61</b>	<b>-3.96</b>	<b>03/01/2011</b>
<b>PIMCO Bravo II LP</b>	<b>37,916,226</b>	<b>0.17</b>	<b>5.40</b>	<b>5.40</b>	<b>29.01</b>	<b>29.65</b>	<b>3.23</b>	<b>5.76</b>	<b>6.86</b>	<b>N/A</b>	<b>8.92</b>	<b>03/01/2013</b>
<b>PIMCO Bravo III LP</b>	<b>170,530,497</b>	<b>0.78</b>	<b>3.27</b>	<b>3.27</b>	<b>11.50</b>	<b>16.38</b>	<b>6.97</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.88</b>	<b>04/01/2017</b>
<b>PIMCO COF II LP</b>	<b>43,794,680</b>	<b>0.20</b>	<b>5.69</b>	<b>5.69</b>	<b>16.11</b>	<b>22.72</b>	<b>7.37</b>	<b>10.69</b>	<b>N/A</b>	<b>N/A</b>	<b>10.69</b>	<b>10/01/2016</b>
Bloomberg US Unv Bond Index			0.07	0.07	-1.07	0.20	5.57	3.30	3.56	3.46	3.30	
Difference			5.62	5.62	17.18	22.52	1.80	7.39	N/A	N/A	7.39	
<b>Real Estate</b>	<b>1,308,222,333</b>	<b>5.96</b>	<b>3.92</b>	<b>3.92</b>	<b>6.20</b>	<b>7.34</b>	<b>3.75</b>	<b>5.03</b>	<b>N/A</b>	<b>N/A</b>	<b>6.57</b>	<b>07/01/2015</b>
NCREIF Property Index			5.23	5.23	10.88	12.15	6.72	6.84	8.10	8.99	7.46	
Difference			-1.31	-1.31	-4.68	-4.81	-2.97	-1.81	N/A	N/A	-0.89	
<b>AEW Core Property Trust (CF)</b>	<b>351,304,486</b>	<b>1.60</b>	<b>3.27</b>	<b>3.27</b>	<b>7.04</b>	<b>7.24</b>	<b>4.86</b>	<b>5.76</b>	<b>7.52</b>	<b>8.19</b>	<b>7.98</b>	<b>07/01/2011</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	9.04	
Difference			-3.14	-3.14	-5.37	-6.40	-1.27	-0.80	-0.41	-0.73	-1.06	
<b>Heitman America Real Estate (CF)</b>	<b>342,205,979</b>	<b>1.56</b>	<b>4.13</b>	<b>4.13</b>	<b>8.08</b>	<b>9.46</b>	<b>3.67</b>	<b>5.47</b>	<b>7.44</b>	<b>8.81</b>	<b>8.54</b>	<b>05/01/2011</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	9.34	
Difference			-2.28	-2.28	-4.33	-4.18	-2.46	-1.09	-0.49	-0.11	-0.80	
<b>L&amp;B Core Income Partners LP</b>	<b>68,346,676</b>	<b>0.31</b>	<b>0.02</b>	<b>0.02</b>	<b>-3.75</b>	<b>-2.45</b>	<b>-6.19</b>	<b>-1.03</b>	<b>3.11</b>	<b>4.41</b>	<b>4.20</b>	<b>04/01/2011</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	9.26	
Difference			-6.39	-6.39	-16.16	-16.09	-12.32	-7.59	-4.82	-4.51	-5.06	
<b>American Strategic Value Realty (CF)</b>	<b>84,842,718</b>	<b>0.39</b>	<b>4.39</b>	<b>4.39</b>	<b>8.34</b>	<b>9.28</b>	<b>8.19</b>	<b>9.08</b>	<b>N/A</b>	<b>N/A</b>	<b>9.89</b>	<b>12/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.13	
Difference			-2.02	-2.02	-4.07	-4.36	2.06	2.52	N/A	N/A	1.76	

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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Angelo Gordon Value X LP</b>	<b>32,437,036</b>	<b>0.15</b>	<b>9.91</b>	<b>9.91</b>	<b>20.35</b>	<b>24.64</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1.82</b>	<b>07/01/2019</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.60	
Difference			3.50	3.50	7.94	11.00	N/A	N/A	N/A	N/A	-4.78	
<b>Artemis Real Estate III LP</b>	<b>25,124,224</b>	<b>0.11</b>	<b>17.52</b>	<b>17.52</b>	<b>22.62</b>	<b>44.07</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>02/01/2019</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.32	
Difference			11.11	11.11	10.21	30.43	N/A	N/A	N/A	N/A	N/A	
<b>Dune Real Estate III LP</b>	<b>40,691,015</b>	<b>0.19</b>	<b>5.63</b>	<b>5.63</b>	<b>7.38</b>	<b>6.68</b>	<b>-2.38</b>	<b>2.98</b>	<b>N/A</b>	<b>N/A</b>	<b>5.62</b>	<b>11/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.03	
Difference			-0.78	-0.78	-5.03	-6.96	-8.51	-3.58	N/A	N/A	-2.41	
<b>Dune Real Estate IV LP</b>	<b>18,043,627</b>	<b>0.08</b>	<b>19.37</b>	<b>19.37</b>	<b>-9.34</b>	<b>-5.54</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-20.81</b>	<b>09/01/2019</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	7.15	
Difference			12.96	12.96	-21.75	-19.18	N/A	N/A	N/A	N/A	-27.96	
<b>FCP Realty IV LP</b>	<b>30,171,509</b>	<b>0.14</b>	<b>4.17</b>	<b>4.17</b>	<b>14.82</b>	<b>17.75</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-9.56</b>	<b>12/01/2018</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.50	
Difference			-2.24	-2.24	2.41	4.11	N/A	N/A	N/A	N/A	-16.06	
<b>FCP Realty V LP</b>	<b>4,419,192</b>	<b>0.02</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>09/01/2021</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.41	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>GreenOak US II LP</b>	<b>21,074,199</b>	<b>0.10</b>	<b>-6.96</b>	<b>-6.96</b>	<b>-31.35</b>	<b>-31.65</b>	<b>-16.94</b>	<b>-7.25</b>	<b>-4.76</b>	<b>N/A</b>	<b>-4.76</b>	<b>10/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	7.93	
Difference			-13.37	-13.37	-43.76	-45.29	-23.07	-13.81	-12.69	N/A	-12.69	
<b>GreenOak US III LP</b>	<b>37,095,512</b>	<b>0.17</b>	<b>13.87</b>	<b>13.87</b>	<b>0.27</b>	<b>-0.79</b>	<b>-5.25</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-13.22</b>	<b>06/01/2018</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.66	
Difference			7.46	7.46	-12.14	-14.43	-11.38	N/A	N/A	N/A	-19.88	
<b>Harbert European Real Estate V LP</b>	<b>32,734,749</b>	<b>0.15</b>	<b>4.91</b>	<b>4.91</b>	<b>8.74</b>	<b>15.57</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-4.14</b>	<b>12/01/2018</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.50	
Difference			-1.50	-1.50	-3.67	1.93	N/A	N/A	N/A	N/A	-10.64	
<b>Invesco Strategic Opportunity (CF)</b>	<b>16,832,269</b>	<b>0.08</b>	<b>17.42</b>	<b>17.42</b>	<b>28.52</b>	<b>30.68</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>63.91</b>	<b>10/01/2019</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.88	
Difference			11.01	11.01	16.11	17.04	N/A	N/A	N/A	N/A	57.03	
<b>L&amp;B Gloden Driller (SA)</b>	<b>74,080,904</b>	<b>0.34</b>	<b>-1.56</b>	<b>-1.56</b>	<b>-4.08</b>	<b>-4.08</b>	<b>9.56</b>	<b>6.79</b>	<b>4.49</b>	<b>N/A</b>	<b>4.34</b>	<b>07/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.09	
Difference			-7.97	-7.97	-16.49	-17.72	3.43	0.23	-3.44	N/A	-3.75	

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

As of September 30, 2021

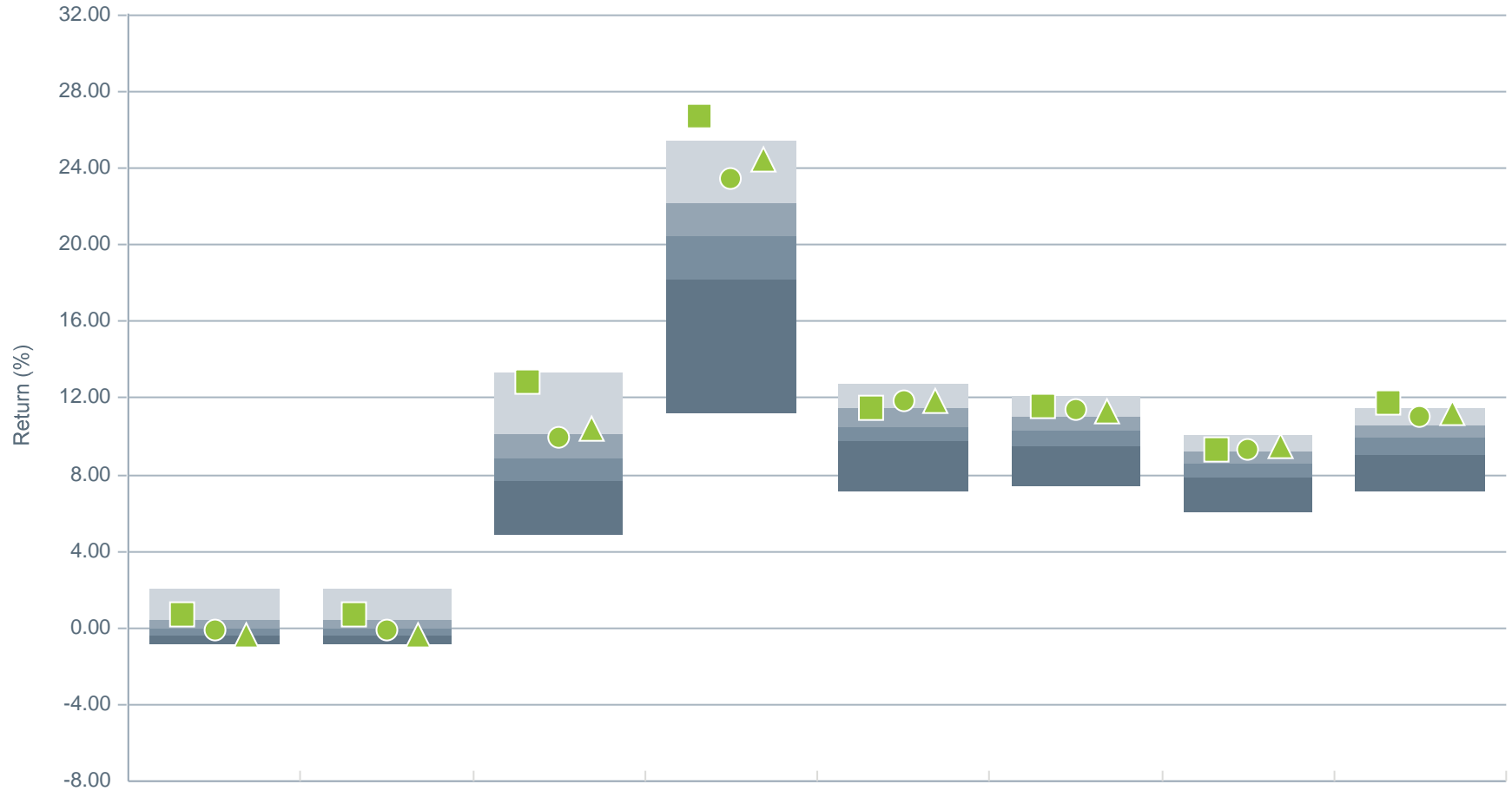
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Landmark Real Estate VII LP</b>	<b>9,115,873</b>	<b>0.04</b>	<b>0.96</b>	<b>0.96</b>	<b>0.00</b>	<b>0.42</b>	<b>-2.54</b>	<b>1.25</b>	<b>N/A</b>	<b>N/A</b>	<b>10.48</b>	<b>12/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.13	
Difference			-5.45	-5.45	-12.41	-13.22	-8.67	-5.31	N/A	N/A	2.35	
<b>Lyrical-OTRS Realty Partner IV LP</b>	<b>61,308,564</b>	<b>0.28</b>	<b>-0.32</b>	<b>-0.32</b>	<b>3.04</b>	<b>7.13</b>	<b>21.41</b>	<b>9.07</b>	<b>N/A</b>	<b>N/A</b>	<b>6.47</b>	<b>11/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.03	
Difference			-6.73	-6.73	-9.37	-6.51	15.28	2.51	N/A	N/A	-1.56	
<b>Starwood Opportunity X LP</b>	<b>11,675,364</b>	<b>0.05</b>	<b>14.95</b>	<b>14.95</b>	<b>31.01</b>	<b>32.56</b>	<b>9.81</b>	<b>12.59</b>	<b>N/A</b>	<b>N/A</b>	<b>13.05</b>	<b>07/01/2015</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	7.26	
Difference			8.54	8.54	18.60	18.92	3.68	6.03	N/A	N/A	5.79	
<b>Starwood Opportunity XI LP</b>	<b>36,638,437</b>	<b>0.17</b>	<b>5.48</b>	<b>5.48</b>	<b>24.05</b>	<b>21.63</b>	<b>19.53</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>22.57</b>	<b>08/01/2018</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	6.42	
Difference			-0.93	-0.93	11.64	7.99	13.40	N/A	N/A	N/A	16.15	
<b>Property ACQ Fund</b>	<b>10,080,000</b>	<b>0.05</b>	<b>0.00</b>	<b>0.00</b>	<b>38.08</b>	<b>38.08</b>	<b>-7.91</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-5.46</b>	<b>08/01/2017</b>

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, 2021

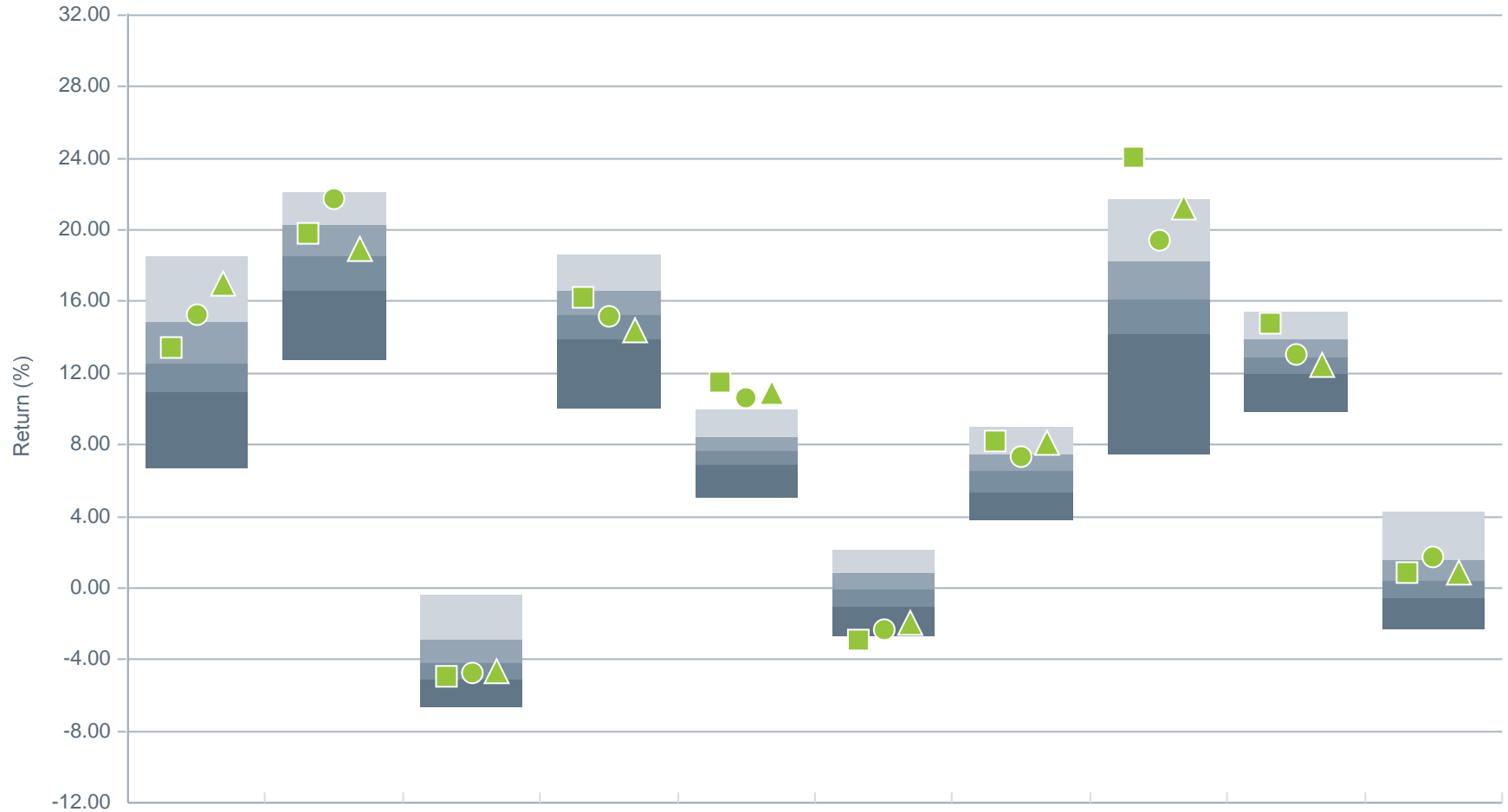


Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.  
 Oklahoma State Pension Commission fiscal year begins on 07/01.



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

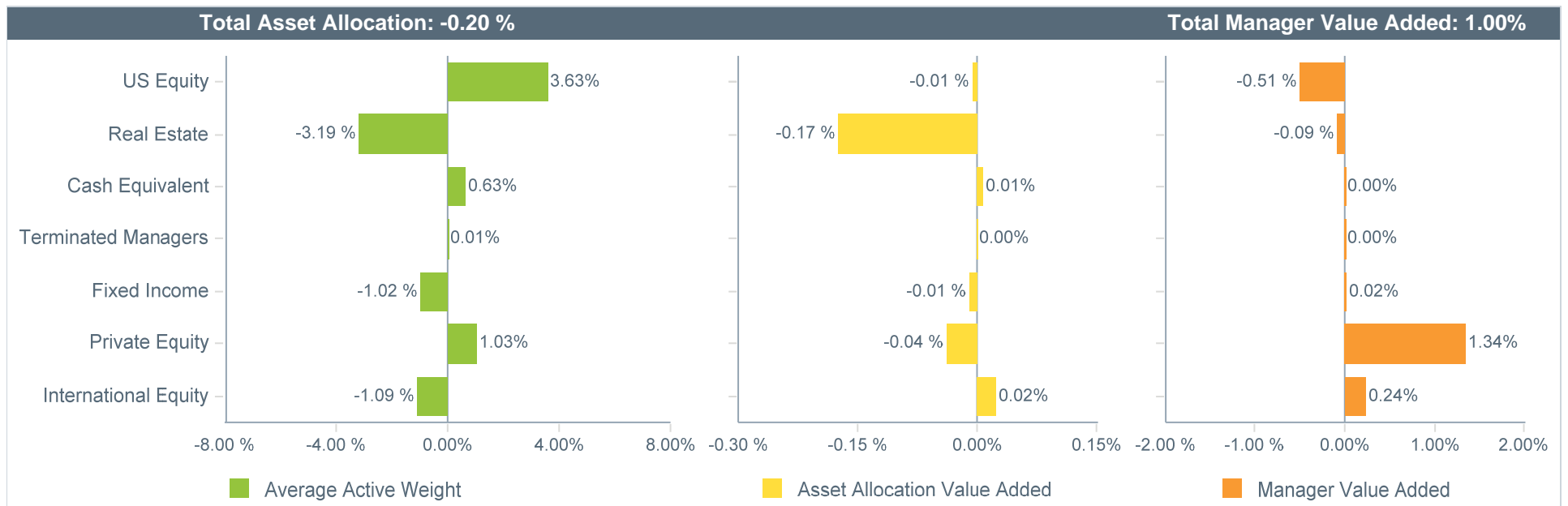
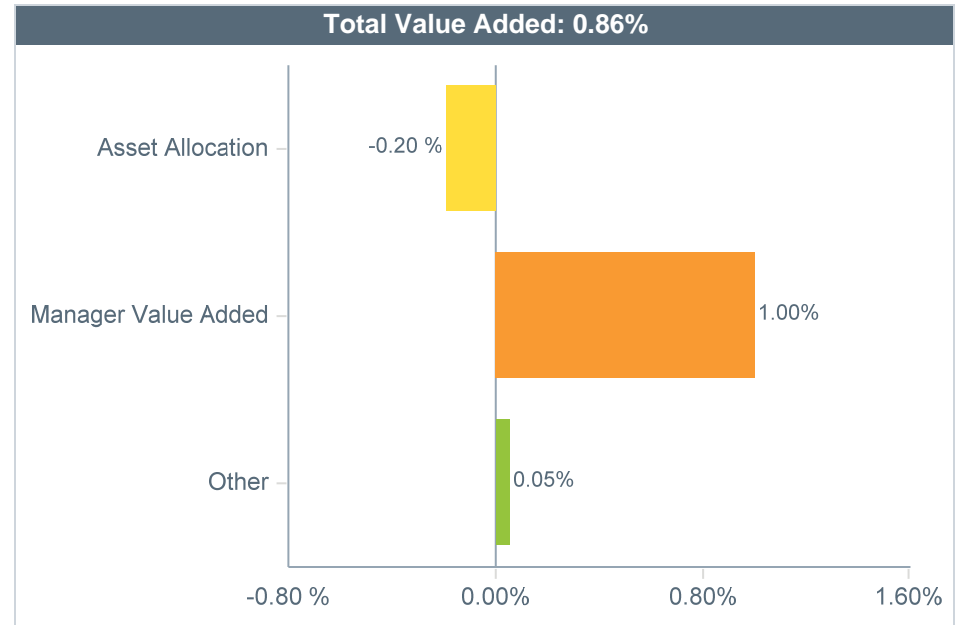
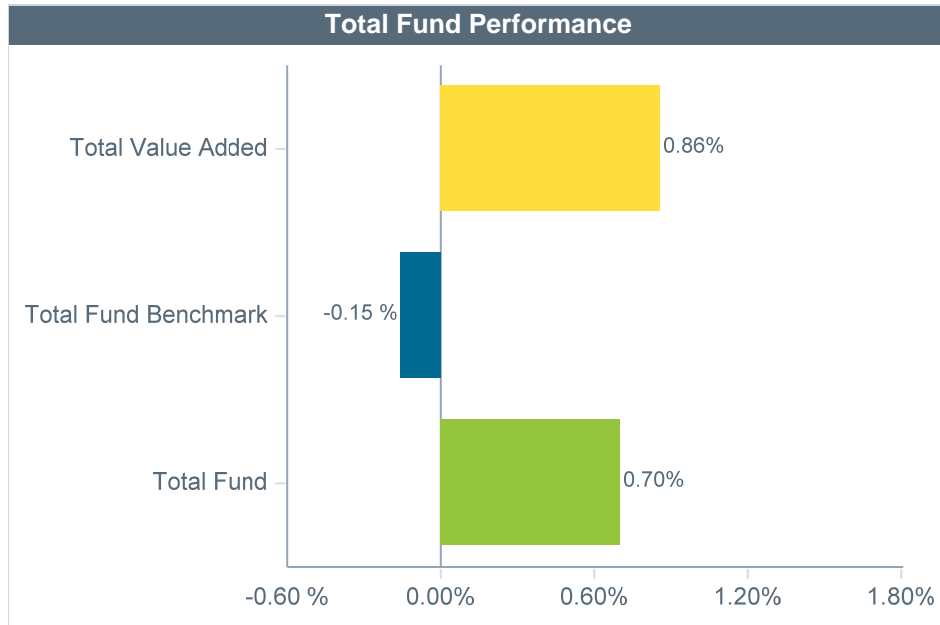
As of September 30, 2021



	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
■ OTRS Total Fund	13.45 (40)	19.83 (32)	-4.98 (72)	16.20 (33)	11.54 (1)	-2.90 (96)	8.16 (12)	24.03 (3)	14.76 (12)	0.87 (38)
● OTRS Policy Index	15.24 (21)	21.72 (9)	-4.75 (66)	15.16 (53)	10.65 (3)	-2.33 (93)	7.36 (28)	19.45 (16)	13.09 (45)	1.73 (24)
▲ OTRS Allocation Index	16.98 (10)	18.94 (44)	-4.70 (64)	14.35 (67)	10.93 (3)	-1.95 (88)	8.15 (12)	21.24 (7)	12.44 (64)	0.88 (37)
5th Percentile	18.53	22.15	-0.35	18.65	9.96	2.13	8.98	21.72	15.42	4.26
1st Quartile	14.87	20.27	-2.95	16.63	8.44	0.90	7.43	18.29	13.94	1.56
Median	12.61	18.52	-4.13	15.30	7.64	-0.07	6.59	16.17	12.90	0.41
3rd Quartile	10.95	16.62	-5.13	13.91	6.81	-1.10	5.35	14.16	11.96	-0.55
95th Percentile	6.68	12.74	-6.71	10.03	5.01	-2.75	3.73	7.40	9.81	-2.37

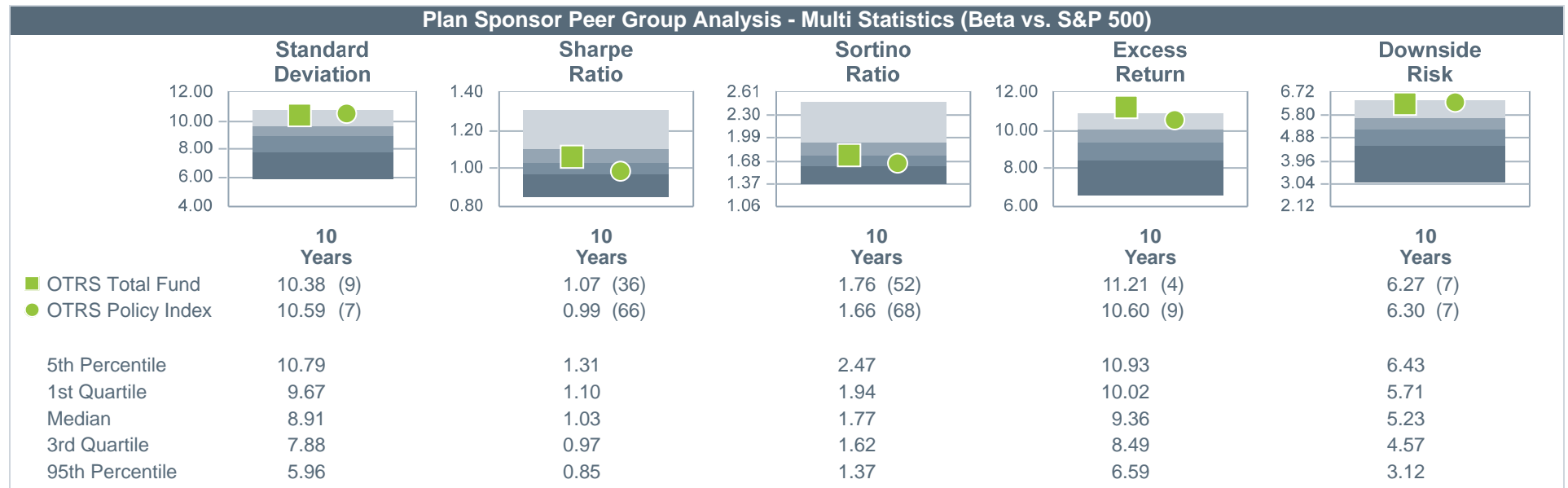
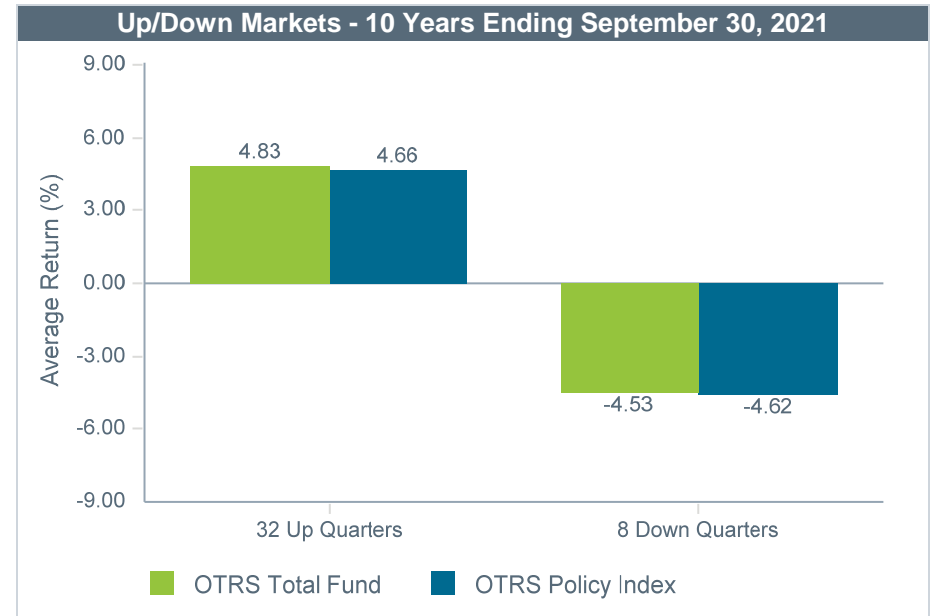
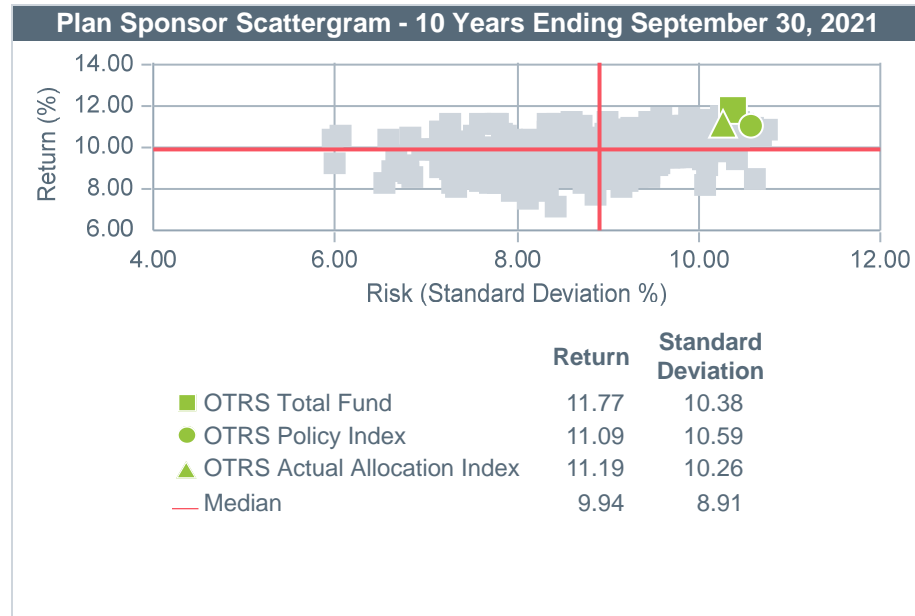
Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.





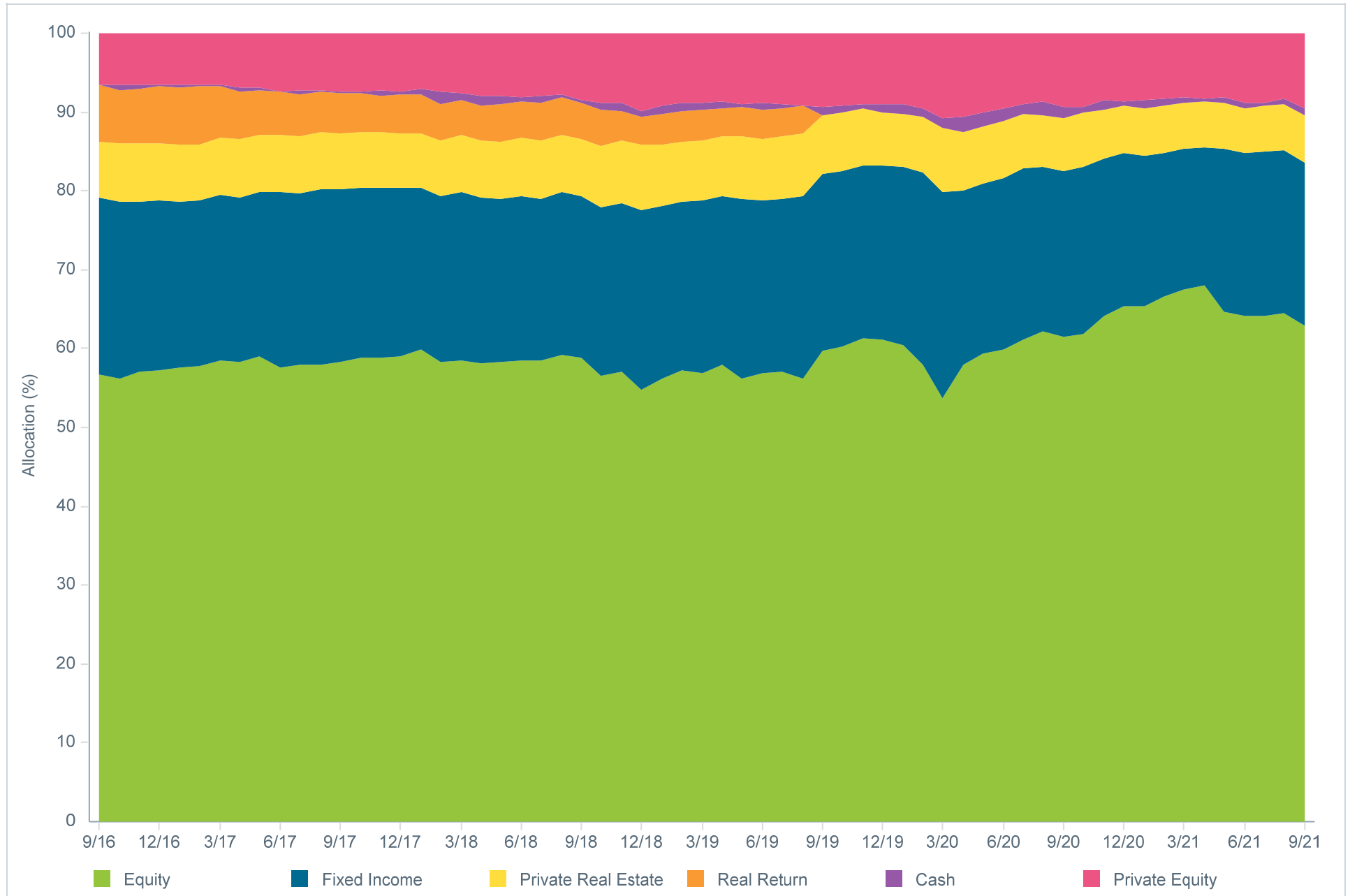
Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation. Allocation to Private Equity includes Private Credit.

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

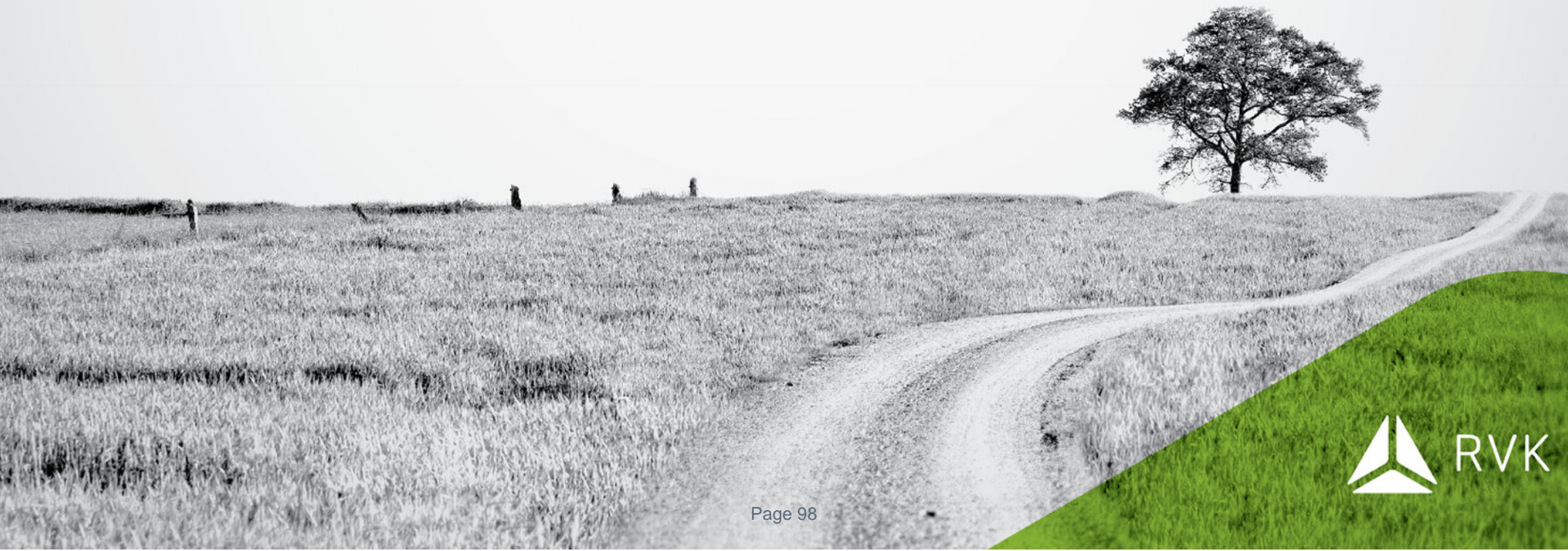


Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



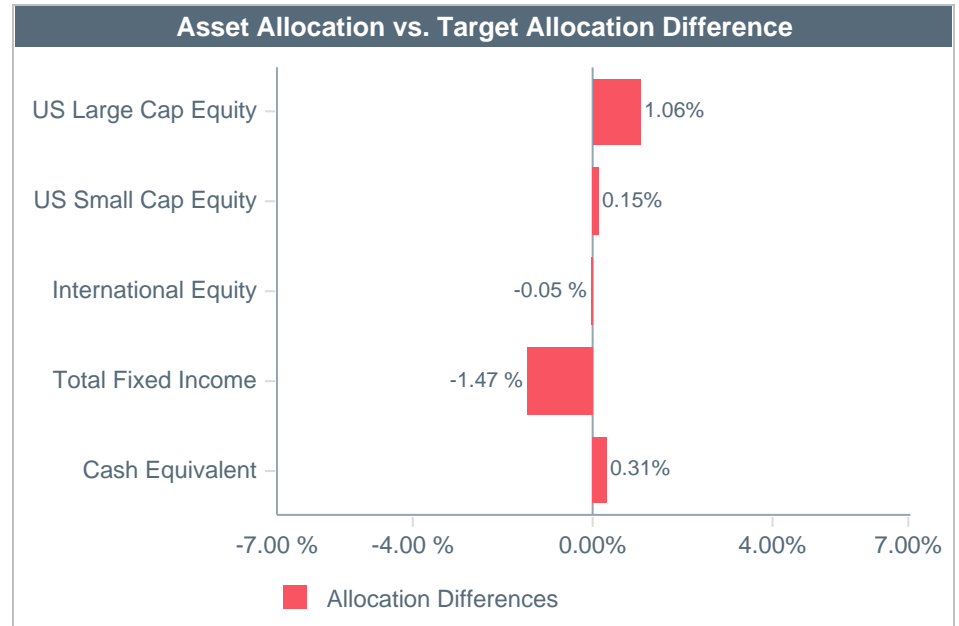


# Oklahoma Public Employees Retirement System (OPERS)



	Performance (%)												
	Trailing							Calendar Year					
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
<b>OPERS Total Fund (Net)</b>	<b>-0.86</b>	<b>-0.86</b>	<b>7.72</b>	<b>19.98</b>	<b>10.92</b>	<b>10.55</b>	<b>8.72</b>	<b>10.16</b>	<b>15.18</b>	<b>21.23</b>	<b>-6.57</b>	<b>17.01</b>	<b>7.59</b>
OPERS Policy Index	-0.90	-0.90	7.04	19.14	11.00	10.55	8.77	10.02	15.19	21.46	-6.09	16.86	8.12
Difference	0.04	0.04	0.68	0.84	-0.08	0.00	-0.05	0.14	-0.01	-0.23	-0.48	0.15	-0.53
OPERS Actual Allocation Index	-0.94	-0.94	7.53	19.75	12.04	11.13	9.18	10.30	18.93	20.87	-6.49	16.51	8.09
Difference	0.08	0.08	0.19	0.23	-1.12	-0.58	-0.46	-0.14	-3.75	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	6.50
Difference	-2.45	-2.45	2.88	13.48	4.42	4.05	2.22	3.66	8.68	14.73	-13.07	10.51	1.09
<b>OPERS Total Fund (Gross)</b>	<b>-0.84</b>	<b>-0.84</b>	<b>7.78</b>	<b>20.08</b>	<b>11.05</b>	<b>10.67</b>	<b>8.84</b>	<b>10.28</b>	<b>15.34</b>	<b>21.38</b>	<b>-6.48</b>	<b>17.13</b>	<b>7.69</b>
OPERS Policy Index	-0.90	-0.90	7.04	19.14	11.00	10.55	8.77	10.02	15.19	21.46	-6.09	16.86	8.12
Difference	0.06	0.06	0.74	0.94	0.05	0.12	0.07	0.26	0.15	-0.08	-0.39	0.27	-0.43
OPERS Actual Allocation Index	-0.94	-0.94	7.53	19.75	12.04	11.13	9.18	10.30	18.93	20.87	-6.49	16.51	8.09
Difference	0.10	0.10	0.25	0.33	-0.99	-0.46	-0.34	-0.02	-3.59	0.51	0.01	0.62	-0.40
All Public Plans-Total Fund Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	12.61	18.52	-4.13	15.30	7.64
Rank	96	96	74	56	34	38	40	36	20	12	93	17	49

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
<b>OPERS (Public Employees)</b>	<b>12,323,438,408</b>	<b>100.00</b>	<b>100.00</b>
US Large Cap Equity	4,321,098,532	35.06	34.00
US Small Cap Equity	757,425,040	6.15	6.00
International Equity	3,444,698,893	27.95	28.00
Total Fixed Income	3,761,828,306	30.53	32.00
Cash Equivalent	38,387,637	0.31	0.00



Parentheses contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding. Fixed Income includes the Grand Centre Real Estate allocation for P... 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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>OPERS Total Fund</b>	<b>12,323,438,408</b>	<b>100.00</b>	<b>-0.86</b>	<b>-0.86</b>	<b>7.72</b>	<b>19.98</b>	<b>10.92</b>	<b>10.55</b>	<b>8.72</b>	<b>10.16</b>	<b>N/A</b>	<b>03/01/1987</b>
OPERS Policy Index			-0.90	-0.90	7.04	19.14	11.00	10.55	8.77	10.02	8.52	
Difference			0.04	0.04	0.68	0.84	-0.08	0.00	-0.05	0.14	N/A	
OPERS Actual Allocation Index			-0.94	-0.94	7.53	19.75	12.04	11.13	9.18	10.30	8.59	
Difference			0.08	0.08	0.19	0.23	-1.12	-0.58	-0.46	-0.14	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			-2.45	-2.45	2.88	13.48	4.42	4.05	2.22	3.66	N/A	
<b>US Equity</b>	<b>5,078,523,572</b>	<b>41.21</b>	<b>-0.03</b>	<b>-0.03</b>	<b>15.65</b>	<b>34.34</b>	<b>15.10</b>	<b>16.48</b>	<b>13.47</b>	<b>16.45</b>	<b>N/A</b>	<b>09/01/1988</b>
OPERS US Equity Custom Index			-0.47	-0.47	14.84	33.49	15.61	16.63	13.81	16.49	N/A	
Difference			0.44	0.44	0.81	0.85	-0.51	-0.15	-0.34	-0.04	N/A	
<b>US Active Large Cap Equity</b>	<b>394,636,076</b>	<b>3.20</b>	<b>0.83</b>	<b>0.83</b>	<b>14.77</b>	<b>29.38</b>	<b>13.58</b>	<b>16.60</b>	<b>12.25</b>	<b>15.99</b>	<b>N/A</b>	<b>08/01/2003</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	10.87	
Difference			0.62	0.62	-0.42	-1.58	-2.85	-0.51	-1.84	-0.77	N/A	
<b>Westfield Large Cap Growth Equity (SA)</b>	<b>394,636,076</b>	<b>3.20</b>	<b>0.83</b>	<b>0.83</b>	<b>14.76</b>	<b>26.93</b>	<b>21.41</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>23.07</b>	<b>02/01/2017</b>
Russell 1000 Grth Index			1.16	1.16	14.30	27.32	22.00	22.84	18.51	19.68	23.51	
Difference			-0.33	-0.33	0.46	-0.39	-0.59	N/A	N/A	N/A	-0.44	
<b>US Large Cap Enhanced Index Equity</b>	<b>1,474,034,823</b>	<b>11.96</b>	<b>1.08</b>	<b>1.08</b>	<b>17.92</b>	<b>32.36</b>	<b>14.53</b>	<b>15.85</b>	<b>12.86</b>	<b>16.22</b>	<b>N/A</b>	<b>03/01/2000</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	7.68	
Difference			0.87	0.87	2.73	1.40	-1.90	-1.26	-1.23	-0.54	N/A	
<b>State Street Large Cap Enhanced Index (SA)</b>	<b>737,075,559</b>	<b>5.98</b>	<b>1.32</b>	<b>1.32</b>	<b>18.23</b>	<b>33.63</b>	<b>15.69</b>	<b>16.60</b>	<b>13.75</b>	<b>16.76</b>	<b>10.30</b>	<b>09/01/2004</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	10.77	
Difference			1.11	1.11	3.04	2.67	-0.74	-0.51	-0.34	0.00	-0.47	
<b>Mellon EB DV Large Cap Stock Index (SA)</b>	<b>736,959,263</b>	<b>5.98</b>	<b>0.83</b>	<b>0.83</b>	<b>17.61</b>	<b>31.11</b>	<b>13.37</b>	<b>15.08</b>	<b>11.97</b>	<b>15.67</b>	<b>9.63</b>	<b>06/01/2004</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	10.52	
Difference			0.62	0.62	2.42	0.15	-3.06	-2.03	-2.12	-1.09	-0.89	
<b>US Large Cap Passive Equity</b>	<b>2,452,427,634</b>	<b>19.90</b>	<b>0.10</b>	<b>0.10</b>	<b>15.34</b>	<b>30.81</b>	<b>16.42</b>	<b>17.09</b>	<b>14.13</b>	<b>16.76</b>	<b>N/A</b>	<b>01/01/2003</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	11.32	
Difference			-0.11	-0.11	0.15	-0.15	-0.01	-0.02	0.04	0.00	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. Grand Centre Real Estate holding is considered Fixed Income for policy purposes; benchmark shown is for illustrative purposes only.



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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>BlackRock Russell 1000 Value (CF)</b>	<b>368,822,764</b>	<b>2.99</b>	<b>-0.78</b>	<b>-0.78</b>	<b>16.16</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>16.16</b>	<b>01/01/2021</b>
Russell 1000 Val Index			-0.78	-0.78	16.14	35.01	10.07	10.94	9.32	13.51	16.14	
Difference			0.00	0.00	0.02	N/A	N/A	N/A	N/A	N/A	0.02	
<b>Blackrock Russell 1000 Index (CF)</b>	<b>2,083,604,869</b>	<b>16.91</b>	<b>0.25</b>	<b>0.25</b>	<b>15.25</b>	<b>31.04</b>	<b>16.48</b>	<b>17.15</b>	<b>14.13</b>	<b>16.80</b>	<b>16.05</b>	<b>09/01/2010</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	16.02	
Difference			0.04	0.04	0.06	0.08	0.05	0.04	0.04	0.04	0.03	
<b>US Active Small Cap Equity</b>	<b>757,425,040</b>	<b>6.15</b>	<b>-2.97</b>	<b>-2.97</b>	<b>13.46</b>	<b>51.93</b>	<b>13.84</b>	<b>16.31</b>	<b>13.40</b>	<b>16.66</b>	<b>N/A</b>	<b>08/01/2003</b>
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	10.25	
Difference			1.39	1.39	1.05	4.25	3.30	2.86	1.50	2.03	N/A	
<b>BHMS Small Cap Value Equity (SA)</b>	<b>235,379,798</b>	<b>1.91</b>	<b>-3.68</b>	<b>-3.68</b>	<b>9.63</b>	<b>54.65</b>	<b>9.81</b>	<b>13.42</b>	<b>11.70</b>	<b>16.41</b>	<b>11.10</b>	<b>12/01/2004</b>
Russell 2000 Val Index			-2.98	-2.98	22.92	63.92	8.58	11.03	10.19	13.22	7.90	
Difference			-0.70	-0.70	-13.29	-9.27	1.23	2.39	1.51	3.19	3.20	
<b>UBS US Small Cap Growth Equity (SA)</b>	<b>257,226,616</b>	<b>2.09</b>	<b>-1.50</b>	<b>-1.50</b>	<b>8.28</b>	<b>39.80</b>	<b>19.90</b>	<b>22.12</b>	<b>17.05</b>	<b>19.02</b>	<b>N/A</b>	<b>06/01/2003</b>
Russell 2000 Grth Index			-5.65	-5.65	2.82	33.27	11.70	15.34	13.19	15.74	11.30	
Difference			4.15	4.15	5.46	6.53	8.20	6.78	3.86	3.28	N/A	
<b>DePrince Race &amp; Zollo Small Cap Value (SA)</b>	<b>264,818,625</b>	<b>2.15</b>	<b>-3.74</b>	<b>-3.74</b>	<b>24.12</b>	<b>64.68</b>	<b>10.52</b>	<b>12.49</b>	<b>10.76</b>	<b>13.99</b>	<b>10.80</b>	<b>03/01/2011</b>
Russell 2000 Val Index			-2.98	-2.98	22.92	63.92	8.58	11.03	10.19	13.22	9.77	
Difference			-0.76	-0.76	1.20	0.76	1.94	1.46	0.57	0.77	1.03	
<b>International Equity</b>	<b>3,444,698,893</b>	<b>27.95</b>	<b>-3.38</b>	<b>-3.38</b>	<b>5.45</b>	<b>23.53</b>	<b>8.88</b>	<b>9.30</b>	<b>6.38</b>	<b>7.96</b>	<b>N/A</b>	<b>05/01/1994</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	5.99	
Difference			-0.50	-0.50	-0.84	-0.92	0.36	-0.14	0.21	-0.01	N/A	
<b>International Core Active Equity</b>	<b>703,149,814</b>	<b>5.71</b>	<b>-4.05</b>	<b>-4.05</b>	<b>7.17</b>	<b>28.12</b>	<b>5.10</b>	<b>6.35</b>	<b>3.93</b>	<b>6.23</b>	<b>N/A</b>	<b>08/01/2003</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	8.08	
Difference			-1.17	-1.17	0.88	3.67	-3.42	-3.09	-2.24	-1.74	N/A	
<b>Mondrian ACWI ex US Equity (SA)</b>	<b>703,149,814</b>	<b>5.71</b>	<b>-4.05</b>	<b>-4.05</b>	<b>7.17</b>	<b>28.12</b>	<b>5.10</b>	<b>6.35</b>	<b>3.93</b>	<b>6.23</b>	<b>N/A</b>	<b>08/01/2001</b>
MSCI ACW Ex US Val Index (USD) (Gross)			-2.14	-2.14	9.66	32.15	4.43	7.06	3.54	6.11	6.24	
Difference			-1.91	-1.91	-2.49	-4.03	0.67	-0.71	0.39	0.12	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. Grand Centre Real Estate holding is considered Fixed Income for policy purposes; benchmark shown is for illustrative purposes only.



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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>International Core Passive Equity</b>	<b>1,946,751,037</b>	<b>15.80</b>	<b>-2.97</b>	<b>-2.97</b>	<b>6.13</b>	<b>24.21</b>	<b>8.28</b>	<b>9.21</b>	<b>5.94</b>	<b>7.73</b>	<b>N/A</b>	<b>08/01/2003</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	8.08	
Difference			-0.09	-0.09	-0.16	-0.24	-0.24	-0.23	-0.23	-0.24	N/A	
<b>Blackrock ACWI Ex US Index (CF)</b>	<b>1,946,751,037</b>	<b>15.80</b>	<b>-2.97</b>	<b>-2.97</b>	<b>6.13</b>	<b>24.21</b>	<b>8.28</b>	<b>9.21</b>	<b>5.94</b>	<b>7.73</b>	<b>6.23</b>	<b>11/01/2009</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	6.46	
Difference			-0.09	-0.09	-0.16	-0.24	-0.24	-0.23	-0.23	-0.24	-0.23	
<b>International Growth Equity</b>	<b>794,798,042</b>	<b>6.45</b>	<b>-3.77</b>	<b>-3.77</b>	<b>2.96</b>	<b>19.15</b>	<b>13.26</b>	<b>12.01</b>	<b>9.24</b>	<b>9.92</b>	<b>7.65</b>	<b>05/01/2005</b>
MSCI ACW Ex US Grth Index (USD) (Gross)			-3.58	-3.58	2.90	17.27	12.30	11.59	8.64	9.69	7.51	
Difference			-0.19	-0.19	0.06	1.88	0.96	0.42	0.60	0.23	0.14	
<b>Baillie Gifford Intl Growth Equity (SA)</b>	<b>405,325,185</b>	<b>3.29</b>	<b>-4.77</b>	<b>-4.77</b>	<b>2.36</b>	<b>18.93</b>	<b>15.69</b>	<b>13.27</b>	<b>10.75</b>	<b>N/A</b>	<b>9.72</b>	<b>10/01/2013</b>
MSCI ACW Ex US Grth Index (USD) (Gross)			-3.58	-3.58	2.90	17.27	12.30	11.59	8.64	9.69	8.13	
Difference			-1.19	-1.19	-0.54	1.66	3.39	1.68	2.11	N/A	1.59	
<b>Blackrock ACWI Ex US Growth (CF)</b>	<b>389,472,857</b>	<b>3.16</b>	<b>-2.70</b>	<b>-2.70</b>	<b>4.77</b>	<b>20.64</b>	<b>10.89</b>	<b>10.76</b>	<b>7.76</b>	<b>8.96</b>	<b>7.50</b>	<b>11/01/2009</b>
MSCI ACW Ex US Grth Index (USD) (Gross)			-3.58	-3.58	2.90	17.27	12.30	11.59	8.64	9.69	8.10	
Difference			0.88	0.88	1.87	3.37	-1.41	-0.83	-0.88	-0.73	-0.60	
<b>Fixed Income</b>	<b>3,752,543,306</b>	<b>30.45</b>	<b>0.36</b>	<b>0.36</b>	<b>-1.39</b>	<b>-0.81</b>	<b>6.83</b>	<b>3.71</b>	<b>4.04</b>	<b>3.77</b>	<b>N/A</b>	<b>04/01/1989</b>
OPERS Fixed Income Custom Index			0.25	0.25	-1.69	-1.33	6.07	3.18	3.63	3.23	N/A	
Difference			0.11	0.11	0.30	0.52	0.76	0.53	0.41	0.54	N/A	
<b>Active Fixed Income</b>	<b>1,497,804,882</b>	<b>12.15</b>	<b>0.23</b>	<b>0.23</b>	<b>-2.89</b>	<b>-2.85</b>	<b>7.65</b>	<b>3.87</b>	<b>4.51</b>	<b>4.29</b>	<b>N/A</b>	<b>08/01/2003</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.19	
Difference			0.18	0.18	-1.33	-1.95	2.30	0.93	1.25	1.28	N/A	
<b>MetWest Core Plus Fixed Income (SA)</b>	<b>1,109,364,674</b>	<b>9.00</b>	<b>0.17</b>	<b>0.17</b>	<b>-0.80</b>	<b>0.46</b>	<b>6.44</b>	<b>3.82</b>	<b>3.84</b>	<b>4.01</b>	<b>N/A</b>	<b>09/01/2001</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.37	
Difference			0.12	0.12	0.76	1.36	1.09	0.88	0.58	1.00	N/A	
<b>Hoisington Long Duration Fixed Income (SA)</b>	<b>388,440,208</b>	<b>3.15</b>	<b>0.39</b>	<b>0.39</b>	<b>-8.58</b>	<b>-11.45</b>	<b>10.38</b>	<b>3.54</b>	<b>6.15</b>	<b>4.87</b>	<b>N/A</b>	<b>10/01/1991</b>
Bloomberg US Trsy Lng Trm Bond Index			0.47	0.47	-7.49	-10.27	9.22	3.31	5.43	4.39	7.43	
Difference			-0.08	-0.08	-1.09	-1.18	1.16	0.23	0.72	0.48	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. Grand Centre Real Estate holding is considered Fixed Income for policy purposes; benchmark shown is for illustrative purposes only.



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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Enhanced Fixed Income</b>	<b>1,821,126,559</b>	<b>14.78</b>	<b>0.14</b>	<b>0.14</b>	<b>-1.30</b>	<b>-0.50</b>	<b>5.91</b>	<b>3.35</b>	<b>3.62</b>	<b>3.43</b>	<b>N/A</b>	<b>06/01/2000</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.90	
Difference			0.09	0.09	0.26	0.40	0.56	0.41	0.36	0.42	N/A	
<b>Blackrock Enhanced Core (SA)</b>	<b>1,821,126,559</b>	<b>14.78</b>	<b>0.14</b>	<b>0.14</b>	<b>-1.30</b>	<b>-0.50</b>	<b>5.91</b>	<b>3.35</b>	<b>3.62</b>	<b>3.43</b>	<b>N/A</b>	<b>06/01/2000</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.90	
Difference			0.09	0.09	0.26	0.40	0.56	0.41	0.36	0.42	N/A	
<b>Passive Fixed Income</b>	<b>433,611,865</b>	<b>3.52</b>	<b>1.76</b>	<b>1.76</b>	<b>3.54</b>	<b>5.24</b>	<b>7.56</b>	<b>4.48</b>	<b>4.03</b>	<b>3.23</b>	<b>4.14</b>	<b>03/01/2010</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.56	
Difference			1.71	1.71	5.10	6.14	2.21	1.54	0.77	0.22	0.58	
<b>Blackrock TIPS (CF)</b>	<b>433,611,865</b>	<b>3.52</b>	<b>1.76</b>	<b>1.76</b>	<b>3.54</b>	<b>5.24</b>	<b>7.56</b>	<b>4.48</b>	<b>4.03</b>	<b>3.23</b>	<b>4.14</b>	<b>03/01/2010</b>
Bloomberg US Trsy US TIPS Index			1.75	1.75	3.51	5.19	7.45	4.34	3.90	3.12	4.10	
Difference			0.01	0.01	0.03	0.05	0.11	0.14	0.13	0.11	0.04	
<b>Real Estate</b>	<b>9,285,000</b>	<b>0.08</b>	<b>-1.25</b>	<b>-1.25</b>	<b>-8.38</b>	<b>-6.79</b>	<b>-4.28</b>	<b>-2.99</b>	<b>-0.69</b>	<b>N/A</b>	<b>-0.82</b>	<b>12/01/2015</b>
NCREIF ODCE Index (EWA) (Net)			6.75	6.75	13.51	14.83	6.84	7.07	8.38	9.22	7.72	
Difference			-8.00	-8.00	-21.89	-21.62	-11.12	-10.06	-9.07	N/A	-8.54	
<b>Grand Centre</b>	<b>9,285,000</b>	<b>0.08</b>	<b>-1.25</b>	<b>-1.25</b>	<b>-8.38</b>	<b>-6.79</b>	<b>-4.28</b>	<b>-2.99</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.82</b>	<b>12/01/2015</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	7.18	
Difference			-7.66	-7.66	-20.79	-20.43	-10.41	-9.55	N/A	N/A	-8.00	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01. Grand Centre Real Estate holding is considered Fixed Income for policy purposes; benchmark shown is for illustrative purposes only.



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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>OPERS Total Fund</b>	<b>12,323,438,408</b>	<b>100.00</b>	<b>-0.84</b>	<b>-0.84</b>	<b>7.78</b>	<b>20.08</b>	<b>11.05</b>	<b>10.67</b>	<b>8.84</b>	<b>10.28</b>	<b>8.67</b>	<b>03/01/1987</b>
OPERS Policy Index			-0.90	-0.90	7.04	19.14	11.00	10.55	8.77	10.02	8.52	
Difference			0.06	0.06	0.74	0.94	0.05	0.12	0.07	0.26	0.15	
OPERS Actual Allocation Index			-0.94	-0.94	7.53	19.75	12.04	11.13	9.18	10.30	8.59	
Difference			0.10	0.10	0.25	0.33	-0.99	-0.46	-0.34	-0.02	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	
Difference			-2.43	-2.43	2.94	13.58	4.55	4.17	2.34	3.78	2.17	
All Public Plans-Total Fund Median			-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	8.45	
Rank			96	96	74	56	34	38	40	36	24	
<b>US Equity</b>	<b>5,078,523,572</b>	<b>41.21</b>	<b>-0.01</b>	<b>-0.01</b>	<b>15.71</b>	<b>34.42</b>	<b>15.25</b>	<b>16.61</b>	<b>13.59</b>	<b>16.57</b>	<b>10.85</b>	<b>09/01/1988</b>
OPERS US Equity Custom Index			-0.47	-0.47	14.84	33.49	15.61	16.63	13.81	16.49	N/A	
Difference			0.46	0.46	0.87	0.93	-0.36	-0.02	-0.22	0.08	N/A	
IM U.S. Equity (SA+CF) Median			-0.41	-0.41	15.93	36.99	13.72	15.36	12.93	16.03	12.06	
Rank			42	42	54	57	42	42	45	43	92	
<b>US Active Large Cap Equity</b>	<b>394,636,076</b>	<b>3.20</b>	<b>0.85</b>	<b>0.85</b>	<b>14.85</b>	<b>29.49</b>	<b>13.65</b>	<b>16.71</b>	<b>12.39</b>	<b>16.12</b>	<b>9.99</b>	<b>08/01/2003</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	10.87	
Difference			0.64	0.64	-0.34	-1.47	-2.78	-0.40	-1.70	-0.64	-0.88	
IM U.S. Large Cap Equity (SA+CF) Median			0.13	0.13	15.89	30.84	15.64	16.70	13.67	16.51	10.93	
Rank			23	23	67	62	62	50	62	56	81	
<b>Westfield Large Cap Growth Equity (SA)</b>	<b>394,636,076</b>	<b>3.20</b>	<b>0.85</b>	<b>0.85</b>	<b>14.85</b>	<b>27.05</b>	<b>21.52</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>23.28</b>	<b>02/01/2017</b>
Russell 1000 Grth Index			1.16	1.16	14.30	27.32	22.00	22.84	18.51	19.68	23.51	
Difference			-0.31	-0.31	0.55	-0.27	-0.48	N/A	N/A	N/A	-0.23	
IM U.S. Large Cap Growth Equity (SA+CF) Median			0.73	0.73	14.18	27.49	20.29	21.03	17.23	18.84	21.91	
Rank			48	48	44	55	39	N/A	N/A	N/A	36	

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. Grand Centre Real Estate holding is considered Fixed Income for policy purposes; benchmark shown is for illustrative purposes only.





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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>US Large Cap Enhanced Index Equity</b>	<b>1,474,034,823</b>	<b>11.96</b>	<b>1.08</b>	<b>1.08</b>	<b>17.93</b>	<b>32.39</b>	<b>14.56</b>	<b>15.88</b>	<b>12.89</b>	<b>16.25</b>	<b>6.61</b>	<b>03/01/2000</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	7.68	
Difference			0.87	0.87	2.74	1.43	-1.87	-1.23	-1.20	-0.51	-1.07	
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median			0.49	0.49	16.69	30.51	14.34	16.52	13.64	16.60	8.07	
Rank			3	3	26	31	47	56	62	71	100	
<b>State Street Large Cap Enhanced Index (SA)</b>	<b>737,075,559</b>	<b>5.98</b>	<b>1.33</b>	<b>1.33</b>	<b>18.25</b>	<b>33.67</b>	<b>15.73</b>	<b>16.64</b>	<b>13.78</b>	<b>16.80</b>	<b>10.35</b>	<b>09/01/2004</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	10.77	
Difference			1.12	1.12	3.06	2.71	-0.70	-0.47	-0.31	0.04	-0.42	
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median			0.49	0.49	16.69	30.51	14.34	16.52	13.64	16.60	10.77	
Rank			2	2	24	22	40	49	47	47	78	
<b>Mellon EB DV Large Cap Stock Index (SA)</b>	<b>736,959,263</b>	<b>5.98</b>	<b>0.83</b>	<b>0.83</b>	<b>17.61</b>	<b>31.12</b>	<b>13.39</b>	<b>15.10</b>	<b>12.00</b>	<b>15.70</b>	<b>9.68</b>	<b>06/01/2004</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	10.52	
Difference			0.62	0.62	2.42	0.16	-3.04	-2.01	-2.09	-1.06	-0.84	
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median			0.49	0.49	16.69	30.51	14.34	16.52	13.64	16.60	10.55	
Rank			10	10	28	40	62	69	74	80	90	
<b>US Large Cap Passive Equity</b>	<b>2,452,427,634</b>	<b>19.90</b>	<b>0.10</b>	<b>0.10</b>	<b>15.35</b>	<b>30.82</b>	<b>16.42</b>	<b>17.09</b>	<b>14.14</b>	<b>16.77</b>	<b>11.49</b>	<b>01/01/2003</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	11.32	
Difference			-0.11	-0.11	0.16	-0.14	-0.01	-0.02	0.05	0.01	0.17	
<b>BlackRock Russell 1000 Value (CF)</b>	<b>368,822,764</b>	<b>2.99</b>	<b>-0.78</b>	<b>-0.78</b>	<b>16.16</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>16.16</b>	<b>01/01/2021</b>
Russell 1000 Val Index			-0.78	-0.78	16.14	35.01	10.07	10.94	9.32	13.51	16.14	
Difference			0.00	0.00	0.02	N/A	N/A	N/A	N/A	N/A	0.02	
IM U.S. Large Cap Value Equity (SA+CF) Median			-0.54	-0.54	17.96	37.30	11.17	12.71	10.36	14.34	17.96	
Rank			61	61	65	N/A	N/A	N/A	N/A	N/A	65	
<b>Blackrock Russell 1000 Index (CF)</b>	<b>2,083,604,869</b>	<b>16.91</b>	<b>0.25</b>	<b>0.25</b>	<b>15.26</b>	<b>31.05</b>	<b>16.49</b>	<b>17.16</b>	<b>14.14</b>	<b>16.80</b>	<b>16.06</b>	<b>09/01/2010</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	16.02	
Difference			0.04	0.04	0.07	0.09	0.06	0.05	0.05	0.04	0.04	
IM U.S. Large Cap Index Equity (SA+CF) Median			0.21	0.21	15.52	30.97	16.00	16.89	13.99	16.63	15.90	
Rank			46	46	55	42	18	19	19	15	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. Grand Centre Real Estate holding is considered Fixed Income for policy purposes; benchmark shown is for illustrative purposes only.



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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>US Active Small Cap Equity</b>	<b>757,425,040</b>	<b>6.15</b>	<b>-2.89</b>	<b>-2.89</b>	<b>13.71</b>	<b>52.36</b>	<b>14.67</b>	<b>16.97</b>	<b>14.04</b>	<b>17.32</b>	<b>12.87</b>	<b>08/01/2003</b>
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	10.25	
Difference			1.47	1.47	1.30	4.68	4.13	3.52	2.14	2.69	2.62	
IM U.S. Small Cap Equity (SA+CF) Median			-1.78	-1.78	17.01	50.29	11.68	14.42	12.75	15.77	11.84	
Rank			72	72	66	46	31	31	36	30	31	
<b>BHMS Small Cap Value Equity (SA)</b>	<b>235,379,798</b>	<b>1.91</b>	<b>-3.55</b>	<b>-3.55</b>	<b>10.04</b>	<b>55.39</b>	<b>10.37</b>	<b>14.00</b>	<b>12.27</b>	<b>17.00</b>	<b>11.73</b>	<b>12/01/2004</b>
Russell 2000 Val Index			-2.98	-2.98	22.92	63.92	8.58	11.03	10.19	13.22	7.90	
Difference			-0.57	-0.57	-12.88	-8.53	1.79	2.97	2.08	3.78	3.83	
IM U.S. Small Cap Value Equity (SA+CF) Median			-1.48	-1.48	22.10	58.79	9.59	11.89	10.60	14.24	9.87	
Rank			89	89	96	62	39	16	21	6	12	
<b>UBS US Small Cap Growth Equity (SA)</b>	<b>257,226,616</b>	<b>2.09</b>	<b>-1.46</b>	<b>-1.46</b>	<b>8.37</b>	<b>39.95</b>	<b>20.95</b>	<b>22.82</b>	<b>17.72</b>	<b>19.71</b>	<b>13.44</b>	<b>06/01/2003</b>
Russell 2000 Grth Index			-5.65	-5.65	2.82	33.27	11.70	15.34	13.19	15.74	11.30	
Difference			4.19	4.19	5.55	6.68	9.25	7.48	4.53	3.97	2.14	
IM U.S. Small Cap Growth Equity (SA+CF) Median			-1.90	-1.90	10.84	40.43	17.12	19.68	16.83	18.69	13.84	
Rank			39	39	68	52	30	37	38	38	59	
<b>DePrince Race &amp; Zollo Small Cap Value (SA)</b>	<b>264,818,625</b>	<b>2.15</b>	<b>-3.66</b>	<b>-3.66</b>	<b>24.39</b>	<b>65.15</b>	<b>11.31</b>	<b>13.13</b>	<b>11.40</b>	<b>14.65</b>	<b>11.42</b>	<b>03/01/2011</b>
Russell 2000 Val Index			-2.98	-2.98	22.92	63.92	8.58	11.03	10.19	13.22	9.77	
Difference			-0.68	-0.68	1.47	1.23	2.73	2.10	1.21	1.43	1.65	
IM U.S. Micro Cap Equity (SA+CF) Median			-3.27	-3.27	24.89	63.39	11.70	15.63	14.02	17.34	13.64	
Rank			54	54	59	48	55	68	72	82	86	
<b>International Equity</b>	<b>3,444,698,893</b>	<b>27.95</b>	<b>-3.35</b>	<b>-3.35</b>	<b>5.55</b>	<b>23.68</b>	<b>9.03</b>	<b>9.47</b>	<b>6.55</b>	<b>8.13</b>	<b>6.32</b>	<b>05/01/1994</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	5.99	
Difference			-0.47	-0.47	-0.74	-0.77	0.51	0.03	0.38	0.16	0.33	
IM All ACWI Ex US (SA+CF) Median			-1.90	-1.90	7.01	25.31	10.09	10.55	7.33	9.71	7.74	
Rank			83	83	72	60	58	62	64	80	99	
<b>International Core Active Equity</b>	<b>703,149,814</b>	<b>5.71</b>	<b>-3.97</b>	<b>-3.97</b>	<b>7.44</b>	<b>28.56</b>	<b>5.47</b>	<b>6.73</b>	<b>4.31</b>	<b>6.63</b>	<b>7.40</b>	<b>08/01/2003</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	8.08	
Difference			-1.09	-1.09	1.15	4.11	-3.05	-2.71	-1.86	-1.34	-0.68	
IM All ACWI Ex US (SA+CF) Median			-1.90	-1.90	7.01	25.31	10.09	10.55	7.33	9.71	9.20	
Rank			89	89	46	31	84	91	94	96	91	
<b>Mondrian ACWI ex US Equity (SA)</b>	<b>703,149,814</b>	<b>5.71</b>	<b>-3.97</b>	<b>-3.97</b>	<b>7.44</b>	<b>28.56</b>	<b>5.47</b>	<b>6.73</b>	<b>4.31</b>	<b>6.63</b>	<b>7.18</b>	<b>08/01/2001</b>
MSCI ACW Ex US Val Index (USD) (Gross)			-2.14	-2.14	9.66	32.15	4.43	7.06	3.54	6.11	6.24	
Difference			-1.83	-1.83	-2.22	-3.59	1.04	-0.33	0.77	0.52	0.94	
IM ACWI Ex US Core (SA+CF) Median			-1.92	-1.92	6.87	24.59	9.90	10.22	7.09	9.20	7.57	
Rank			93	93	45	21	87	95	100	100	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. Grand Centre Real Estate holding is considered Fixed Income for policy purposes; benchmark shown is for illustrative purposes only.



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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>International Core Passive Equity</b>	<b>1,946,751,037</b>	<b>15.80</b>	<b>-2.96</b>	<b>-2.96</b>	<b>6.15</b>	<b>24.24</b>	<b>8.29</b>	<b>9.24</b>	<b>5.98</b>	<b>7.78</b>	<b>7.31</b>	<b>08/01/2003</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	8.08	
Difference			-0.08	-0.08	-0.14	-0.21	-0.23	-0.20	-0.19	-0.19	-0.77	
<b>Blackrock ACWI Ex US Index (CF)</b>	<b>1,946,751,037</b>	<b>15.80</b>	<b>-2.96</b>	<b>-2.96</b>	<b>6.15</b>	<b>24.24</b>	<b>8.29</b>	<b>9.24</b>	<b>5.98</b>	<b>7.78</b>	<b>6.28</b>	<b>11/01/2009</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	6.46	
Difference			-0.08	-0.08	-0.14	-0.21	-0.23	-0.20	-0.19	-0.19	-0.18	
<b>International Growth Equity</b>	<b>794,798,042</b>	<b>6.45</b>	<b>-3.73</b>	<b>-3.73</b>	<b>3.08</b>	<b>19.32</b>	<b>13.50</b>	<b>12.25</b>	<b>9.47</b>	<b>10.11</b>	<b>7.80</b>	<b>05/01/2005</b>
MSCI ACW Ex US Grth Index (USD) (Gross)			-3.58	-3.58	2.90	17.27	12.30	11.59	8.64	9.69	7.51	
Difference			-0.15	-0.15	0.18	2.05	1.20	0.66	0.83	0.42	0.29	
IM ACWI Ex US Growth (SA+CF) Median			-1.50	-1.50	6.33	21.85	12.93	12.81	9.73	11.34	8.76	
Rank			85	85	79	74	46	62	59	85	87	
<b>Baillie Gifford Intl Growth Equity (SA)</b>	<b>405,325,185</b>	<b>3.29</b>	<b>-4.71</b>	<b>-4.71</b>	<b>2.53</b>	<b>19.18</b>	<b>16.10</b>	<b>13.69</b>	<b>11.16</b>	<b>N/A</b>	<b>10.10</b>	<b>10/01/2013</b>
MSCI ACW Ex US Grth Index (USD) (Gross)			-3.58	-3.58	2.90	17.27	12.30	11.59	8.64	9.69	8.13	
Difference			-1.13	-1.13	-0.37	1.91	3.80	2.10	2.52	N/A	1.97	
IM ACWI Ex US Growth (SA+CF) Median			-1.50	-1.50	6.33	21.85	12.93	12.81	9.73	11.34	9.31	
Rank			95	95	83	74	29	34	24	N/A	30	
<b>Blackrock ACWI Ex US Growth (CF)</b>	<b>389,472,857</b>	<b>3.16</b>	<b>-2.69</b>	<b>-2.69</b>	<b>4.83</b>	<b>20.72</b>	<b>10.93</b>	<b>10.81</b>	<b>7.81</b>	<b>9.02</b>	<b>7.56</b>	<b>11/01/2009</b>
MSCI ACW Ex US Grth Index (USD) (Gross)			-3.58	-3.58	2.90	17.27	12.30	11.59	8.64	9.69	8.10	
Difference			0.89	0.89	1.93	3.45	-1.37	-0.78	-0.83	-0.67	-0.54	
IM ACWI Ex US Growth (SA+CF) Median			-1.50	-1.50	6.33	21.85	12.93	12.81	9.73	11.34	9.78	
Rank			67	67	71	63	77	86	84	95	99	

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. Grand Centre Real Estate holding is considered Fixed Income for policy purposes; benchmark shown is for illustrative purposes only.



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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Fixed Income</b>	<b>3,752,543,306</b>	<b>30.45</b>	<b>0.36</b>	<b>0.36</b>	<b>-1.35</b>	<b>-0.74</b>	<b>6.92</b>	<b>3.79</b>	<b>4.12</b>	<b>3.86</b>	<b>6.81</b>	<b>04/01/1989</b>
OPERS Fixed Income Custom Index			0.25	0.25	-1.69	-1.33	6.07	3.18	3.63	3.23	N/A	
Difference			0.11	0.11	0.34	0.59	0.85	0.61	0.49	0.63	N/A	
IM U.S. Broad Market Fixed Income (SA+CF) Median			0.15	0.15	-0.70	0.83	6.21	3.79	3.95	3.94	6.52	
Rank			14	14	79	85	18	50	37	56	13	
<b>Active Fixed Income</b>	<b>1,497,804,882</b>	<b>12.15</b>	<b>0.24</b>	<b>0.24</b>	<b>-2.85</b>	<b>-2.78</b>	<b>7.78</b>	<b>3.97</b>	<b>4.61</b>	<b>4.41</b>	<b>6.35</b>	<b>08/01/2003</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.19	
Difference			0.19	0.19	-1.29	-1.88	2.43	1.03	1.35	1.40	2.16	
IM U.S. Broad Market Fixed Income (SA+CF) Median			0.15	0.15	-0.70	0.83	6.21	3.79	3.95	3.94	4.94	
Rank			28	28	100	100	5	39	16	28	6	
<b>MetWest Core Plus Fixed Income (SA)</b>	<b>1,109,364,674</b>	<b>9.00</b>	<b>0.18</b>	<b>0.18</b>	<b>-0.77</b>	<b>0.51</b>	<b>6.56</b>	<b>3.91</b>	<b>3.92</b>	<b>4.11</b>	<b>5.53</b>	<b>09/01/2001</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.37	
Difference			0.13	0.13	0.79	1.41	1.21	0.97	0.66	1.10	1.16	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			0.22	0.22	-0.21	1.94	6.58	4.13	4.20	4.38	5.41	
Rank			60	60	75	81	54	64	66	66	38	
<b>Hoisington Long Duration Fixed Income (SA)</b>	<b>388,440,208</b>	<b>3.15</b>	<b>0.42</b>	<b>0.42</b>	<b>-8.49</b>	<b>-11.33</b>	<b>10.52</b>	<b>3.67</b>	<b>6.29</b>	<b>5.01</b>	<b>8.30</b>	<b>10/01/1991</b>
Bloomberg US Trsy Lng Trm Bond Index			0.47	0.47	-7.49	-10.27	9.22	3.31	5.43	4.39	7.43	
Difference			-0.05	-0.05	-1.00	-1.06	1.30	0.36	0.86	0.62	0.87	
IM U.S. Long Duration (SA+CF) Median			0.10	0.10	-3.44	-0.39	10.89	6.06	6.88	6.71	N/A	
Rank			7	7	100	100	76	100	90	100	N/A	
<b>Enhanced Fixed Income</b>	<b>1,821,126,559</b>	<b>14.78</b>	<b>0.14</b>	<b>0.14</b>	<b>-1.26</b>	<b>-0.42</b>	<b>5.99</b>	<b>3.43</b>	<b>3.70</b>	<b>3.52</b>	<b>5.13</b>	<b>06/01/2000</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.90	
Difference			0.09	0.09	0.30	0.48	0.64	0.49	0.44	0.51	0.23	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			0.10	0.10	-1.15	0.00	6.05	3.59	3.80	3.66	5.36	
Rank			38	38	58	63	55	63	61	64	76	
<b>Blackrock Enhanced Core (SA)</b>	<b>1,821,126,559</b>	<b>14.78</b>	<b>0.14</b>	<b>0.14</b>	<b>-1.26</b>	<b>-0.42</b>	<b>5.99</b>	<b>3.43</b>	<b>3.70</b>	<b>3.52</b>	<b>5.13</b>	<b>06/01/2000</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.90	
Difference			0.09	0.09	0.30	0.48	0.64	0.49	0.44	0.51	0.23	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			0.10	0.10	-1.15	0.00	6.05	3.59	3.80	3.66	5.36	
Rank			38	38	58	63	55	63	61	64	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. Grand Centre Real Estate holding is considered Fixed Income for policy purposes; benchmark shown is for illustrative purposes only.



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

As of September 30, 2021

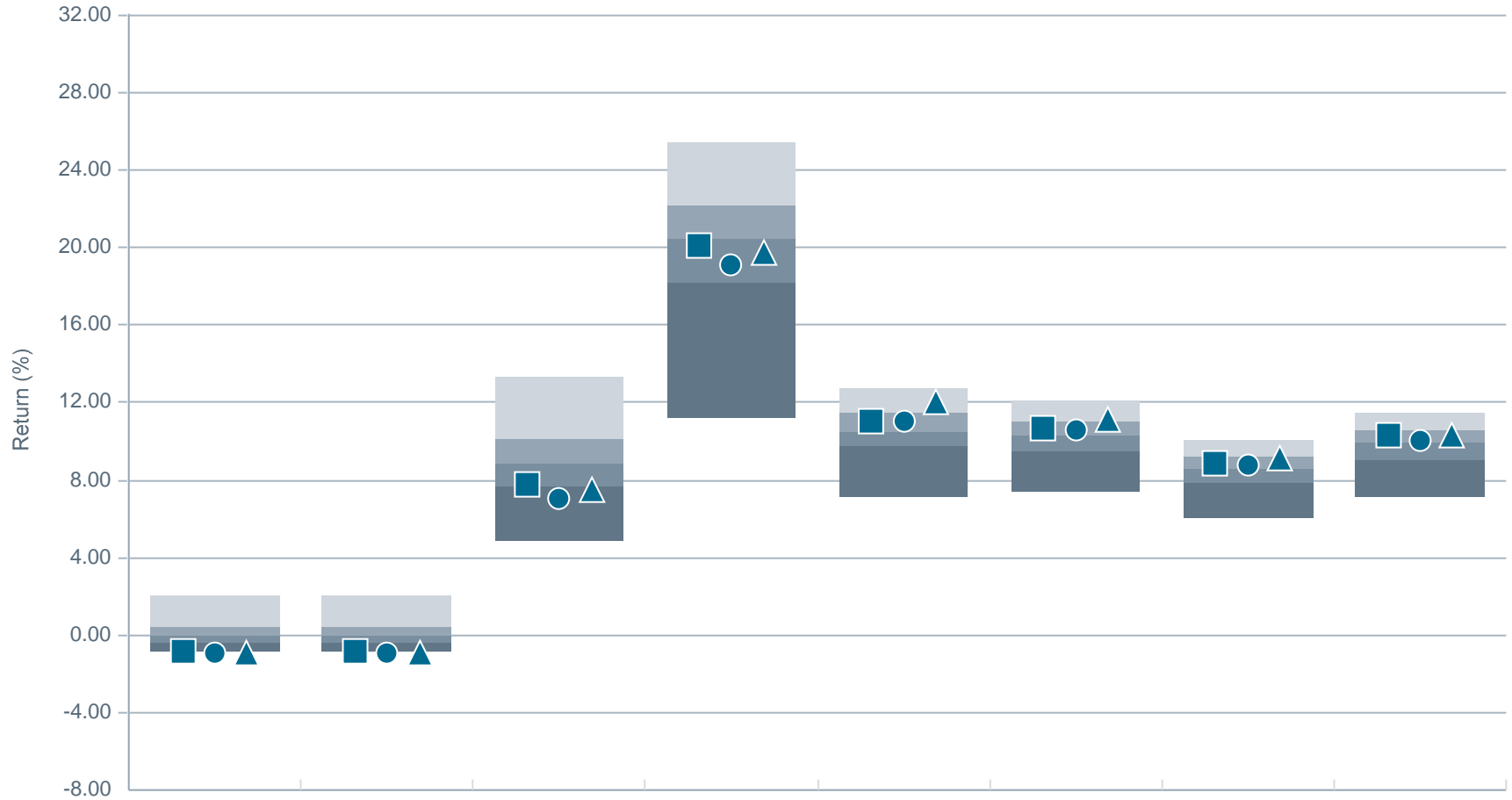
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Passive Fixed Income</b>	<b>433,611,865</b>	<b>3.52</b>	<b>1.76</b>	<b>1.76</b>	<b>3.55</b>	<b>5.25</b>	<b>7.57</b>	<b>4.49</b>	<b>4.04</b>	<b>3.24</b>	<b>4.15</b>	<b>03/01/2010</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.56	
Difference			1.71	1.71	5.11	6.15	2.22	1.55	0.78	0.23	0.59	
<b>Blackrock TIPS (CF)</b>	<b>433,611,865</b>	<b>3.52</b>	<b>1.76</b>	<b>1.76</b>	<b>3.55</b>	<b>5.25</b>	<b>7.57</b>	<b>4.49</b>	<b>4.04</b>	<b>3.24</b>	<b>4.15</b>	<b>03/01/2010</b>
Bloomberg US Trsy US TIPS Index			1.75	1.75	3.51	5.19	7.45	4.34	3.90	3.12	4.10	
Difference			0.01	0.01	0.04	0.06	0.12	0.15	0.14	0.12	0.05	
IM U.S. TIPS (SA+CF) Median			1.72	1.72	3.54	5.23	7.46	4.38	3.94	3.18	4.14	
Rank			33	33	47	49	33	37	33	47	44	
<b>Real Estate</b>	<b>9,285,000</b>	<b>0.08</b>	<b>-1.25</b>	<b>-1.25</b>	<b>-8.38</b>	<b>-6.79</b>	<b>-4.28</b>	<b>-2.99</b>	<b>-0.69</b>	<b>N/A</b>	<b>-0.82</b>	<b>12/01/2015</b>
NCREIF ODCE Index (EWA) (Net)			6.75	6.75	13.51	14.83	6.84	7.07	8.38	9.22	7.72	
Difference			-8.00	-8.00	-21.89	-21.62	-11.12	-10.06	-9.07	N/A	-8.54	
<b>Grand Centre</b>	<b>9,285,000</b>	<b>0.08</b>	<b>-1.25</b>	<b>-1.25</b>	<b>-8.38</b>	<b>-6.79</b>	<b>-4.28</b>	<b>-2.99</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.82</b>	<b>12/01/2015</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	7.18	
Difference			-7.66	-7.66	-20.79	-20.43	-10.41	-9.55	N/A	N/A	-8.00	

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. Grand Centre Real Estate holding is considered Fixed Income for policy purposes; benchmark shown is for illustrative purposes only.



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

As of September 30, 2021



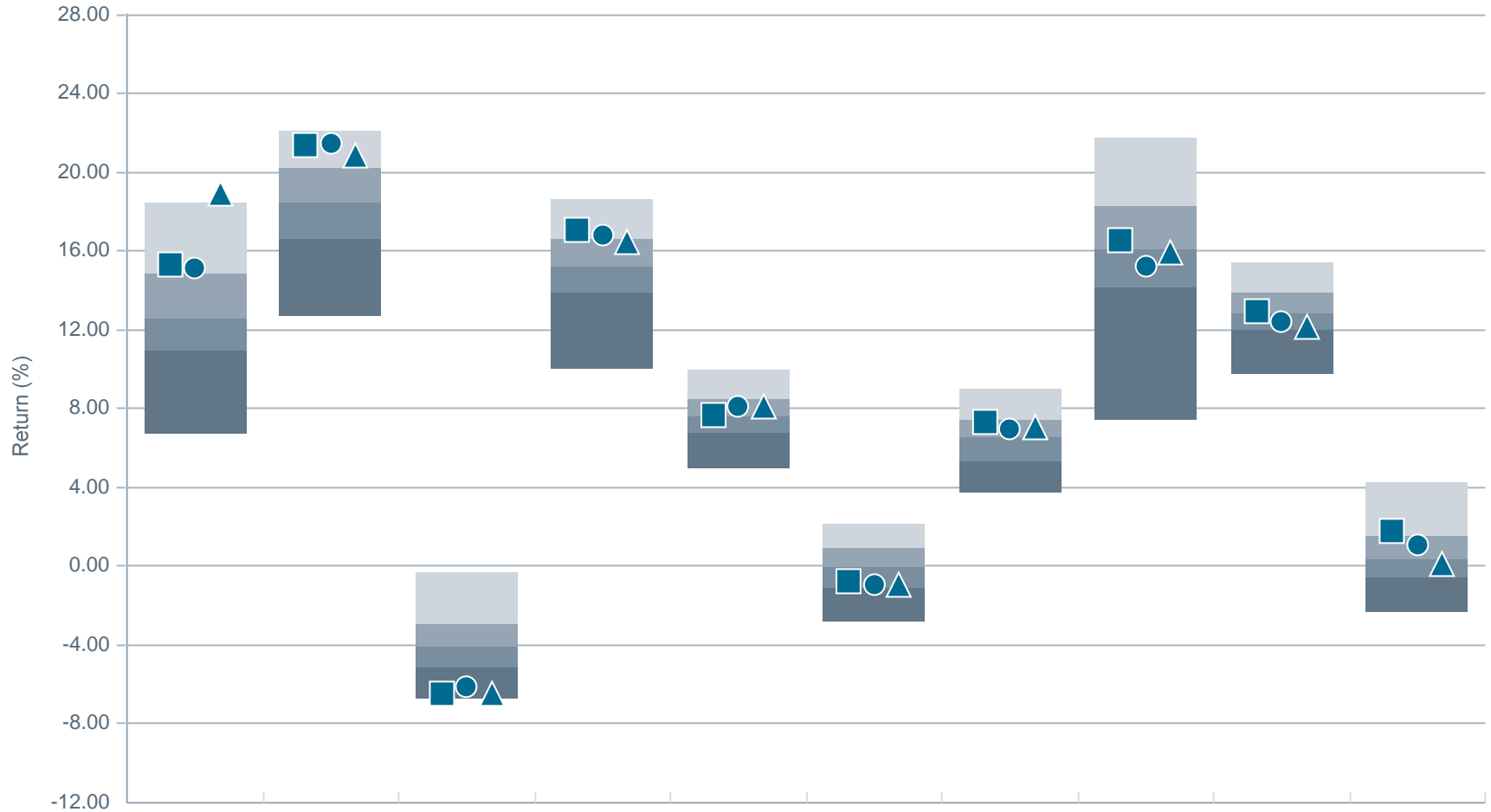
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OPERS Total Fund	-0.84 (96)	-0.84 (96)	7.78 (74)	20.08 (56)	11.05 (34)	10.67 (38)	8.84 (40)	10.28 (36)
● OPERS Policy Index	-0.90 (97)	-0.90 (97)	7.04 (85)	19.14 (67)	11.00 (37)	10.55 (42)	8.77 (42)	10.02 (49)
▲ OPERS Allocation Index	-0.94 (97)	-0.94 (97)	7.53 (79)	19.75 (61)	12.04 (13)	11.13 (23)	9.18 (27)	10.30 (35)
5th Percentile	2.04	2.04	13.29	25.43	12.81	12.16	10.09	11.51
1st Quartile	0.40	0.40	10.11	22.20	11.49	11.07	9.21	10.60
Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94
3rd Quartile	-0.41	-0.41	7.68	18.19	9.76	9.47	7.89	9.08
95th Percentile	-0.83	-0.83	4.87	11.26	7.17	7.39	6.10	7.15

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

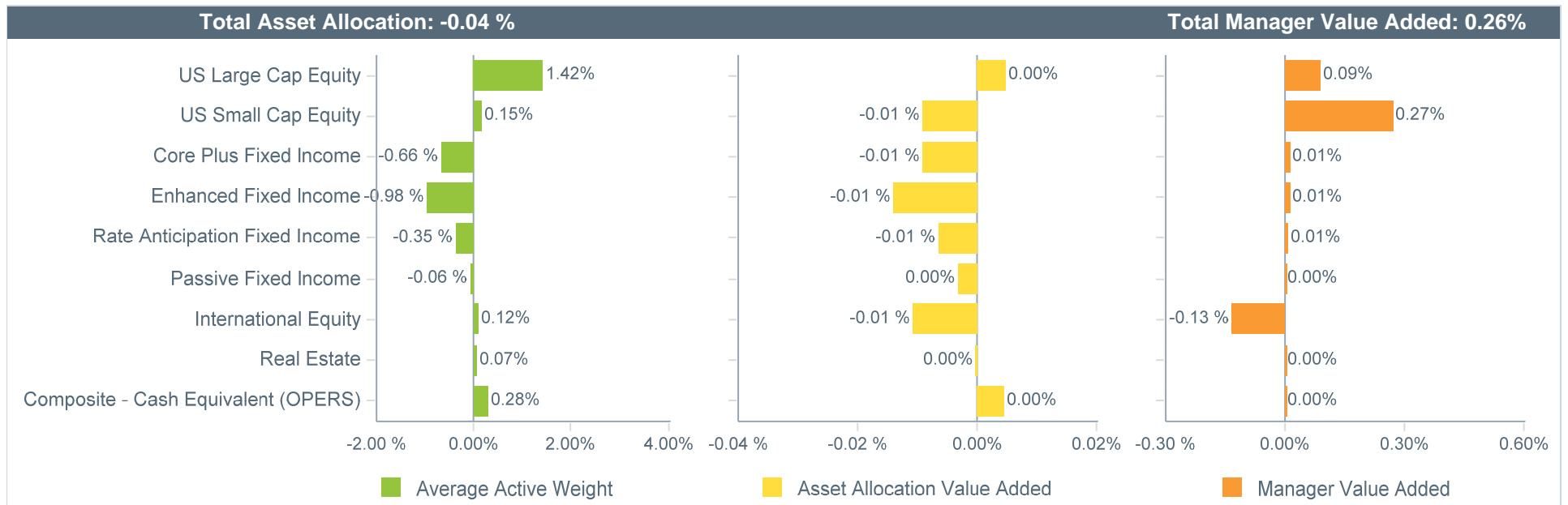
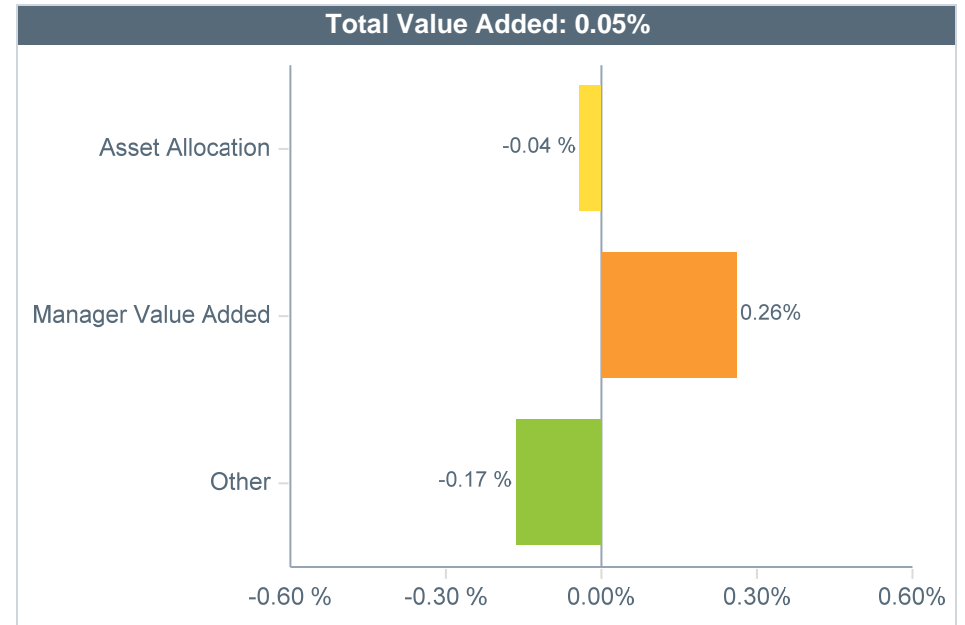
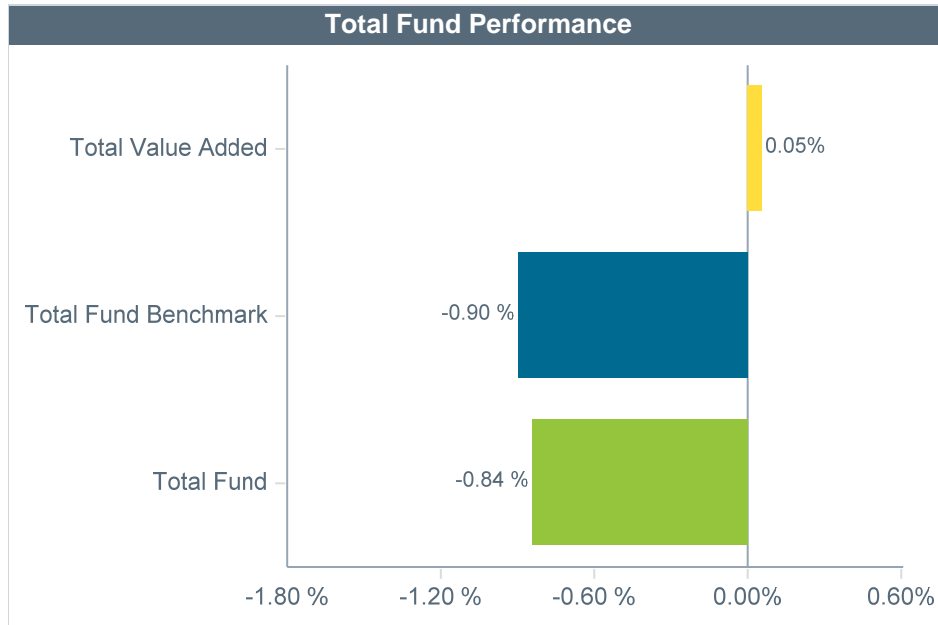
As of September 30, 2021



	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
■ OPERS Total Fund	15.34 (20)	21.38 (12)	-6.48 (93)	17.13 (17)	7.69 (49)	-0.77 (65)	7.37 (28)	16.60 (47)	12.94 (49)	1.81 (23)
● OPERS Policy Index	15.19 (22)	21.46 (11)	-6.09 (89)	16.86 (21)	8.12 (36)	-0.89 (71)	7.00 (37)	15.27 (62)	12.47 (64)	1.11 (33)
▲ OPERS Allocation Index	18.93 (4)	20.87 (17)	-6.49 (93)	16.51 (28)	8.09 (37)	-0.94 (72)	7.05 (35)	15.94 (54)	12.21 (69)	0.13 (60)
5th Percentile	18.53	22.15	-0.35	18.65	9.96	2.13	8.98	21.72	15.42	4.26
1st Quartile	14.87	20.27	-2.95	16.63	8.44	0.90	7.43	18.29	13.94	1.56
Median	12.61	18.52	-4.13	15.30	7.64	-0.07	6.59	16.17	12.90	0.41
3rd Quartile	10.95	16.62	-5.13	13.91	6.81	-1.10	5.35	14.16	11.96	-0.55
95th Percentile	6.68	12.74	-6.71	10.03	5.01	-2.75	3.73	7.40	9.81	-2.37

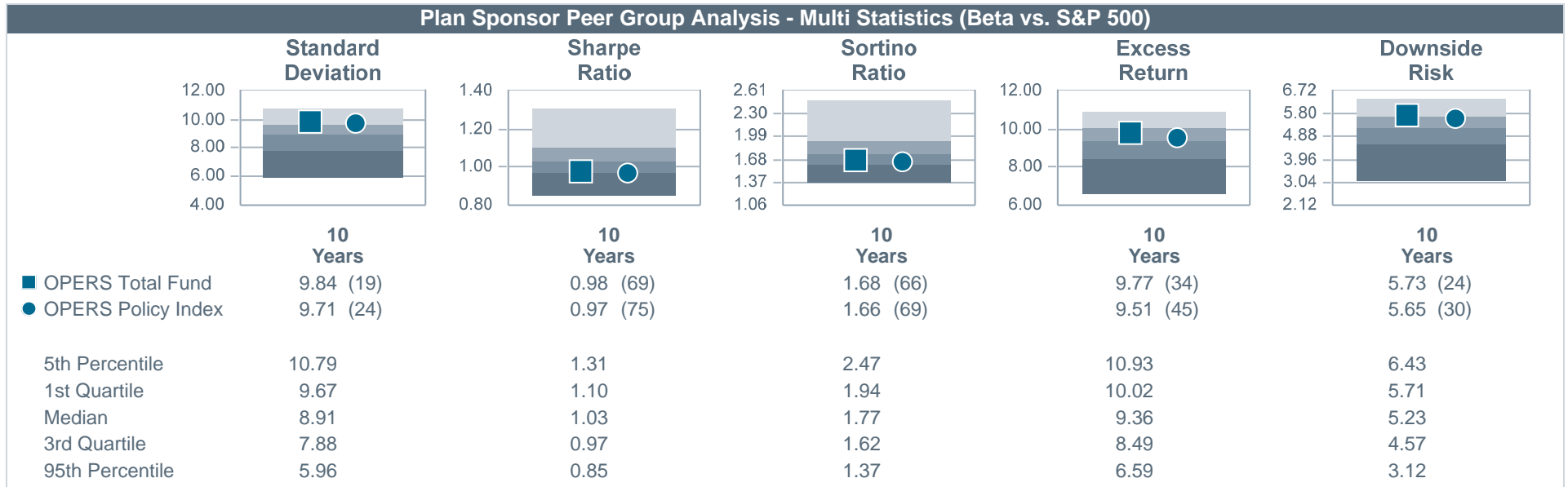
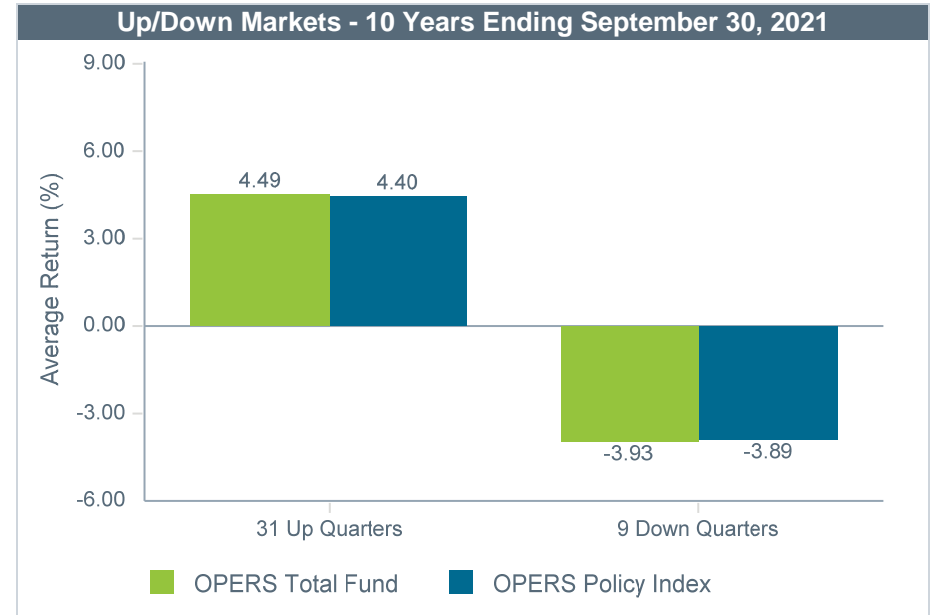
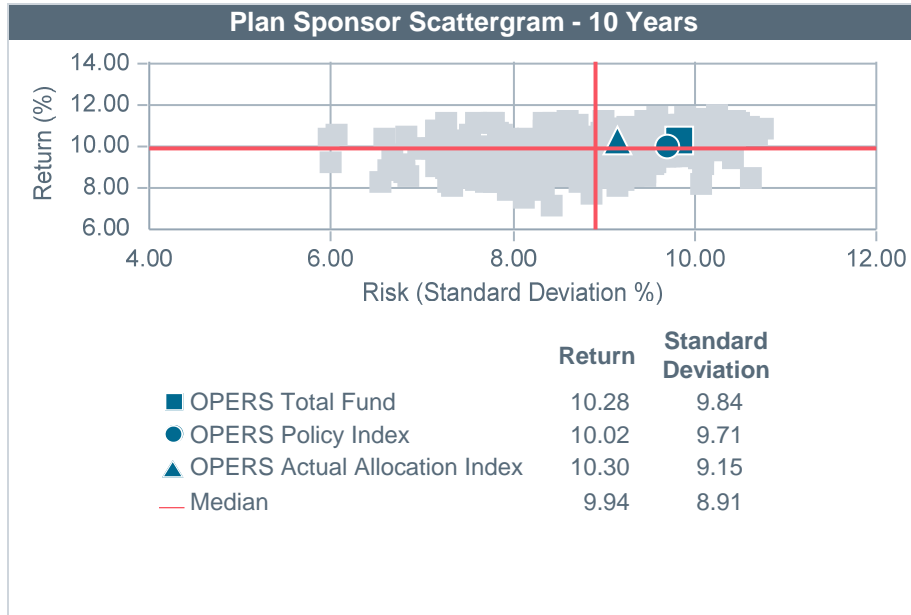
Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



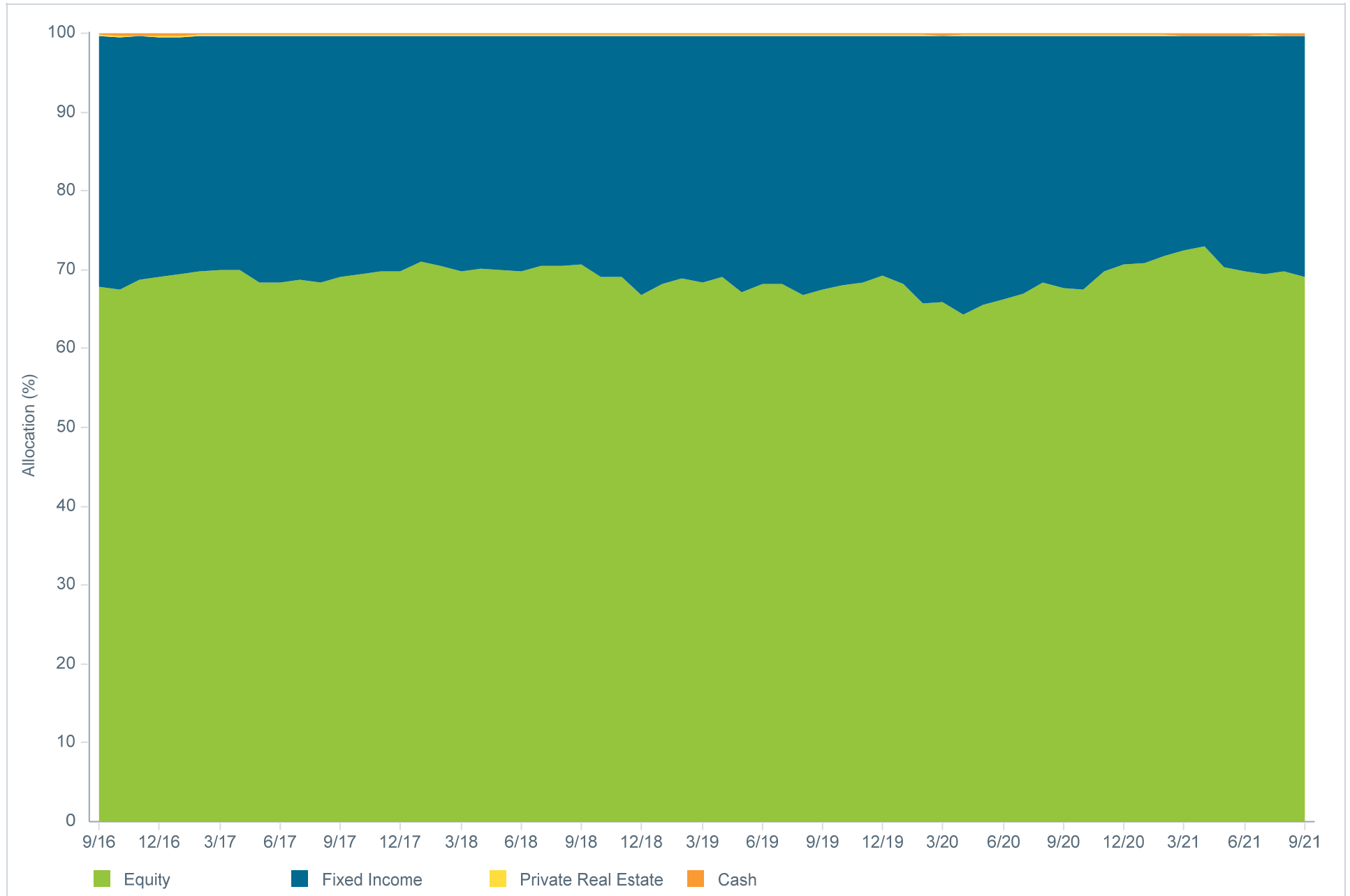


Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation.





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

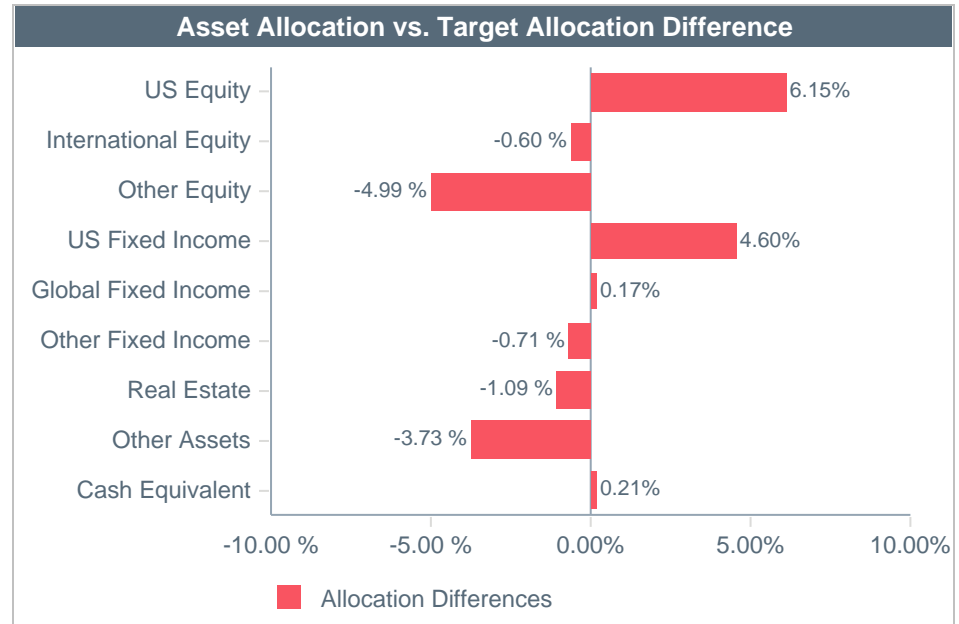


# Oklahoma Firefighters Pension & Retirement System (OFPRS)



	Performance (%)												
	Trailing							Calendar Year					
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
<b>OFPRS Total Fund (Gross)</b>	<b>-0.18</b>	<b>-0.18</b>	<b>9.41</b>	<b>23.21</b>	<b>12.36</b>	<b>12.67</b>	<b>10.69</b>	<b>11.82</b>	<b>18.44</b>	<b>20.15</b>	<b>-2.46</b>	<b>18.67</b>	<b>7.42</b>
OFPRS Policy Index	0.76	0.76	11.37	22.94	12.15	11.97	10.16	11.63	13.85	21.76	-3.80	16.41	8.76
Difference	-0.94	-0.94	-1.96	0.27	0.21	0.70	0.53	0.19	4.59	-1.61	1.34	2.26	-1.34
OFPRS Actual Allocation Index	0.30	0.30	9.92	21.76	12.08	12.05	10.06	11.44	17.79	20.30	-3.93	15.64	9.45
Difference	-0.48	-0.48	-0.51	1.45	0.28	0.62	0.63	0.38	0.65	-0.15	1.47	3.03	-2.03
All Public Plans-Total Fund Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	12.61	18.52	-4.13	15.30	7.64
Rank	61	61	37	18	9	3	3	3	6	28	19	5	58

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
<b>OFPRS (Firefighters)</b>	<b>3,662,719,102</b>	<b>100.00</b>	<b>100.00</b>
US Equity	1,763,677,170	48.15	42.00
International Equity	527,339,423	14.40	15.00
Other Equity	245,008	0.01	5.00
US Fixed Income	461,502,178	12.60	8.00
Global Fixed Income	262,484,364	7.17	7.00
Other Fixed Income	157,188,544	4.29	5.00
Real Estate	326,220,965	8.91	10.00
Other Assets	156,302,316	4.27	8.00
Cash Equivalent	7,759,134	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. Net of fees returns for the Firefighters plan are not available.



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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>OFPRS Total Fund</b>	<b>3,662,719,102</b>	<b>100.00</b>	<b>-0.18</b>	<b>-0.18</b>	<b>9.41</b>	<b>23.21</b>	<b>12.36</b>	<b>12.67</b>	<b>10.69</b>	<b>11.82</b>	<b>8.80</b>	<b>07/01/1989</b>
OFPRS Policy Index			0.76	0.76	11.37	22.94	12.15	11.97	10.16	11.63	N/A	
Difference			-0.94	-0.94	-1.96	0.27	0.21	0.70	0.53	0.19	N/A	
OFPRS Actual Allocation Index			0.30	0.30	9.92	21.76	12.08	12.05	10.06	11.44	8.63	
Difference			-0.48	-0.48	-0.51	1.45	0.28	0.62	0.63	0.38	0.17	
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			-2.00	-2.00	3.84	15.71	4.86	5.17	3.19	4.32	1.30	
All Public Plans-Total Fund Median			-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	8.50	
Rank			61	61	37	18	9	3	3	3	24	
<b>Total Equity</b>	<b>2,291,016,593</b>	<b>62.55</b>	<b>-1.43</b>	<b>-1.43</b>	<b>11.16</b>	<b>31.05</b>	<b>16.37</b>	<b>17.02</b>	<b>13.71</b>	<b>15.33</b>	<b>9.96</b>	<b>07/01/1989</b>
Wilshire 5000 Index			0.14	0.14	15.62	32.35	16.19	17.01	14.11	16.66	10.74	
Difference			-1.57	-1.57	-4.46	-1.30	0.18	0.01	-0.40	-1.33	-0.78	
<b>US Equity</b>	<b>1,763,677,170</b>	<b>48.15</b>	<b>-1.34</b>	<b>-1.34</b>	<b>13.06</b>	<b>33.14</b>	<b>16.67</b>	<b>17.73</b>	<b>14.46</b>	<b>16.58</b>	<b>10.42</b>	<b>07/01/1989</b>
Wilshire 5000 Index			0.14	0.14	15.62	32.35	16.19	17.01	14.11	16.66	10.74	
Difference			-1.48	-1.48	-2.56	0.79	0.48	0.72	0.35	-0.08	-0.32	
IM U.S. Equity (SA+CF) Median			-0.41	-0.41	15.93	36.99	13.72	15.36	12.93	16.03	11.80	
Rank			67	67	73	60	31	30	32	43	91	
<b>US Large Cap Equity</b>	<b>1,280,859,276</b>	<b>34.97</b>	<b>-0.41</b>	<b>-0.41</b>	<b>15.19</b>	<b>30.83</b>	<b>16.02</b>	<b>16.83</b>	<b>13.71</b>	<b>16.66</b>	<b>10.66</b>	<b>07/01/1989</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	10.87	
Difference			-0.62	-0.62	0.00	-0.13	-0.41	-0.28	-0.38	-0.10	-0.21	
IM U.S. Large Cap Equity (SA+CF) Median			0.13	0.13	15.89	30.84	15.64	16.70	13.67	16.51	11.17	
Rank			67	67	61	51	45	49	50	43	83	
<b>US Large Cap Core Equity</b>	<b>802,167,668</b>	<b>21.90</b>	<b>-0.05</b>	<b>-0.05</b>	<b>15.98</b>	<b>32.90</b>	<b>15.42</b>	<b>16.05</b>	<b>13.54</b>	<b>16.46</b>	<b>10.34</b>	<b>11/01/1996</b>
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	9.56	
Difference			-0.63	-0.63	0.06	2.90	-0.57	-0.85	-0.47	-0.17	0.78	
IM U.S. Large Cap Core Equity (SA+CF) Median			0.12	0.12	15.91	30.41	15.32	16.56	13.66	16.55	10.34	
Rank			61	61	47	28	49	61	53	54	50	
<b>SSgA Equity Index (CF)</b>	<b>240,090,646</b>	<b>6.55</b>	<b>0.56</b>	<b>0.56</b>	<b>15.89</b>	<b>29.97</b>	<b>15.99</b>	<b>16.90</b>	<b>14.04</b>	<b>16.66</b>	<b>9.58</b>	<b>11/01/1996</b>
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	9.56	
Difference			-0.02	-0.02	-0.03	-0.03	0.00	0.00	0.03	0.03	0.02	
IM U.S. Large Cap Index Equity (SA+CF) Median			0.21	0.21	15.52	30.97	16.00	16.89	13.99	16.63	9.64	
Rank			33	33	41	70	51	43	37	39	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 Firefighters Pension & Retirement System  
Asset Allocation & Performance - Gross of Fees

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>SSgA Eq Wtd S&amp;P Index (CF)</b>	<b>234,532,129</b>	<b>6.40</b>	<b>-0.35</b>	<b>-0.35</b>	<b>18.60</b>	<b>40.68</b>	<b>13.99</b>	<b>14.42</b>	<b>12.31</b>	<b>15.92</b>	<b>10.63</b>	<b>12/01/2001</b>
S&P 500 Index (Eq Wtd)			-0.22	-0.22	18.92	40.87	14.29	14.61	12.41	15.99	10.65	
Difference			-0.13	-0.13	-0.32	-0.19	-0.30	-0.19	-0.10	-0.07	-0.02	
IM U.S. Large Cap Index Equity (SA+CF) Median			0.21	0.21	15.52	30.97	16.00	16.89	13.99	16.63	9.27	
Rank			80	80	3	4	82	83	81	84	2	
<b>Liquidity Pool - SSgA Equity Index (CF)</b>	<b>75,552,384</b>	<b>2.06</b>	<b>0.56</b>	<b>0.56</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.14</b>	<b>04/01/2021</b>
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	9.18	
Difference			-0.02	-0.02	N/A	N/A	N/A	N/A	N/A	N/A	-0.04	
IM U.S. Large Cap Core Equity (SA+CF) Median			0.12	0.12	15.91	30.41	15.32	16.56	13.66	16.55	8.18	
Rank			32	32	N/A	N/A	N/A	N/A	N/A	N/A	30	
<b>Liquidity Pool - SSgA Eq Wtd S&amp;P Index (CF)</b>	<b>19,158,510</b>	<b>0.52</b>	<b>-0.34</b>	<b>-0.34</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>6.56</b>	<b>04/01/2021</b>
S&P 500 Index (Eq Wtd)			-0.22	-0.22	18.92	40.87	14.29	14.61	12.41	15.99	6.66	
Difference			-0.12	-0.12	N/A	N/A	N/A	N/A	N/A	N/A	-0.10	
IM U.S. Large Cap Core Equity (SA+CF) Median			0.12	0.12	15.91	30.41	15.32	16.56	13.66	16.55	8.18	
Rank			72	72	N/A	N/A	N/A	N/A	N/A	N/A	77	
<b>Intech Enhanced Investment Tech (SA)</b>	<b>232,833,999</b>	<b>6.36</b>	<b>-0.80</b>	<b>-0.80</b>	<b>12.87</b>	<b>27.61</b>	<b>15.81</b>	<b>16.56</b>	<b>13.90</b>	<b>16.53</b>	<b>10.00</b>	<b>02/01/2002</b>
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	9.19	
Difference			-1.38	-1.38	-3.05	-2.39	-0.18	-0.34	-0.11	-0.10	0.81	
IM U.S. Large Cap Index Equity (SA+CF) Median			0.21	0.21	15.52	30.97	16.00	16.89	13.99	16.63	9.37	
Rank			89	89	95	91	74	77	72	74	13	
<b>US Large Cap Value Equity</b>	<b>246,954,139</b>	<b>6.74</b>	<b>-1.83</b>	<b>-1.83</b>	<b>14.64</b>	<b>31.54</b>	<b>10.85</b>	<b>12.60</b>	<b>9.43</b>	<b>13.41</b>	<b>9.61</b>	<b>06/01/1990</b>
Russell 1000 Val Index			-0.78	-0.78	16.14	35.01	10.07	10.94	9.32	13.51	9.96	
Difference			-1.05	-1.05	-1.50	-3.47	0.78	1.66	0.11	-0.10	-0.35	
IM U.S. Large Cap Value Equity (SA+CF) Median			-0.54	-0.54	17.96	37.30	11.17	12.71	10.36	14.34	11.00	
Rank			87	87	79	73	54	53	73	78	96	
<b>Beutel Goodman American Equity (SA)</b>	<b>129,891,568</b>	<b>3.55</b>	<b>-3.18</b>	<b>-3.18</b>	<b>12.75</b>	<b>28.74</b>	<b>14.41</b>	<b>14.80</b>	<b>N/A</b>	<b>N/A</b>	<b>14.98</b>	<b>05/01/2016</b>
Russell 1000 Val Index			-0.78	-0.78	16.14	35.01	10.07	10.94	9.32	13.51	11.24	
Difference			-2.40	-2.40	-3.39	-6.27	4.34	3.86	N/A	N/A	3.74	
IM U.S. Large Cap Value Equity (SA+CF) Median			-0.54	-0.54	17.96	37.30	11.17	12.71	10.36	14.34	12.74	
Rank			96	96	91	82	20	22	N/A	N/A	20	
<b>Aristotle US Equity (SA)</b>	<b>117,062,571</b>	<b>3.20</b>	<b>-0.29</b>	<b>-0.29</b>	<b>16.82</b>	<b>34.87</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>29.61</b>	<b>09/01/2020</b>
Russell 1000 Val Index			-0.78	-0.78	16.14	35.01	10.07	10.94	9.32	13.51	28.94	
Difference			0.49	0.49	0.68	-0.14	N/A	N/A	N/A	N/A	0.67	
IM U.S. Large Cap Value Equity (SA+CF) Median			-0.54	-0.54	17.96	37.30	11.17	12.71	10.36	14.34	30.47	
Rank			43	43	61	61	N/A	N/A	N/A	N/A	54	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>US Large Cap Growth Equity</b>	<b>231,737,469</b>	<b>6.33</b>	<b>-0.10</b>	<b>-0.10</b>	<b>12.70</b>	<b>23.51</b>	<b>22.37</b>	<b>23.12</b>	<b>18.42</b>	<b>20.40</b>	<b>10.89</b>	<b>07/01/1989</b>
Russell 1000 Grth Index			1.16	1.16	14.30	27.32	22.00	22.84	18.51	19.68	11.33	
Difference			-1.26	-1.26	-1.60	-3.81	0.37	0.28	-0.09	0.72	-0.44	
IM U.S. Large Cap Growth Equity (SA+CF) Median			0.73	0.73	14.18	27.49	20.29	21.03	17.23	18.84	12.47	
Rank			76	76	72	89	30	29	32	20	100	
<b>Fred Alger Capital Appreciation (SA)</b>	<b>231,737,469</b>	<b>6.33</b>	<b>-0.10</b>	<b>-0.10</b>	<b>12.70</b>	<b>23.51</b>	<b>22.37</b>	<b>23.09</b>	<b>18.40</b>	<b>20.39</b>	<b>18.89</b>	<b>08/01/2010</b>
Russell 1000 Grth Index			1.16	1.16	14.30	27.32	22.00	22.84	18.51	19.68	18.41	
Difference			-1.26	-1.26	-1.60	-3.81	0.37	0.25	-0.11	0.71	0.48	
IM U.S. Large Cap Growth Equity (SA+CF) Median			0.73	0.73	14.18	27.49	20.29	21.03	17.23	18.84	17.63	
Rank			76	76	72	89	30	30	32	20	20	
<b>US Small Cap Equity</b>	<b>482,817,894</b>	<b>13.18</b>	<b>-3.87</b>	<b>-3.87</b>	<b>7.08</b>	<b>37.33</b>	<b>17.82</b>	<b>19.49</b>	<b>16.03</b>	<b>17.48</b>	<b>10.91</b>	<b>07/01/1992</b>
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	10.26	
Difference			0.49	0.49	-5.33	-10.35	7.28	6.04	4.13	2.85	0.65	
IM U.S. Small Cap Equity (SA+CF) Median			-1.78	-1.78	17.01	50.29	11.68	14.42	12.75	15.77	13.11	
Rank			85	85	92	85	18	18	20	28	92	
<b>Liquidity Pool - SSgA Small Cap Completeness Index (CF)</b>	<b>40,285,112</b>	<b>1.10</b>	<b>-3.02</b>	<b>-3.02</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>3.65</b>	<b>04/01/2021</b>
Russell Sm Cap Compl Index			-3.09	-3.09	11.17	41.51	15.77	16.53	13.55	16.36	3.63	
Difference			0.07	0.07	N/A	N/A	N/A	N/A	N/A	N/A	0.02	
IM U.S. Small Cap Equity (SA+CF) Median			-1.78	-1.78	17.01	50.29	11.68	14.42	12.75	15.77	2.82	
Rank			74	74	N/A	N/A	N/A	N/A	N/A	N/A	39	
<b>US Small Cap Value Equity</b>	<b>232,276,150</b>	<b>6.34</b>	<b>-2.28</b>	<b>-2.28</b>	<b>16.01</b>	<b>46.40</b>	<b>12.93</b>	<b>14.95</b>	<b>13.12</b>	<b>15.48</b>	<b>11.20</b>	<b>09/01/1992</b>
Russell 2000 Val Index			-2.98	-2.98	22.92	63.92	8.58	11.03	10.19	13.22	10.90	
Difference			0.70	0.70	-6.91	-17.52	4.35	3.92	2.93	2.26	0.30	
IM U.S. Small Cap Value Equity (SA+CF) Median			-1.48	-1.48	22.10	58.79	9.59	11.89	10.60	14.24	13.29	
Rank			67	67	79	83	14	14	14	26	91	
<b>Earnest Partner Small Cap Value Equity (SA)</b>	<b>120,104,786</b>	<b>3.28</b>	<b>-2.34</b>	<b>-2.34</b>	<b>16.87</b>	<b>49.01</b>	<b>15.79</b>	<b>16.33</b>	<b>13.73</b>	<b>16.77</b>	<b>10.36</b>	<b>09/01/2005</b>
Russell 2000 Val Index			-2.98	-2.98	22.92	63.92	8.58	11.03	10.19	13.22	7.84	
Difference			0.64	0.64	-6.05	-14.91	7.21	5.30	3.54	3.55	2.52	
IM U.S. Small Cap Value Equity (SA+CF) Median			-1.48	-1.48	22.10	58.79	9.59	11.89	10.60	14.24	9.60	
Rank			69	69	76	79	6	9	10	8	31	
<b>River Road Small Cap Value Equity (SA)</b>	<b>112,171,365</b>	<b>3.06</b>	<b>-2.19</b>	<b>-2.19</b>	<b>14.18</b>	<b>42.30</b>	<b>9.51</b>	<b>13.21</b>	<b>12.26</b>	<b>13.96</b>	<b>8.11</b>	<b>05/01/2007</b>
Russell 2000 Val Index			-2.98	-2.98	22.92	63.92	8.58	11.03	10.19	13.22	6.99	
Difference			0.79	0.79	-8.74	-21.62	0.93	2.18	2.07	0.74	1.12	
IM U.S. Small Cap Value Equity (SA+CF) Median			-1.48	-1.48	22.10	58.79	9.59	11.89	10.60	14.24	8.97	
Rank			64	64	86	93	52	27	21	61	79	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>US Small Cap Growth Equity</b>	<b>210,256,632</b>	<b>5.74</b>	<b>-5.59</b>	<b>-5.59</b>	<b>-0.12</b>	<b>30.02</b>	<b>21.56</b>	<b>24.07</b>	<b>19.07</b>	<b>19.59</b>	<b>9.78</b>	<b>07/01/1992</b>
Russell 2000 Grth Index			-5.65	-5.65	2.82	33.27	11.70	15.34	13.19	15.74	9.13	
Difference			0.06	0.06	-2.94	-3.25	9.86	8.73	5.88	3.85	0.65	
IM U.S. Small Cap Growth Equity (SA+CF) Median			-1.90	-1.90	10.84	40.43	17.12	19.68	16.83	18.69	13.50	
Rank			92	92	95	87	27	26	28	39	98	
<b>Lord Abbett Small Cap Growth Equity (SA)</b>	<b>108,286,529</b>	<b>2.96</b>	<b>-3.38</b>	<b>-3.38</b>	<b>2.40</b>	<b>31.02</b>	<b>22.08</b>	<b>26.15</b>	<b>18.35</b>	<b>20.01</b>	<b>16.10</b>	<b>05/01/2011</b>
Russell 2000 Grth Index			-5.65	-5.65	2.82	33.27	11.70	15.34	13.19	15.74	11.87	
Difference			2.27	2.27	-0.42	-2.25	10.38	10.81	5.16	4.27	4.23	
IM U.S. Small Cap Growth Equity (SA+CF) Median			-1.90	-1.90	10.84	40.43	17.12	19.68	16.83	18.69	14.80	
Rank			74	74	90	86	24	16	36	29	26	
<b>Delaware SMID Focus Growth Equity (SA)</b>	<b>101,970,103</b>	<b>2.78</b>	<b>-7.82</b>	<b>-7.82</b>	<b>-2.65</b>	<b>28.98</b>	<b>20.93</b>	<b>22.13</b>	<b>19.60</b>	<b>19.00</b>	<b>16.29</b>	<b>05/01/2011</b>
Russell 2500 Grth Index			-3.53	-3.53	4.84	31.98	16.01	18.21	14.93	17.20	13.47	
Difference			-4.29	-4.29	-7.49	-3.00	4.92	3.92	4.67	1.80	2.82	
IM U.S. SMID Cap Growth Equity (SA+CF) Median			-0.75	-0.75	9.94	34.87	18.77	20.51	16.48	18.30	14.60	
Rank			100	100	98	83	35	37	14	35	20	
<b>Other Equity</b>												
<b>Tortoise Direct Opportunities (CF)</b>	<b>245,008</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>33.37</b>	<b>27.26</b>	<b>-5.77</b>	<b>-0.98</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.98</b>	<b>10/01/2016</b>
Alerian MLP Index			-5.71	-5.71	39.40	84.63	-4.32	-2.42	-6.89	1.21	-2.42	
Difference			5.72	5.72	-6.03	-57.37	-1.45	1.44	N/A	N/A	1.44	
<b>International Equity</b>	<b>527,339,423</b>	<b>14.40</b>	<b>-1.74</b>	<b>-1.74</b>	<b>5.97</b>	<b>25.34</b>	<b>15.63</b>	<b>14.51</b>	<b>11.14</b>	<b>10.87</b>	<b>N/A</b>	<b>07/01/1989</b>
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	N/A	
Difference			1.25	1.25	0.07	1.42	7.60	5.57	5.46	3.39	N/A	
IM International Equity (SA+CF) Median			-1.60	-1.56	8.26	25.93	9.59	10.17	7.37	9.40	8.93	
Rank			52	53	65	53	14	13	15	29	N/A	
<b>International Developed Equity</b>	<b>361,305,674</b>	<b>9.86</b>	<b>0.57</b>	<b>0.57</b>	<b>9.28</b>	<b>28.70</b>	<b>19.09</b>	<b>17.19</b>	<b>13.78</b>	<b>13.07</b>	<b>7.48</b>	<b>04/01/1994</b>
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	5.73	
Difference			3.56	3.56	3.38	4.78	11.06	8.25	8.10	5.59	1.75	
IM International Equity Developed Markets (SA+CF) Median			-0.86	-0.79	9.48	26.99	9.07	10.29	7.72	9.90	8.13	
Rank			25	27	52	41	5	5	5	11	62	
<b>Liquidity Pool - SSGA MSCI ACWI ex US (CF)</b>	<b>40,450,303</b>	<b>1.10</b>	<b>-3.01</b>	<b>-3.01</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>2.39</b>	<b>04/01/2021</b>
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	2.32	
Difference			-0.02	-0.02	N/A	N/A	N/A	N/A	N/A	N/A	0.07	
IM All ACWI Ex US (SA+CF) Median			-1.90	-1.90	7.01	25.31	10.09	10.55	7.33	9.71	3.82	
Rank			76	76	N/A	N/A	N/A	N/A	N/A	N/A	63	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Chautauqua Intl Growth Equity (CF)</b>	<b>175,167,941</b>	<b>4.78</b>	<b>1.25</b>	<b>1.25</b>	<b>7.85</b>	<b>27.41</b>	<b>16.27</b>	<b>15.13</b>	<b>12.05</b>	<b>N/A</b>	<b>12.07</b>	<b>09/01/2012</b>
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	7.10	
Difference			4.24	4.24	1.95	3.49	8.24	6.19	6.37	N/A	4.97	
IM All ACWI Ex US (SA+CF) Median			-1.90	-1.90	7.01	25.31	10.09	10.55	7.33	9.71	9.14	
Rank			10	10	45	38	14	12	10	N/A	12	
<b>WCM Berkeley Street Intl Equity (SA)</b>	<b>186,105,158</b>	<b>5.08</b>	<b>0.66</b>	<b>0.66</b>	<b>12.45</b>	<b>32.12</b>	<b>22.28</b>	<b>19.45</b>	<b>16.02</b>	<b>N/A</b>	<b>15.77</b>	<b>09/01/2012</b>
MSCI EAFE Index (USD) (Net)			-0.45	-0.45	8.35	25.73	7.62	8.81	5.80	8.10	7.76	
Difference			1.11	1.11	4.10	6.39	14.66	10.64	10.22	N/A	8.01	
IM EAFE Core (SA+CF) Median			-0.59	-0.59	9.18	25.74	7.96	9.28	6.78	9.44	8.76	
Rank			8	8	5	5	1	1	1	N/A	1	
<b>Emerging Markets Equity</b>	<b>125,583,446</b>	<b>3.43</b>	<b>-8.47</b>	<b>-8.47</b>	<b>-2.67</b>	<b>16.83</b>	<b>6.41</b>	<b>6.95</b>	<b>3.73</b>	<b>N/A</b>	<b>4.34</b>	<b>09/01/2012</b>
MSCI Emg Mkts Index (USD) (Net)			-8.09	-8.09	-1.25	18.20	8.58	9.23	5.62	6.09	5.58	
Difference			-0.38	-0.38	-1.42	-1.37	-2.17	-2.28	-1.89	N/A	-1.24	
IM Emerging Markets Equity (SA+CF) Median			-6.31	-6.31	2.49	22.74	10.86	10.14	6.63	7.67	7.23	
Rank			77	77	78	77	90	91	91	N/A	97	
<b>RBC GAM Emerging Markets Equity (CF)</b>	<b>60,541,500</b>	<b>1.65</b>	<b>-8.14</b>	<b>-8.14</b>	<b>-4.92</b>	<b>12.44</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>7.44</b>	<b>02/01/2019</b>
MSCI Emg Mkts Index (USD) (Net)			-8.09	-8.09	-1.25	18.20	8.58	9.23	5.62	6.09	9.45	
Difference			-0.05	-0.05	-3.67	-5.76	N/A	N/A	N/A	N/A	-2.01	
IM Emerging Markets Equity (SA+CF) Median			-6.31	-6.31	2.49	22.74	10.86	10.14	6.63	7.67	11.82	
Rank			73	73	90	93	N/A	N/A	N/A	N/A	89	
<b>Wellington Emerging Markets (CF)</b>	<b>65,041,946</b>	<b>1.78</b>	<b>-8.78</b>	<b>-8.78</b>	<b>-0.49</b>	<b>21.24</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>10.37</b>	<b>02/01/2019</b>
MSCI Emg Mkts Index (USD) (Net)			-8.09	-8.09	-1.25	18.20	8.58	9.23	5.62	6.09	9.45	
Difference			-0.69	-0.69	0.76	3.04	N/A	N/A	N/A	N/A	0.92	
IM Emerging Markets Equity (SA+CF) Median			-6.31	-6.31	2.49	22.74	10.86	10.14	6.63	7.67	11.82	
Rank			81	81	67	58	N/A	N/A	N/A	N/A	62	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Fixed Income</b>	<b>723,986,541</b>	<b>19.77</b>	<b>-1.13</b>	<b>-1.13</b>	<b>-2.41</b>	<b>1.86</b>	<b>4.24</b>	<b>2.81</b>	<b>3.01</b>	<b>3.27</b>	<b>5.80</b>	<b>07/01/1989</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	5.83	
Difference			-1.18	-1.18	-0.85	2.76	-1.11	-0.13	-0.25	0.26	-0.03	
IM Global Fixed Income (SA+CF) Median			-0.02	-0.02	0.03	4.78	5.64	4.54	3.85	3.94	N/A	
Rank			74	74	69	69	85	82	67	61	N/A	
<b>Garcia Hamilton Core Fixed Income (SA)</b>	<b>200,482,788</b>	<b>5.47</b>	<b>-0.08</b>	<b>-0.08</b>	<b>-2.15</b>	<b>-1.44</b>	<b>4.64</b>	<b>3.03</b>	<b>3.50</b>	<b>N/A</b>	<b>3.49</b>	<b>08/01/2014</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.24	
Difference			-0.13	-0.13	-0.59	-0.54	-0.71	0.09	0.24	N/A	0.25	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			0.10	0.10	-1.15	0.00	6.05	3.59	3.80	3.66	3.78	
Rank			93	93	100	95	100	86	75	N/A	75	
<b>Orleans Core Fixed Income (SA)</b>	<b>156,824,961</b>	<b>4.28</b>	<b>-0.10</b>	<b>-0.10</b>	<b>-1.37</b>	<b>0.02</b>	<b>5.53</b>	<b>3.24</b>	<b>3.48</b>	<b>N/A</b>	<b>3.40</b>	<b>08/01/2014</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.24	
Difference			-0.15	-0.15	0.19	0.92	0.18	0.30	0.22	N/A	0.16	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			0.10	0.10	-1.15	0.00	6.05	3.59	3.80	3.66	3.78	
Rank			93	93	67	49	81	75	76	N/A	80	
<b>Liquidity Pool - SSgA Aggregate Bond (CF)</b>	<b>94,762,809</b>	<b>2.59</b>	<b>0.06</b>	<b>0.06</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1.89</b>	<b>04/01/2021</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	1.88	
Difference			0.01	0.01	N/A	N/A	N/A	N/A	N/A	N/A	0.01	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			0.10	0.10	-1.15	0.00	6.05	3.59	3.80	3.66	2.13	
Rank			66	66	N/A	N/A	N/A	N/A	N/A	N/A	81	
<b>Garrison Middle Market Funding (CF)</b>	<b>1,457,305</b>	<b>0.04</b>	<b>2.77</b>	<b>2.77</b>	<b>29.74</b>	<b>36.12</b>	<b>6.15</b>	<b>5.06</b>	<b>5.08</b>	<b>N/A</b>	<b>5.09</b>	<b>08/01/2013</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.33	
Difference			2.72	2.72	31.30	37.02	0.80	2.12	1.82	N/A	1.76	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			0.22	0.22	-0.21	1.94	6.58	4.13	4.20	4.38	4.29	
Rank			1	1	1	1	68	16	12	N/A	16	
<b>Medley Opportunity II (CF)</b>	<b>7,974,314</b>	<b>0.22</b>	<b>0.14</b>	<b>0.14</b>	<b>13.01</b>	<b>1.29</b>	<b>-10.69</b>	<b>-6.69</b>	<b>-3.08</b>	<b>N/A</b>	<b>-2.76</b>	<b>08/01/2013</b>
CS Lvg'd Loan Index			1.13	1.13	4.65	8.46	4.09	4.64	4.25	5.04	4.21	
Difference			-0.99	-0.99	8.36	-7.17	-14.78	-11.33	-7.33	N/A	-6.97	
<b>Brandywine Global Fixed Income (CF)</b>	<b>262,484,364</b>	<b>7.17</b>	<b>-3.23</b>	<b>-3.23</b>	<b>-4.46</b>	<b>5.72</b>	<b>5.00</b>	<b>3.51</b>	<b>3.00</b>	<b>3.87</b>	<b>5.04</b>	<b>10/01/2009</b>
FTSE Wrld Gov't Bond Index			-1.24	-1.24	-5.93	-3.33	3.73	1.35	1.74	1.06	1.67	
Difference			-1.99	-1.99	1.47	9.05	1.27	2.16	1.26	2.81	3.37	
IM Global Fixed Income (SA+CF) Median			-0.02	-0.02	0.03	4.78	5.64	4.54	3.85	3.94	4.33	
Rank			97	97	85	44	67	67	67	52	38	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Other Fixed Income</b>												
<b>PIMCO Corporate Opp II (CF)</b>	<b>15,468,116</b>	<b>0.42</b>	<b>5.69</b>	<b>5.69</b>	<b>14.87</b>	<b>21.38</b>	<b>6.99</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>10.29</b>	<b>01/01/2017</b>
Bloomberg US Corp Hi Yld Index			0.89	0.89	4.53	11.28	6.91	6.52	5.89	7.42	6.48	
Difference			4.80	4.80	10.34	10.10	0.08	N/A	N/A	N/A	3.81	
<b>PIMCO Bravo III (CF)</b>	<b>48,504,387</b>	<b>1.32</b>	<b>2.83</b>	<b>2.83</b>	<b>11.47</b>	<b>16.31</b>	<b>6.57</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.25</b>	<b>12/01/2017</b>
Bloomberg US Corp Hi Yld Index			0.89	0.89	4.53	11.28	6.91	6.52	5.89	7.42	6.15	
Difference			1.94	1.94	6.94	5.03	-0.34	N/A	N/A	N/A	3.10	
<b>PIMCO Private Income (CF)</b>	<b>93,216,041</b>	<b>2.54</b>	<b>3.94</b>	<b>3.94</b>	<b>13.54</b>	<b>19.42</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>10.12</b>	<b>05/01/2019</b>
Bloomberg US Corp Hi Yld Index			0.89	0.89	4.53	11.28	6.91	6.52	5.89	7.42	6.96	
Difference			3.05	3.05	9.01	8.14	N/A	N/A	N/A	N/A	3.16	
<b>Hedge Fund</b>												
<b>HFRI FOF: Cnsvt Index</b>	<b>694,515</b>	<b>0.02</b>	<b>-13.55</b>	<b>-13.55</b>	<b>-11.23</b>	<b>-6.49</b>	<b>-5.95</b>	<b>-1.09</b>	<b>-1.23</b>	<b>0.87</b>	<b>-1.15</b>	<b>06/01/2015</b>
HFRI FOF: Cnsvt Index			1.08	1.08	6.99	13.23	5.42	4.90	3.60	4.00	3.50	
Difference			-14.63	-14.63	-18.22	-19.72	-11.37	-5.99	-4.83	-3.13	-4.65	
<b>Glouston Capital Partners Permal (CF)</b>	<b>694,515</b>	<b>0.02</b>	<b>-13.55</b>	<b>-13.55</b>	<b>-11.23</b>	<b>-6.49</b>	<b>-5.92</b>	<b>-1.17</b>	<b>N/A</b>	<b>N/A</b>	<b>-1.46</b>	<b>06/01/2015</b>
HFRI FOF: Cnsvt Index			1.08	1.08	6.99	13.23	5.42	4.90	3.60	4.00	3.50	
Difference			-14.63	-14.63	-18.22	-19.72	-11.34	-6.07	N/A	N/A	-4.96	
<b>Real Estate</b>												
<b>NCREIF ODCE Index (Appreciation) (AWA) (Net)</b>	<b>326,220,965</b>	<b>8.91</b>	<b>5.17</b>	<b>5.17</b>	<b>8.66</b>	<b>10.19</b>	<b>5.14</b>	<b>6.52</b>	<b>8.47</b>	<b>8.77</b>	<b>6.73</b>	<b>05/01/2005</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	2.46	
Difference			-0.44	-0.44	-1.27	-0.17	2.20	3.27	4.02	3.63	4.27	
<b>JP Morgan Strategic Property (CF)</b>	<b>107,584,675</b>	<b>2.94</b>	<b>6.72</b>	<b>6.72</b>	<b>11.72</b>	<b>13.88</b>	<b>6.39</b>	<b>6.95</b>	<b>8.39</b>	<b>9.79</b>	<b>7.90</b>	<b>05/01/2005</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	2.46	
Difference			1.11	1.11	1.79	3.52	3.45	3.70	3.94	4.65	5.44	
<b>Portfolio Advisors Real Estate III LP</b>	<b>2,006,426</b>	<b>0.05</b>	<b>1.52</b>	<b>1.52</b>	<b>-5.40</b>	<b>-11.60</b>	<b>-10.77</b>	<b>-5.38</b>	<b>1.21</b>	<b>2.99</b>	<b>-2.26</b>	<b>08/01/2008</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	0.82	
Difference			-4.09	-4.09	-15.33	-21.96	-13.71	-8.63	-3.24	-2.15	-3.08	
<b>Portfolio Advisors Real Estate IV LP</b>	<b>1,164,664</b>	<b>0.03</b>	<b>0.51</b>	<b>0.51</b>	<b>4.79</b>	<b>-0.53</b>	<b>-1.83</b>	<b>3.64</b>	<b>7.46</b>	<b>6.49</b>	<b>6.38</b>	<b>08/01/2011</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	5.28	
Difference			-5.10	-5.10	-5.14	-10.89	-4.77	0.39	3.01	1.35	1.10	
<b>Angelo Gordon Net Lease III LP</b>	<b>22,731,284</b>	<b>0.62</b>	<b>1.97</b>	<b>1.97</b>	<b>6.34</b>	<b>8.03</b>	<b>6.94</b>	<b>7.76</b>	<b>6.73</b>	<b>N/A</b>	<b>5.03</b>	<b>04/01/2014</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	4.65	
Difference			-3.64	-3.64	-3.59	-2.33	4.00	4.51	2.28	N/A	0.38	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Mesirow Real Estate (CF)</b>	<b>10,395,068</b>	<b>0.28</b>	<b>1.51</b>	<b>1.51</b>	<b>9.22</b>	<b>12.04</b>	<b>11.82</b>	<b>11.19</b>	<b>9.33</b>	<b>N/A</b>	<b>8.78</b>	<b>05/01/2014</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	4.70	
Difference			-4.10	-4.10	-0.71	1.68	8.88	7.94	4.88	N/A	4.08	
<b>Mesirow Real Estate Value IV LP (OFPRS)</b>	<b>4,505,458</b>	<b>0.12</b>	<b>-1.80</b>	<b>-1.80</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>06/01/2021</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	8.71	
Difference			-7.41	-7.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Dune Real Estate III LP</b>	<b>19,782,933</b>	<b>0.54</b>	<b>5.63</b>	<b>5.63</b>	<b>7.38</b>	<b>6.68</b>	<b>-2.44</b>	<b>3.58</b>	<b>6.34</b>	<b>N/A</b>	<b>6.05</b>	<b>06/01/2014</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	4.76	
Difference			0.02	0.02	-2.55	-3.68	-5.38	0.33	1.89	N/A	1.29	
<b>Portfolio Advisors Real Estate LP</b>	<b>4,473,390</b>	<b>0.12</b>	<b>0.30</b>	<b>0.30</b>	<b>-4.42</b>	<b>-10.54</b>	<b>-8.17</b>	<b>-4.01</b>	<b>3.15</b>	<b>N/A</b>	<b>2.38</b>	<b>07/01/2014</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	4.58	
Difference			-5.31	-5.31	-14.35	-20.90	-11.11	-7.26	-1.30	N/A	-2.20	
<b>Landmark Real Estate VII LP</b>	<b>6,511,351</b>	<b>0.18</b>	<b>0.90</b>	<b>0.90</b>	<b>-0.15</b>	<b>0.27</b>	<b>-2.53</b>	<b>1.21</b>	<b>10.08</b>	<b>N/A</b>	<b>10.08</b>	<b>10/01/2014</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	4.45	
Difference			-4.71	-4.71	-10.08	-10.09	-5.47	-2.04	5.63	N/A	5.63	
<b>JP Morgan Special Situation Property (CF)</b>	<b>66,414,023</b>	<b>1.81</b>	<b>8.43</b>	<b>8.43</b>	<b>15.54</b>	<b>18.21</b>	<b>9.33</b>	<b>9.77</b>	<b>N/A</b>	<b>N/A</b>	<b>11.84</b>	<b>12/01/2014</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	4.56	
Difference			2.82	2.82	5.61	7.85	6.39	6.52	N/A	N/A	7.28	
<b>Hall Capital III LP</b>	<b>7,408,233</b>	<b>0.20</b>	<b>-1.00</b>	<b>-1.00</b>	<b>11.17</b>	<b>11.09</b>	<b>7.62</b>	<b>8.66</b>	<b>N/A</b>	<b>N/A</b>	<b>3.02</b>	<b>12/01/2014</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	4.56	
Difference			-6.61	-6.61	1.24	0.73	4.68	5.41	N/A	N/A	-1.54	
<b>Portfolio Advisors Real Estate VI LP</b>	<b>17,436,128</b>	<b>0.48</b>	<b>3.62</b>	<b>3.62</b>	<b>10.65</b>	<b>8.96</b>	<b>6.43</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>8.80</b>	<b>02/01/2017</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	3.26	
Difference			-1.99	-1.99	0.72	-1.40	3.49	N/A	N/A	N/A	5.54	
<b>Dune Real Estate IV LP</b>	<b>14,912,161</b>	<b>0.41</b>	<b>19.49</b>	<b>19.49</b>	<b>-9.59</b>	<b>-5.84</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-14.67</b>	<b>09/01/2019</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	3.70	
Difference			13.88	13.88	-19.52	-16.20	N/A	N/A	N/A	N/A	-18.37	
<b>Hall Capital Real Estate LP</b>	<b>6,144,069</b>	<b>0.17</b>	<b>1.25</b>	<b>1.25</b>	<b>17.26</b>	<b>19.22</b>	<b>9.05</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.05</b>	<b>10/01/2018</b>
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	2.94	
Difference			-4.36	-4.36	7.33	8.86	6.11	N/A	N/A	N/A	6.11	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Terracap Partners V LP (OFPRS)	34,751,102	0.95	-0.39	-0.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	05/01/2021
NCREIF ODCE Index (Appreciation) (AWA) (Net)			5.61	5.61	9.93	10.36	2.94	3.25	4.45	5.14	8.71	
Difference			-6.00	-6.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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



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

As of September 30, 2021

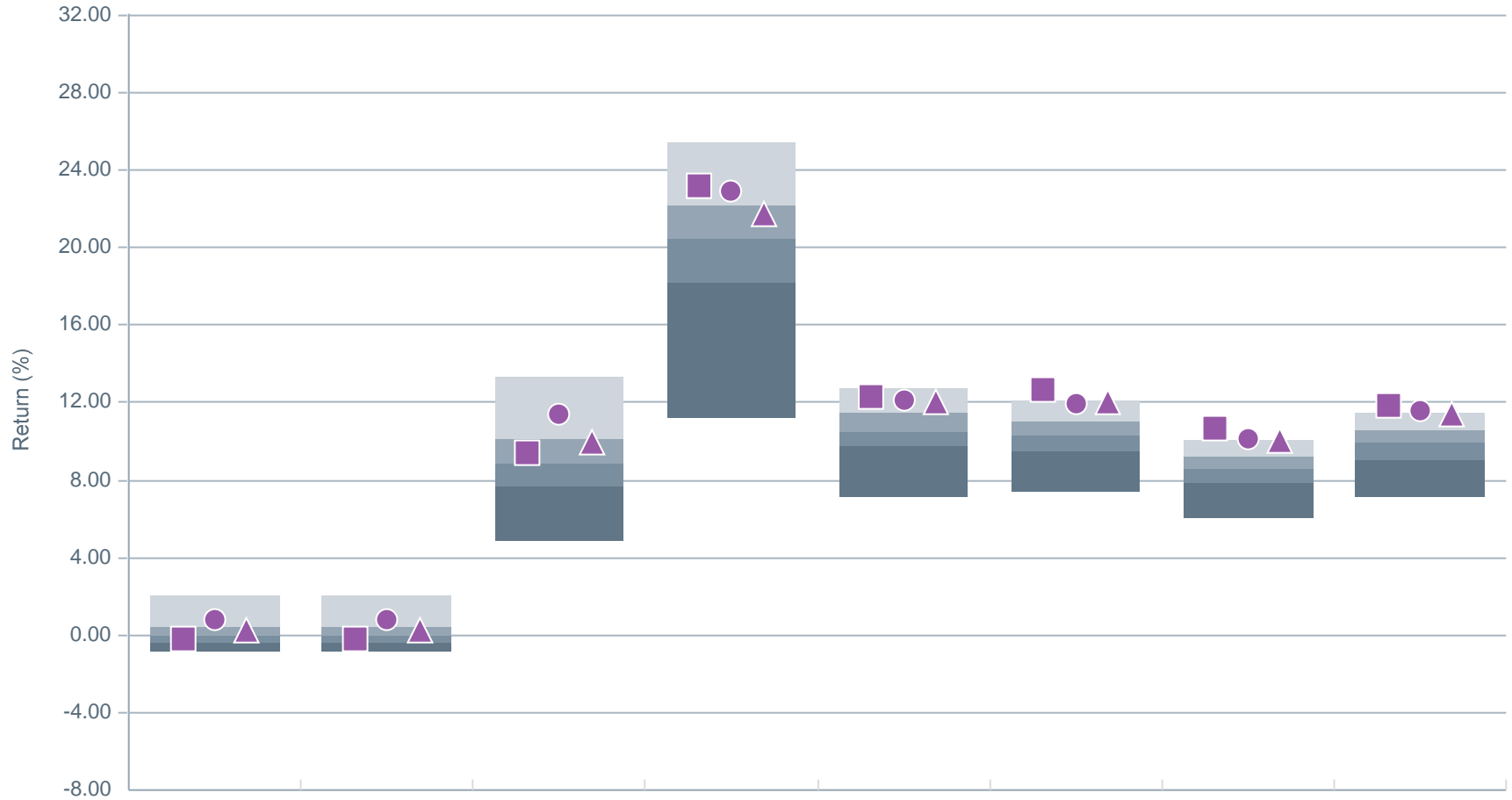
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Private Equity	155,607,801	4.25	10.16	10.16	42.36	50.61	19.69	18.65	17.06	N/A	18.09	04/01/2014
Pomona Captial VIII LP	5,401,436	0.15	12.62	12.62	59.79	81.68	26.19	23.05	19.69	N/A	21.60	04/01/2014
Capital Dynamics Global Secondaries IV	30,817,095	0.84	0.08	0.08	22.00	22.19	11.62	14.69	N/A	N/A	12.06	01/01/2015
Ardian AESF VI LP	32,413,510	0.88	12.84	12.84	41.96	43.20	17.13	N/A	N/A	N/A	15.24	04/01/2017
Pomona Capital IX LP	32,575,960	0.89	10.86	10.86	53.45	70.95	33.09	N/A	N/A	N/A	44.42	03/01/2018
Argonaut Private Equity IV LP	13,758,551	0.38	10.58	10.58	24.63	26.15	6.44	N/A	N/A	N/A	6.26	09/01/2018
Ardian ASF VIII LP	34,359,005	0.94	16.48	16.48	60.34	80.21	N/A	N/A	N/A	N/A	58.50	05/01/2020
Ardian Real Estate (CF)	6,282,245	0.17	18.97	18.97	58.50	84.91	19.95	17.53	17.37	N/A	16.38	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, 2021



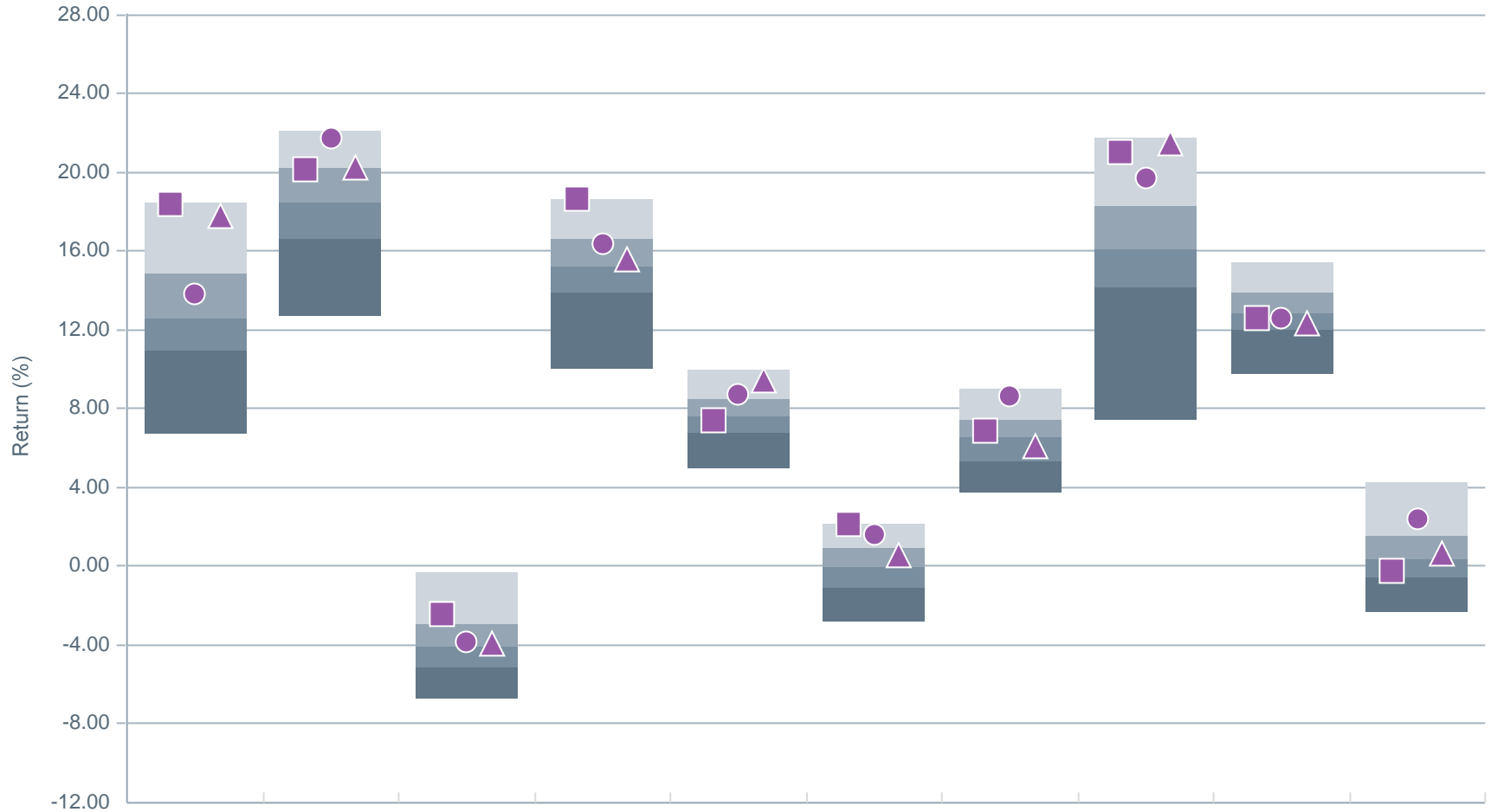
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OFPRS Total Fund	-0.18 (61)	-0.18 (61)	9.41 (37)	23.21 (18)	12.36 (9)	12.67 (3)	10.69 (3)	11.82 (3)
● OFPRS Policy Index	0.76 (16)	0.76 (16)	11.37 (13)	22.94 (20)	12.15 (10)	11.97 (8)	10.16 (5)	11.63 (4)
▲ OFPRS Allocation Index	0.30 (30)	0.30 (30)	9.92 (28)	21.76 (33)	12.08 (13)	12.05 (7)	10.06 (6)	11.44 (6)
5th Percentile	2.04	2.04	13.29	25.43	12.81	12.16	10.09	11.51
1st Quartile	0.40	0.40	10.11	22.20	11.49	11.07	9.21	10.60
Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94
3rd Quartile	-0.41	-0.41	7.68	18.19	9.76	9.47	7.89	9.08
95th Percentile	-0.83	-0.83	4.87	11.26	7.17	7.39	6.10	7.15

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, 2021

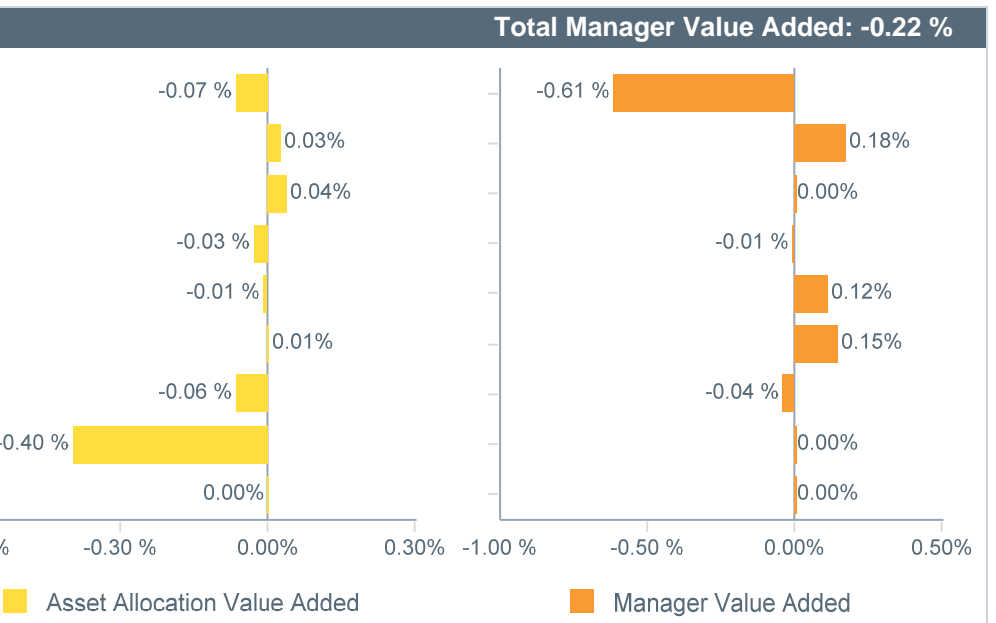
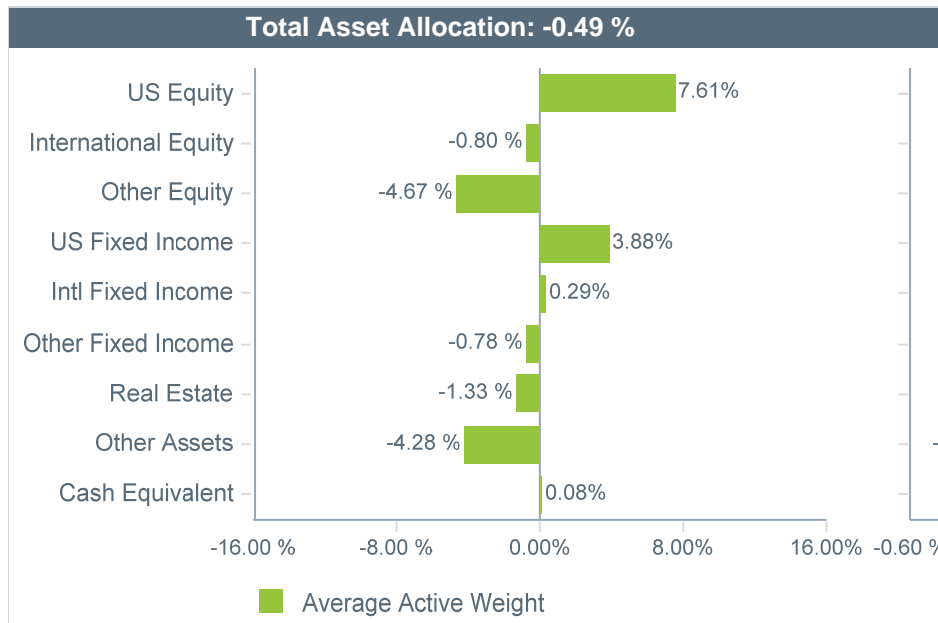
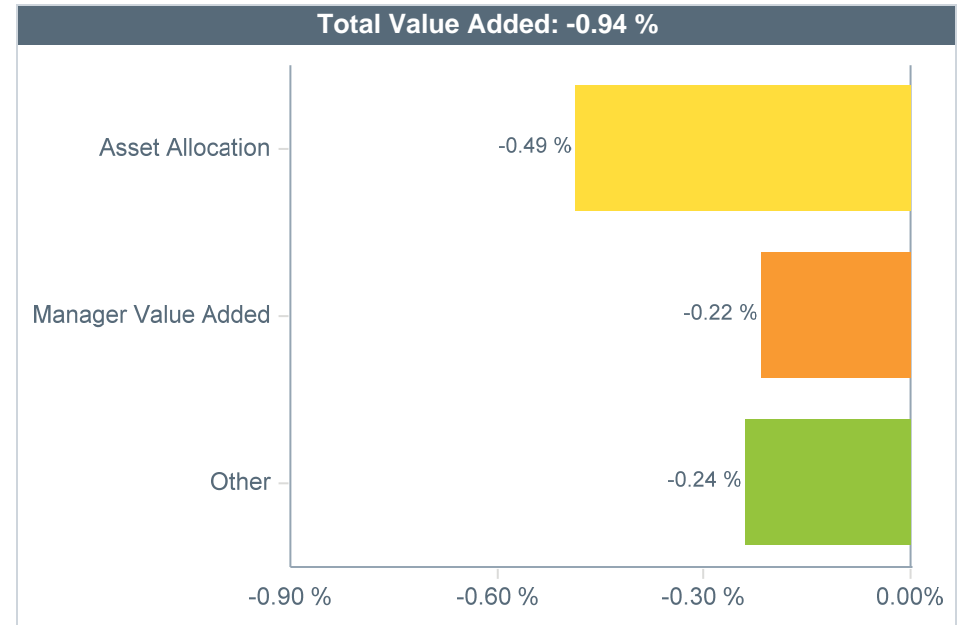
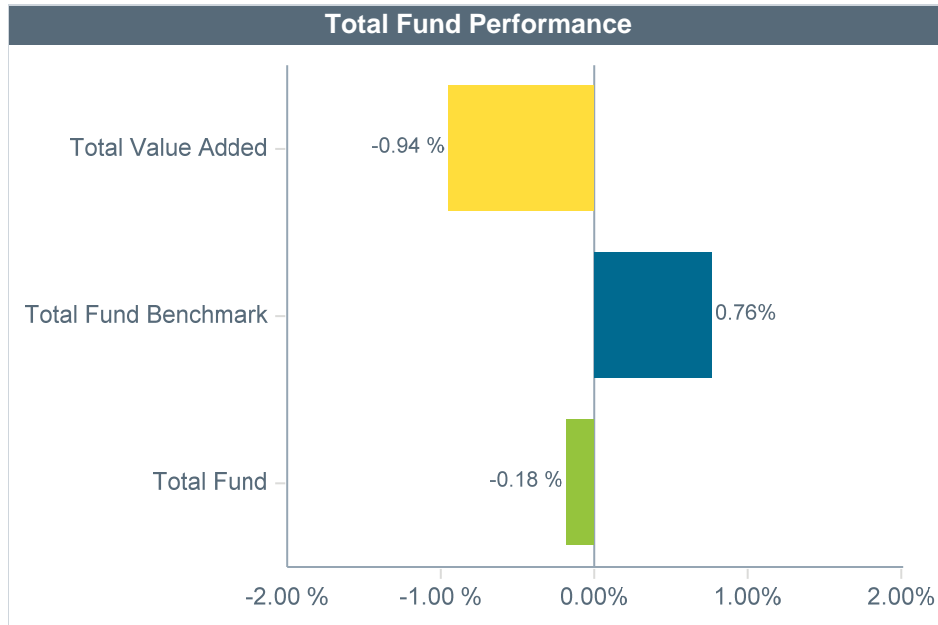


	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
■ OFPRS Total Fund	18.44 (6)	20.15 (28)	-2.46 (19)	18.67 (5)	7.42 (58)	2.12 (6)	6.91 (41)	21.10 (7)	12.57 (61)	-0.19 (67)
● OFPRS Policy Index	13.85 (35)	21.76 (9)	-3.80 (44)	16.41 (30)	8.76 (17)	1.60 (11)	8.64 (7)	19.76 (14)	12.63 (60)	2.41 (17)
▲ OFPRS Allocation Index	17.79 (7)	20.30 (25)	-3.93 (46)	15.64 (42)	9.45 (10)	0.56 (34)	6.12 (62)	21.48 (6)	12.32 (67)	0.67 (45)
5th Percentile	18.53	22.15	-0.35	18.65	9.96	2.13	8.98	21.72	15.42	4.26
1st Quartile	14.87	20.27	-2.95	16.63	8.44	0.90	7.43	18.29	13.94	1.56
Median	12.61	18.52	-4.13	15.30	7.64	-0.07	6.59	16.17	12.90	0.41
3rd Quartile	10.95	16.62	-5.13	13.91	6.81	-1.10	5.35	14.16	11.96	-0.55
95th Percentile	6.68	12.74	-6.71	10.03	5.01	-2.75	3.73	7.40	9.81	-2.37

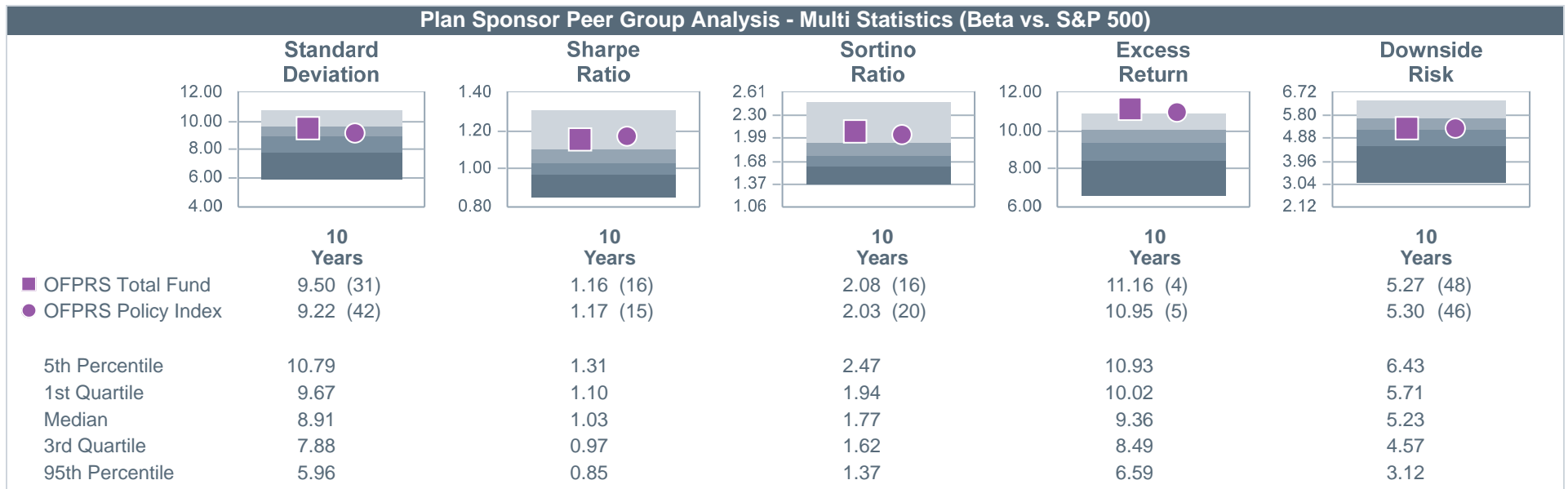
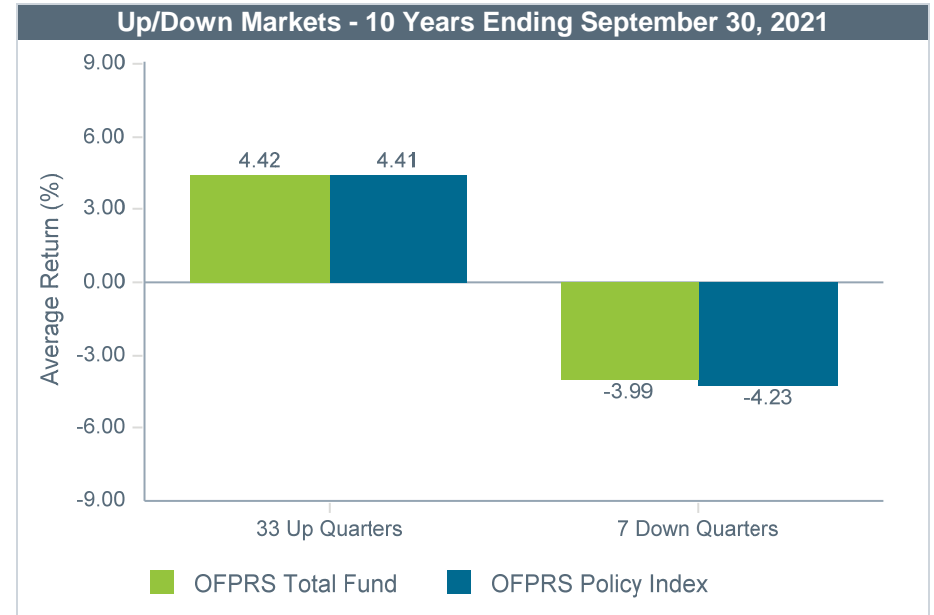
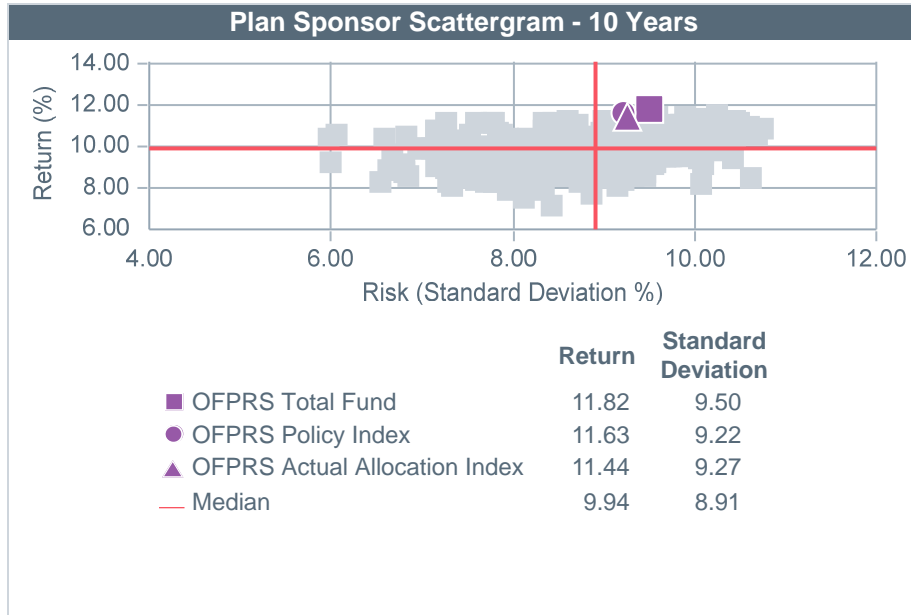
Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



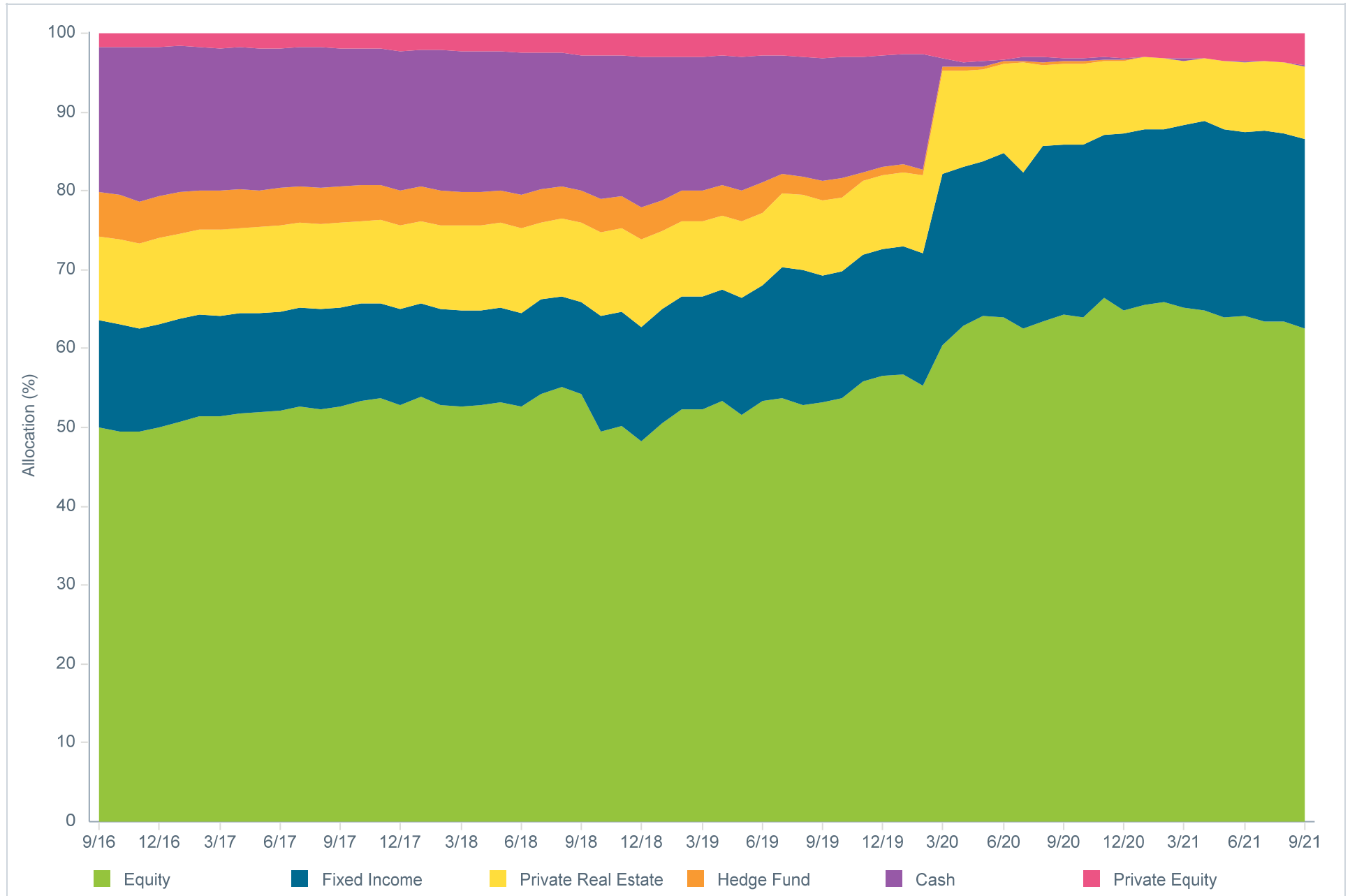




Performance shown is gross of fees. Calculation is based on quarterly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation. Allocation to Other Equity includes opportunistic equity; Other Fixed Income includes non-core Fixed Income; and Other Assets include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



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

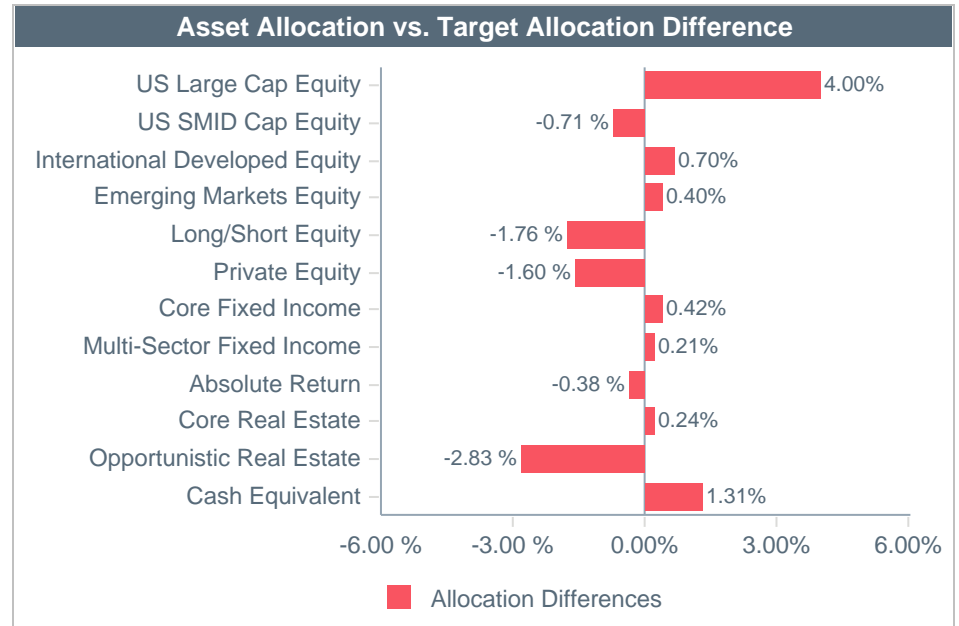


# Oklahoma Police Pension & Retirement System (OPPRS)



	Performance (%)												
	Trailing							Calendar Year					
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
<b>OPPRS Total Fund (Net)</b>	<b>1.87</b>	<b>1.87</b>	<b>12.52</b>	<b>24.02</b>	<b>10.48</b>	<b>10.02</b>	<b>8.19</b>	<b>9.29</b>	<b>12.17</b>	<b>15.22</b>	<b>-2.85</b>	<b>12.91</b>	<b>7.04</b>
OPPRS Policy Index	0.40	0.40	9.11	19.30	10.50	9.92	7.71	9.51	12.66	19.13	-5.34	15.45	7.07
Difference	1.47	1.47	3.41	4.72	-0.02	0.10	0.48	-0.22	-0.49	-3.91	2.49	-2.54	-0.03
OPPRS Actual Allocation Index	0.17	0.17	8.44	18.67	10.04	9.61	7.72	9.34	14.67	15.02	-3.70	13.78	6.66
Difference	1.70	1.70	4.08	5.35	0.44	0.41	0.47	-0.05	-2.50	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	7.50
Difference	0.05	0.05	6.95	16.52	2.98	2.52	0.69	1.79	4.67	7.72	-10.35	5.41	-0.46
<b>OPPRS Total Fund (Gross)</b>	<b>1.97</b>	<b>1.97</b>	<b>12.81</b>	<b>24.44</b>	<b>10.88</b>	<b>10.44</b>	<b>8.62</b>	<b>9.72</b>	<b>12.54</b>	<b>15.68</b>	<b>-2.46</b>	<b>13.40</b>	<b>7.47</b>
OPPRS Policy Index	0.40	0.40	9.11	19.30	10.50	9.92	7.71	9.51	12.66	19.13	-5.34	15.45	7.07
Difference	1.57	1.57	3.70	5.14	0.38	0.52	0.91	0.21	-0.12	-3.45	2.88	-2.05	0.40
OPPRS Actual Allocation Index	0.17	0.17	8.44	18.67	10.04	9.61	7.72	9.34	14.67	15.02	-3.70	13.78	6.66
Difference	1.80	1.80	4.37	5.77	0.84	0.83	0.90	0.38	-2.13	0.66	1.24	-0.38	0.81
All Public Plans-Total Fund Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	12.61	18.52	-4.13	15.30	7.64
Rank	7	7	6	9	40	45	49	58	52	84	19	82	56

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
<b>OPPRS (Police)</b>	<b>3,255,900,485</b>	<b>100.00</b>	<b>100.00</b>
US Large Cap Equity	618,528,859	19.00	15.00
US SMID Cap Equity	302,422,239	9.29	10.00
International Developed Equity	348,239,518	10.70	10.00
Emerging Markets Equity	175,778,386	5.40	5.00
Long/Short Equity	268,227,486	8.24	10.00
Private Equity	436,424,120	13.40	15.00
Core Fixed Income	257,843,373	7.92	7.50
Multi-Sector Fixed Income	251,175,758	7.71	7.50
Absolute Return	150,414,182	4.62	5.00
Core Real Estate	333,541,398	10.24	10.00
Opportunistic Real Estate	70,686,042	2.17	5.00
Cash Equivalent	42,619,123	1.31	0.00



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



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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>OPPRS Total Fund</b>	<b>3,255,900,485</b>	<b>100.00</b>	<b>1.87</b>	<b>1.87</b>	<b>12.52</b>	<b>24.02</b>	<b>10.48</b>	<b>10.02</b>	<b>8.19</b>	<b>9.29</b>	<b>7.20</b>	<b>07/01/2005</b>
OPPRS Policy Index			0.40	0.40	9.11	19.30	10.50	9.92	7.71	9.51	6.93	
Difference			1.47	1.47	3.41	4.72	-0.02	0.10	0.48	-0.22	0.27	
OPPRS Actual Allocation Index			0.17	0.17	8.44	18.67	10.04	9.61	7.72	9.34	7.03	
Difference			1.70	1.70	4.08	5.35	0.44	0.41	0.47	-0.05	0.17	
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			0.05	0.05	6.95	16.52	2.98	2.52	0.69	1.79	-0.30	
<b>Total Equity</b>	<b>2,149,620,609</b>	<b>66.02</b>	<b>1.92</b>	<b>1.92</b>	<b>17.56</b>	<b>35.93</b>	<b>14.78</b>	<b>14.14</b>	<b>11.38</b>	<b>12.48</b>	<b>8.70</b>	<b>07/01/2005</b>
MSCI ACW Index (USD) (Net)			-1.05	-1.05	11.12	27.44	12.58	13.20	9.95	11.90	8.03	
Difference			2.97	2.97	6.44	8.49	2.20	0.94	1.43	0.58	0.67	
<b>US Equity</b>												
<b>Northern Trust Russell 1000 Index (SA)</b>	<b>618,528,859</b>	<b>19.00</b>	<b>0.21</b>	<b>0.21</b>	<b>15.20</b>	<b>30.96</b>	<b>16.41</b>	<b>17.10</b>	<b>14.08</b>	<b>16.74</b>	<b>N/A</b>	<b>07/01/1998</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	8.20	
Difference			0.00	0.00	0.01	0.00	-0.02	-0.01	-0.01	-0.02	N/A	
<b>Boston Partners SMID Value Equity (SA)</b>	<b>145,403,814</b>	<b>4.47</b>	<b>-2.11</b>	<b>-2.11</b>	<b>21.22</b>	<b>57.26</b>	<b>9.90</b>	<b>10.79</b>	<b>9.64</b>	<b>13.71</b>	<b>N/A</b>	<b>06/01/1997</b>
Russell 2500 Val Index			-2.07	-2.07	20.14	54.38	8.87	10.49	9.52	13.35	9.78	
Difference			-0.04	-0.04	1.08	2.88	1.03	0.30	0.12	0.36	N/A	
<b>Silvercrest Small Cap Growth Equity (SA)</b>	<b>157,018,425</b>	<b>4.82</b>	<b>-1.96</b>	<b>-1.96</b>	<b>19.82</b>	<b>59.37</b>	<b>20.77</b>	<b>23.02</b>	<b>18.40</b>	<b>N/A</b>	<b>12.64</b>	<b>01/01/2014</b>
Russell 2000 Grth Index			-5.65	-5.65	2.82	33.27	11.70	15.34	13.19	15.74	11.25	
Difference			3.69	3.69	17.00	26.10	9.07	7.68	5.21	N/A	1.39	
<b>International Equity</b>												
<b>Mondrian International Value Equity (SA)</b>	<b>162,966,722</b>	<b>5.01</b>	<b>-1.16</b>	<b>-1.16</b>	<b>11.28</b>	<b>30.99</b>	<b>4.42</b>	<b>6.25</b>	<b>3.82</b>	<b>6.37</b>	<b>N/A</b>	<b>04/01/2004</b>
MSCI EAFE Val Index (USD) (Gross)			-0.81	-0.81	10.21	31.43	3.65	6.58	3.34	6.58	5.23	
Difference			-0.35	-0.35	1.07	-0.44	0.77	-0.33	0.48	-0.21	N/A	
<b>Barings Focused EAFE Plus Equity (SA)</b>	<b>185,272,796</b>	<b>5.69</b>	<b>-1.42</b>	<b>-1.42</b>	<b>4.29</b>	<b>17.62</b>	<b>6.16</b>	<b>8.34</b>	<b>6.95</b>	<b>N/A</b>	<b>5.96</b>	<b>02/01/2012</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	7.11	
Difference			1.46	1.46	-2.00	-6.83	-2.36	-1.10	0.78	N/A	-1.15	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01. 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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>AB EM Strategic Core Equity (CF)</b>	<b>105,467,598</b>	<b>3.24</b>	<b>-10.40</b>	<b>-10.40</b>	<b>-5.69</b>	<b>7.64</b>	<b>4.61</b>	<b>5.88</b>	<b>N/A</b>	<b>N/A</b>	<b>5.88</b>	<b>10/01/2016</b>
MSCI Emg Mkts Index (USD) (Gross)			-7.97	-7.97	-0.99	18.58	8.96	9.62	6.00	6.46	9.62	
Difference			-2.43	-2.43	-4.70	-10.94	-4.35	-3.74	N/A	N/A	-3.74	
<b>Wasatch EM Small Cap (SA)</b>	<b>70,310,788</b>	<b>2.16</b>	<b>5.83</b>	<b>5.83</b>	<b>25.51</b>	<b>54.18</b>	<b>27.38</b>	<b>16.77</b>	<b>11.34</b>	<b>N/A</b>	<b>9.97</b>	<b>08/01/2012</b>
MSCI Emg Mkts Sm Cap Index (USD) (Gross)			-2.00	-2.00	17.56	43.79	13.53	10.14	6.52	7.55	7.51	
Difference			7.83	7.83	7.95	10.39	13.85	6.63	4.82	N/A	2.46	
<b>Fixed Income</b>	<b>659,433,313</b>	<b>20.25</b>	<b>0.19</b>	<b>0.19</b>	<b>1.43</b>	<b>4.17</b>	<b>4.76</b>	<b>3.66</b>	<b>3.09</b>	<b>N/A</b>	<b>N/A</b>	<b>07/01/2005</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.03	
Difference			0.14	0.14	2.99	5.07	-0.59	0.72	-0.17	N/A	N/A	
<b>Agincourt Core Fixed Income (SA)</b>	<b>257,843,373</b>	<b>7.92</b>	<b>0.03</b>	<b>0.03</b>	<b>-1.74</b>	<b>-0.98</b>	<b>5.79</b>	<b>3.35</b>	<b>3.58</b>	<b>3.49</b>	<b>N/A</b>	<b>07/01/1998</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.73	
Difference			-0.02	-0.02	-0.18	-0.08	0.44	0.41	0.32	0.48	N/A	
<b>Loomis Sayles Global World Bond (SA)</b>	<b>88,266,971</b>	<b>2.71</b>	<b>-1.56</b>	<b>-1.56</b>	<b>-5.69</b>	<b>-0.75</b>	<b>5.04</b>	<b>2.60</b>	<b>2.61</b>	<b>2.43</b>	<b>3.26</b>	<b>05/01/2008</b>
FTSE Wrld Gov't Bond Index			-1.24	-1.24	-5.93	-3.33	3.73	1.35	1.74	1.06	2.17	
Difference			-0.32	-0.32	0.24	2.58	1.31	1.25	0.87	1.37	1.09	
<b>Oaktree Global Credit (SA)</b>	<b>134,250,658</b>	<b>4.12</b>	<b>0.95</b>	<b>0.95</b>	<b>5.18</b>	<b>11.24</b>	<b>4.05</b>	<b>4.45</b>	<b>4.21</b>	<b>6.00</b>	<b>5.65</b>	<b>01/01/1998</b>
Oaktree Global Credit Custom Index			0.39	0.39	3.39	9.15	5.32	2.92	3.25	3.00	N/A	
Difference			0.56	0.56	1.79	2.09	-1.27	1.53	0.96	3.00	N/A	
<b>Absolute Return</b>												
<b>PAAMCO (CF)</b>	<b>6,523,158</b>	<b>0.20</b>	<b>0.62</b>	<b>0.62</b>	<b>6.30</b>	<b>8.24</b>	<b>2.49</b>	<b>2.81</b>	<b>1.44</b>	<b>3.44</b>	<b>N/A</b>	<b>10/01/2002</b>
HFRI FOF: Cnsvt Index			1.08	1.08	6.99	13.23	5.42	4.90	3.60	4.00	3.49	
Difference			-0.46	-0.46	-0.69	-4.99	-2.93	-2.09	-2.16	-0.56	N/A	
<b>Wellington Global Total Return (CF)</b>	<b>79,375,024</b>	<b>2.44</b>	<b>-0.09</b>	<b>-0.09</b>	<b>2.13</b>	<b>1.94</b>	<b>2.49</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>2.94</b>	<b>12/01/2016</b>
ICE BofAML 3 Mo US T-Bill Index+4%			1.00	1.00	3.02	4.07	5.23	5.20	4.90	4.65	5.24	
Difference			-1.09	-1.09	-0.89	-2.13	-2.74	N/A	N/A	N/A	-2.30	
<b>TCW MetWest Unconstrained (SA)</b>	<b>64,516,000</b>	<b>1.98</b>	<b>0.30</b>	<b>0.30</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>01/01/2021</b>
ICE BofAML 3 Mo US T-Bill Index+3%			0.76	0.76	2.28	3.07	4.22	4.19	3.89	3.65	2.28	
Difference			-0.46	-0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Private Credit</b>	<b>28,658,129</b>	<b>0.88</b>	<b>3.33</b>	<b>3.33</b>	<b>22.03</b>	<b>25.45</b>	<b>12.48</b>	<b>11.16</b>	<b>N/A</b>	<b>N/A</b>	<b>11.16</b>	<b>10/01/2016</b>

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Real Assets</b>	<b>404,227,439</b>	<b>12.42</b>	<b>4.79</b>	<b>4.79</b>	<b>9.79</b>	<b>11.11</b>	<b>3.53</b>	<b>4.89</b>	<b>4.33</b>	<b>5.54</b>	<b>N/A</b>	<b>01/01/1998</b>
OPPRS Real Assets Blended Benchmark			6.41	6.41	12.41	13.64	4.85	5.00	2.78	4.72	5.93	
Difference			-1.62	-1.62	-2.62	-2.53	-1.32	-0.11	1.55	0.82	N/A	
<b>JP Morgan Strategic Property (CF)</b>	<b>170,103,069</b>	<b>5.22</b>	<b>6.50</b>	<b>6.50</b>	<b>11.17</b>	<b>13.08</b>	<b>5.53</b>	<b>6.05</b>	<b>7.44</b>	<b>8.82</b>	<b>5.12</b>	<b>11/01/2007</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	4.80	
Difference			0.09	0.09	-1.24	-0.56	-0.60	-0.51	-0.49	-0.10	0.32	
<b>Blackstone Property Partners (CF)</b>	<b>163,438,329</b>	<b>5.02</b>	<b>3.68</b>	<b>3.68</b>	<b>7.76</b>	<b>8.77</b>	<b>5.02</b>	<b>6.32</b>	<b>N/A</b>	<b>N/A</b>	<b>8.54</b>	<b>12/01/2014</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.13	
Difference			-2.73	-2.73	-4.65	-4.87	-1.11	-0.24	N/A	N/A	0.41	
<b>Private Real Estate</b>	<b>70,686,042</b>	<b>2.17</b>	<b>4.49</b>	<b>4.49</b>	<b>12.68</b>	<b>13.19</b>	<b>9.54</b>	<b>9.12</b>	<b>10.14</b>	<b>9.07</b>	<b>8.91</b>	<b>08/01/2011</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	9.12	
Difference			-1.92	-1.92	0.27	-0.45	3.41	2.56	2.21	0.15	-0.21	
<b>Columbus Square (SA)</b>	<b>4,411,508</b>	<b>0.14</b>	<b>-3.50</b>	<b>-3.50</b>	<b>-3.31</b>	<b>-3.40</b>	<b>-1.15</b>	<b>2.64</b>	<b>4.28</b>	<b>5.37</b>	<b>N/A</b>	<b>03/01/1995</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.02	
Difference			-9.91	-9.91	-15.72	-17.04	-7.28	-3.92	-3.65	-3.55	N/A	
<b>Long/Short Equity</b>	<b>268,227,486</b>	<b>8.24</b>	<b>-2.45</b>	<b>-2.45</b>	<b>2.01</b>	<b>15.89</b>	<b>9.88</b>	<b>9.16</b>	<b>7.37</b>	<b>7.94</b>	<b>7.55</b>	<b>05/01/2012</b>
MSCI ACW Index (USD) (Net)			-1.05	-1.05	11.12	27.44	12.58	13.20	9.95	11.90	10.67	
Difference			-1.40	-1.40	-9.11	-11.55	-2.70	-4.04	-2.58	-3.96	-3.12	
HFRI FOF: Strategic Index			0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	5.11	
Difference			-2.53	-2.53	-3.65	-1.17	2.10	2.31	2.51	2.75	2.44	
<b>Grosvenor Long/Short Equity (CF)</b>	<b>3,103,461</b>	<b>0.10</b>	<b>-5.16</b>	<b>-5.16</b>	<b>2.40</b>	<b>19.82</b>	<b>10.10</b>	<b>9.28</b>	<b>7.45</b>	<b>8.14</b>	<b>N/A</b>	<b>09/01/2003</b>
HFRI FOF: Strategic Index			0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	4.53	
Difference			-5.24	-5.24	-3.26	2.76	2.32	2.43	2.59	2.95	N/A	
<b>K2 Mauna Kea (CF)</b>	<b>265,124,025</b>	<b>8.14</b>	<b>-2.42</b>	<b>-2.42</b>	<b>2.30</b>	<b>15.49</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>17.38</b>	<b>06/01/2020</b>
HFRI FOF: Strategic Index			0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	19.83	
Difference			-2.50	-2.50	-3.36	-1.57	N/A	N/A	N/A	N/A	-2.45	
<b>Private Equity</b>	<b>436,424,120</b>	<b>13.40</b>	<b>17.61</b>	<b>17.61</b>	<b>54.45</b>	<b>71.44</b>	<b>26.51</b>	<b>20.61</b>	<b>17.17</b>	<b>15.35</b>	<b>14.31</b>	<b>07/01/2003</b>
MSCI ACW Index (USD) (Net)			-1.05	-1.05	11.12	27.44	12.58	13.20	9.95	11.90	9.03	
Difference			18.66	18.66	43.33	44.00	13.93	7.41	7.22	3.45	5.28	
Cambridge US Prvt Eq Index			0.00	0.00	24.50	39.06	19.19	18.64	15.33	15.85	15.54	
Difference			17.61	17.61	29.95	32.38	7.32	1.97	1.84	-0.50	-1.23	

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 - Gross of Fees

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>OPPRS Total Fund</b>	<b>3,255,900,485</b>	<b>100.00</b>	<b>1.97</b>	<b>1.97</b>	<b>12.81</b>	<b>24.44</b>	<b>10.88</b>	<b>10.44</b>	<b>8.62</b>	<b>9.72</b>	<b>7.54</b>	<b>07/01/2005</b>
OPPRS Policy Index			0.40	0.40	9.11	19.30	10.50	9.92	7.71	9.51	6.93	
Difference			1.57	1.57	3.70	5.14	0.38	0.52	0.91	0.21	0.61	
OPPRS Actual Allocation Index			0.17	0.17	8.44	18.67	10.04	9.61	7.72	9.34	7.03	
Difference			1.80	1.80	4.37	5.77	0.84	0.83	0.90	0.38	0.51	
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			0.15	0.15	7.24	16.94	3.38	2.94	1.12	2.22	0.04	
All Public Plans-Total Fund Median			-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	7.51	
Rank			7	7	6	9	40	45	49	58	47	
<b>Total Equity</b>	<b>2,149,620,609</b>	<b>66.02</b>	<b>1.98</b>	<b>1.98</b>	<b>17.80</b>	<b>36.29</b>	<b>15.12</b>	<b>14.51</b>	<b>11.74</b>	<b>12.85</b>	<b>9.00</b>	<b>07/01/2005</b>
MSCI ACW Index (USD) (Net)			-1.05	-1.05	11.12	27.44	12.58	13.20	9.95	11.90	8.03	
Difference			3.03	3.03	6.68	8.85	2.54	1.31	1.79	0.95	0.97	
IM Global Equity (SA+CF) Median			-0.48	-0.46	11.94	27.95	12.56	13.44	10.48	13.11	8.92	
Rank			9	9	12	20	31	37	35	55	48	
<b>US Equity</b>												
<b>Northern Trust Russell 1000 Index (SA)</b>	<b>618,528,859</b>	<b>19.00</b>	<b>0.21</b>	<b>0.21</b>	<b>15.21</b>	<b>30.97</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>07/01/1998</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	8.20	
Difference			0.00	0.00	0.02	0.01	N/A	N/A	N/A	N/A	N/A	
IM U.S. Large Cap Index Equity (SA+CF) Median			0.21	0.21	15.52	30.97	16.00	16.89	13.99	16.63	8.04	
Rank			51	51	59	49	N/A	N/A	N/A	N/A	N/A	
<b>Boston Partners SMID Value Equity (SA)</b>	<b>145,403,814</b>	<b>4.47</b>	<b>-1.96</b>	<b>-1.96</b>	<b>21.85</b>	<b>58.28</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>06/01/1997</b>
Russell 2500 Val Index			-2.07	-2.07	20.14	54.38	8.87	10.49	9.52	13.35	9.78	
Difference			0.11	0.11	1.71	3.90	N/A	N/A	N/A	N/A	N/A	
IM U.S. SMID Cap Value Equity (SA+CF) Median			-1.67	-1.67	19.83	50.40	11.14	12.33	10.71	14.51	11.64	
Rank			60	60	31	25	N/A	N/A	N/A	N/A	N/A	
<b>Silvercrest Small Cap Growth Equity (SA)</b>	<b>157,018,425</b>	<b>4.82</b>	<b>-1.75</b>	<b>-1.75</b>	<b>20.56</b>	<b>60.70</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>01/01/2014</b>
Russell 2000 Grth Index			-5.65	-5.65	2.82	33.27	11.70	15.34	13.19	15.74	11.25	
Difference			3.90	3.90	17.74	27.43	N/A	N/A	N/A	N/A	N/A	
IM U.S. Small Cap Growth Equity (SA+CF) Median			-1.90	-1.90	10.84	40.43	17.12	19.68	16.83	18.69	14.56	
Rank			48	48	7	8	N/A	N/A	N/A	N/A	N/A	

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01. 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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>International Equity</b>												
<b>Mondrian International Value Equity (SA)</b>	<b>162,966,722</b>	<b>5.01</b>	<b>-1.06</b>	<b>-1.06</b>	<b>11.62</b>	<b>31.54</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>04/01/2004</b>
MSCI EAFE Val Index (USD) (Gross)			-0.81	-0.81	10.21	31.43	3.65	6.58	3.34	6.58	5.23	
Difference			-0.25	-0.25	1.41	0.11	N/A	N/A	N/A	N/A	N/A	
IM International Value Equity (SA+CF) Median			-1.37	-1.35	10.19	30.28	6.93	8.49	6.21	9.04	7.63	
Rank			39	41	39	48	N/A	N/A	N/A	N/A	N/A	
<b>Barings Focused EAFE Plus Equity (SA)</b>	<b>185,272,796</b>	<b>5.69</b>	<b>-1.32</b>	<b>-1.32</b>	<b>4.69</b>	<b>18.19</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>02/01/2012</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	7.11	
Difference			1.56	1.56	-1.60	-6.26	N/A	N/A	N/A	N/A	N/A	
IM International Equity (SA+CF) Median			-1.60	-1.56	8.26	25.93	9.59	10.17	7.37	9.40	8.56	
Rank			45	46	72	82	N/A	N/A	N/A	N/A	N/A	
<b>AB EM Strategic Core Equity (CF)</b>	<b>105,467,598</b>	<b>3.24</b>	<b>-10.27</b>	<b>-10.27</b>	<b>-5.25</b>	<b>8.32</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>10/01/2016</b>
MSCI Emg Mkts Index (USD) (Gross)			-7.97	-7.97	-0.99	18.58	8.96	9.62	6.00	6.46	9.62	
Difference			-2.30	-2.30	-4.26	-10.26	N/A	N/A	N/A	N/A	N/A	
IM Emerging Markets Equity (SA+CF) Median			-6.31	-6.31	2.49	22.74	10.86	10.14	6.63	7.67	10.14	
Rank			94	94	92	98	N/A	N/A	N/A	N/A	N/A	
<b>Wasatch EM Small Cap (SA)</b>	<b>70,310,788</b>	<b>2.16</b>	<b>6.12</b>	<b>6.12</b>	<b>26.71</b>	<b>56.18</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>08/01/2012</b>
MSCI Emg Mkts Sm Cap Index (USD) (Gross)			-2.00	-2.00	17.56	43.79	13.53	10.14	6.52	7.55	7.51	
Difference			8.12	8.12	9.15	12.39	N/A	N/A	N/A	N/A	N/A	
IM Emerging Markets Equity (SA+CF) Median			-6.31	-6.31	2.49	22.74	10.86	10.14	6.63	7.67	7.20	
Rank			3	3	4	3	N/A	N/A	N/A	N/A	N/A	
<b>Fixed Income</b>												
<b>Bloomberg US Agg Bond Index</b>	<b>659,433,313</b>	<b>20.25</b>	<b>0.27</b>	<b>0.27</b>	<b>1.66</b>	<b>4.48</b>	<b>5.16</b>	<b>4.08</b>	<b>3.55</b>	<b>4.42</b>	<b>4.98</b>	<b>07/01/2005</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.03	
Difference			0.22	0.22	3.22	5.38	-0.19	1.14	0.29	1.41	0.95	
IM U.S. Fixed Income (SA+CF) Median			0.15	0.15	0.11	1.41	5.64	3.75	3.83	3.89	4.46	
Rank			36	36	27	27	58	43	59	41	36	
<b>Agincourt Core Fixed Income (SA)</b>	<b>257,843,373</b>	<b>7.92</b>	<b>0.06</b>	<b>0.06</b>	<b>-1.64</b>	<b>-0.84</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>07/01/1998</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.73	
Difference			0.01	0.01	-0.08	0.06	N/A	N/A	N/A	N/A	N/A	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			0.10	0.10	-1.15	0.00	6.05	3.59	3.80	3.66	5.15	
Rank			63	63	89	83	N/A	N/A	N/A	N/A	N/A	

Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal year begins on 07/01. 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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Loomis Sayles Global World Bond (SA)</b>	<b>88,266,971</b>	<b>2.71</b>	<b>-1.48</b>	<b>-1.48</b>	<b>-5.46</b>	<b>-0.42</b>	N/A	N/A	N/A	N/A	N/A	05/01/2008
FTSE Wrld Gov't Bond Index			-1.24	-1.24	-5.93	-3.33	3.73	1.35	1.74	1.06	2.17	
Difference			-0.24	-0.24	0.47	2.91	N/A	N/A	N/A	N/A	N/A	
IM Global Fixed Income (SA+CF) Median			-0.02	-0.02	0.03	4.78	5.64	4.54	3.85	3.94	4.14	
Rank			82	82	91	86	N/A	N/A	N/A	N/A	N/A	
<b>Oaktree Global Credit (SA)</b>	<b>134,250,658</b>	<b>4.12</b>	<b>1.09</b>	<b>1.09</b>	<b>5.64</b>	<b>11.88</b>	<b>4.68</b>	<b>5.09</b>	<b>4.84</b>	<b>6.55</b>	<b>6.13</b>	01/01/1998
Oaktree Global Credit Custom Index			0.39	0.39	3.39	9.15	5.32	2.92	3.25	3.00	N/A	
Difference			0.70	0.70	2.25	2.73	-0.64	2.17	1.59	3.55	N/A	
<b>Absolute Return</b>												
<b>PAAMCO (CF)</b>	<b>6,523,158</b>	<b>0.20</b>	<b>0.86</b>	<b>0.86</b>	<b>7.03</b>	<b>9.23</b>	N/A	N/A	N/A	N/A	N/A	10/01/2002
HFRI FOF: Cnsvt Index			1.08	1.08	6.99	13.23	5.42	4.90	3.60	4.00	3.49	
Difference			-0.22	-0.22	0.04	-4.00	N/A	N/A	N/A	N/A	N/A	
<b>Wellington Global Total Return (CF)</b>	<b>79,375,024</b>	<b>2.44</b>	<b>-0.03</b>	<b>-0.03</b>	<b>2.32</b>	<b>2.20</b>	N/A	N/A	N/A	N/A	N/A	12/01/2016
ICE BofAML 3 Mo US T-Bill Index+4%			1.00	1.00	3.02	4.07	5.23	5.20	4.90	4.65	5.24	
Difference			-1.03	-1.03	-0.70	-1.87	N/A	N/A	N/A	N/A	N/A	
<b>TCW MetWest Unconstrained (SA)</b>	<b>64,516,000</b>	<b>1.98</b>	<b>0.45</b>	<b>0.45</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	01/01/2021
ICE BofAML 3 Mo US T-Bill Index+3%			0.76	0.76	2.28	3.07	4.22	4.19	3.89	3.65	2.28	
Difference			-0.31	-0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Private Credit</b>	<b>28,658,129</b>	<b>0.88</b>	<b>3.33</b>	<b>3.33</b>	<b>22.03</b>	<b>25.45</b>	<b>12.48</b>	<b>11.16</b>	N/A	N/A	11.16	10/01/2016
<b>Real Assets</b>	<b>404,227,439</b>	<b>12.42</b>	<b>5.13</b>	<b>5.13</b>	<b>10.59</b>	<b>12.13</b>	<b>4.27</b>	<b>5.68</b>	<b>5.05</b>	<b>6.34</b>	<b>5.63</b>	01/01/1998
OPPRS Real Assets Blended Benchmark			6.41	6.41	12.41	13.64	4.85	5.00	2.78	4.72	5.93	
Difference			-1.28	-1.28	-1.82	-1.51	-0.58	0.68	2.27	1.62	-0.30	
<b>JP Morgan Strategic Property (CF)</b>	<b>170,103,069</b>	<b>5.22</b>	<b>6.72</b>	<b>6.72</b>	<b>11.87</b>	<b>14.05</b>	N/A	N/A	N/A	N/A	N/A	11/01/2007
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	4.80	
Difference			0.31	0.31	-0.54	0.41	N/A	N/A	N/A	N/A	N/A	
<b>Blackstone Property Partners (CF)</b>	<b>163,438,329</b>	<b>5.02</b>	<b>4.38</b>	<b>4.38</b>	<b>9.14</b>	<b>10.44</b>	N/A	N/A	N/A	N/A	N/A	12/01/2014
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.13	
Difference			-2.03	-2.03	-3.27	-3.20	N/A	N/A	N/A	N/A	N/A	
<b>Private Real Estate</b>	<b>70,686,042</b>	<b>2.17</b>	<b>4.49</b>	<b>4.49</b>	<b>12.68</b>	<b>13.19</b>	<b>9.54</b>	<b>9.12</b>	<b>10.14</b>	<b>9.07</b>	<b>8.91</b>	08/01/2011
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	9.12	
Difference			-1.92	-1.92	0.27	-0.45	3.41	2.56	2.21	0.15	-0.21	

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, 2021

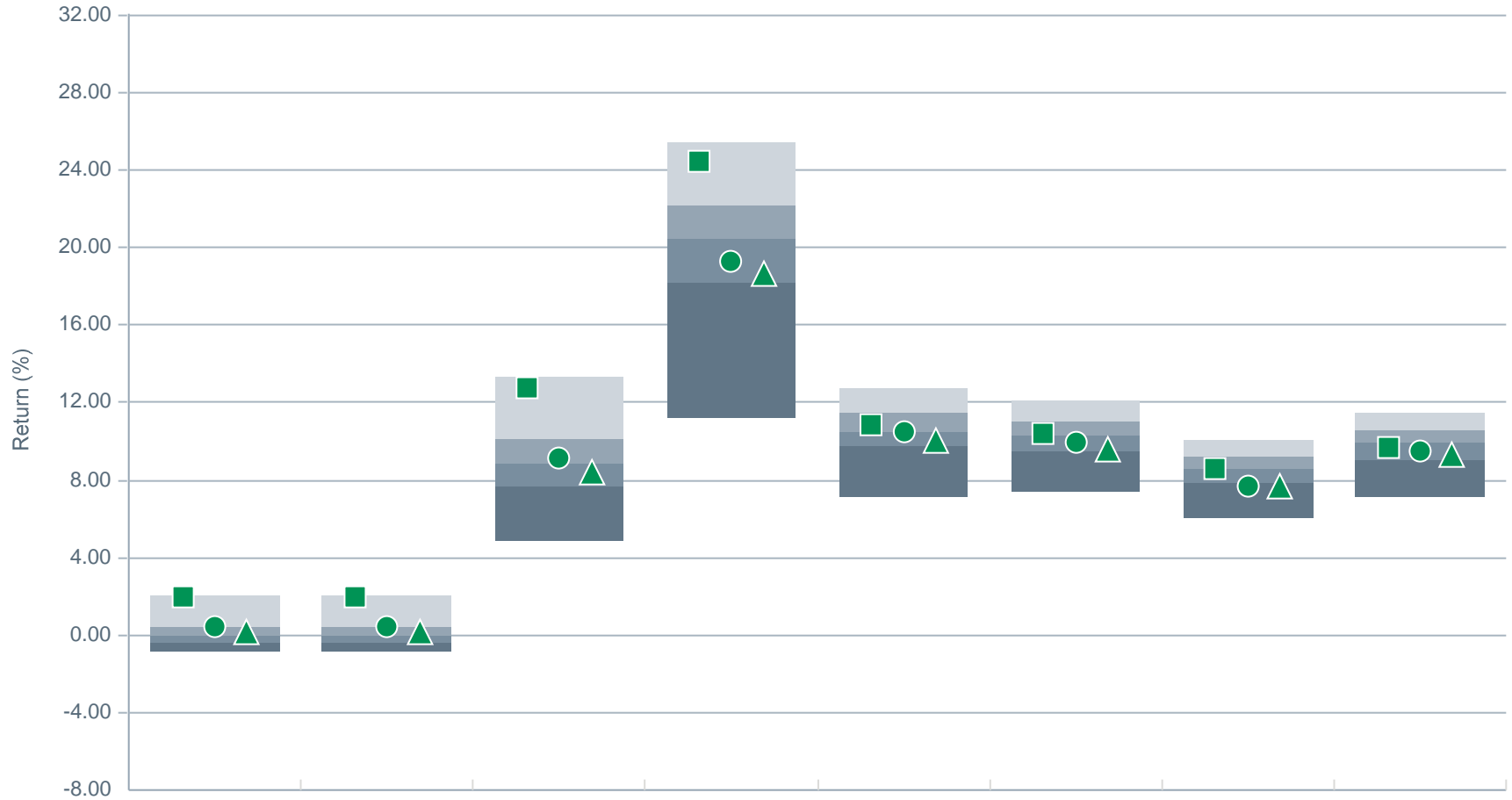
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Columbus Square (SA)</b>	<b>4,411,508</b>	<b>0.14</b>	<b>-3.50</b>	<b>-3.50</b>	<b>-3.31</b>	<b>-3.40</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>03/01/1995</b>
NCREIF ODCE Index (AWA) (Net)			6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	8.02	
Difference			-9.91	-9.91	-15.72	-17.04	N/A	N/A	N/A	N/A	N/A	
<b>Long/Short Equity</b>	<b>268,227,486</b>	<b>8.24</b>	<b>-2.45</b>	<b>-2.45</b>	<b>2.04</b>	<b>15.96</b>	<b>10.20</b>	<b>9.54</b>	<b>7.77</b>	<b>8.39</b>	<b>8.00</b>	<b>05/01/2012</b>
MSCI ACW Index (USD) (Net)			-1.05	-1.05	11.12	27.44	12.58	13.20	9.95	11.90	10.67	
Difference			-1.40	-1.40	-9.08	-11.48	-2.38	-3.66	-2.18	-3.51	-2.67	
HFRI FOF: Strategic Index			0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	5.11	
Difference			-2.53	-2.53	-3.62	-1.10	2.42	2.69	2.91	3.20	2.89	
<b>Grosvenor Long/Short Equity (CF)</b>	<b>3,103,461</b>	<b>0.10</b>	<b>-4.96</b>	<b>-4.96</b>	<b>3.05</b>	<b>20.86</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>09/01/2003</b>
HFRI FOF: Strategic Index			0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	4.53	
Difference			-5.04	-5.04	-2.61	3.80	N/A	N/A	N/A	N/A	N/A	
<b>K2 Mauna Kea (CF)</b>	<b>265,124,025</b>	<b>8.14</b>	<b>-2.42</b>	<b>-2.42</b>	<b>2.30</b>	<b>15.49</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>17.38</b>	<b>06/01/2020</b>
HFRI FOF: Strategic Index			0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	19.83	
Difference			-2.50	-2.50	-3.36	-1.57	N/A	N/A	N/A	N/A	-2.45	
<b>Private Equity</b>	<b>436,424,120</b>	<b>13.40</b>	<b>17.61</b>	<b>17.61</b>	<b>54.45</b>	<b>71.44</b>	<b>26.51</b>	<b>20.61</b>	<b>17.17</b>	<b>15.35</b>	<b>14.31</b>	<b>07/01/2003</b>
MSCI ACW Index (USD) (Net)			-1.05	-1.05	11.12	27.44	12.58	13.20	9.95	11.90	9.03	
Difference			18.66	18.66	43.33	44.00	13.93	7.41	7.22	3.45	5.28	
Cambridge US Prvt Eq Index			0.00	0.00	24.50	39.06	19.19	18.64	15.33	15.85	15.54	
Difference			17.61	17.61	29.95	32.38	7.32	1.97	1.84	-0.50	-1.23	

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, 2021



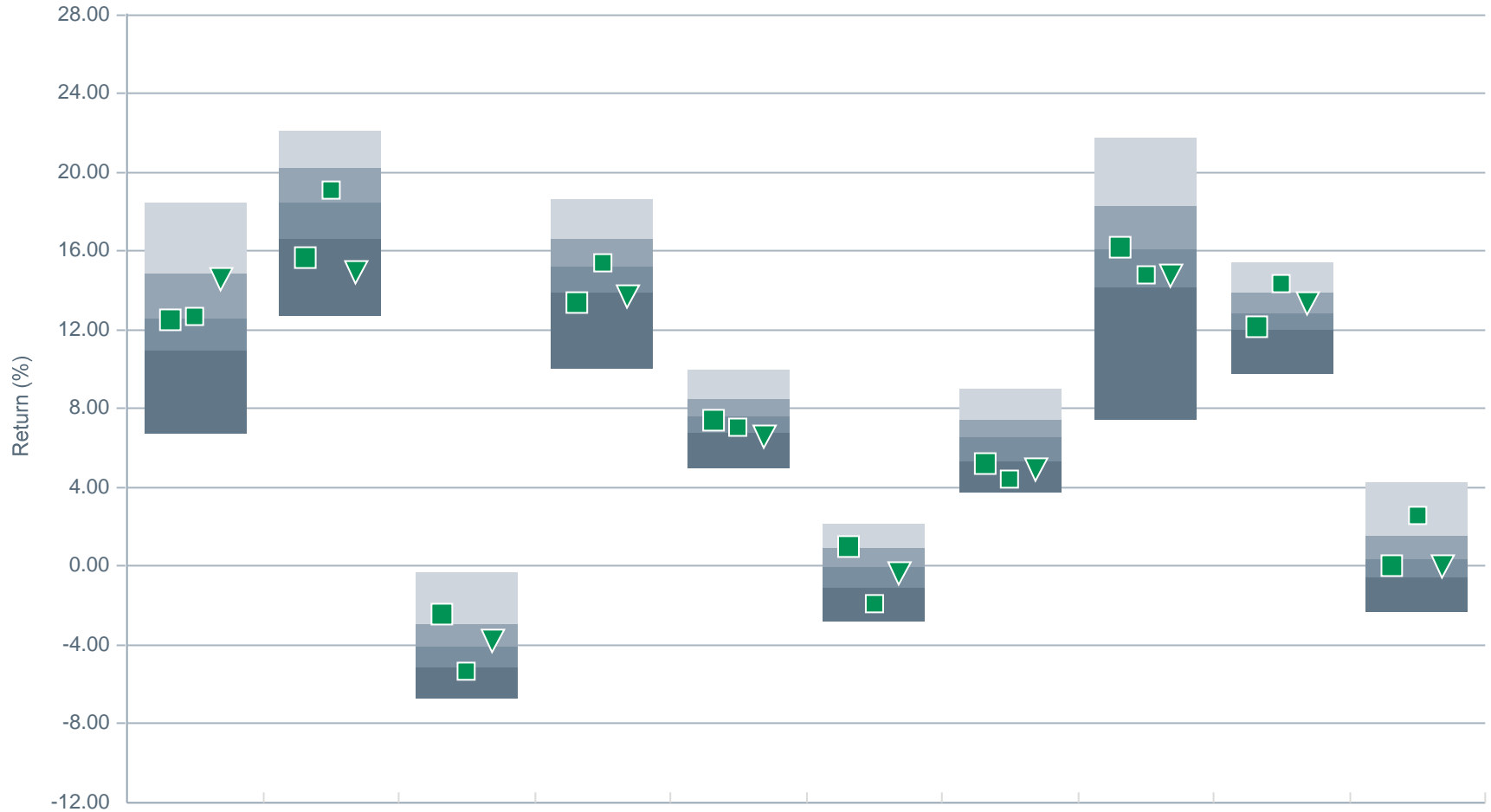
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OPPRS Total Fund	1.97 (7)	1.97 (7)	12.81 (6)	24.44 (9)	10.88 (40)	10.44 (45)	8.62 (49)	9.72 (58)
● OPPRS Policy Index	0.40 (25)	0.40 (25)	9.11 (43)	19.30 (66)	10.50 (49)	9.92 (62)	7.71 (80)	9.51 (63)
▲ OPPRS Allocation Index	0.17 (34)	0.17 (34)	8.44 (58)	18.67 (72)	10.04 (65)	9.61 (73)	7.72 (80)	9.34 (70)
5th Percentile	2.04	2.04	13.29	25.43	12.81	12.16	10.09	11.51
1st Quartile	0.40	0.40	10.11	22.20	11.49	11.07	9.21	10.60
Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94
3rd Quartile	-0.41	-0.41	7.68	18.19	9.76	9.47	7.89	9.08
95th Percentile	-0.83	-0.83	4.87	11.26	7.17	7.39	6.10	7.15

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

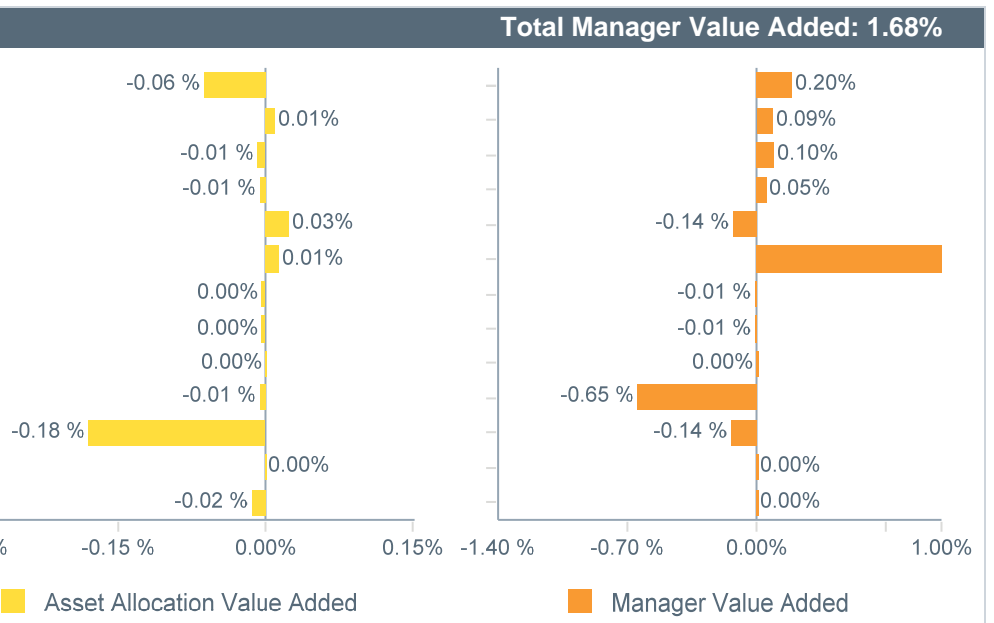
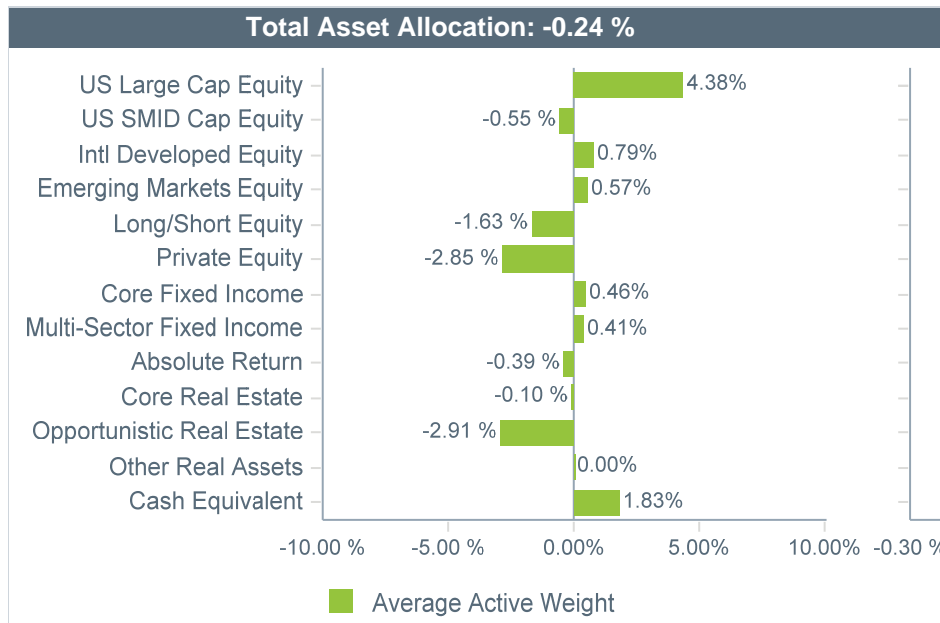
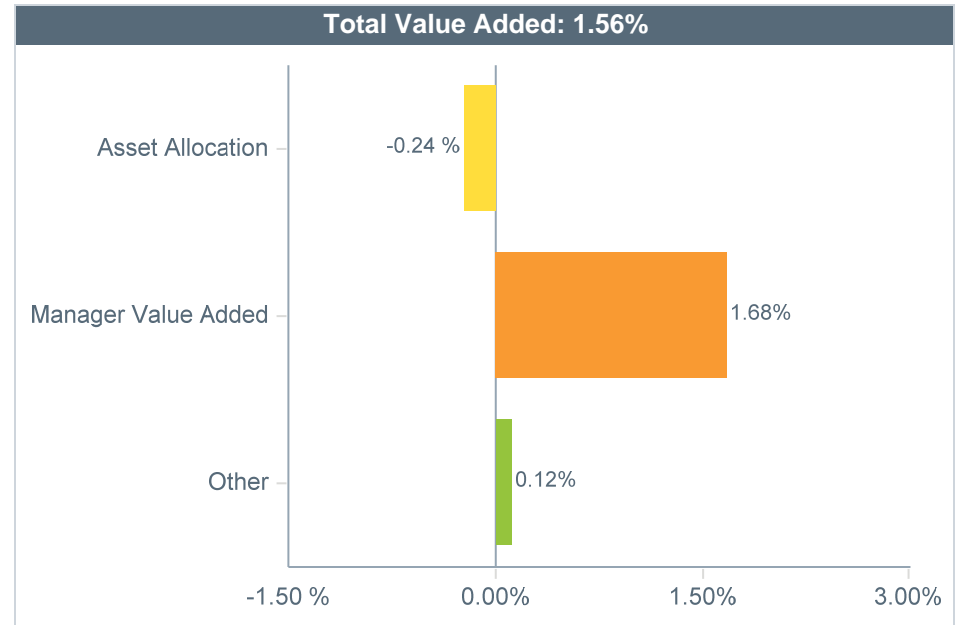
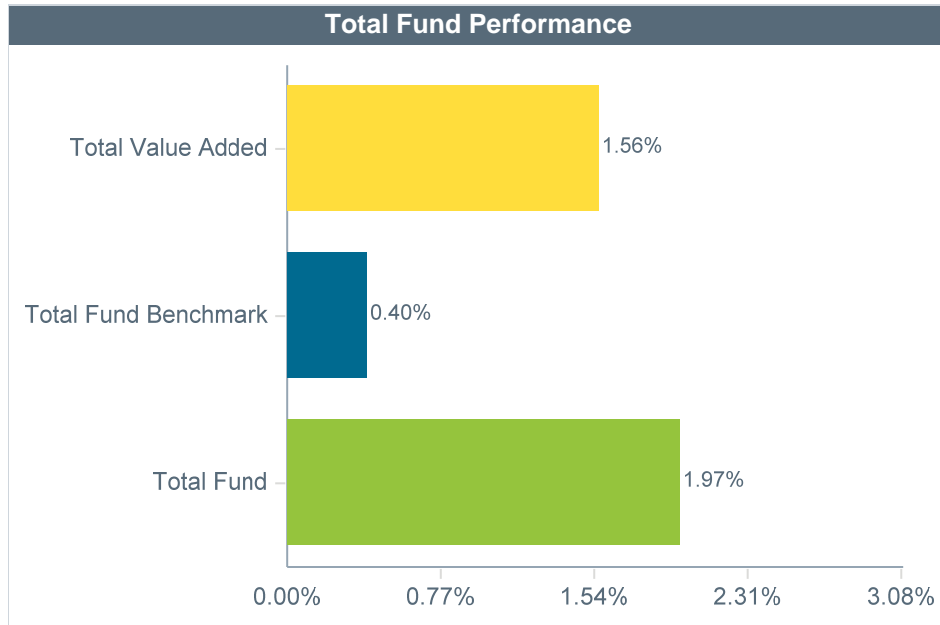
As of September 30, 2021



	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
■ OPPRS Total Fund	12.54 (52)	15.68 (84)	-2.46 (19)	13.40 (82)	7.47 (56)	1.05 (19)	5.20 (80)	16.18 (50)	12.20 (70)	0.02 (61)
■ OPPRS Policy Index	12.66 (50)	19.13 (42)	-5.34 (79)	15.45 (47)	7.07 (67)	-1.93 (88)	4.47 (90)	14.82 (66)	14.35 (19)	2.56 (16)
▼ OPPRS Allocation Index	14.67 (27)	15.02 (88)	-3.70 (42)	13.78 (77)	6.66 (79)	-0.35 (57)	4.97 (84)	14.77 (67)	13.44 (36)	0.09 (61)
5th Percentile	18.53	22.15	-0.35	18.65	9.96	2.13	8.98	21.72	15.42	4.26
1st Quartile	14.87	20.27	-2.95	16.63	8.44	0.90	7.43	18.29	13.94	1.56
Median	12.61	18.52	-4.13	15.30	7.64	-0.07	6.59	16.17	12.90	0.41
3rd Quartile	10.95	16.62	-5.13	13.91	6.81	-1.10	5.35	14.16	11.96	-0.55
95th Percentile	6.68	12.74	-6.71	10.03	5.01	-2.75	3.73	7.40	9.81	-2.37

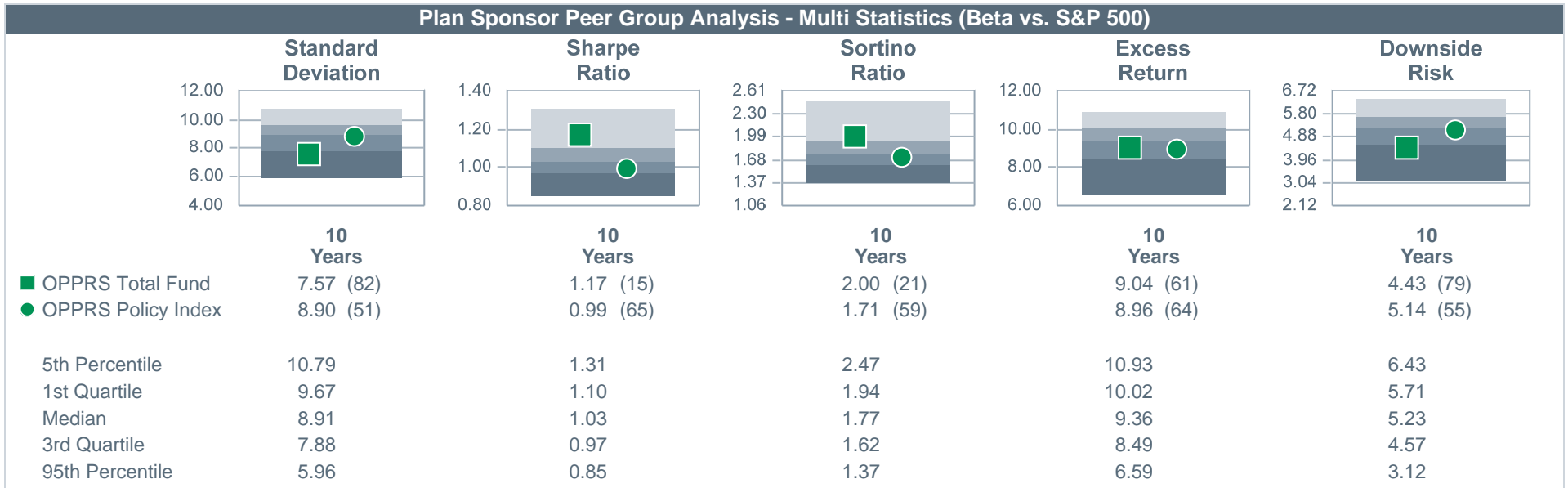
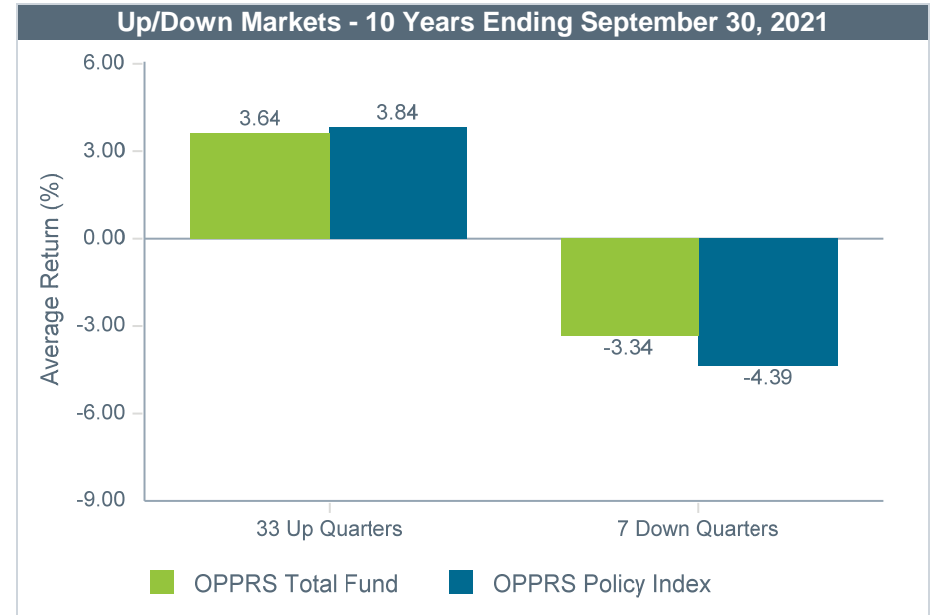
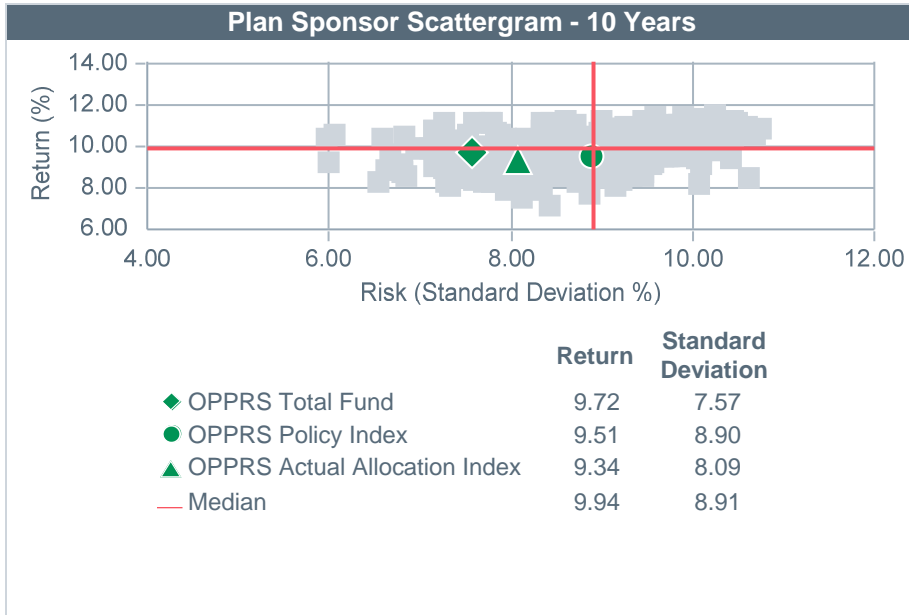
Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.





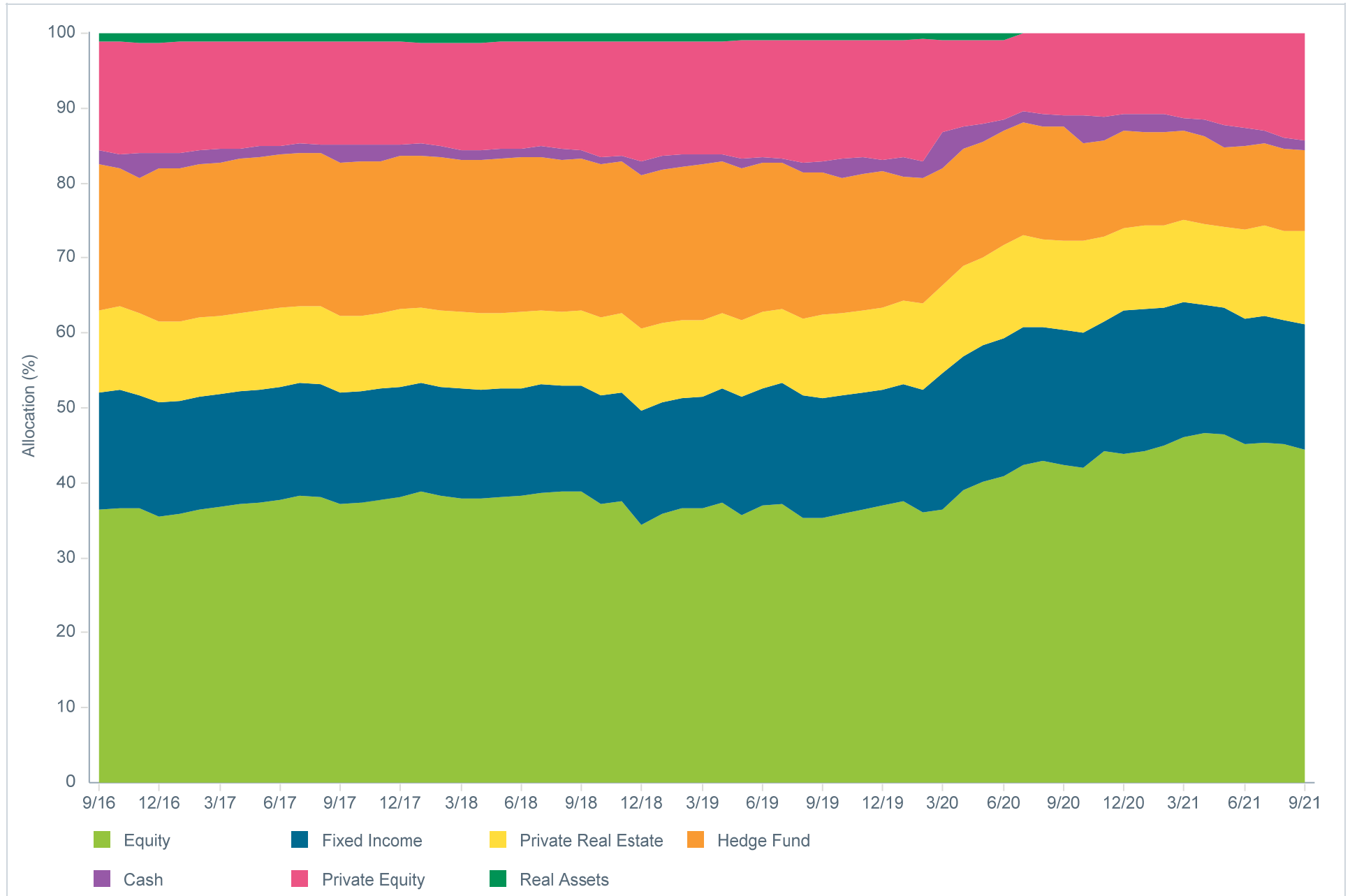
Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation. Allocation to Multi-Sector Fixed Income includes Private Credit.





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





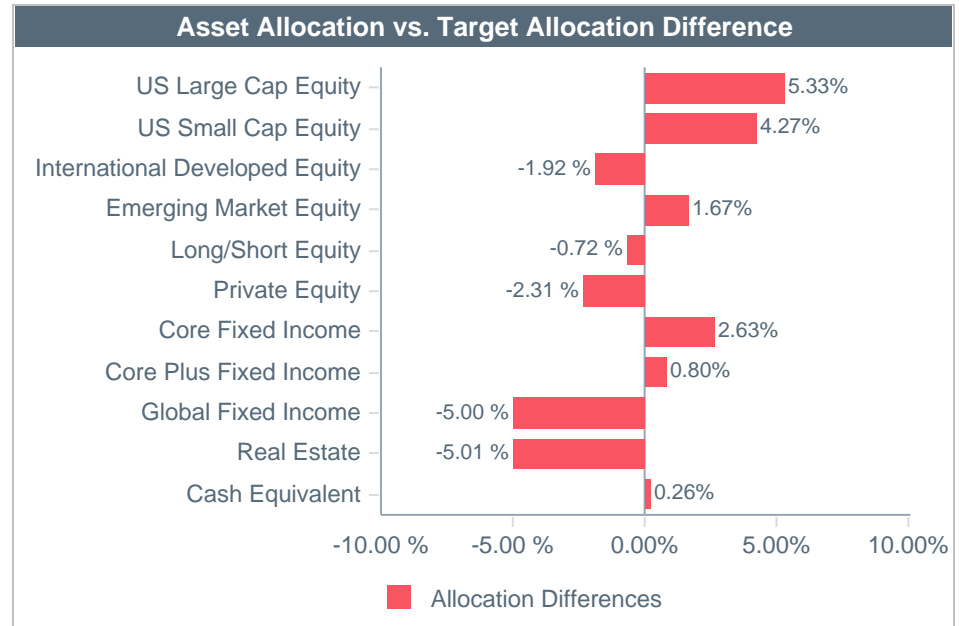
Allocation to Fixed Income includes Private Credit.

# Oklahoma Law Enforcement Retirement System (OLERS)



	Performance (%)												
	Trailing							Calendar Year					
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
<b>OLERS Total Fund (Net)</b>	<b>0.51</b>	<b>0.51</b>	<b>10.57</b>	<b>23.62</b>	<b>10.03</b>	<b>10.06</b>	<b>8.08</b>	<b>9.60</b>	<b>11.83</b>	<b>17.49</b>	<b>-4.75</b>	<b>14.53</b>	<b>7.16</b>
OLERS Policy Index	0.19	0.19	9.46	20.51	10.61	10.31	8.90	10.14	12.77	19.12	-3.67	13.36	8.64
Difference	0.32	0.32	1.11	3.11	-0.58	-0.25	-0.82	-0.54	-0.94	-1.63	-1.08	1.17	-1.48
OLERS Actual Allocation Index	-0.42	-0.42	8.99	21.18	10.90	10.40	8.80	10.00	14.73	17.33	-3.47	14.63	8.27
Difference	0.93	0.93	1.58	2.44	-0.87	-0.34	-0.72	-0.40	-2.90	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	7.50
Difference	-1.31	-1.31	5.00	16.12	2.53	2.56	0.58	2.10	4.33	9.99	-12.25	7.03	-0.34
<b>OLERS Total Fund (Gross)</b>	<b>0.55</b>	<b>0.55</b>	<b>10.70</b>	<b>23.82</b>	<b>10.22</b>	<b>10.26</b>	<b>8.27</b>	<b>9.73</b>	<b>12.03</b>	<b>17.70</b>	<b>-4.55</b>	<b>14.71</b>	<b>7.32</b>
OLERS Policy Index	0.19	0.19	9.46	20.51	10.61	10.31	8.90	10.14	12.77	19.12	-3.67	13.36	8.64
Difference	0.36	0.36	1.24	3.31	-0.39	-0.05	-0.63	-0.41	-0.74	-1.42	-0.88	1.35	-1.32
OLERS Actual Allocation Index	-0.42	-0.42	8.99	21.18	10.90	10.40	8.80	10.00	14.73	17.33	-3.47	14.63	8.27
Difference	0.97	0.97	1.71	2.64	-0.68	-0.14	-0.53	-0.27	-2.70	0.37	-1.08	0.08	-0.95
All Public Plans-Total Fund Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	12.61	18.52	-4.13	15.30	7.64
Rank	20	20	19	12	59	51	59	57	59	61	60	61	61

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
<b>OLERS (Law Enforcement)</b>	<b>1,171,526,787</b>	<b>100.00</b>	<b>100.00</b>
US Large Cap Equity	296,692,243	25.33	20.00
US Small Cap Equity	167,233,527	14.27	10.00
International Developed Equity	153,189,176	13.08	15.00
Emerging Market Equity	78,166,698	6.67	5.00
Long/Short Equity	50,151,972	4.28	5.00
Private Equity	90,080,018	7.69	10.00
Core Fixed Income	89,438,195	7.63	5.00
Core Plus Fixed Income	126,539,277	10.80	10.00
Global Fixed Income	-	0.00	5.00
Real Estate	116,984,755	9.99	15.00
Cash Equivalent	3,050,925	0.26	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 Law Enforcement Retirement System  
Asset Allocation & Performance - Net of Fees

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>OLERS Total Fund</b>	<b>1,171,526,787</b>	<b>100.00</b>	<b>0.51</b>	<b>0.51</b>	<b>10.57</b>	<b>23.62</b>	<b>10.03</b>	<b>10.06</b>	<b>8.08</b>	<b>9.60</b>	<b>12.02</b>	<b>10/01/1990</b>
OLERS Policy Index			0.19	0.19	9.46	20.51	10.61	10.31	8.90	10.14	N/A	
Difference			0.32	0.32	1.11	3.11	-0.58	-0.25	-0.82	-0.54	N/A	
OLERS Actual Allocation Index			-0.42	-0.42	8.99	21.18	10.90	10.40	8.80	10.00	8.74	
Difference			0.93	0.93	1.58	2.44	-0.87	-0.34	-0.72	-0.40	3.28	
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			-1.31	-1.31	5.00	16.12	2.53	2.56	0.58	2.10	4.52	
<b>US Equity</b>	<b>463,925,770</b>	<b>39.60</b>	<b>-0.02</b>	<b>-0.02</b>	<b>17.81</b>	<b>43.28</b>	<b>15.62</b>	<b>17.22</b>	<b>13.73</b>	<b>16.54</b>	<b>N/A</b>	<b>10/01/1990</b>
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	11.17	
Difference			-0.60	-0.60	1.89	13.28	-0.37	0.32	-0.28	-0.09	N/A	
<b>Hotchkis Wiley Large Cap Value Equity (SA)</b>	<b>94,450,831</b>	<b>8.06</b>	<b>-1.52</b>	<b>-1.52</b>	<b>23.04</b>	<b>59.68</b>	<b>10.24</b>	<b>13.35</b>	<b>10.44</b>	<b>15.28</b>	<b>12.25</b>	<b>11/01/1990</b>
Russell 1000 Val Index			-0.78	-0.78	16.14	35.01	10.07	10.94	9.32	13.51	10.77	
Difference			-0.74	-0.74	6.90	24.67	0.17	2.41	1.12	1.77	1.48	
<b>Kennedy Capital Small Cap Value Equity (SA)</b>	<b>82,450,924</b>	<b>7.04</b>	<b>-0.98</b>	<b>-0.98</b>	<b>27.33</b>	<b>66.14</b>	<b>11.00</b>	<b>12.48</b>	<b>11.48</b>	<b>14.93</b>	<b>22.51</b>	<b>02/01/1996</b>
Russell 2000 Val Index			-2.98	-2.98	22.92	63.92	8.58	11.03	10.19	13.22	9.94	
Difference			2.00	2.00	4.41	2.22	2.42	1.45	1.29	1.71	12.57	
<b>NTGI S&amp;P 500 Index (CF)</b>	<b>108,221,563</b>	<b>9.24</b>	<b>0.68</b>	<b>0.68</b>	<b>16.03</b>	<b>30.12</b>	<b>16.00</b>	<b>16.90</b>	<b>14.02</b>	<b>16.63</b>	<b>11.64</b>	<b>08/01/2008</b>
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	12.04	
Difference			0.10	0.10	0.11	0.12	0.01	0.00	0.01	0.00	-0.40	
<b>Polen Focus Growth (CF)</b>	<b>94,019,849</b>	<b>8.03</b>	<b>2.79</b>	<b>2.79</b>	<b>18.46</b>	<b>30.46</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>33.19</b>	<b>01/01/2019</b>
Russell 1000 Grth Index			1.16	1.16	14.30	27.32	22.00	22.84	18.51	19.68	32.29	
Difference			1.63	1.63	4.16	3.14	N/A	N/A	N/A	N/A	0.90	
<b>Wellington Small Cap Growth (CF)</b>	<b>84,782,603</b>	<b>7.24</b>	<b>-1.33</b>	<b>-1.33</b>	<b>4.79</b>	<b>38.12</b>	<b>14.26</b>	<b>17.16</b>	<b>N/A</b>	<b>N/A</b>	<b>16.70</b>	<b>08/01/2016</b>
Russell 2000 Grth Index			-5.65	-5.65	2.82	33.27	11.70	15.34	13.19	15.74	15.36	
Difference			4.32	4.32	1.97	4.85	2.56	1.82	N/A	N/A	1.34	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>International Equity</b>	<b>231,355,874</b>	<b>19.75</b>	<b>-2.23</b>	<b>-2.23</b>	<b>6.72</b>	<b>24.16</b>	<b>10.02</b>	<b>9.65</b>	<b>6.76</b>	<b>7.13</b>	<b>N/A</b>	<b>10/01/1990</b>
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	N/A	
Difference			0.76	0.76	0.82	0.24	1.99	0.71	1.08	-0.35	N/A	
<b>International Developed Equity</b>	<b>153,189,176</b>	<b>13.08</b>	<b>-1.30</b>	<b>-1.30</b>	<b>7.66</b>	<b>23.77</b>	<b>5.24</b>	<b>7.19</b>	<b>4.96</b>	<b>5.95</b>	<b>N/A</b>	<b>11/01/1995</b>
MSCI EAFE Index (USD) (Net)			-0.45	-0.45	8.35	25.73	7.62	8.81	5.80	8.10	5.44	
Difference			-0.85	-0.85	-0.69	-1.96	-2.38	-1.62	-0.84	-2.15	N/A	
<b>Barings Focused Intl Equity (SA)</b>	<b>74,805,421</b>	<b>6.39</b>	<b>-1.42</b>	<b>-1.42</b>	<b>4.39</b>	<b>17.74</b>	<b>6.19</b>	<b>8.36</b>	<b>6.95</b>	<b>N/A</b>	<b>6.36</b>	<b>02/01/2012</b>
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	6.62	
Difference			1.57	1.57	-1.51	-6.18	-1.84	-0.58	1.27	N/A	-0.26	
<b>Mondrian International Equity (SA)</b>	<b>78,383,755</b>	<b>6.69</b>	<b>-1.18</b>	<b>-1.18</b>	<b>11.15</b>	<b>30.82</b>	<b>4.28</b>	<b>6.08</b>	<b>3.65</b>	<b>6.20</b>	<b>4.86</b>	<b>01/01/2005</b>
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	5.69	
Difference			1.81	1.81	5.25	6.90	-3.75	-2.86	-2.03	-1.28	-0.83	
<b>Emerging Market Equity</b>	<b>78,166,698</b>	<b>6.67</b>	<b>-3.99</b>	<b>-3.99</b>	<b>4.44</b>	<b>23.65</b>	<b>18.23</b>	<b>13.65</b>	<b>8.95</b>	<b>N/A</b>	<b>8.20</b>	<b>07/01/2012</b>
MSCI Emg Mkts Index (USD) (Net)			-8.09	-8.09	-1.25	18.20	8.58	9.23	5.62	6.09	5.66	
Difference			4.10	4.10	5.69	5.45	9.65	4.42	3.33	N/A	2.54	
<b>Wasatch EM Small Cap CI A (CF)</b>	<b>24,352,021</b>	<b>2.08</b>	<b>6.89</b>	<b>6.89</b>	<b>26.77</b>	<b>55.73</b>	<b>27.80</b>	<b>17.00</b>	<b>11.49</b>	<b>N/A</b>	<b>10.10</b>	<b>07/01/2012</b>
MSCI Emg Mkts Index (USD) (Net)			-8.09	-8.09	-1.25	18.20	8.58	9.23	5.62	6.09	5.66	
Difference			14.98	14.98	28.02	37.53	19.22	7.77	5.87	N/A	4.44	
<b>William Blair Emerging Markets Leaders (CF)</b>	<b>53,814,677</b>	<b>4.59</b>	<b>-8.22</b>	<b>-8.22</b>	<b>-3.27</b>	<b>13.11</b>	<b>14.75</b>	<b>12.32</b>	<b>N/A</b>	<b>N/A</b>	<b>12.46</b>	<b>09/01/2016</b>
MSCI Emg Mkts Index (USD) (Net)			-8.09	-8.09	-1.25	18.20	8.58	9.23	5.62	6.09	9.35	
Difference			-0.13	-0.13	-2.02	-5.09	6.17	3.09	N/A	N/A	3.11	
<b>Fixed Income</b>	<b>215,977,472</b>	<b>18.44</b>	<b>-0.69</b>	<b>-0.69</b>	<b>-1.87</b>	<b>-0.62</b>	<b>3.82</b>	<b>2.82</b>	<b>2.70</b>	<b>3.26</b>	<b>N/A</b>	<b>10/01/1990</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	5.78	
Difference			-0.74	-0.74	-0.31	0.28	-1.53	-0.12	-0.56	0.25	N/A	
<b>NTGI Aggregate Index (SA)</b>	<b>89,438,195</b>	<b>7.63</b>	<b>0.07</b>	<b>0.07</b>	<b>-1.58</b>	<b>-0.90</b>	<b>5.37</b>	<b>2.94</b>	<b>3.27</b>	<b>3.03</b>	<b>4.03</b>	<b>04/01/2004</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.98	
Difference			0.02	0.02	-0.02	0.00	0.02	0.00	0.01	0.02	0.05	
<b>TCW Core Plus Fixed Income (SA)</b>	<b>126,539,277</b>	<b>10.80</b>	<b>0.26</b>	<b>0.26</b>	<b>-0.41</b>	<b>1.04</b>	<b>6.82</b>	<b>4.31</b>	<b>4.31</b>	<b>4.96</b>	<b>6.25</b>	<b>03/01/1996</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	5.02	
Difference			0.21	0.21	1.15	1.94	1.47	1.37	1.05	1.95	1.23	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Long/Short Equity</b>	<b>50,151,972</b>	<b>4.28</b>	<b>0.76</b>	<b>0.76</b>	<b>7.10</b>	<b>16.86</b>	<b>5.72</b>	<b>6.66</b>	<b>5.44</b>	<b>6.70</b>	<b>N/A</b>	<b>01/01/2008</b>
MSCI ACW Index (USD) (Net)			-1.05	-1.05	11.12	27.44	12.58	13.20	9.95	11.90	6.36	
Difference			1.81	1.81	-4.02	-10.58	-6.86	-6.54	-4.51	-5.20	N/A	
HFRI FOF: Strategic Index			0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	2.42	
Difference			0.68	0.68	1.44	-0.20	-2.06	-0.19	0.58	1.51	N/A	
<b>Grosvenor (CF)</b>	<b>472,355</b>	<b>0.04</b>	<b>-1.04</b>	<b>-1.04</b>	<b>-2.57</b>	<b>6.75</b>	<b>2.37</b>	<b>4.62</b>	<b>3.99</b>	<b>5.68</b>	<b>3.91</b>	<b>01/01/2008</b>
MSCI ACW Index (USD) (Net)			-1.05	-1.05	11.12	27.44	12.58	13.20	9.95	11.90	6.36	
Difference			0.01	0.01	-13.69	-20.69	-10.21	-8.58	-5.96	-6.22	-2.45	
HFRI FOF: Strategic Index			0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	2.42	
Difference			-1.12	-1.12	-8.23	-10.31	-5.41	-2.23	-0.87	0.49	1.49	
<b>Mauna Kea (CF)</b>	<b>49,679,617</b>	<b>4.24</b>	<b>0.79</b>	<b>0.79</b>	<b>8.45</b>	<b>17.61</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>16.60</b>	<b>08/01/2020</b>
MSCI ACW Index (USD) (Net)			-1.05	-1.05	11.12	27.44	12.58	13.20	9.95	11.90	25.94	
Difference			1.84	1.84	-2.67	-9.83	N/A	N/A	N/A	N/A	-9.34	
HFRI FOF: Strategic Index			0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	17.10	
Difference			0.71	0.71	2.79	0.55	N/A	N/A	N/A	N/A	-0.50	
<b>Real Estate</b>	<b>116,984,755</b>	<b>9.99</b>	<b>5.23</b>	<b>5.23</b>	<b>9.50</b>	<b>10.69</b>	<b>3.63</b>	<b>4.58</b>	<b>4.22</b>	<b>5.66</b>	<b>N/A</b>	<b>04/01/1999</b>
NCREIF Property Index			5.23	5.23	10.88	12.15	6.72	6.84	8.10	8.99	8.69	
Difference			0.00	0.00	-1.38	-1.46	-3.09	-2.26	-3.88	-3.33	N/A	
<b>JPMCB Strategic Property (CF)</b>	<b>97,274,990</b>	<b>8.30</b>	<b>6.49</b>	<b>6.49</b>	<b>11.08</b>	<b>12.97</b>	<b>5.51</b>	<b>6.00</b>	<b>7.40</b>	<b>N/A</b>	<b>8.75</b>	<b>04/01/2012</b>
NCREIF Property Index			5.23	5.23	10.88	12.15	6.72	6.84	8.10	8.99	8.86	
Difference			1.26	1.26	0.20	0.82	-1.21	-0.84	-0.70	N/A	-0.11	
<b>UBS Trumbull Property (SA)</b>	<b>15,149,765</b>	<b>1.29</b>	<b>-0.74</b>	<b>-0.74</b>	<b>3.06</b>	<b>0.93</b>	<b>-1.11</b>	<b>1.47</b>	<b>3.73</b>	<b>N/A</b>	<b>4.86</b>	<b>01/01/2013</b>
NCREIF Property Index			5.23	5.23	10.88	12.15	6.72	6.84	8.10	8.99	8.72	
Difference			-5.97	-5.97	-7.82	-11.22	-7.83	-5.37	-4.37	N/A	-3.86	
<b>Colcord Center (CF)</b>	<b>4,560,000</b>	<b>0.39</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>4.20</b>	<b>3.53</b>	<b>4.99</b>	<b>2.99</b>	<b>3.29</b>	<b>05/01/2008</b>

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Private Equity</b>	<b>90,080,018</b>	<b>7.69</b>	<b>9.21</b>	<b>9.21</b>	<b>35.17</b>	<b>45.87</b>	<b>17.86</b>	<b>14.92</b>	<b>11.81</b>	<b>11.79</b>	<b>N/A</b>	<b>10/01/1990</b>
S&P 500 Index+5%			1.82	1.82	20.24	36.51	21.79	22.74	19.71	22.47	16.73	
Difference			7.39	7.39	14.93	9.36	-3.93	-7.82	-7.90	-10.68	N/A	
Cambridge US Prvt Eq Index			0.00	0.00	24.50	39.06	19.19	18.64	15.33	15.85	15.08	
Difference			9.21	9.21	10.67	6.81	-1.33	-3.72	-3.52	-4.06	N/A	
<b>American Private Equity II LP</b>	<b>484,850</b>	<b>0.04</b>	<b>2.06</b>	<b>2.06</b>	<b>15.82</b>	<b>24.67</b>	<b>-8.29</b>	<b>-2.75</b>	<b>-2.59</b>	<b>1.98</b>	<b>2.99</b>	<b>02/01/2006</b>
<b>Apollo IX LP</b>	<b>5,122,364</b>	<b>0.44</b>	<b>5.01</b>	<b>5.01</b>	<b>48.78</b>	<b>51.39</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>6.39</b>	<b>03/01/2019</b>
<b>Apollo VIII LP</b>	<b>6,224,151</b>	<b>0.53</b>	<b>9.37</b>	<b>9.37</b>	<b>36.85</b>	<b>46.02</b>	<b>13.25</b>	<b>14.84</b>	<b>13.98</b>	<b>N/A</b>	<b>6.27</b>	<b>02/01/2014</b>
<b>Carval CR Value (CF)</b>	<b>3,265,070</b>	<b>0.28</b>	<b>2.53</b>	<b>2.53</b>	<b>11.33</b>	<b>11.33</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.63</b>	<b>08/01/2020</b>
<b>FirstMark Capital Opportunity III LP</b>	<b>4,647,104</b>	<b>0.40</b>	<b>11.14</b>	<b>11.14</b>	<b>52.45</b>	<b>57.45</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>39.75</b>	<b>06/01/2020</b>
<b>FirstMark V LP</b>	<b>1,680,201</b>	<b>0.14</b>	<b>-1.86</b>	<b>-1.86</b>	<b>-5.63</b>	<b>-5.30</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-15.67</b>	<b>07/01/2020</b>
<b>Francisco PTRS-AGI-SL (CF)</b>	<b>3,202,493</b>	<b>0.27</b>	<b>11.14</b>	<b>11.14</b>	<b>12.73</b>	<b>-0.17</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.17</b>	<b>10/01/2020</b>
<b>Francisco Partners SL (CF)</b>	<b>421,236</b>	<b>0.04</b>	<b>16.78</b>	<b>16.78</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>02/01/2021</b>
<b>Knightsbridge VI LP</b>	<b>3,567,716</b>	<b>0.30</b>	<b>4.61</b>	<b>4.61</b>	<b>96.05</b>	<b>116.06</b>	<b>44.28</b>	<b>27.65</b>	<b>18.84</b>	<b>17.27</b>	<b>11.36</b>	<b>12/01/2004</b>
<b>Knightsbridge VII LP</b>	<b>10,544,521</b>	<b>0.90</b>	<b>17.23</b>	<b>17.23</b>	<b>68.52</b>	<b>96.34</b>	<b>41.92</b>	<b>28.41</b>	<b>22.68</b>	<b>19.83</b>	<b>12.83</b>	<b>09/01/2008</b>
<b>Oaktree Opp XI LP</b>	<b>3,547,531</b>	<b>0.30</b>	<b>14.61</b>	<b>14.61</b>	<b>38.36</b>	<b>36.56</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>30.61</b>	<b>08/01/2020</b>
<b>Warburg Pincus Global Growth LP</b>	<b>33,369,420</b>	<b>2.85</b>	<b>5.65</b>	<b>5.65</b>	<b>18.48</b>	<b>23.05</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-10.28</b>	<b>03/01/2019</b>
<b>Warburg Pincus XII LP</b>	<b>14,003,361</b>	<b>1.20</b>	<b>17.74</b>	<b>17.74</b>	<b>47.65</b>	<b>66.16</b>	<b>25.64</b>	<b>19.55</b>	<b>N/A</b>	<b>N/A</b>	<b>7.17</b>	<b>12/01/2015</b>

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 - Gross of Fees

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>OLERS Total Fund</b>	<b>1,171,526,787</b>	<b>100.00</b>	<b>0.55</b>	<b>0.55</b>	<b>10.70</b>	<b>23.82</b>	<b>10.22</b>	<b>10.26</b>	<b>8.27</b>	<b>9.73</b>	<b>11.53</b>	<b>10/01/1990</b>
OLERS Policy Index			0.19	0.19	9.46	20.51	10.61	10.31	8.90	10.14	N/A	
Difference			0.36	0.36	1.24	3.31	-0.39	-0.05	-0.63	-0.41	N/A	
OLERS Actual Allocation Index			-0.42	-0.42	8.99	21.18	10.90	10.40	8.80	10.00	8.74	
Difference			0.97	0.97	1.71	2.64	-0.68	-0.14	-0.53	-0.27	2.79	
Actuarial Discount Rate (7.5%)			1.82	1.82	5.57	7.50	7.50	7.50	7.50	7.50	7.50	
Difference			-1.27	-1.27	5.13	16.32	2.72	2.76	0.77	2.23	4.03	
All Public Plans-Total Fund Median			-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	8.64	
Rank			20	20	19	12	59	51	59	57	1	
<b>US Equity</b>	<b>463,925,770</b>	<b>39.60</b>	<b>-0.02</b>	<b>-0.02</b>	<b>17.81</b>	<b>43.29</b>	<b>15.63</b>	<b>17.22</b>	<b>13.74</b>	<b>16.54</b>	<b>N/A</b>	<b>10/01/1990</b>
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	11.17	
Difference			-0.60	-0.60	1.89	13.29	-0.36	0.32	-0.27	-0.09	N/A	
IM U.S. Equity (SA+CF) Median			-0.41	-0.41	15.93	36.99	13.72	15.36	12.93	16.03	12.43	
Rank			42	42	37	36	40	34	43	43	N/A	
<b>Hotchkis Wiley Large Cap Value Equity (SA)</b>	<b>94,450,831</b>	<b>8.06</b>	<b>-1.52</b>	<b>-1.52</b>	<b>23.04</b>	<b>59.68</b>	<b>10.24</b>	<b>13.35</b>	<b>10.44</b>	<b>15.28</b>	<b>11.84</b>	<b>11/01/1990</b>
Russell 1000 Val Index			-0.78	-0.78	16.14	35.01	10.07	10.94	9.32	13.51	10.77	
Difference			-0.74	-0.74	6.90	24.67	0.17	2.41	1.12	1.77	1.07	
IM U.S. Large Cap Value Equity (SA+CF) Median			-0.54	-0.54	17.96	37.30	11.17	12.71	10.36	14.34	11.70	
Rank			79	79	11	2	65	39	50	27	47	
<b>Kennedy Capital Small Cap Value Equity (SA)</b>	<b>82,450,924</b>	<b>7.04</b>	<b>-0.98</b>	<b>-0.98</b>	<b>27.33</b>	<b>66.14</b>	<b>11.00</b>	<b>12.48</b>	<b>11.48</b>	<b>14.93</b>	<b>22.51</b>	<b>02/01/1996</b>
Russell 2000 Val Index			-2.98	-2.98	22.92	63.92	8.58	11.03	10.19	13.22	9.94	
Difference			2.00	2.00	4.41	2.22	2.42	1.45	1.29	1.71	12.57	
IM U.S. Small Cap Value Equity (SA+CF) Median			-1.48	-1.48	22.10	58.79	9.59	11.89	10.60	14.24	12.29	
Rank			37	37	21	28	32	38	32	37	1	
<b>NTGI S&amp;P 500 Index (CF)</b>	<b>108,221,563</b>	<b>9.24</b>	<b>0.68</b>	<b>0.68</b>	<b>16.04</b>	<b>30.14</b>	<b>16.03</b>	<b>16.93</b>	<b>14.04</b>	<b>16.65</b>	<b>12.05</b>	<b>08/01/2008</b>
S&P 500 Index (Cap Wtd)			0.58	0.58	15.92	30.00	15.99	16.90	14.01	16.63	12.04	
Difference			0.10	0.10	0.12	0.14	0.04	0.03	0.03	0.02	0.01	
IM U.S. Large Cap Index Equity (SA+CF) Median			0.21	0.21	15.52	30.97	16.00	16.89	13.99	16.63	12.08	
Rank			11	11	20	59	42	40	36	45	63	
<b>Polen Focus Growth (CF)</b>	<b>94,019,849</b>	<b>8.03</b>	<b>2.79</b>	<b>2.79</b>	<b>18.46</b>	<b>30.46</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>33.19</b>	<b>01/01/2019</b>
Russell 1000 Grth Index			1.16	1.16	14.30	27.32	22.00	22.84	18.51	19.68	32.29	
Difference			1.63	1.63	4.16	3.14	N/A	N/A	N/A	N/A	0.90	
IM U.S. Large Cap Growth Equity (SA+CF) Median			0.73	0.73	14.18	27.49	20.29	21.03	17.23	18.84	29.75	
Rank			9	9	12	22	N/A	N/A	N/A	N/A	23	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Wellington Small Cap Growth (CF)</b>	<b>84,782,603</b>	<b>7.24</b>	<b>-1.33</b>	<b>-1.33</b>	<b>4.79</b>	<b>38.12</b>	<b>14.26</b>	<b>17.16</b>	<b>N/A</b>	<b>N/A</b>	<b>16.70</b>	<b>08/01/2016</b>
Russell 2000 Grth Index			-5.65	-5.65	2.82	33.27	11.70	15.34	13.19	15.74	15.36	
Difference			4.32	4.32	1.97	4.85	2.56	1.82	N/A	N/A	1.34	
IM U.S. Small Cap Growth Equity (SA+CF) Median			-1.90	-1.90	10.84	40.43	17.12	19.68	16.83	18.69	19.84	
Rank			37	37	83	61	71	72	N/A	N/A	77	
<b>International Equity</b>	<b>231,355,874</b>	<b>19.75</b>	<b>-2.15</b>	<b>-2.15</b>	<b>6.97</b>	<b>24.54</b>	<b>10.41</b>	<b>10.09</b>	<b>7.22</b>	<b>7.84</b>	<b>N/A</b>	<b>10/01/1990</b>
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	N/A	
Difference			0.84	0.84	1.07	0.62	2.38	1.15	1.54	0.36	N/A	
IM International Equity (SA+CF) Median			-1.60	-1.56	8.26	25.93	9.59	10.17	7.37	9.40	8.84	
Rank			56	57	57	57	45	52	52	76	N/A	
<b>International Developed Equity</b>	<b>153,189,176</b>	<b>13.08</b>	<b>-1.19</b>	<b>-1.19</b>	<b>8.04</b>	<b>24.35</b>	<b>5.84</b>	<b>7.86</b>	<b>5.62</b>	<b>6.81</b>	<b>N/A</b>	<b>11/01/1995</b>
MSCI EAFE Index (USD) (Net)			-0.45	-0.45	8.35	25.73	7.62	8.81	5.80	8.10	5.44	
Difference			-0.74	-0.74	-0.31	-1.38	-1.78	-0.95	-0.18	-1.29	N/A	
IM International Equity Developed Markets (SA+CF) Median			-0.86	-0.79	9.48	26.99	9.07	10.29	7.72	9.90	8.17	
Rank			57	58	62	64	82	78	83	98	N/A	
<b>Barings Focused Intl Equity (SA)</b>	<b>74,805,421</b>	<b>6.39</b>	<b>-1.32</b>	<b>-1.32</b>	<b>4.69</b>	<b>18.20</b>	<b>6.75</b>	<b>9.09</b>	<b>7.76</b>	<b>N/A</b>	<b>7.15</b>	<b>02/01/2012</b>
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	6.62	
Difference			1.67	1.67	-1.21	-5.72	-1.28	0.15	2.08	N/A	0.53	
IM All ACWI Ex US (SA+CF) Median			-1.90	-1.90	7.01	25.31	10.09	10.55	7.33	9.71	8.88	
Rank			35	35	81	87	74	68	44	N/A	81	
<b>Mondrian International Equity (SA)</b>	<b>78,383,755</b>	<b>6.69</b>	<b>-1.06</b>	<b>-1.06</b>	<b>11.62</b>	<b>31.54</b>	<b>4.88</b>	<b>6.70</b>	<b>4.26</b>	<b>6.83</b>	<b>5.41</b>	<b>01/01/2005</b>
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	5.69	
Difference			1.93	1.93	5.72	7.62	-3.15	-2.24	-1.42	-0.65	-0.28	
IM All ACWI Ex US (SA+CF) Median			-1.90	-1.90	7.01	25.31	10.09	10.55	7.33	9.71	7.41	
Rank			30	30	16	20	91	91	94	96	89	

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



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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Emerging Market Equity</b>	<b>78,166,698</b>	<b>6.67</b>	<b>-3.99</b>	<b>-3.99</b>	<b>4.44</b>	<b>23.65</b>	<b>18.23</b>	<b>13.65</b>	<b>8.96</b>	<b>N/A</b>	<b>8.20</b>	<b>07/01/2012</b>
MSCI Emg Mkts Index (USD) (Net)			-8.09	-8.09	-1.25	18.20	8.58	9.23	5.62	6.09	5.66	
Difference			4.10	4.10	5.69	5.45	9.65	4.42	3.34	N/A	2.54	
IM Emerging Markets Equity (SA+CF) Median			-6.31	-6.31	2.49	22.74	10.86	10.14	6.63	7.67	7.29	
Rank			33	33	40	47	11	15	21	N/A	34	
<b>Wasatch EM Small Cap CI A (CF)</b>	<b>24,352,021</b>	<b>2.08</b>	<b>6.89</b>	<b>6.89</b>	<b>26.77</b>	<b>55.73</b>	<b>27.80</b>	<b>17.00</b>	<b>11.49</b>	<b>N/A</b>	<b>10.10</b>	<b>07/01/2012</b>
MSCI Emg Mkts Index (USD) (Net)			-8.09	-8.09	-1.25	18.20	8.58	9.23	5.62	6.09	5.66	
Difference			14.98	14.98	28.02	37.53	19.22	7.77	5.87	N/A	4.44	
IM Emerging Markets Equity (SA+CF) Median			-6.31	-6.31	2.49	22.74	10.86	10.14	6.63	7.67	7.29	
Rank			2	2	4	3	2	5	6	N/A	18	
<b>William Blair Emerging Markets Leaders (CF)</b>	<b>53,814,677</b>	<b>4.59</b>	<b>-8.22</b>	<b>-8.22</b>	<b>-3.27</b>	<b>13.11</b>	<b>14.75</b>	<b>12.32</b>	<b>N/A</b>	<b>N/A</b>	<b>12.46</b>	<b>09/01/2016</b>
MSCI Emg Mkts Index (USD) (Net)			-8.09	-8.09	-1.25	18.20	8.58	9.23	5.62	6.09	9.35	
Difference			-0.13	-0.13	-2.02	-5.09	6.17	3.09	N/A	N/A	3.11	
IM Emerging Markets Equity (SA+CF) Median			-6.31	-6.31	2.49	22.74	10.86	10.14	6.63	7.67	10.21	
Rank			73	73	83	92	22	24	N/A	N/A	24	
<b>Fixed Income</b>	<b>215,977,472</b>	<b>18.44</b>	<b>-0.65</b>	<b>-0.65</b>	<b>-1.78</b>	<b>-0.50</b>	<b>3.95</b>	<b>2.92</b>	<b>2.77</b>	<b>3.31</b>	<b>N/A</b>	<b>10/01/1990</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	5.78	
Difference			-0.70	-0.70	-0.22	0.40	-1.40	-0.02	-0.49	0.30	N/A	
IM Global Fixed Income (SA+CF) Median			-0.02	-0.02	0.03	4.78	5.64	4.54	3.85	3.94	6.32	
Rank			65	65	67	86	88	79	70	60	N/A	
<b>NTGI Aggregate Index (SA)</b>	<b>89,438,195</b>	<b>7.63</b>	<b>0.07</b>	<b>0.07</b>	<b>-1.56</b>	<b>-0.87</b>	<b>5.40</b>	<b>2.97</b>	<b>3.30</b>	<b>3.05</b>	<b>4.04</b>	<b>04/01/2004</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.98	
Difference			0.02	0.02	0.00	0.03	0.05	0.03	0.04	0.04	0.06	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			0.10	0.10	-1.15	0.00	6.05	3.59	3.80	3.66	4.48	
Rank			60	60	81	85	88	88	89	90	88	
<b>TCW Core Plus Fixed Income (SA)</b>	<b>126,539,277</b>	<b>10.80</b>	<b>0.26</b>	<b>0.26</b>	<b>-0.41</b>	<b>1.04</b>	<b>6.82</b>	<b>4.31</b>	<b>4.31</b>	<b>4.96</b>	<b>6.25</b>	<b>03/01/1996</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	5.02	
Difference			0.21	0.21	1.15	1.94	1.47	1.37	1.05	1.95	1.23	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			0.22	0.22	-0.21	1.94	6.58	4.13	4.20	4.38	5.79	
Rank			40	40	56	69	35	41	42	26	31	
<b>Long/Short Equity</b>	<b>50,151,972</b>	<b>4.28</b>	<b>0.76</b>	<b>0.76</b>	<b>7.10</b>	<b>16.86</b>	<b>5.72</b>	<b>6.66</b>	<b>5.44</b>	<b>6.70</b>	<b>N/A</b>	<b>01/01/2008</b>
MSCI ACW Index (USD) (Net)			-1.05	-1.05	11.12	27.44	12.58	13.20	9.95	11.90	6.36	
Difference			1.81	1.81	-4.02	-10.58	-6.86	-6.54	-4.51	-5.20	N/A	
HFRI FOF: Strategic Index			0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	2.42	
Difference			0.68	0.68	1.44	-0.20	-2.06	-0.19	0.58	1.51	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 Law Enforcement Retirement System  
Asset Allocation & Performance - Gross of Fees

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Grosvenor (CF)</b>	<b>472,355</b>	<b>0.04</b>	<b>-1.04</b>	<b>-1.04</b>	<b>-2.57</b>	<b>6.75</b>	<b>2.37</b>	<b>4.62</b>	<b>3.99</b>	<b>5.68</b>	<b>3.36</b>	<b>01/01/2008</b>
HFRI FOF: Strategic Index			0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	2.42	
Difference			-1.12	-1.12	-8.23	-10.31	-5.41	-2.23	-0.87	0.49	0.94	
<b>Mauna Kea (CF)</b>	<b>49,679,617</b>	<b>4.24</b>	<b>0.79</b>	<b>0.79</b>	<b>8.45</b>	<b>17.61</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>16.60</b>	<b>08/01/2020</b>
HFRI FOF: Strategic Index			0.08	0.08	5.66	17.06	7.78	6.85	4.86	5.19	17.10	
Difference			0.71	0.71	2.79	0.55	N/A	N/A	N/A	N/A	-0.50	
<b>Real Estate</b>	<b>116,984,755</b>	<b>9.99</b>	<b>5.42</b>	<b>5.42</b>	<b>10.19</b>	<b>11.64</b>	<b>4.49</b>	<b>5.42</b>	<b>5.05</b>	<b>6.83</b>	<b>6.07</b>	<b>04/01/1999</b>
NCREIF Property Index			5.23	5.23	10.88	12.15	6.72	6.84	8.10	8.99	8.69	
Difference			0.19	0.19	-0.69	-0.51	-2.23	-1.42	-3.05	-2.16	-2.62	
<b>JPMCB Strategic Property (CF)</b>	<b>97,274,990</b>	<b>8.30</b>	<b>6.72</b>	<b>6.72</b>	<b>11.87</b>	<b>14.06</b>	<b>6.54</b>	<b>7.03</b>	<b>8.45</b>	<b>N/A</b>	<b>9.73</b>	<b>04/01/2012</b>
NCREIF Property Index			5.23	5.23	10.88	12.15	6.72	6.84	8.10	8.99	8.86	
Difference			1.49	1.49	0.99	1.91	-0.18	0.19	0.35	N/A	0.87	
<b>UBS Trumbull Property (SA)</b>	<b>15,149,765</b>	<b>1.29</b>	<b>-0.74</b>	<b>-0.74</b>	<b>3.42</b>	<b>1.45</b>	<b>-0.37</b>	<b>2.34</b>	<b>4.71</b>	<b>N/A</b>	<b>5.87</b>	<b>01/01/2013</b>
NCREIF Property Index			5.23	5.23	10.88	12.15	6.72	6.84	8.10	8.99	8.72	
Difference			-5.97	-5.97	-7.46	-10.70	-7.09	-4.50	-3.39	N/A	-2.85	
<b>Colcord Center (CF)</b>	<b>4,560,000</b>	<b>0.39</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>4.20</b>	<b>3.53</b>	<b>4.99</b>	<b>2.99</b>	<b>3.29</b>	<b>05/01/2008</b>
<b>Private Equity</b>	<b>90,080,018</b>	<b>7.69</b>	<b>9.21</b>	<b>9.21</b>	<b>35.15</b>	<b>45.86</b>	<b>17.86</b>	<b>14.92</b>	<b>11.80</b>	<b>11.79</b>	<b>N/A</b>	<b>10/01/1990</b>
S&P 500 Index+5%			1.82	1.82	20.24	36.51	21.79	22.74	19.71	22.47	16.73	
Difference			7.39	7.39	14.91	9.35	-3.93	-7.82	-7.91	-10.68	N/A	
Cambridge US Prvt Eq Index			0.00	0.00	24.50	39.06	19.19	18.64	15.33	15.85	15.08	
Difference			9.21	9.21	10.65	6.80	-1.33	-3.72	-3.53	-4.06	N/A	
<b>American Private Equity II LP</b>	<b>484,850</b>	<b>0.04</b>	<b>2.06</b>	<b>2.06</b>	<b>15.82</b>	<b>24.67</b>	<b>-8.29</b>	<b>-2.75</b>	<b>-2.59</b>	<b>1.98</b>	<b>2.99</b>	<b>02/01/2006</b>
<b>Apollo IX LP</b>	<b>5,122,364</b>	<b>0.44</b>	<b>5.01</b>	<b>5.01</b>	<b>48.78</b>	<b>51.39</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>6.39</b>	<b>03/01/2019</b>
<b>Apollo VIII LP</b>	<b>6,224,151</b>	<b>0.53</b>	<b>9.37</b>	<b>9.37</b>	<b>36.73</b>	<b>45.89</b>	<b>13.22</b>	<b>14.82</b>	<b>13.97</b>	<b>N/A</b>	<b>6.26</b>	<b>02/01/2014</b>
<b>Carval CR Value (CF)</b>	<b>3,265,070</b>	<b>0.28</b>	<b>2.53</b>	<b>2.53</b>	<b>11.33</b>	<b>11.33</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.63</b>	<b>08/01/2020</b>
<b>FirstMark Capital Opportunity III LP</b>	<b>4,647,104</b>	<b>0.40</b>	<b>11.14</b>	<b>11.14</b>	<b>52.45</b>	<b>57.45</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>39.75</b>	<b>06/01/2020</b>
<b>FirstMark V LP</b>	<b>1,680,201</b>	<b>0.14</b>	<b>-1.86</b>	<b>-1.86</b>	<b>-5.63</b>	<b>-5.30</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-15.67</b>	<b>07/01/2020</b>
<b>Francisco Partners SL (CF)</b>	<b>421,236</b>	<b>0.04</b>	<b>16.78</b>	<b>16.78</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>02/01/2021</b>
<b>Francisco PTRS-AGI-SL (CF)</b>	<b>3,202,493</b>	<b>0.27</b>	<b>11.14</b>	<b>11.14</b>	<b>12.73</b>	<b>-0.17</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.17</b>	<b>10/01/2020</b>
<b>Knightsbridge VI LP</b>	<b>3,567,716</b>	<b>0.30</b>	<b>4.61</b>	<b>4.61</b>	<b>96.05</b>	<b>116.06</b>	<b>44.28</b>	<b>27.65</b>	<b>18.84</b>	<b>17.27</b>	<b>11.36</b>	<b>12/01/2004</b>

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, 2021

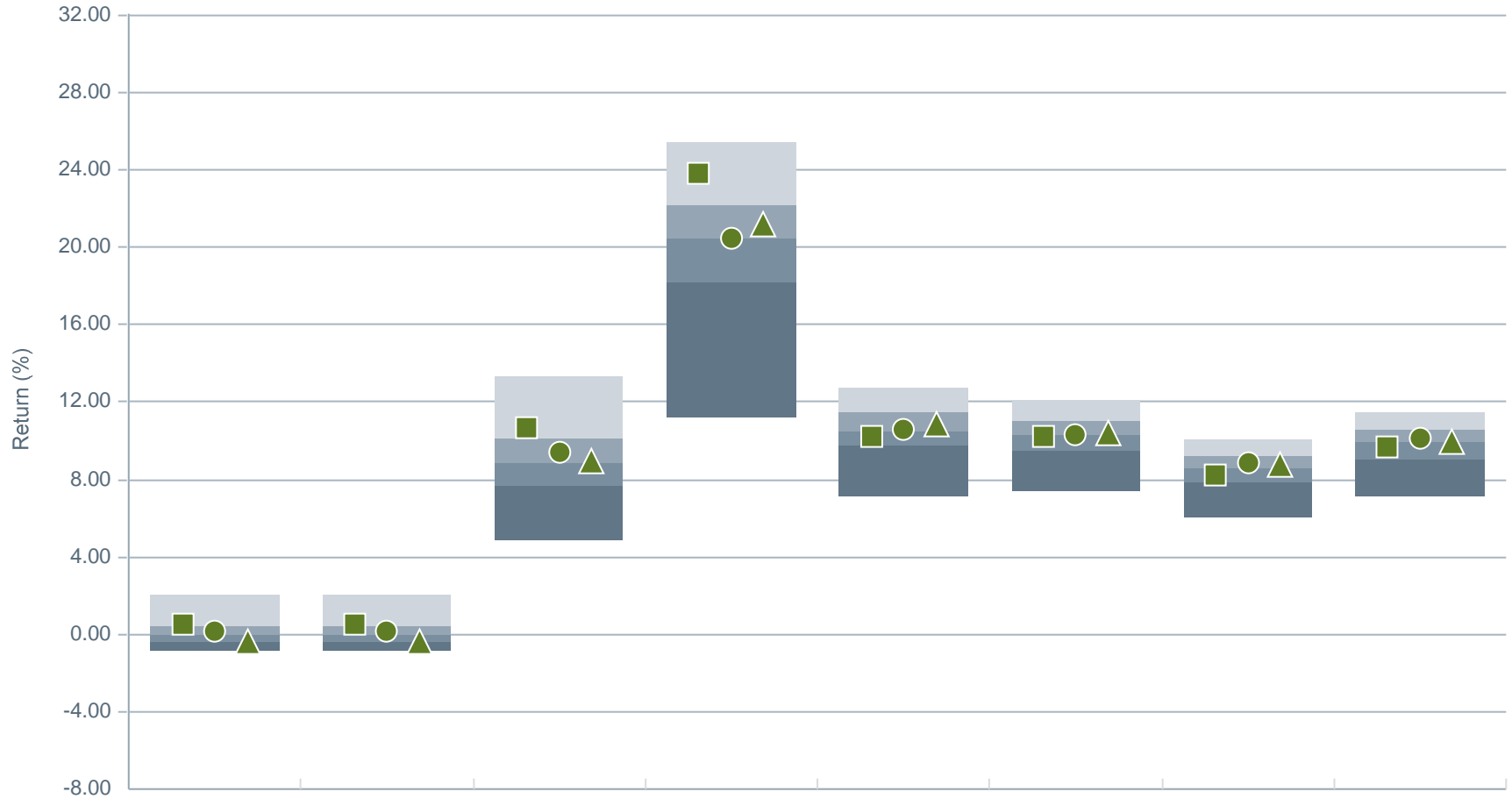
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Knightsbridge VII LP	10,544,521	0.90	17.23	17.23	68.52	96.34	41.92	28.41	22.68	19.83	12.27	09/01/2008
Oaktree Opp XI LP	3,547,531	0.30	14.61	14.61	38.36	36.56	N/A	N/A	N/A	N/A	30.61	08/01/2020
Warburg Pincus Global Growth LP	33,369,420	2.85	5.65	5.65	18.48	23.05	N/A	N/A	N/A	N/A	-10.28	03/01/2019
Warburg Pincus XII LP	14,003,361	1.20	17.74	17.74	47.65	66.16	25.64	19.55	N/A	N/A	7.17	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, 2021



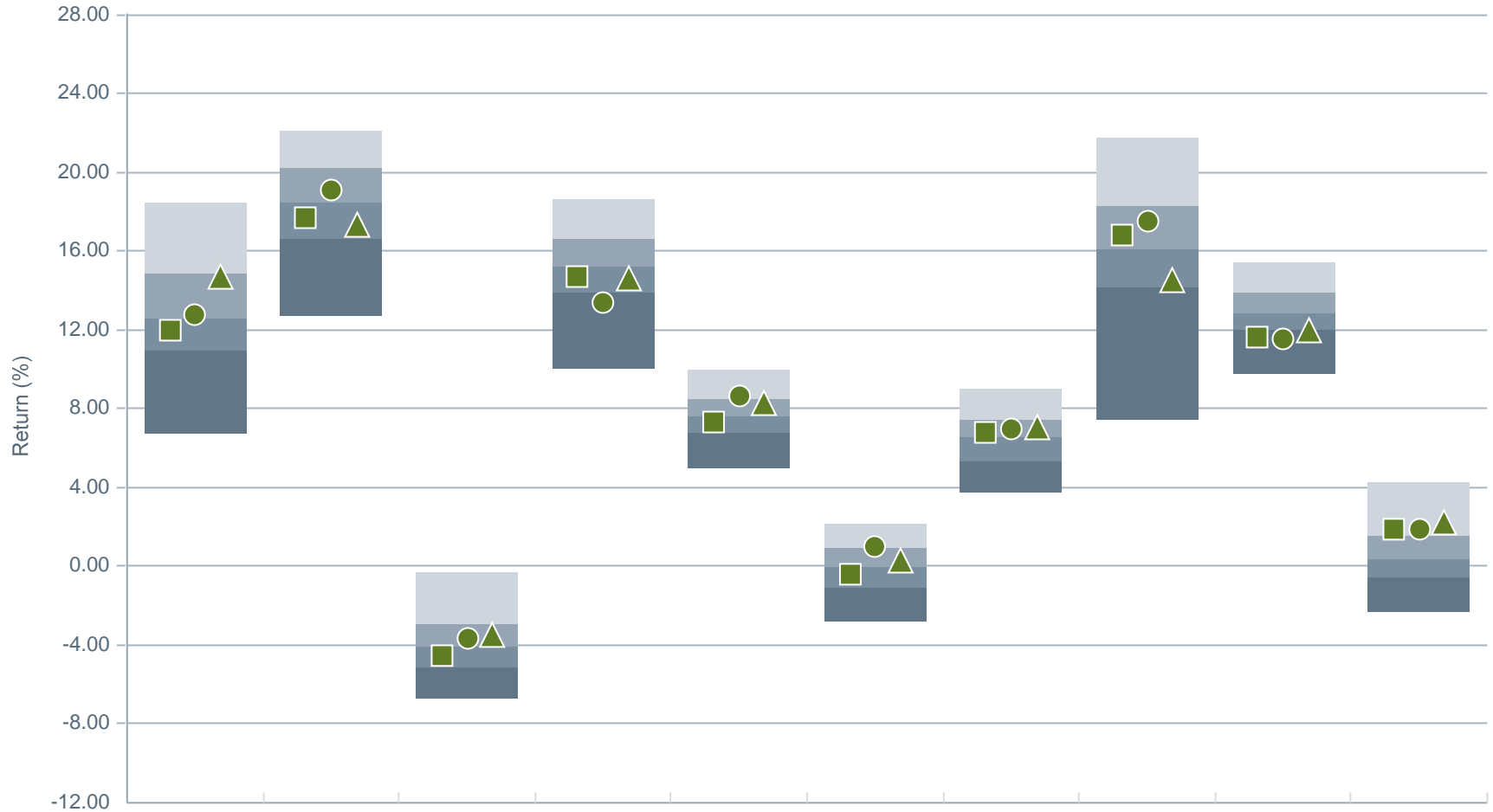
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OLERS Total Fund	0.55 (20)	0.55 (20)	10.70 (19)	23.82 (12)	10.22 (59)	10.26 (51)	8.27 (59)	9.73 (57)
● OLERS Policy Index	0.19 (33)	0.19 (33)	9.46 (36)	20.51 (49)	10.61 (48)	10.31 (51)	8.90 (36)	10.14 (42)
▲ OLERS Allocation Index	-0.42 (77)	-0.42 (77)	8.99 (47)	21.18 (41)	10.90 (40)	10.40 (46)	8.80 (42)	10.00 (49)
5th Percentile	2.04	2.04	13.29	25.43	12.81	12.16	10.09	11.51
1st Quartile	0.40	0.40	10.11	22.20	11.49	11.07	9.21	10.60
Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94
3rd Quartile	-0.41	-0.41	7.68	18.19	9.76	9.47	7.89	9.08
95th Percentile	-0.83	-0.83	4.87	11.26	7.17	7.39	6.10	7.15

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

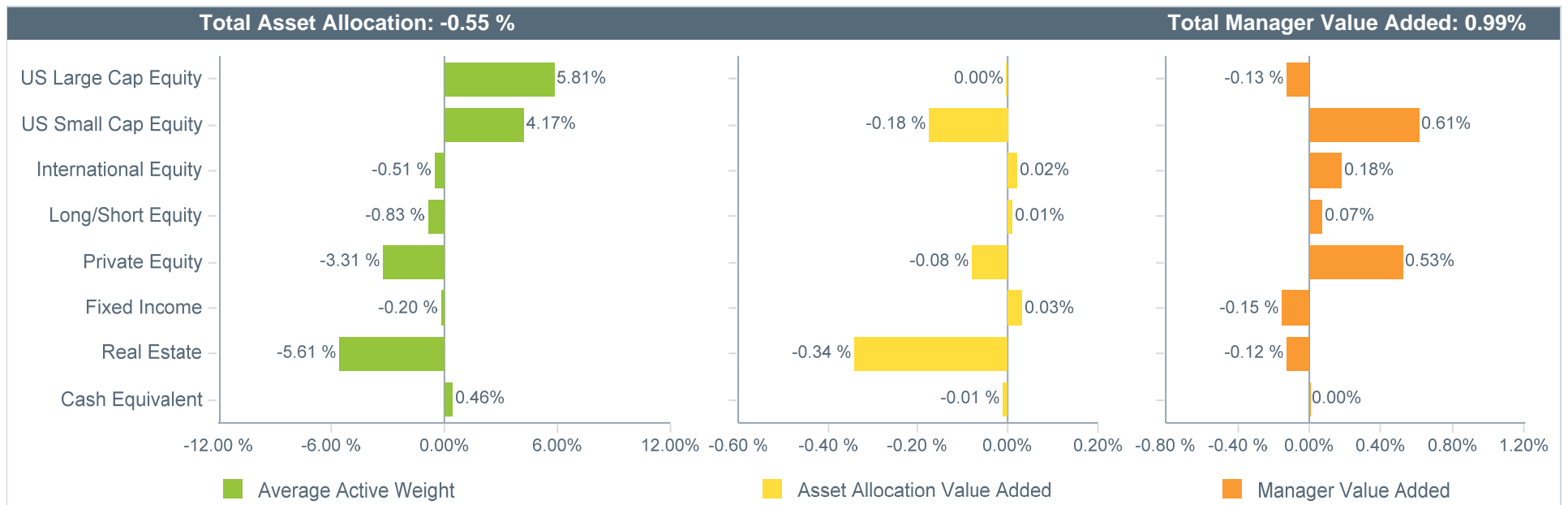
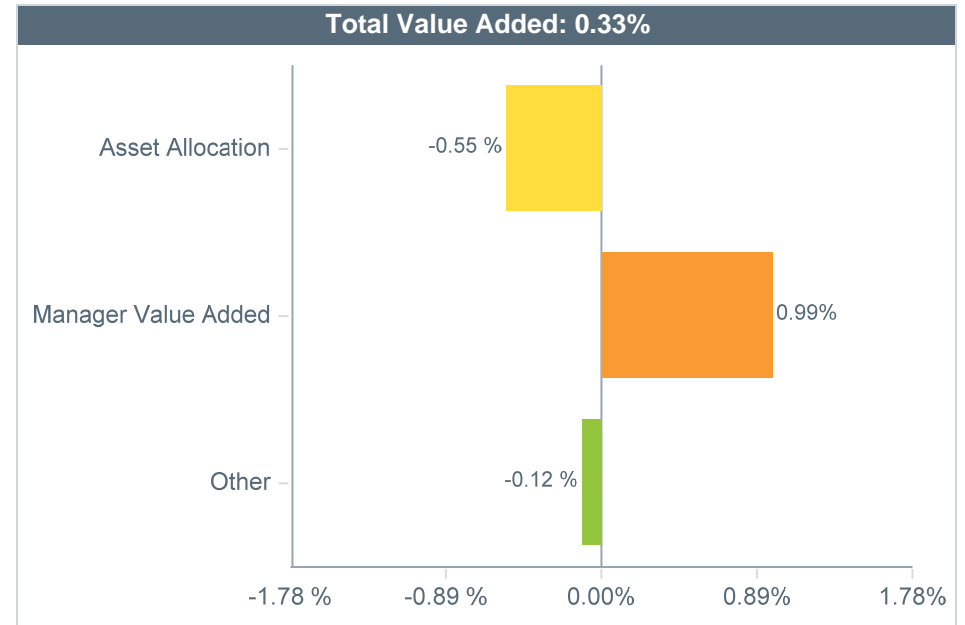
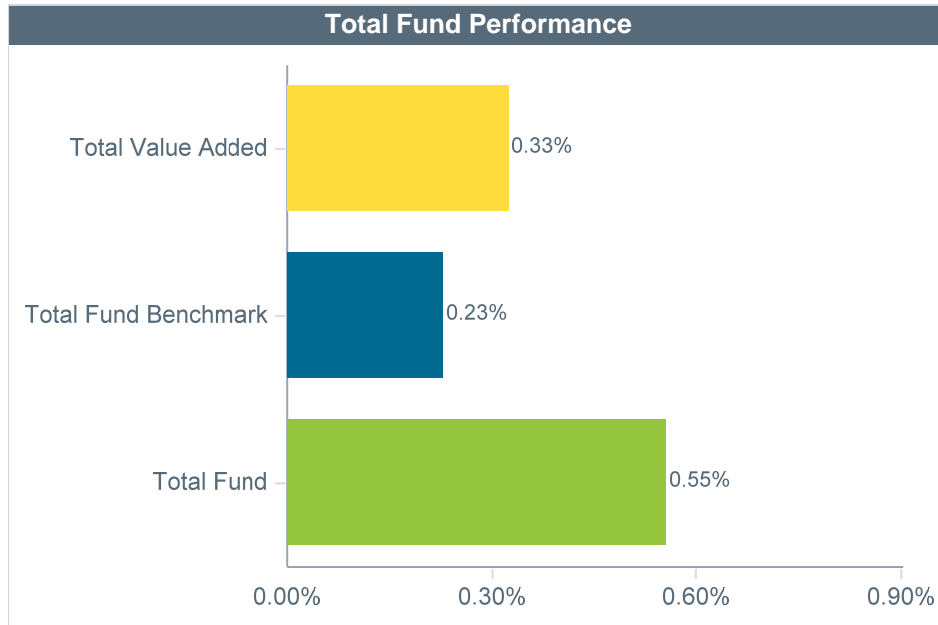
As of September 30, 2021



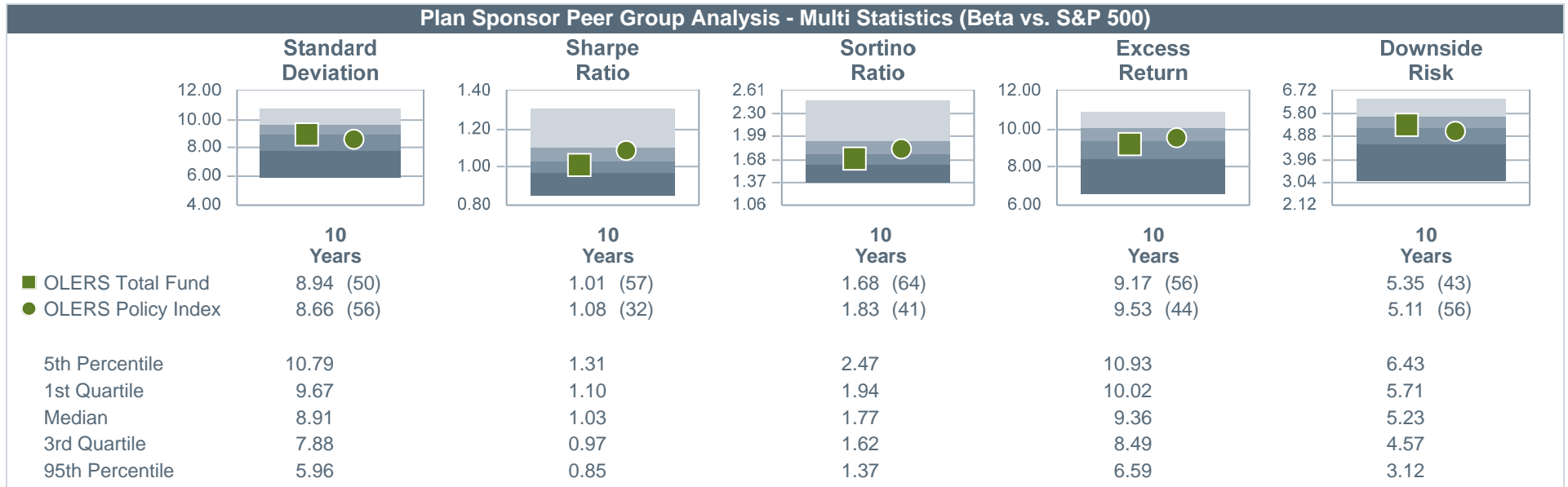
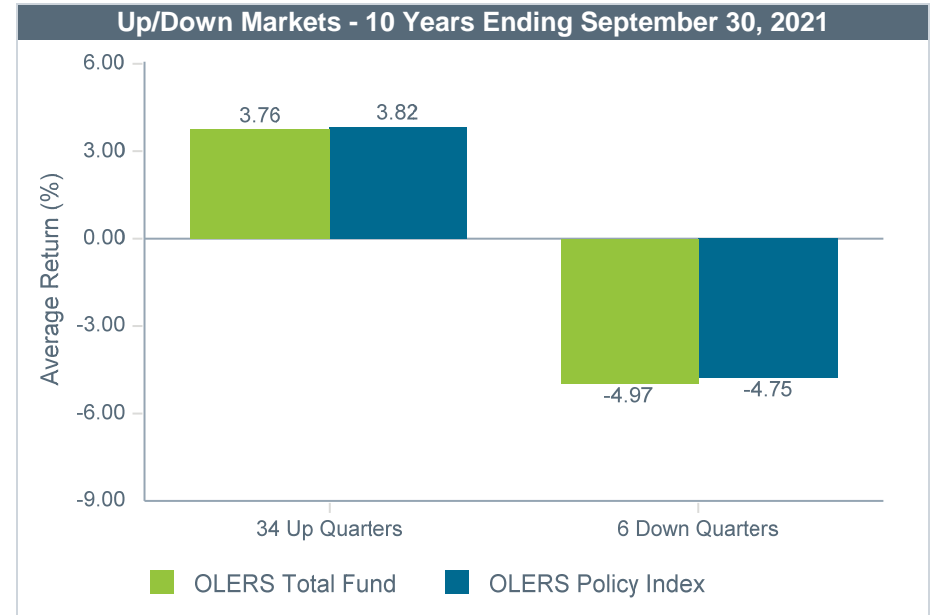
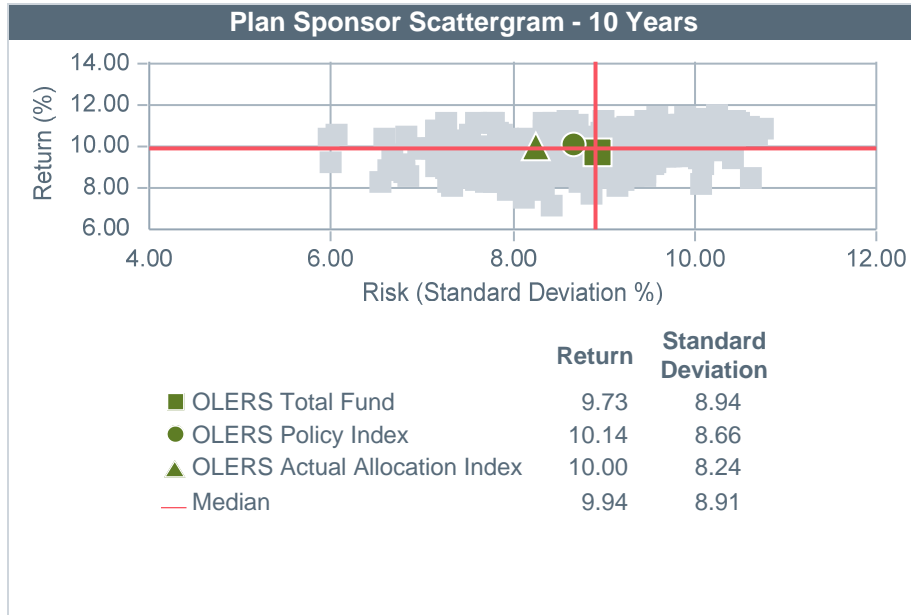
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
■ OLETS Total Fund	12.03 (59)	17.70 (61)	-4.55 (60)	14.71 (61)	7.32 (61)	-0.37 (58)	6.83 (45)	16.80 (44)	11.69 (83)	1.93 (22)
● OLETS Policy Index	12.77 (49)	19.12 (42)	-3.67 (42)	13.36 (83)	8.64 (21)	1.00 (20)	7.01 (36)	17.53 (34)	11.57 (84)	1.93 (22)
▲ OLETS Allocation Index	14.73 (27)	17.33 (66)	-3.47 (36)	14.63 (62)	8.27 (31)	0.33 (39)	7.07 (35)	14.59 (70)	12.03 (72)	2.22 (20)
5th Percentile	18.53	22.15	-0.35	18.65	9.96	2.13	8.98	21.72	15.42	4.26
1st Quartile	14.87	20.27	-2.95	16.63	8.44	0.90	7.43	18.29	13.94	1.56
Median	12.61	18.52	-4.13	15.30	7.64	-0.07	6.59	16.17	12.90	0.41
3rd Quartile	10.95	16.62	-5.13	13.91	6.81	-1.10	5.35	14.16	11.96	-0.55
95th Percentile	6.68	12.74	-6.71	10.03	5.01	-2.75	3.73	7.40	9.81	-2.37

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



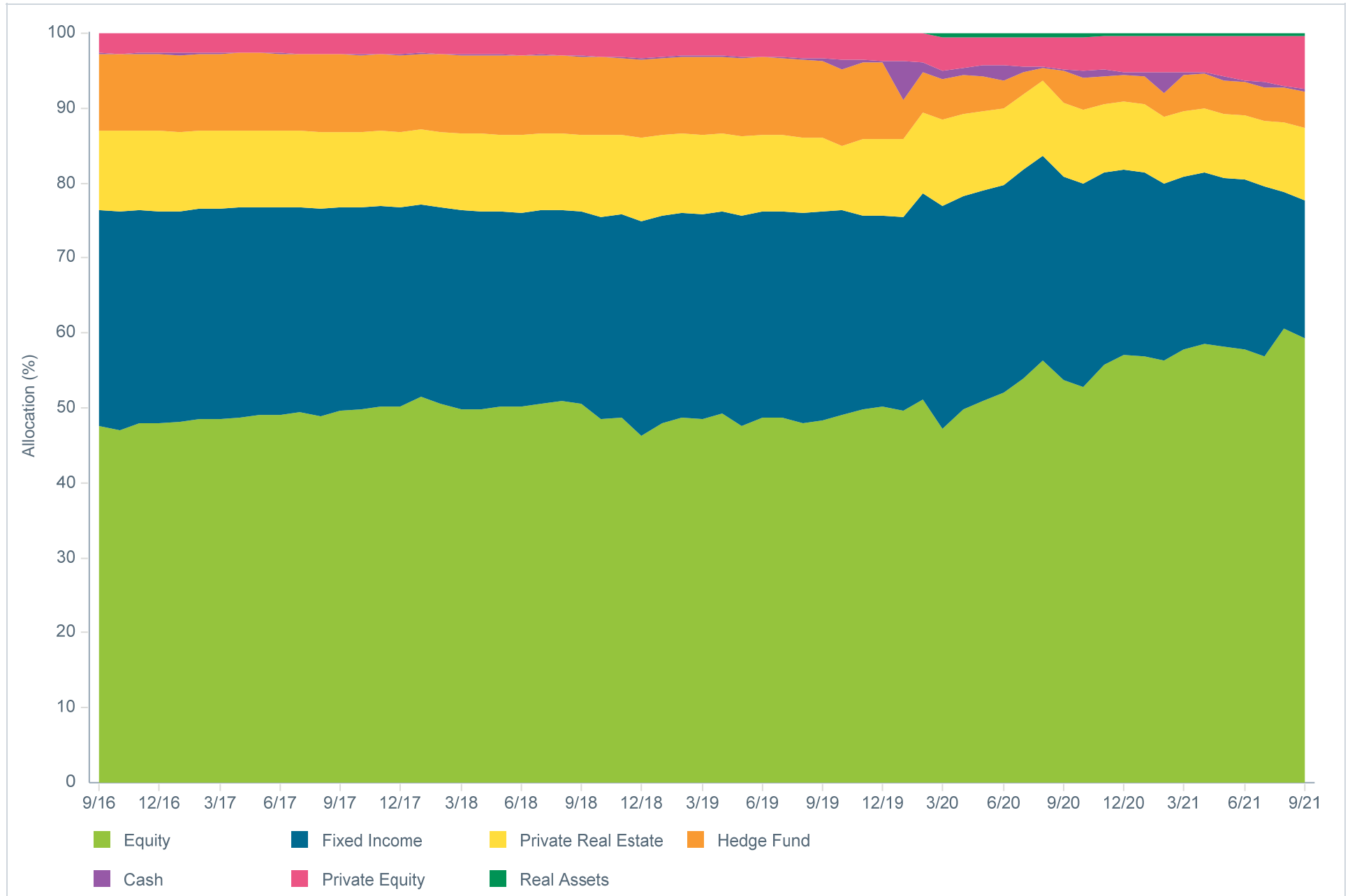


Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation.



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





# Uniform Retirement System for Justices & Judges (URSJJ)

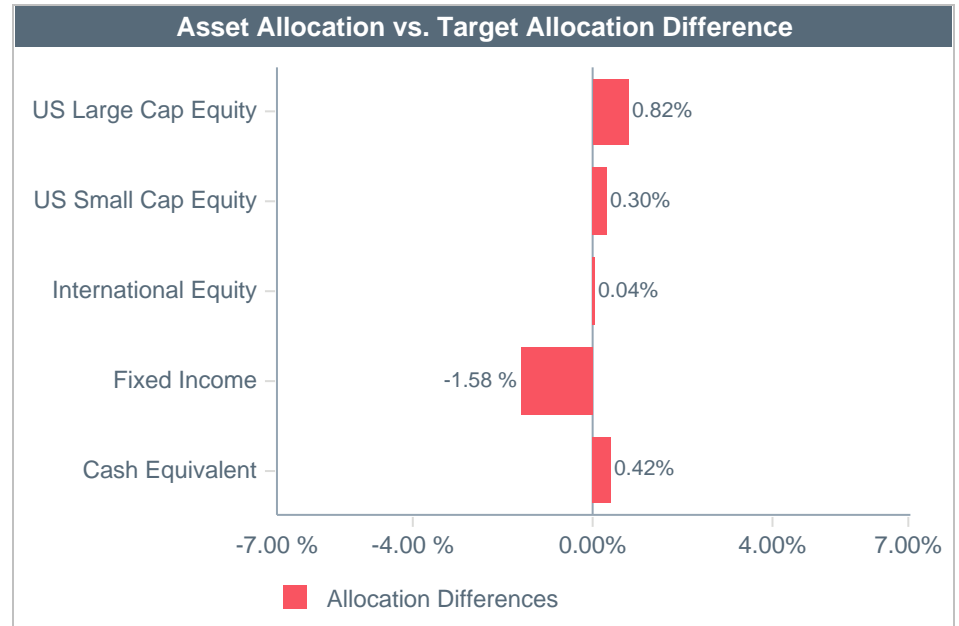


Oklahoma State Pension Commission  
 Uniform Retirement System for Justices & Judges  
 Total Fund Summary

As of September 30, 2021

	Performance (%)												
	Trailing							Calendar Year					
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
<b>URSJJ Total Fund (Net)</b>	<b>-0.93</b>	<b>-0.93</b>	<b>7.52</b>	<b>19.76</b>	<b>10.91</b>	<b>10.53</b>	<b>8.71</b>	<b>10.07</b>	<b>15.06</b>	<b>21.36</b>	<b>-6.43</b>	<b>16.85</b>	<b>8.05</b>
URSJJ Policy Index	-0.90	-0.90	7.04	19.14	11.02	10.56	8.78	10.03	15.19	21.51	-6.09	16.86	8.12
Difference	-0.03	-0.03	0.48	0.62	-0.11	-0.03	-0.07	0.04	-0.13	-0.15	-0.34	-0.01	-0.07
URSJJ Actual Allocation Index	-0.95	-0.95	7.51	19.67	11.96	11.09	9.07	10.18	18.70	21.01	-6.52	16.63	7.90
Difference	0.02	0.02	0.01	0.09	-1.05	-0.56	-0.36	-0.11	-3.64	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	6.50
Difference	-2.52	-2.52	2.68	13.26	4.41	4.03	2.21	3.57	8.56	14.86	-12.93	10.35	1.55
<b>URSJJ Total Fund (Gross)</b>	<b>-0.93</b>	<b>-0.93</b>	<b>7.54</b>	<b>19.80</b>	<b>10.94</b>	<b>10.57</b>	<b>8.75</b>	<b>10.11</b>	<b>15.10</b>	<b>21.40</b>	<b>-6.38</b>	<b>16.89</b>	<b>8.09</b>
URSJJ Policy Index	-0.90	-0.90	7.04	19.14	11.02	10.56	8.78	10.03	15.19	21.51	-6.09	16.86	8.12
Difference	-0.03	-0.03	0.50	0.66	-0.08	0.01	-0.03	0.08	-0.09	-0.11	-0.29	0.03	-0.03
URSJJ Actual Allocation Index	-0.95	-0.95	7.51	19.67	11.96	11.09	9.07	10.18	18.70	21.01	-6.52	16.63	7.90
Difference	0.02	0.02	0.03	0.13	-1.02	-0.52	-0.32	-0.07	-3.60	0.39	0.14	0.26	0.19
All Public Plans-Total Fund Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	12.61	18.52	-4.13	15.30	7.64
Rank	97	97	78	60	39	42	42	43	23	11	92	21	37

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
<b>URSJJ (Judges)</b>	<b>426,277,741</b>	<b>100.00</b>	<b>100.00</b>
US Large Cap Equity	148,418,953	34.82	34.00
US Small Cap Equity	26,840,446	6.30	6.00
International Equity	119,545,689	28.04	28.00
Fixed Income	129,691,418	30.42	32.00
Cash Equivalent	1,781,235	0.42	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  
Uniform Retirement System for Justices & Judges  
Asset Allocation & Performance - Net of Fees

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>URSJJ Total Fund</b>	<b>426,277,741</b>	<b>100.00</b>	<b>-0.93</b>	<b>-0.93</b>	<b>7.52</b>	<b>19.76</b>	<b>10.91</b>	<b>10.53</b>	<b>8.71</b>	<b>10.07</b>	<b>N/A</b>	<b>06/01/1986</b>
URSJJ Policy Index			-0.90	-0.90	7.04	19.14	11.02	10.56	8.78	10.03	9.07	
Difference			-0.03	-0.03	0.48	0.62	-0.11	-0.03	-0.07	0.04	N/A	
URSJJ Actual Allocation Index			-0.95	-0.95	7.51	19.67	11.96	11.09	9.07	10.18	8.64	
Difference			0.02	0.02	0.01	0.09	-1.05	-0.56	-0.36	-0.11	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			-2.52	-2.52	2.68	13.26	4.41	4.03	2.21	3.57	N/A	
<b>US Equity</b>	<b>175,259,399</b>	<b>41.11</b>	<b>-0.48</b>	<b>-0.48</b>	<b>14.79</b>	<b>33.53</b>	<b>15.55</b>	<b>16.58</b>	<b>13.79</b>	<b>16.45</b>	<b>N/A</b>	<b>10/01/1989</b>
URSJJ US Equity Custom Index			-0.47	-0.47	14.84	33.49	15.61	16.63	13.81	16.49	N/A	
Difference			-0.01	-0.01	-0.05	0.04	-0.06	-0.05	-0.02	-0.04	N/A	
<b>BlackRock Russell 1000 Index (CF)</b>	<b>148,418,953</b>	<b>34.82</b>	<b>0.23</b>	<b>0.23</b>	<b>15.21</b>	<b>31.02</b>	<b>16.45</b>	<b>17.14</b>	<b>14.12</b>	<b>16.79</b>	<b>15.27</b>	<b>07/01/2009</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	15.92	
Difference			0.02	0.02	0.02	0.06	0.02	0.03	0.03	0.03	-0.65	
<b>BlackRock Russell 2000 Index (CF)</b>	<b>26,840,446</b>	<b>6.30</b>	<b>-4.32</b>	<b>-4.32</b>	<b>12.49</b>	<b>47.81</b>	<b>10.65</b>	<b>13.62</b>	<b>12.09</b>	<b>14.84</b>	<b>14.41</b>	<b>07/01/2009</b>
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	14.24	
Difference			0.04	0.04	0.08	0.13	0.11	0.17	0.19	0.21	0.17	
<b>International Equity</b>	<b>119,545,689</b>	<b>28.04</b>	<b>-2.97</b>	<b>-2.97</b>	<b>6.08</b>	<b>24.16</b>	<b>8.26</b>	<b>9.20</b>	<b>5.94</b>	<b>7.73</b>	<b>N/A</b>	<b>05/01/1994</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	5.99	
Difference			-0.09	-0.09	-0.21	-0.29	-0.26	-0.24	-0.23	-0.24	N/A	
<b>BlackRock MSCI ACWI Ex US (CF)</b>	<b>119,545,689</b>	<b>28.04</b>	<b>-2.97</b>	<b>-2.97</b>	<b>6.08</b>	<b>24.16</b>	<b>8.26</b>	<b>9.20</b>	<b>5.94</b>	<b>7.73</b>	<b>6.18</b>	<b>10/01/2009</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	6.31	
Difference			-0.09	-0.09	-0.21	-0.29	-0.26	-0.24	-0.23	-0.24	-0.13	

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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Fixed Income</b>	<b>129,691,418</b>	<b>30.42</b>	<b>0.35</b>	<b>0.35</b>	<b>-1.50</b>	<b>-0.97</b>	<b>6.80</b>	<b>3.66</b>	<b>3.99</b>	<b>3.72</b>	<b>N/A</b>	<b>10/01/1989</b>
URSJJ Fixed Income Custom Index			0.25	0.25	-1.69	-1.33	6.07	3.18	3.63	3.23	N/A	
Difference			0.10	0.10	0.19	0.36	0.73	0.48	0.36	0.49	N/A	
<b>BlackRock US Fixed Income (SA)</b>	<b>63,187,010</b>	<b>14.82</b>	<b>0.13</b>	<b>0.13</b>	<b>-1.43</b>	<b>-0.65</b>	<b>5.82</b>	<b>3.28</b>	<b>3.55</b>	<b>3.38</b>	<b>N/A</b>	<b>06/01/2000</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.90	
Difference			0.08	0.08	0.13	0.25	0.47	0.34	0.29	0.37	N/A	
<b>MetWest US Fixed Income (SA)</b>	<b>38,362,596</b>	<b>9.00</b>	<b>0.16</b>	<b>0.16</b>	<b>-0.74</b>	<b>0.52</b>	<b>6.47</b>	<b>3.81</b>	<b>3.80</b>	<b>3.96</b>	<b>N/A</b>	<b>09/01/2001</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.37	
Difference			0.11	0.11	0.82	1.42	1.12	0.87	0.54	0.95	N/A	
<b>Hoisington US Long Duration Fixed Income (SA)</b>	<b>13,711,231</b>	<b>3.22</b>	<b>0.40</b>	<b>0.40</b>	<b>-8.46</b>	<b>-11.39</b>	<b>10.48</b>	<b>3.60</b>	<b>6.02</b>	<b>4.77</b>	<b>N/A</b>	<b>10/01/1991</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	5.46	
Difference			0.35	0.35	-6.90	-10.49	5.13	0.66	2.76	1.76	N/A	
<b>BlackRock TIPS (CF)</b>	<b>14,430,581</b>	<b>3.39</b>	<b>1.76</b>	<b>1.76</b>	<b>3.54</b>	<b>5.24</b>	<b>7.56</b>	<b>4.48</b>	<b>4.03</b>	<b>3.23</b>	<b>4.14</b>	<b>03/01/2010</b>
Bloomberg US Trsy US TIPS Index			1.75	1.75	3.51	5.19	7.45	4.34	3.90	3.12	4.10	
Difference			0.01	0.01	0.03	0.05	0.11	0.14	0.13	0.11	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  
Uniform Retirement System for Justices & Judges  
Asset Allocation & Performance - Gross of Fees

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>URSJJ Total Fund</b>	<b>426,277,741</b>	<b>100.00</b>	<b>-0.93</b>	<b>-0.93</b>	<b>7.54</b>	<b>19.80</b>	<b>10.94</b>	<b>10.57</b>	<b>8.75</b>	<b>10.11</b>	<b>8.78</b>	<b>06/01/1986</b>
URSJJ Policy Index			-0.90	-0.90	7.04	19.14	11.02	10.56	8.78	10.03	9.07	
Difference			-0.03	-0.03	0.50	0.66	-0.08	0.01	-0.03	0.08	-0.29	
URSJJ Actual Allocation Index			-0.95	-0.95	7.51	19.67	11.96	11.09	9.07	10.18	8.64	
Difference			0.02	0.02	0.03	0.13	-1.02	-0.52	-0.32	-0.07	0.14	
Actuarial Discount Rate (7.0%)			1.71	1.71	5.21	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			-2.64	-2.64	2.33	12.80	3.94	3.57	1.75	3.11	1.78	
All Public Plans-Total Fund Median			-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	8.48	
Rank			97	97	78	60	39	42	42	43	24	
<b>US Equity</b>	<b>175,259,399</b>	<b>41.11</b>	<b>-0.48</b>	<b>-0.48</b>	<b>14.80</b>	<b>33.54</b>	<b>15.56</b>	<b>16.59</b>	<b>13.80</b>	<b>16.46</b>	<b>10.19</b>	<b>10/01/1989</b>
URSJJ US Equity Custom Index			-0.47	-0.47	14.84	33.49	15.61	16.63	13.81	16.49	N/A	
Difference			-0.01	-0.01	-0.04	0.05	-0.05	-0.04	-0.01	-0.03	N/A	
All Public Plans-US Equity Segment Median			-0.15	-0.15	15.19	33.06	14.96	16.24	13.51	16.20	N/A	
Rank			72	72	65	37	34	41	35	30	N/A	
<b>BlackRock Russell 1000 Index (CF)</b>	<b>148,418,953</b>	<b>34.82</b>	<b>0.23</b>	<b>0.23</b>	<b>15.22</b>	<b>31.03</b>	<b>16.46</b>	<b>17.15</b>	<b>14.13</b>	<b>16.79</b>	<b>15.27</b>	<b>07/01/2009</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	15.92	
Difference			0.02	0.02	0.03	0.07	0.03	0.04	0.04	0.03	-0.65	
IM U.S. Large Cap Core Equity (SA+CF) Median			0.12	0.12	15.91	30.41	15.32	16.56	13.66	16.55	15.66	
Rank			45	45	56	45	33	31	37	37	64	
<b>BlackRock Russell 2000 Index (CF)</b>	<b>26,840,446</b>	<b>6.30</b>	<b>-4.32</b>	<b>-4.32</b>	<b>12.50</b>	<b>47.83</b>	<b>10.67</b>	<b>13.64</b>	<b>12.12</b>	<b>14.87</b>	<b>14.44</b>	<b>07/01/2009</b>
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	14.24	
Difference			0.04	0.04	0.09	0.15	0.13	0.19	0.22	0.24	0.20	
IM U.S. Small Cap Core Equity (SA+CF) Median			-1.38	-1.38	18.27	51.40	11.88	14.79	13.17	16.02	16.02	
Rank			93	93	84	68	66	66	68	77	84	

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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>International Equity</b>	<b>119,545,689</b>	<b>28.04</b>	<b>-2.96</b>	<b>-2.96</b>	<b>6.11</b>	<b>24.19</b>	<b>8.28</b>	<b>9.23</b>	<b>5.98</b>	<b>7.77</b>	<b>6.01</b>	<b>05/01/1994</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	5.99	
Difference			-0.08	-0.08	-0.18	-0.26	-0.24	-0.21	-0.19	-0.20	0.02	
All Public Plans-Intl. Equity Segment Median			-1.95	-1.95	7.89	27.17	10.26	10.72	7.43	9.19	N/A	
Rank			77	77	77	76	92	89	92	97	N/A	
<b>BlackRock MSCI ACWI Ex US (CF)</b>	<b>119,545,689</b>	<b>28.04</b>	<b>-2.96</b>	<b>-2.96</b>	<b>6.11</b>	<b>24.19</b>	<b>8.28</b>	<b>9.23</b>	<b>5.98</b>	<b>7.77</b>	<b>6.27</b>	<b>11/01/2009</b>
MSCI ACW Ex US Index (USD) (Gross)			-2.88	-2.88	6.29	24.45	8.52	9.44	6.17	7.97	6.46	
Difference			-0.08	-0.08	-0.18	-0.26	-0.24	-0.21	-0.19	-0.20	-0.19	
IM All ACWI Ex US (SA+CF) Median			-1.90	-1.90	7.01	25.31	10.09	10.55	7.33	9.71	8.36	
Rank			74	74	67	58	62	66	73	86	88	
<b>Fixed Income</b>	<b>129,691,418</b>	<b>30.42</b>	<b>0.36</b>	<b>0.36</b>	<b>-1.46</b>	<b>-0.90</b>	<b>6.89</b>	<b>3.74</b>	<b>4.07</b>	<b>3.81</b>	<b>6.58</b>	<b>10/01/1989</b>
OPERS Fixed Income Custom Index			0.25	0.25	-1.69	-1.33	6.07	3.18	3.63	3.23	N/A	
Difference			0.11	0.11	0.23	0.43	0.82	0.56	0.44	0.58	N/A	
<b>BlackRock US Fixed Income (SA)</b>	<b>63,187,010</b>	<b>14.82</b>	<b>0.13</b>	<b>0.13</b>	<b>-1.39</b>	<b>-0.57</b>	<b>5.91</b>	<b>3.36</b>	<b>3.64</b>	<b>3.47</b>	<b>5.18</b>	<b>06/01/2000</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.90	
Difference			0.08	0.08	0.17	0.33	0.56	0.42	0.38	0.46	0.28	
IM U.S. Broad Market Fixed Income (SA+CF) Median			0.15	0.15	-0.70	0.83	6.21	3.79	3.95	3.94	5.58	
Rank			54	54	80	81	70	78	76	79	80	
<b>MetWest US Fixed Income (SA)</b>	<b>38,362,596</b>	<b>9.00</b>	<b>0.17</b>	<b>0.17</b>	<b>-0.70</b>	<b>0.57</b>	<b>6.59</b>	<b>3.90</b>	<b>3.89</b>	<b>4.06</b>	<b>5.39</b>	<b>09/01/2001</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.37	
Difference			0.12	0.12	0.86	1.47	1.24	0.96	0.63	1.05	1.02	
IM U.S. Broad Market Fixed Income (SA+CF) Median			0.15	0.15	-0.70	0.83	6.21	3.79	3.95	3.94	5.09	
Rank			45	45	51	56	32	45	57	45	27	
<b>Hoisington US Long Duration Fixed Income (SA)</b>	<b>13,711,231</b>	<b>3.22</b>	<b>0.43</b>	<b>0.43</b>	<b>-8.37</b>	<b>-11.27</b>	<b>10.62</b>	<b>3.74</b>	<b>6.17</b>	<b>4.92</b>	<b>8.25</b>	<b>10/01/1991</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	5.46	
Difference			0.38	0.38	-6.81	-10.37	5.27	0.80	2.91	1.91	2.79	
IM U.S. Long Duration (SA+CF) Median			0.10	0.10	-3.44	-0.39	10.89	6.06	6.88	6.71	N/A	
Rank			7	7	100	100	68	100	92	100	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  
 Uniform Retirement System for Justices & Judges  
 Asset Allocation & Performance - Gross of Fees

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>BlackRock TIPS (CF)</b>	<b>14,430,581</b>	<b>3.39</b>	<b>1.76</b>	<b>1.76</b>	<b>3.55</b>	<b>5.25</b>	<b>7.57</b>	<b>4.49</b>	<b>4.04</b>	<b>3.24</b>	<b>4.16</b>	<b>03/01/2010</b>
Bloomberg US Trsy US TIPS Index			1.75	1.75	3.51	5.19	7.45	4.34	3.90	3.12	4.10	
Difference			0.01	0.01	0.04	0.06	0.12	0.15	0.14	0.12	0.06	
IM U.S. TIPS (SA+CF) Median			1.72	1.72	3.54	5.23	7.46	4.38	3.94	3.18	4.14	
Rank			33	33	47	49	33	37	33	47	43	

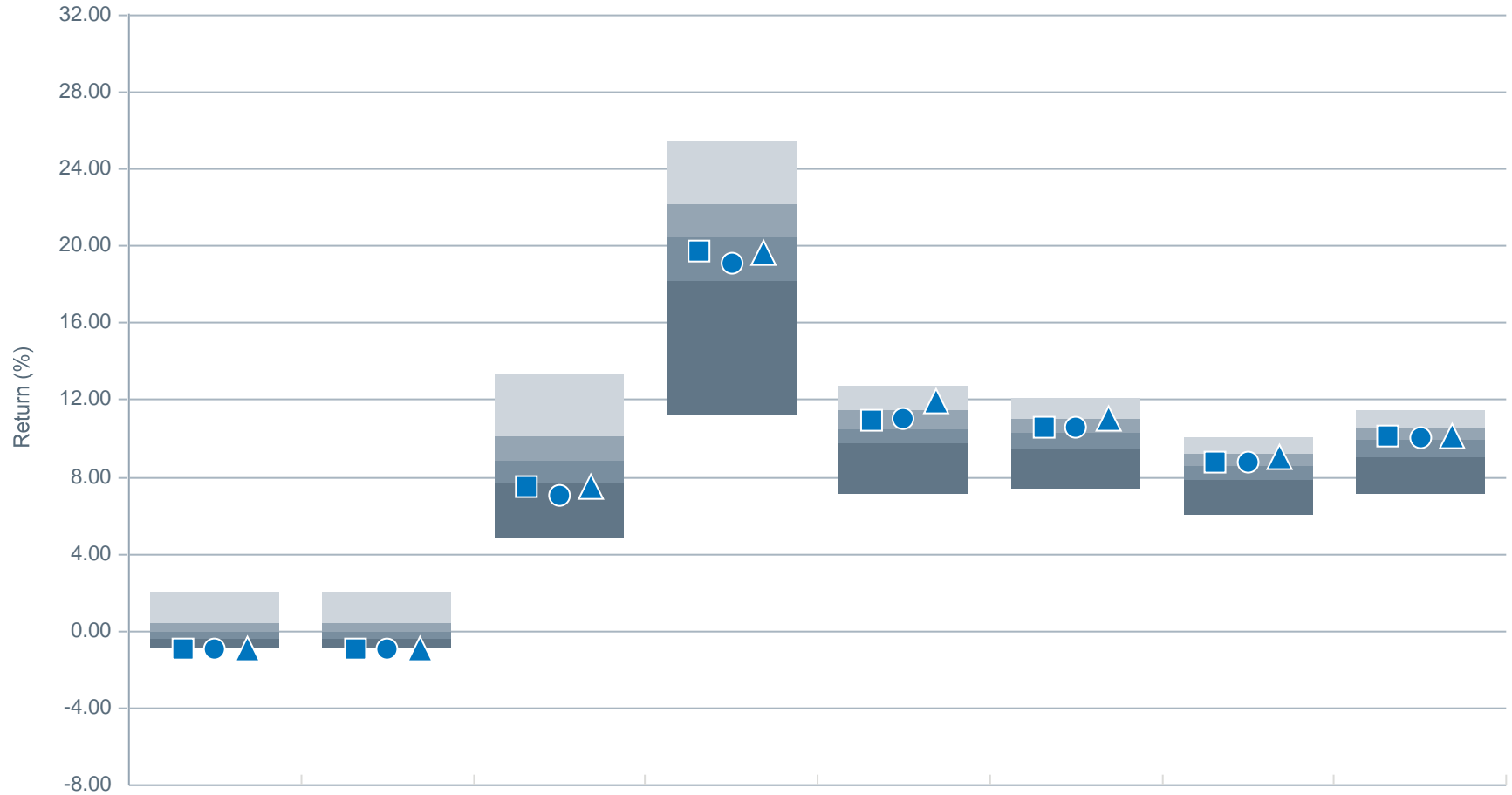
Performance shown is gross of fees. Performance is annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions and additional comments. Oklahoma State Pension Commission fiscal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





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

As of September 30, 2021



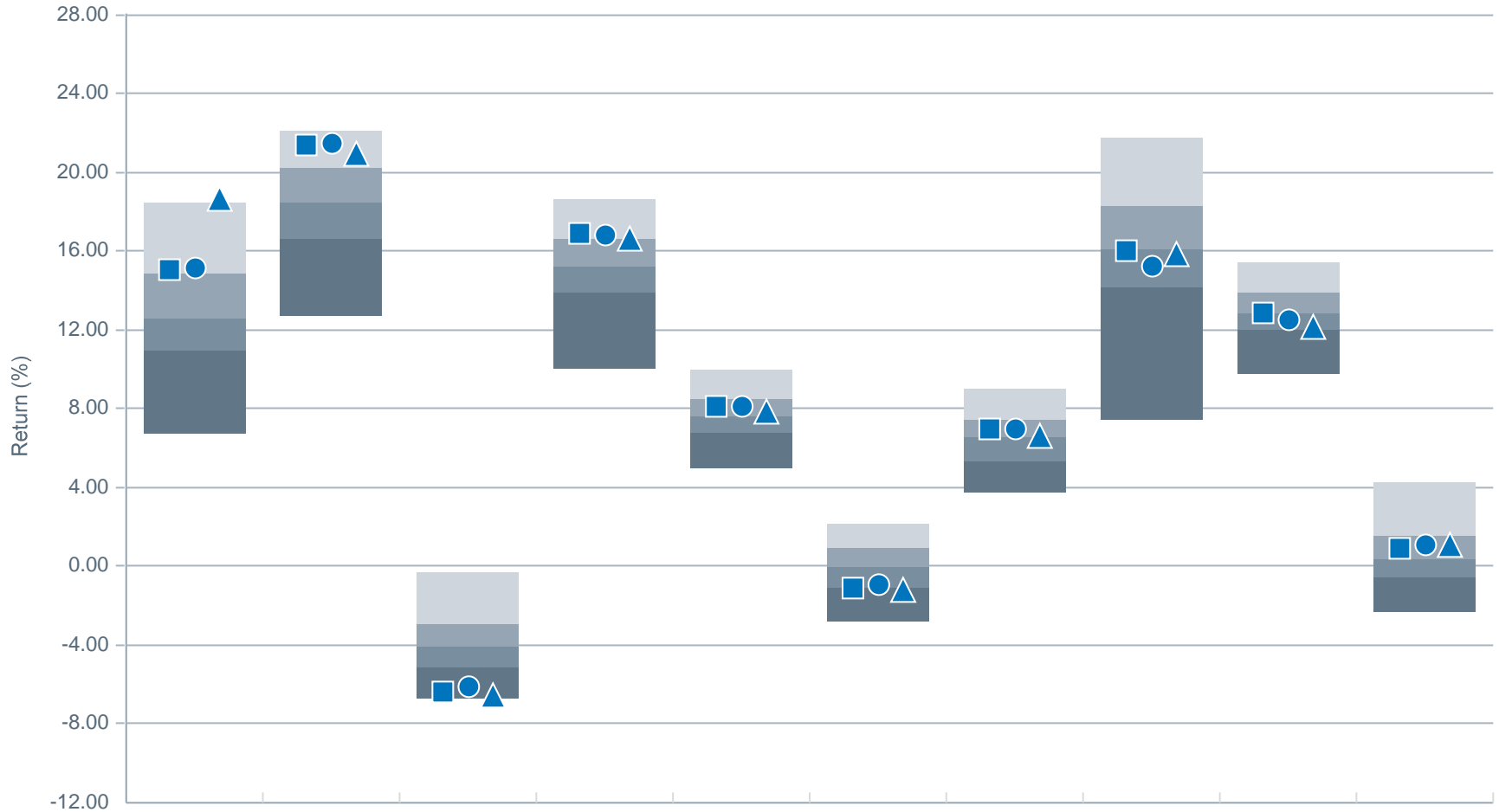
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ URSJJ Total Fund	-0.93 (97)	-0.93 (97)	7.54 (78)	19.80 (60)	10.94 (39)	10.57 (42)	8.75 (42)	10.11 (43)
● URSJJ Policy Index	-0.90 (97)	-0.90 (97)	7.04 (85)	19.14 (67)	11.02 (36)	10.56 (42)	8.78 (42)	10.03 (48)
▲ URSJJ Allocation Index	-0.95 (97)	-0.95 (97)	7.51 (79)	19.67 (62)	11.96 (15)	11.09 (25)	9.07 (30)	10.18 (40)
5th Percentile	2.04	2.04	13.29	25.43	12.81	12.16	10.09	11.51
1st Quartile	0.40	0.40	10.11	22.20	11.49	11.07	9.21	10.60
Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94
3rd Quartile	-0.41	-0.41	7.68	18.19	9.76	9.47	7.89	9.08
95th Percentile	-0.83	-0.83	4.87	11.26	7.17	7.39	6.10	7.15

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

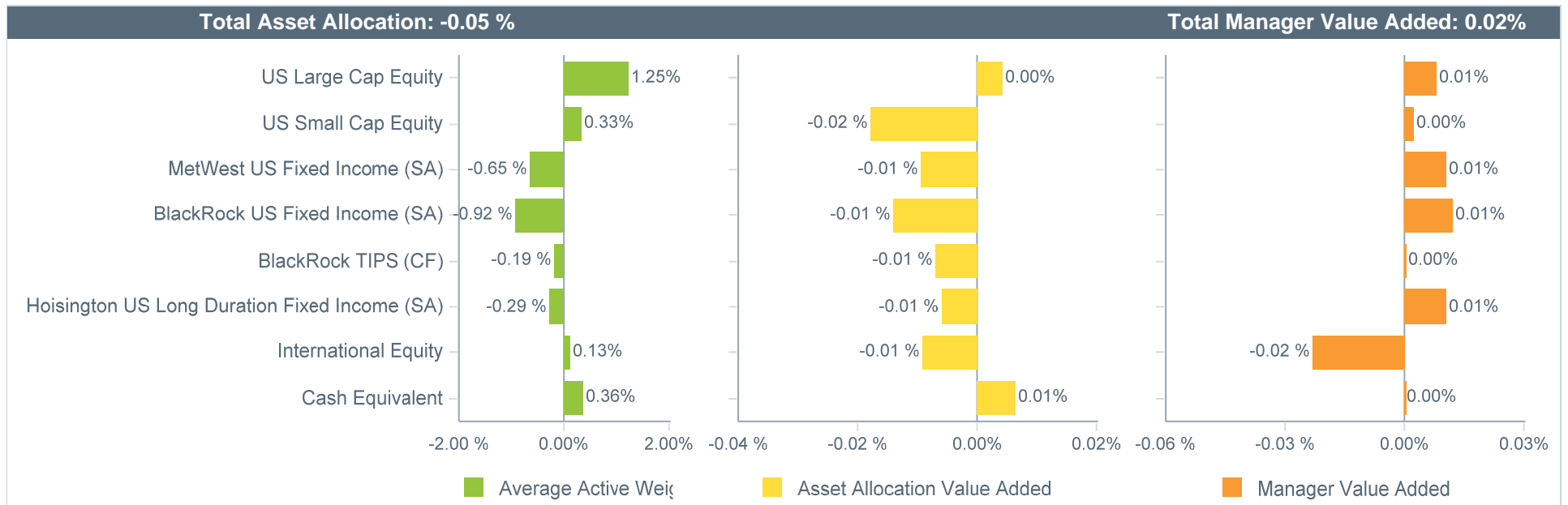
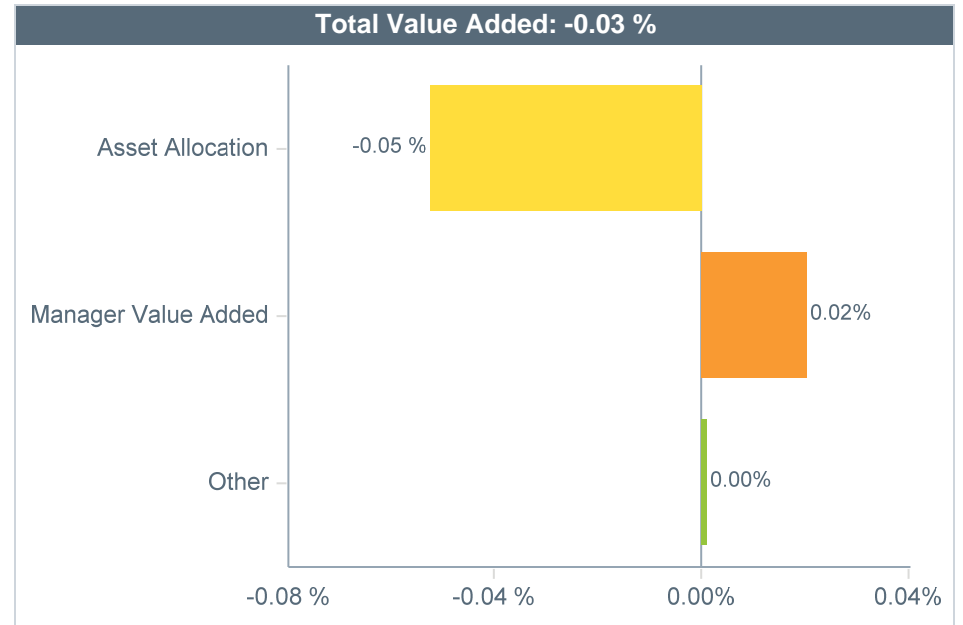
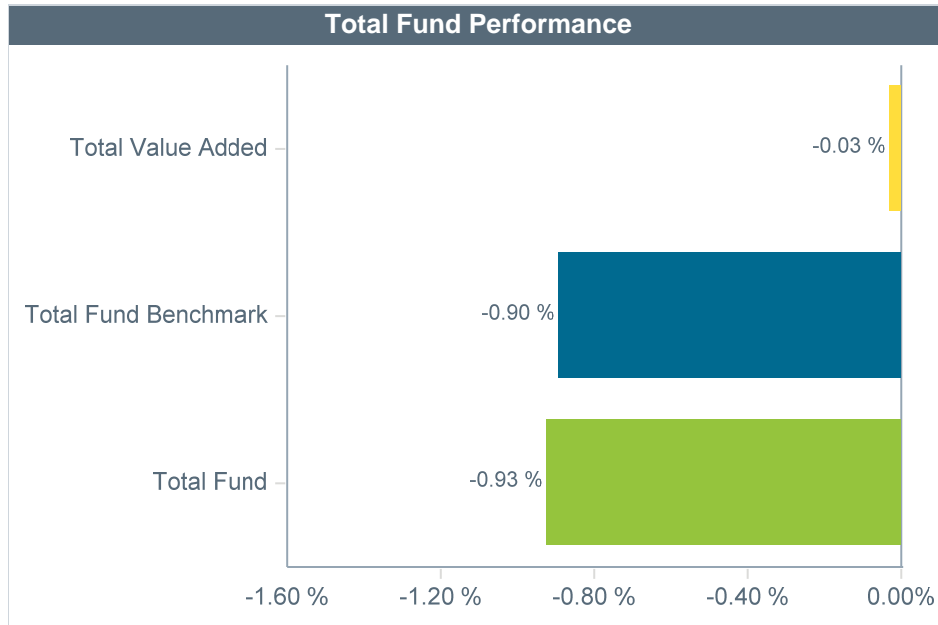
As of September 30, 2021



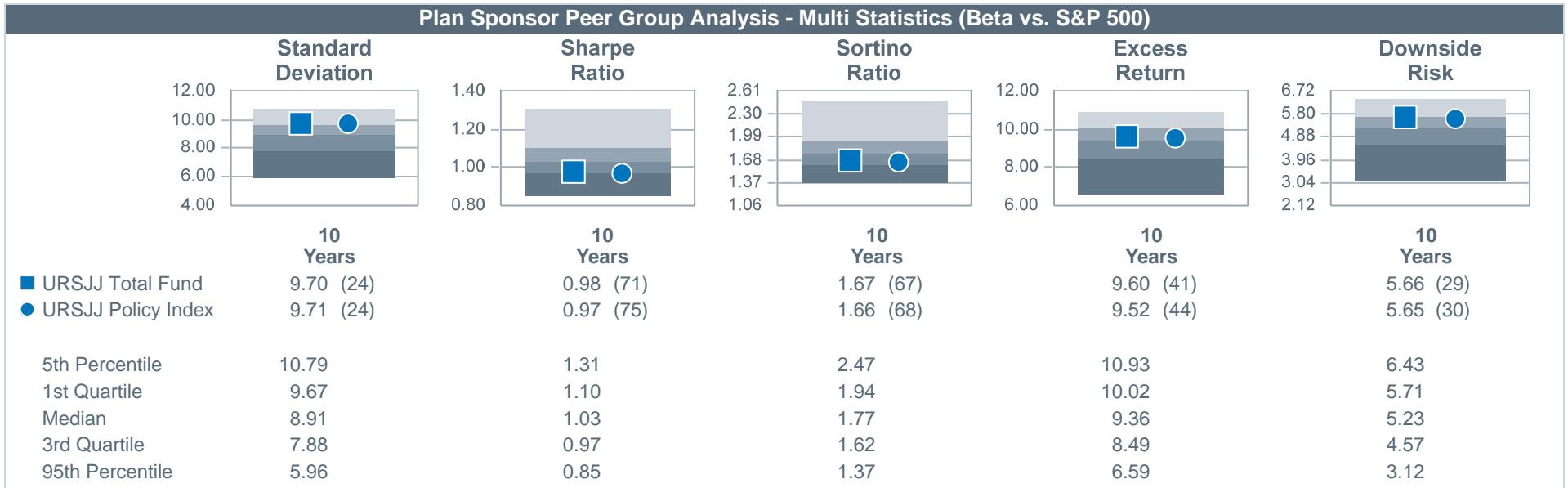
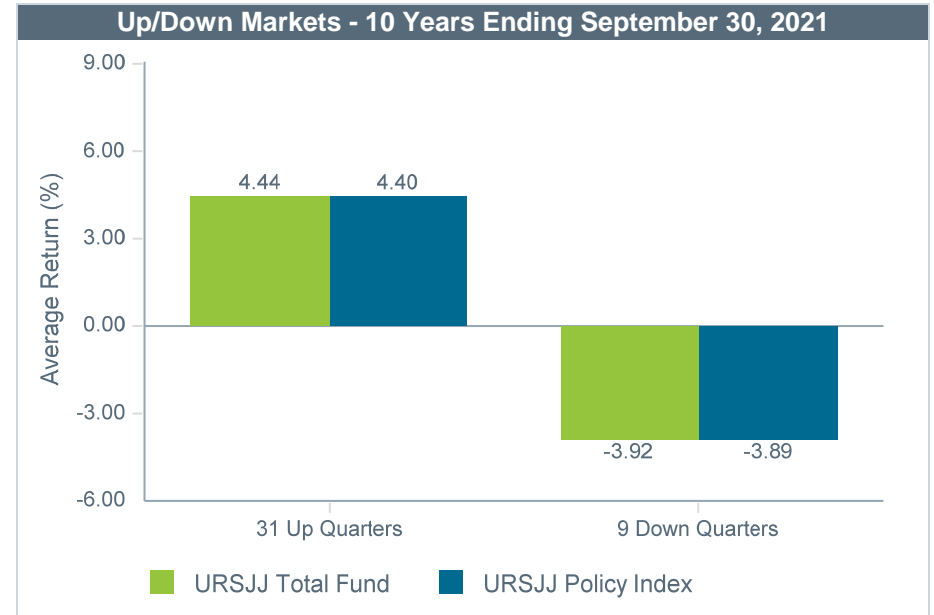
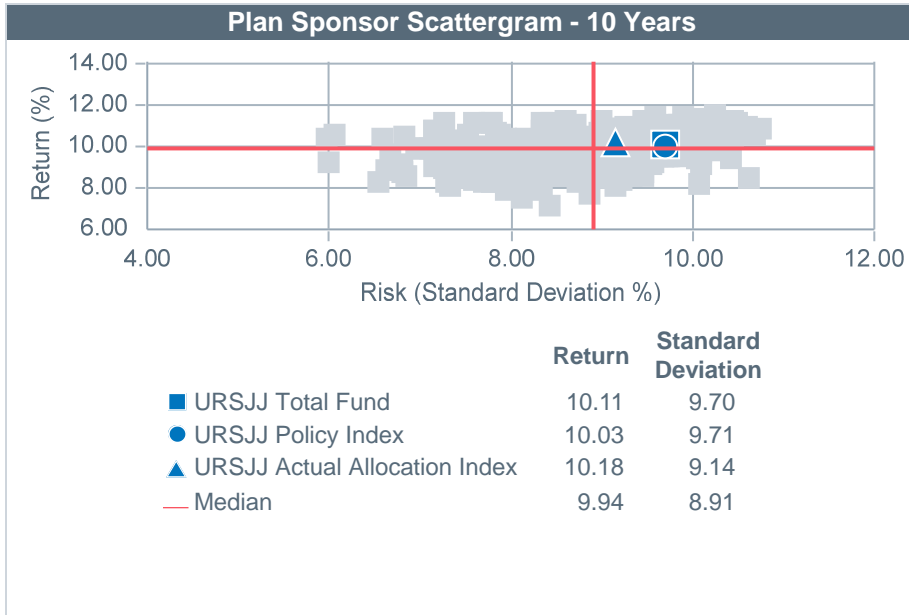
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
■ URSJJ Total Fund	15.10 (23)	21.40 (11)	-6.38 (92)	16.89 (21)	8.09 (37)	-1.07 (75)	7.00 (37)	16.01 (53)	12.91 (50)	0.88 (37)
● URSJJ Policy Index	15.19 (22)	21.51 (10)	-6.09 (89)	16.86 (21)	8.12 (36)	-0.89 (71)	7.00 (37)	15.27 (62)	12.52 (62)	1.10 (33)
▲ URSJJ Allocation Index	18.70 (5)	21.01 (16)	-6.52 (93)	16.63 (25)	7.90 (43)	-1.19 (77)	6.67 (49)	15.87 (55)	12.14 (71)	1.07 (34)
5th Percentile	18.53	22.15	-0.35	18.65	9.96	2.13	8.98	21.72	15.42	4.26
1st Quartile	14.87	20.27	-2.95	16.63	8.44	0.90	7.43	18.29	13.94	1.56
Median	12.61	18.52	-4.13	15.30	7.64	-0.07	6.59	16.17	12.90	0.41
3rd Quartile	10.95	16.62	-5.13	13.91	6.81	-1.10	5.35	14.16	11.96	-0.55
95th Percentile	6.68	12.74	-6.71	10.03	5.01	-2.75	3.73	7.40	9.81	-2.37

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

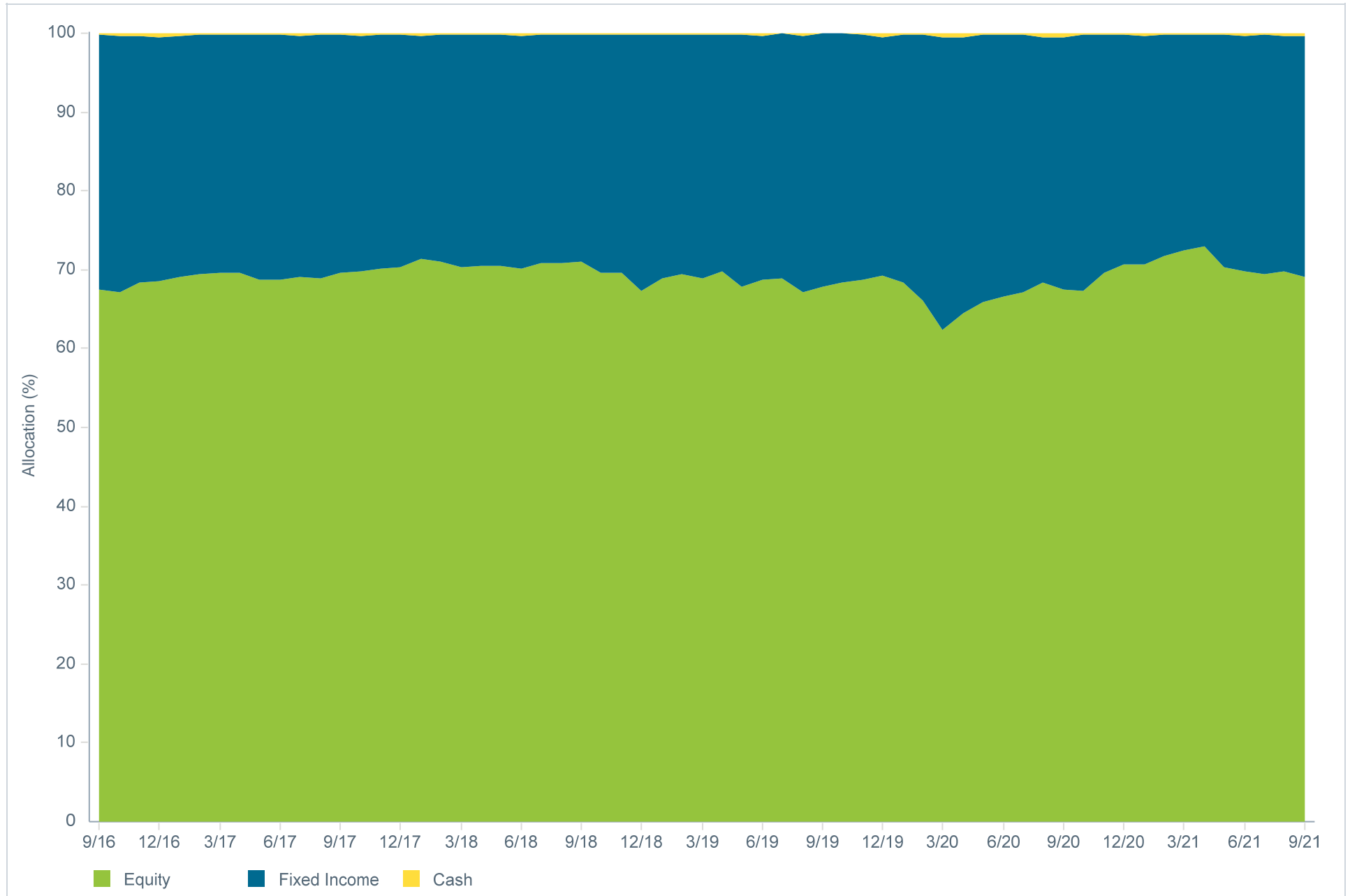




Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation.



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

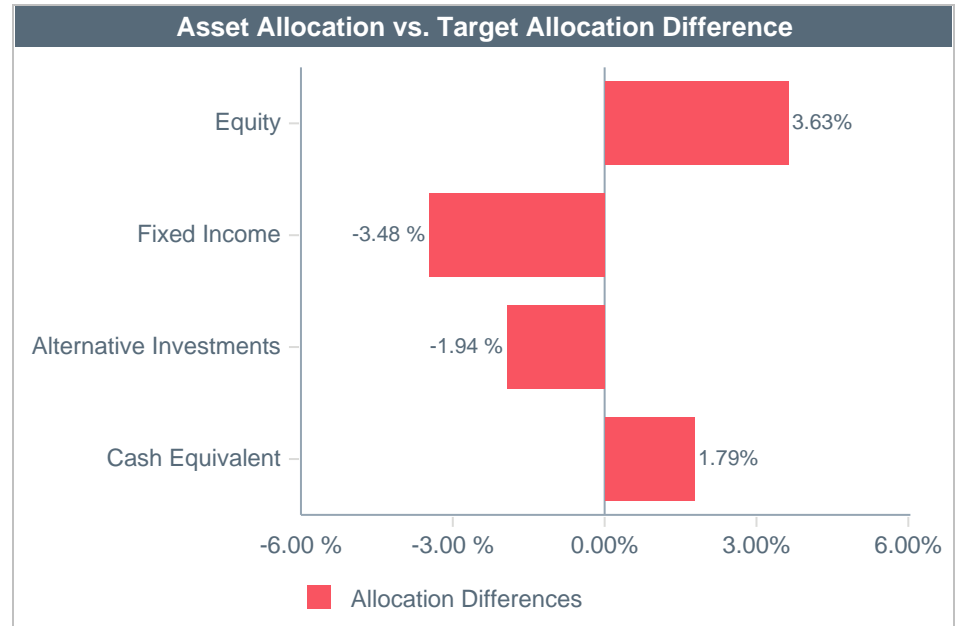


# Oklahoma Wildlife Conservation Retirement System (OWCRS)



	Performance (%)												
	Trailing							Calendar Year					
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
<b>OWCRS Total Fund (Net)</b>	<b>-0.33</b>	<b>-0.33</b>	<b>7.23</b>	<b>16.28</b>	<b>9.98</b>	<b>9.72</b>	<b>8.16</b>	<b>9.16</b>	<b>13.00</b>	<b>19.21</b>	<b>-3.85</b>	<b>13.93</b>	<b>6.18</b>
OWCRS Policy Index	-0.63	-0.63	6.39	18.46	9.05	8.60	7.23	8.67	12.67	17.53	-4.95	12.96	7.34
Difference	0.30	0.30	0.84	-2.18	0.93	1.12	0.93	0.49	0.33	1.68	1.10	0.97	-1.16
OWCRS Actual Allocation Index	-0.73	-0.73	6.95	19.44	10.40	10.16	8.65	9.49	13.21	20.53	-3.71	14.38	8.04
Difference	0.40	0.40	0.28	-3.16	-0.42	-0.44	-0.49	-0.33	-0.21	-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	7.00
Difference	-2.04	-2.04	2.02	9.28	2.98	2.72	1.16	2.16	6.00	12.21	-10.85	6.93	-0.82
<b>OWCRS Total Fund (Gross)</b>	<b>-0.25</b>	<b>-0.25</b>	<b>7.50</b>	<b>16.66</b>	<b>10.27</b>	<b>9.98</b>	<b>8.40</b>	<b>9.38</b>	<b>13.34</b>	<b>19.46</b>	<b>-3.68</b>	<b>14.13</b>	<b>6.39</b>
OWCRS Policy Index	-0.63	-0.63	6.39	18.46	9.05	8.60	7.23	8.67	12.67	17.53	-4.95	12.96	7.34
Difference	0.38	0.38	1.11	-1.80	1.22	1.38	1.17	0.71	0.67	1.93	1.27	1.17	-0.95
OWCRS Actual Allocation Index	-0.73	-0.73	6.95	19.44	10.40	10.16	8.65	9.49	13.21	20.53	-3.71	14.38	8.04
Difference	0.48	0.48	0.55	-2.78	-0.13	-0.18	-0.25	-0.11	0.13	-1.07	0.03	-0.25	-1.65
All Public Plans-Total Fund Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	12.61	18.52	-4.13	15.30	7.64
Rank	66	66	80	88	57	60	55	68	41	37	42	71	85

Asset Allocation vs. Target Allocation			
	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)
<b>OWCRS (Wildlife)</b>	<b>139,862,555</b>	<b>100.00</b>	<b>100.00</b>
Equity	75,010,341	53.63	50.00
Fixed Income	51,072,131	36.52	40.00
Alternative Investments	11,272,284	8.06	10.00
Cash Equivalent	2,507,799	1.79	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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>OWCRS Total Fund</b>	<b>139,862,555</b>	<b>100.00</b>	<b>-0.33</b>	<b>-0.33</b>	<b>7.23</b>	<b>16.28</b>	<b>9.98</b>	<b>9.72</b>	<b>8.16</b>	<b>9.16</b>	<b>6.58</b>	<b>01/01/2006</b>
OWCRS Policy Index			-0.63	-0.63	6.39	18.46	9.05	8.60	7.23	8.67	6.79	
Difference			0.30	0.30	0.84	-2.18	0.93	1.12	0.93	0.49	-0.21	
OWCRS Actual Allocation Index			-0.73	-0.73	6.95	19.44	10.40	10.16	8.65	9.49	7.18	
Difference			0.40	0.40	0.28	-3.16	-0.42	-0.44	-0.49	-0.33	-0.60	
Actuarial Discount Rate (7.0%)			1.71	1.71	5.21	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			-2.04	-2.04	2.02	9.28	2.98	2.72	1.16	2.16	-0.42	
<b>Equity</b>	<b>75,010,341</b>	<b>53.63</b>	<b>-0.60</b>	<b>-0.60</b>	<b>12.85</b>	<b>28.50</b>	<b>12.17</b>	<b>14.47</b>	<b>11.93</b>	<b>14.80</b>	<b>9.26</b>	<b>01/01/2006</b>
OWCRS Equity Custom Index			-1.49	-1.49	13.14	36.74	11.46	13.09	10.62	N/A	N/A	
Difference			0.89	0.89	-0.29	-8.24	0.71	1.38	1.31	N/A	N/A	
<b>iShares:Russ 1000 ETF (IWB)</b>	<b>2,932,496</b>	<b>2.10</b>	<b>0.20</b>	<b>0.20</b>	<b>13.65</b>	<b>29.13</b>	<b>15.77</b>	<b>16.65</b>	<b>13.74</b>	<b>16.46</b>	<b>28.79</b>	<b>03/01/2020</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	30.04	
Difference			-0.01	-0.01	-1.54	-1.83	-0.66	-0.46	-0.35	-0.30	-1.25	
<b>Vanguard S-C Id;Inst (VSCIX)</b>	<b>4,325,672</b>	<b>3.09</b>	<b>-2.60</b>	<b>-2.60</b>	<b>13.34</b>	<b>44.07</b>	<b>11.99</b>	<b>13.99</b>	<b>11.99</b>	<b>15.34</b>	<b>10.15</b>	<b>12/01/2005</b>
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	9.20	
Difference			1.76	1.76	0.93	-3.61	1.45	0.54	0.09	0.71	0.95	
<b>Bank of Oklahoma Managed Equity (SA)</b>	<b>49,290,594</b>	<b>35.24</b>	<b>0.39</b>	<b>0.39</b>	<b>15.60</b>	<b>28.29</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>39.92</b>	<b>04/01/2020</b>
Russell 3000 Index			-0.10	-0.10	14.99	31.88	16.00	16.85	13.93	16.60	45.63	
Difference			0.49	0.49	0.61	-3.59	N/A	N/A	N/A	N/A	-5.71	
<b>Vanguard Dev Mkt;Adm (VTMGX)</b>	<b>6,255,119</b>	<b>4.47</b>	<b>-1.56</b>	<b>-1.56</b>	<b>8.20</b>	<b>26.51</b>	<b>8.18</b>	<b>9.18</b>	<b>6.40</b>	<b>8.62</b>	<b>4.76</b>	<b>09/01/1999</b>
MSCI Wrld Ex US Index (USD) (Net)			-0.66	-0.66	9.19	26.50	7.87	8.88	5.69	7.88	4.69	
Difference			-0.90	-0.90	-0.99	0.01	0.31	0.30	0.71	0.74	0.07	
<b>Dodge &amp; Cox Intl Stock (DODFX)</b>	<b>4,029,363</b>	<b>2.88</b>	<b>-3.33</b>	<b>-3.33</b>	<b>8.42</b>	<b>35.22</b>	<b>6.00</b>	<b>7.39</b>	<b>3.41</b>	<b>7.78</b>	<b>3.60</b>	<b>03/01/2014</b>
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	5.20	
Difference			-0.34	-0.34	2.52	11.30	-2.03	-1.55	-2.27	0.30	-1.60	
<b>MFS Intl New Discv;R6 (MIDLX)</b>	<b>4,235,167</b>	<b>3.03</b>	<b>0.30</b>	<b>0.30</b>	<b>5.38</b>	<b>18.74</b>	<b>8.20</b>	<b>9.84</b>	<b>8.28</b>	<b>10.27</b>	<b>7.24</b>	<b>03/01/2014</b>
MSCI ACW Ex US Grth Index (USD) (Net)			-3.62	-3.62	2.66	16.95	11.94	11.22	8.26	9.32	7.52	
Difference			3.92	3.92	2.72	1.79	-3.74	-1.38	0.02	0.95	-0.28	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Invesco Dev Mkt;R6 (ODVIX)</b>	<b>3,941,929</b>	<b>2.82</b>	<b>-9.16</b>	<b>-9.16</b>	<b>-3.20</b>	<b>15.21</b>	<b>9.37</b>	<b>9.96</b>	<b>5.61</b>	<b>7.50</b>	<b>5.94</b>	<b>06/01/2013</b>
MSCI Emg Mkts Index (USD) (Net)			-8.09	-8.09	-1.25	18.20	8.58	9.23	5.62	6.09	5.10	
Difference			-1.07	-1.07	-1.95	-2.99	0.79	0.73	-0.01	1.41	0.84	
<b>Fixed Income</b>	<b>51,072,131</b>	<b>36.52</b>	<b>0.11</b>	<b>0.11</b>	<b>-0.27</b>	<b>1.38</b>	<b>5.87</b>	<b>3.18</b>	<b>3.22</b>	<b>2.97</b>	<b>3.54</b>	<b>01/01/2006</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.17	
Difference			0.06	0.06	1.29	2.28	0.52	0.24	-0.04	-0.04	-0.63	
<b>Bank of Oklahoma Managed Fixed Income (SA)</b>	<b>23,786,150</b>	<b>17.01</b>	<b>-0.02</b>	<b>-0.02</b>	<b>-0.71</b>	<b>0.17</b>	<b>5.32</b>	<b>2.75</b>	<b>2.84</b>	<b>2.57</b>	<b>3.37</b>	<b>12/01/2005</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.21	
Difference			-0.07	-0.07	0.85	1.07	-0.03	-0.19	-0.42	-0.44	-0.84	
<b>MetWest:Total Rtn;I (MWTIX)</b>	<b>7,204,158</b>	<b>5.15</b>	<b>0.13</b>	<b>0.13</b>	<b>-1.04</b>	<b>0.15</b>	<b>6.15</b>	<b>3.51</b>	<b>3.52</b>	<b>4.17</b>	<b>4.25</b>	<b>08/01/2017</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.63	
Difference			0.08	0.08	0.52	1.05	0.80	0.57	0.26	1.16	0.62	
<b>PIMCO:Income;Inst (PIMIX)</b>	<b>8,512,871</b>	<b>6.09</b>	<b>0.58</b>	<b>0.58</b>	<b>2.43</b>	<b>6.99</b>	<b>5.66</b>	<b>5.34</b>	<b>5.20</b>	<b>7.09</b>	<b>4.65</b>	<b>08/01/2017</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.63	
Difference			0.53	0.53	3.99	7.89	0.31	2.40	1.94	4.08	1.02	
<b>PIMCO:Intl Bd (DH);Inst (PFORX)</b>	<b>4,317,694</b>	<b>3.09</b>	<b>-0.11</b>	<b>-0.11</b>	<b>-1.31</b>	<b>0.76</b>	<b>4.23</b>	<b>3.45</b>	<b>4.12</b>	<b>5.07</b>	<b>1.81</b>	<b>03/01/2020</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	1.26	
Difference			-0.16	-0.16	0.25	1.66	-1.12	0.51	0.86	2.06	0.55	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Alternative Investments</b>	<b>11,272,284</b>	<b>8.06</b>	<b>-0.65</b>	<b>-0.65</b>	<b>5.79</b>	<b>13.17</b>	<b>4.94</b>	<b>5.35</b>	<b>3.84</b>	<b>4.05</b>	<b>3.53</b>	<b>12/01/2010</b>
OWCRS Alternatives Custom Index			0.74	0.74	5.73	14.31	6.49	5.53	3.75	N/A	N/A	
Difference			-1.39	-1.39	0.06	-1.14	-1.55	-0.18	0.09	N/A	N/A	
<b>First Eagle:Global;I (SGIIX)</b>	<b>5,613,340</b>	<b>4.01</b>	<b>-1.87</b>	<b>-1.87</b>	<b>8.32</b>	<b>20.34</b>	<b>9.08</b>	<b>8.09</b>	<b>7.25</b>	<b>8.76</b>	<b>7.73</b>	<b>08/01/2017</b>
MSCI Wrld Index (USD) (Net)			-0.01	-0.01	13.04	28.82	13.14	13.74	10.50	12.68	12.76	
Difference			-1.86	-1.86	-4.72	-8.48	-4.06	-5.65	-3.25	-3.92	-5.03	
<b>Calamos:Mkt Neut Inc;I (CMNIX)</b>	<b>5,658,944</b>	<b>4.05</b>	<b>0.59</b>	<b>0.59</b>	<b>3.31</b>	<b>5.34</b>	<b>4.49</b>	<b>4.60</b>	<b>4.09</b>	<b>4.67</b>	<b>4.47</b>	<b>08/01/2017</b>
Bloomberg US Govt/Credit Bond Index			0.04	0.04	-1.93	-1.13	5.94	3.24	3.54	3.24	4.00	
Difference			0.55	0.55	5.24	6.47	-1.45	1.36	0.55	1.43	0.47	

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, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>OWCRS Total Fund</b>	<b>139,862,555</b>	<b>100.00</b>	<b>-0.25</b>	<b>-0.25</b>	<b>7.50</b>	<b>16.66</b>	<b>10.27</b>	<b>9.98</b>	<b>8.40</b>	<b>9.38</b>	<b>6.80</b>	<b>01/01/2006</b>
OWCRS Policy Index			-0.63	-0.63	6.39	18.46	9.05	8.60	7.23	8.67	6.79	
Difference			0.38	0.38	1.11	-1.80	1.22	1.38	1.17	0.71	0.01	
OWCRS Actual Allocation Index			-0.73	-0.73	6.95	19.44	10.40	10.16	8.65	9.49	7.18	
Difference			0.48	0.48	0.55	-2.78	-0.13	-0.18	-0.25	-0.11	-0.38	
Actuarial Discount Rate (7.0%)			1.71	1.71	5.21	7.00	7.00	7.00	7.00	7.00	7.00	
Difference			-1.96	-1.96	2.29	9.66	3.27	2.98	1.40	2.38	-0.20	
All Public Plans-Total Fund Median			-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94	7.36	
Rank			66	66	80	88	57	60	55	68	79	
<b>Equity</b>	<b>75,010,341</b>	<b>53.63</b>	<b>-0.54</b>	<b>-0.54</b>	<b>13.07</b>	<b>28.85</b>	<b>12.31</b>	<b>14.55</b>	<b>11.99</b>	<b>14.85</b>	<b>9.28</b>	<b>01/01/2006</b>
OWCRS Equity Custom Index			-1.49	-1.49	13.14	36.74	11.46	13.09	10.62	N/A	N/A	
Difference			0.95	0.95	-0.07	-7.89	0.85	1.46	1.37	N/A	N/A	
<b>iShares:Russ 1000 ETF (IWB)</b>	<b>2,932,496</b>	<b>2.10</b>	<b>0.25</b>	<b>0.25</b>	<b>13.80</b>	<b>29.35</b>	<b>15.95</b>	<b>16.83</b>	<b>13.91</b>	<b>16.63</b>	<b>28.99</b>	<b>03/01/2020</b>
Russell 1000 Index			0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	30.04	
Difference			0.04	0.04	-1.39	-1.61	-0.48	-0.28	-0.18	-0.13	-1.05	
IM U.S. Large Cap Equity (MF) Median			0.05	0.05	14.78	28.72	15.45	16.19	13.08	15.73	28.72	
Rank			43	43	64	46	47	46	42	39	49	
<b>Vanguard S-C Id;Inst (VSCIX)</b>	<b>4,325,672</b>	<b>3.09</b>	<b>-2.59</b>	<b>-2.59</b>	<b>13.38</b>	<b>44.13</b>	<b>12.04</b>	<b>14.03</b>	<b>12.03</b>	<b>15.39</b>	<b>10.20</b>	<b>12/01/2005</b>
Russell 2000 Index			-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	9.20	
Difference			1.77	1.77	0.97	-3.55	1.50	0.58	0.13	0.76	1.00	
IM U.S. Small Cap Core Equity (MF) Median			-2.28	-2.28	17.33	49.87	9.14	11.82	10.42	13.47	8.60	
Rank			58	58	76	81	16	13	18	11	4	
<b>Bank of Oklahoma Managed Equity (SA)</b>	<b>49,290,594</b>	<b>35.24</b>	<b>0.43</b>	<b>0.43</b>	<b>15.76</b>	<b>28.52</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>40.12</b>	<b>04/01/2020</b>
Russell 3000 Index			-0.10	-0.10	14.99	31.88	16.00	16.85	13.93	16.60	45.63	
Difference			0.53	0.53	0.77	-3.36	N/A	N/A	N/A	N/A	-5.51	
<b>Vanguard Dev Mkt;Adm (VTMGX)</b>	<b>6,255,119</b>	<b>4.47</b>	<b>-1.55</b>	<b>-1.55</b>	<b>8.25</b>	<b>26.60</b>	<b>8.25</b>	<b>9.26</b>	<b>6.48</b>	<b>8.69</b>	<b>4.84</b>	<b>09/01/1999</b>
MSCI Wrld Ex US Index (USD) (Net)			-0.66	-0.66	9.19	26.50	7.87	8.88	5.69	7.88	4.69	
Difference			-0.89	-0.89	-0.94	0.10	0.38	0.38	0.79	0.81	0.15	
IM All ACWI Ex US (MF) Median			-2.69	-2.69	6.02	22.94	9.91	9.53	6.66	8.55	5.65	
Rank			23	23	21	28	70	53	52	47	68	

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



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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Dodge &amp; Cox Intl Stock (DODFX)</b>	<b>4,029,363</b>	<b>2.88</b>	<b>-3.17</b>	<b>-3.17</b>	<b>8.94</b>	<b>36.07</b>	<b>6.67</b>	<b>8.07</b>	<b>4.06</b>	<b>8.46</b>	<b>4.26</b>	<b>03/01/2014</b>
MSCI ACW Ex US Index (USD) (Net)			-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	5.20	
Difference			-0.18	-0.18	3.04	12.15	-1.36	-0.87	-1.62	0.98	-0.94	
IM ACWI Ex US Core (MF) Median			-2.95	-2.95	6.24	23.84	8.69	8.96	5.97	7.94	5.32	
Rank			63	63	15	2	89	78	96	33	84	
<b>MFS Intl New Discv;R6 (MIDLX)</b>	<b>4,235,167</b>	<b>3.03</b>	<b>0.53</b>	<b>0.53</b>	<b>6.11</b>	<b>19.82</b>	<b>9.20</b>	<b>10.86</b>	<b>9.28</b>	<b>11.30</b>	<b>8.23</b>	<b>03/01/2014</b>
MSCI ACW Ex US Grth Index (USD) (Net)			-3.62	-3.62	2.66	16.95	11.94	11.22	8.26	9.32	7.52	
Difference			4.15	4.15	3.45	2.87	-2.74	-0.36	1.02	1.98	0.71	
IM ACWI Ex US Growth (MF) Median			-2.37	-2.37	4.44	20.29	12.87	12.02	8.73	10.01	7.83	
Rank			19	19	35	52	92	75	37	22	36	
<b>Invesco Dev Mkt;R6 (ODVIX)</b>	<b>3,941,929</b>	<b>2.82</b>	<b>-8.97</b>	<b>-8.97</b>	<b>-2.60</b>	<b>16.15</b>	<b>10.27</b>	<b>10.86</b>	<b>6.48</b>	<b>8.40</b>	<b>6.82</b>	<b>06/01/2013</b>
MSCI Emg Mkts Index (USD) (Net)			-8.09	-8.09	-1.25	18.20	8.58	9.23	5.62	6.09	5.10	
Difference			-0.88	-0.88	-1.35	-2.05	1.69	1.63	0.86	2.31	1.72	
IM Emerging Markets Equity (MF) Median			-7.51	-7.51	-0.31	19.16	9.45	8.81	5.42	6.22	4.98	
Rank			74	74	70	71	41	27	33	19	22	

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



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

As of September 30, 2021

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Fixed Income</b>	<b>51,072,131</b>	<b>36.52</b>	<b>0.19</b>	<b>0.19</b>	<b>-0.03</b>	<b>1.70</b>	<b>6.04</b>	<b>3.28</b>	<b>3.29</b>	<b>3.02</b>	<b>3.57</b>	<b>01/01/2006</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.17	
Difference			0.14	0.14	1.53	2.60	0.69	0.34	0.03	0.01	-0.60	
<b>Bank of Oklahoma Managed Fixed Income (SA)</b>	<b>23,786,150</b>	<b>17.01</b>	<b>0.02</b>	<b>0.02</b>	<b>-0.58</b>	<b>0.35</b>	<b>5.51</b>	<b>2.99</b>	<b>3.06</b>	<b>2.78</b>	<b>3.57</b>	<b>12/01/2005</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	4.21	
Difference			-0.03	-0.03	0.98	1.25	0.16	0.05	-0.20	-0.23	-0.64	
IM U.S. Broad Market Fixed Income (SA+CF) Median			0.15	0.15	-0.70	0.83	6.21	3.79	3.95	3.94	4.96	
Rank			81	81	46	62	85	92	98	99	100	
<b>MetWest:Total Rtn;I (MWTIX)</b>	<b>7,204,158</b>	<b>5.15</b>	<b>0.24</b>	<b>0.24</b>	<b>-0.71</b>	<b>0.59</b>	<b>6.61</b>	<b>3.96</b>	<b>3.97</b>	<b>4.63</b>	<b>4.71</b>	<b>08/01/2017</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.63	
Difference			0.19	0.19	0.85	1.49	1.26	1.02	0.71	1.62	1.08	
IM U.S. Broad Market Core+ Fixed Income (MF) Median			0.11	0.11	-0.71	1.26	5.90	3.65	3.53	3.80	4.09	
Rank			25	25	51	68	25	32	21	11	19	
<b>PIMCO:Income;Inst (PIMIX)</b>	<b>8,512,871</b>	<b>6.09</b>	<b>0.71</b>	<b>0.71</b>	<b>2.81</b>	<b>7.53</b>	<b>6.54</b>	<b>6.32</b>	<b>6.21</b>	<b>8.15</b>	<b>5.59</b>	<b>08/01/2017</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.63	
Difference			0.66	0.66	4.37	8.43	1.19	3.38	2.95	5.14	1.96	
IM Multi-Sector General Bond (MF) Median			0.18	0.18	1.70	6.04	5.50	4.32	3.93	4.73	4.22	
Rank			14	14	29	29	18	3	2	1	9	
<b>PIMCO:Intl Bd (DH);Inst (PFORX)</b>	<b>4,317,694</b>	<b>3.09</b>	<b>0.02</b>	<b>0.02</b>	<b>-0.90</b>	<b>1.34</b>	<b>4.81</b>	<b>4.02</b>	<b>4.69</b>	<b>5.65</b>	<b>2.39</b>	<b>03/01/2020</b>
Bloomberg US Agg Bond Index			0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	1.26	
Difference			-0.03	-0.03	0.66	2.24	-0.54	1.08	1.43	2.64	1.13	
IM International Fixed Income (MF) Median			-1.57	-1.57	-4.80	-0.06	3.09	1.32	0.81	1.57	1.50	
Rank			12	12	6	24	11	2	1	1	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 Wildlife Conservation Retirement System  
Asset Allocation & Performance - Gross of Fees

As of September 30, 2021

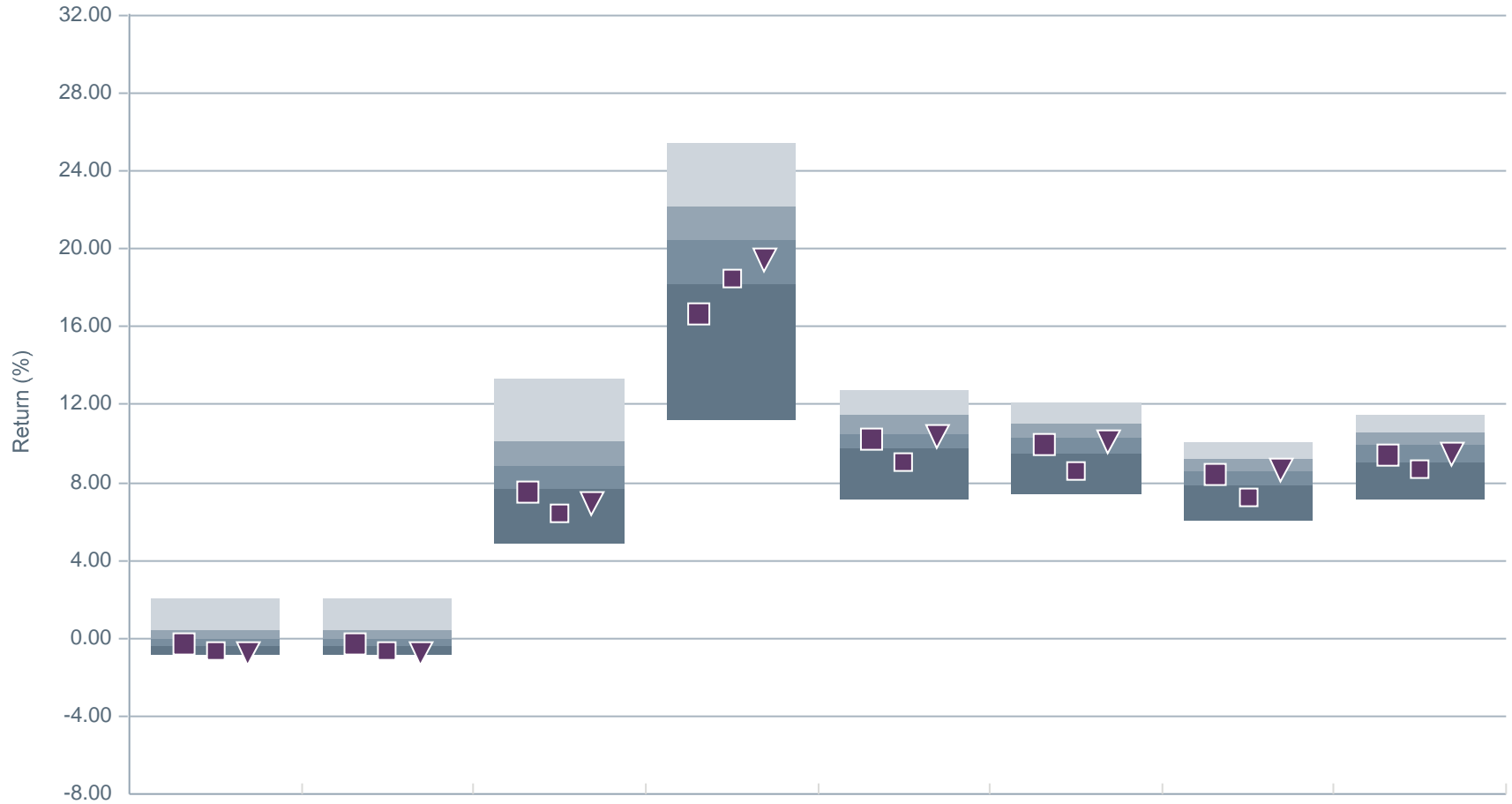
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Alternative Investments</b>	<b>11,272,284</b>	<b>8.06</b>	<b>-0.43</b>	<b>-0.43</b>	<b>6.50</b>	<b>14.14</b>	<b>5.37</b>	<b>5.61</b>	<b>4.03</b>	<b>4.18</b>	<b>3.65</b>	<b>12/01/2010</b>
OWCRS Alternatives Custom Index			0.74	0.74	5.73	14.31	6.49	5.53	3.75	N/A	N/A	
Difference			-1.17	-1.17	0.77	-0.17	-1.12	0.08	0.28	N/A	N/A	
<b>First Eagle:Global;I (SGIIX)</b>	<b>5,613,340</b>	<b>4.01</b>	<b>-1.66</b>	<b>-1.66</b>	<b>9.01</b>	<b>21.36</b>	<b>10.00</b>	<b>9.01</b>	<b>8.17</b>	<b>9.68</b>	<b>8.64</b>	<b>08/01/2017</b>
MSCI Wrld Index (USD) (Net)			-0.01	-0.01	13.04	28.82	13.14	13.74	10.50	12.68	12.76	
Difference			-1.65	-1.65	-4.03	-7.46	-3.14	-4.73	-2.33	-3.00	-4.12	
<b>Calamos:Mkt Neut Inc;I (CMNIX)</b>	<b>5,658,944</b>	<b>4.05</b>	<b>0.83</b>	<b>0.83</b>	<b>4.05</b>	<b>6.35</b>	<b>5.52</b>	<b>5.65</b>	<b>5.14</b>	<b>5.72</b>	<b>5.51</b>	<b>08/01/2017</b>
Bloomberg US Govt/Credit Bond Index			0.04	0.04	-1.93	-1.13	5.94	3.24	3.54	3.24	4.00	
Difference			0.79	0.79	5.98	7.48	-0.42	2.41	1.60	2.48	1.51	

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, 2021



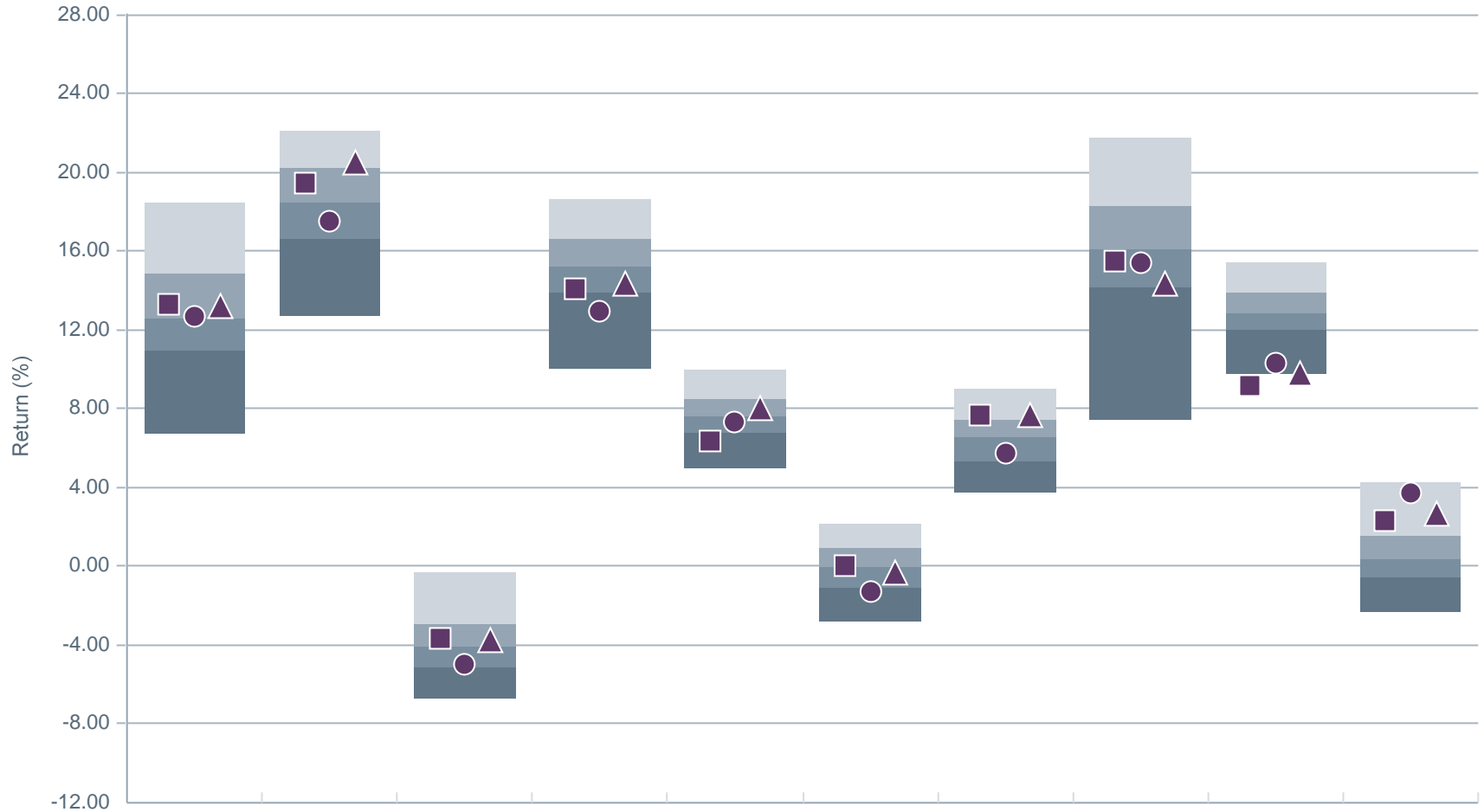
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
■ OWCERS Total Fund	-0.25 (66)	-0.25 (66)	7.50 (80)	16.66 (88)	10.27 (57)	9.98 (60)	8.40 (55)	9.38 (68)
■ OWCERS Policy Index	-0.63 (90)	-0.63 (90)	6.39 (91)	18.46 (73)	9.05 (88)	8.60 (90)	7.23 (89)	8.67 (85)
▼ OWCERS Allocation Index	-0.73 (92)	-0.73 (92)	6.95 (86)	19.44 (64)	10.40 (53)	10.16 (55)	8.65 (47)	9.49 (63)
5th Percentile	2.04	2.04	13.29	25.43	12.81	12.16	10.09	11.51
1st Quartile	0.40	0.40	10.11	22.20	11.49	11.07	9.21	10.60
Median	-0.06	-0.06	8.83	20.45	10.48	10.31	8.58	9.94
3rd Quartile	-0.41	-0.41	7.68	18.19	9.76	9.47	7.89	9.08
95th Percentile	-0.83	-0.83	4.87	11.26	7.17	7.39	6.10	7.15

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, 2021

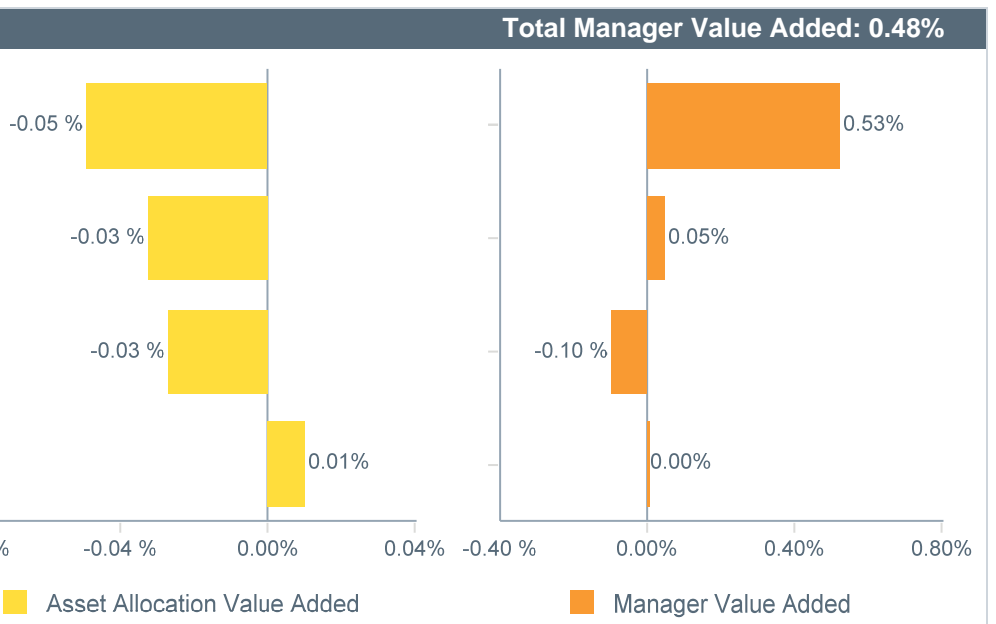
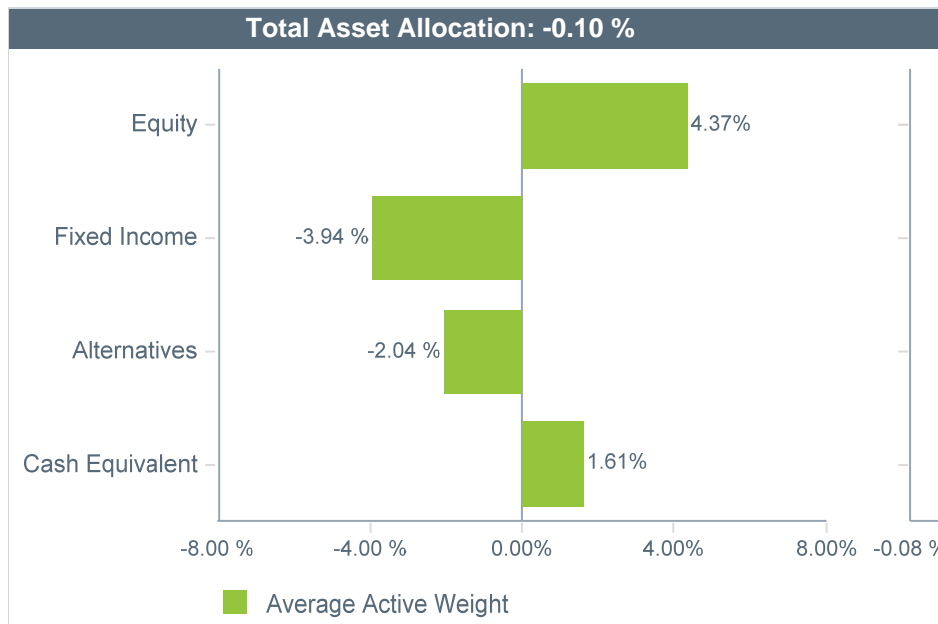
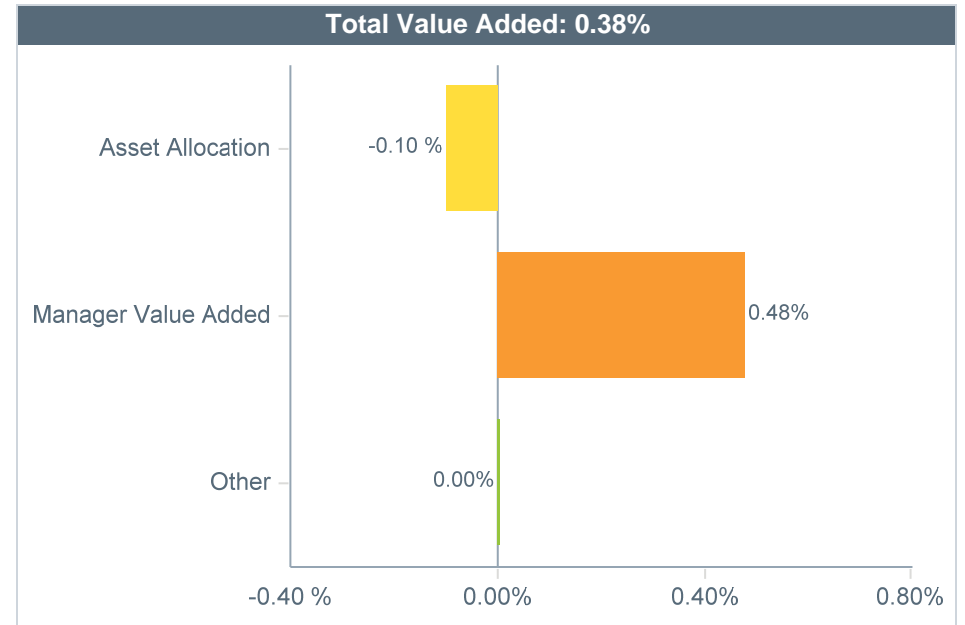
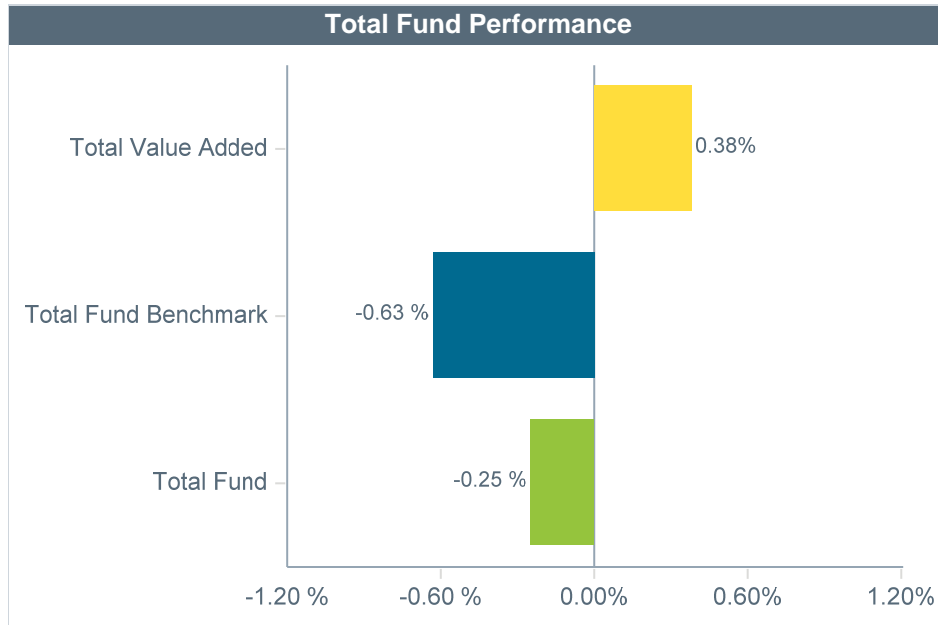


	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
■ OWCERS Total Fund	13.34 (41)	19.46 (37)	-3.68 (42)	14.13 (71)	6.39 (85)	0.05 (47)	7.71 (19)	15.51 (60)	9.15 (97)	2.34 (18)
● OWCERS Policy Index	12.67 (50)	17.53 (63)	-4.95 (71)	12.96 (86)	7.34 (61)	-1.27 (78)	5.80 (69)	15.43 (61)	10.29 (93)	3.69 (7)
▲ OWCERS Allocation Index	13.21 (44)	20.53 (21)	-3.71 (42)	14.38 (66)	8.04 (39)	-0.28 (56)	7.68 (20)	14.39 (73)	9.78 (96)	2.68 (15)
5th Percentile	18.53	22.15	-0.35	18.65	9.96	2.13	8.98	21.72	15.42	4.26
1st Quartile	14.87	20.27	-2.95	16.63	8.44	0.90	7.43	18.29	13.94	1.56
Median	12.61	18.52	-4.13	15.30	7.64	-0.07	6.59	16.17	12.90	0.41
3rd Quartile	10.95	16.62	-5.13	13.91	6.81	-1.10	5.35	14.16	11.96	-0.55
95th Percentile	6.68	12.74	-6.71	10.03	5.01	-2.75	3.73	7.40	9.81	-2.37

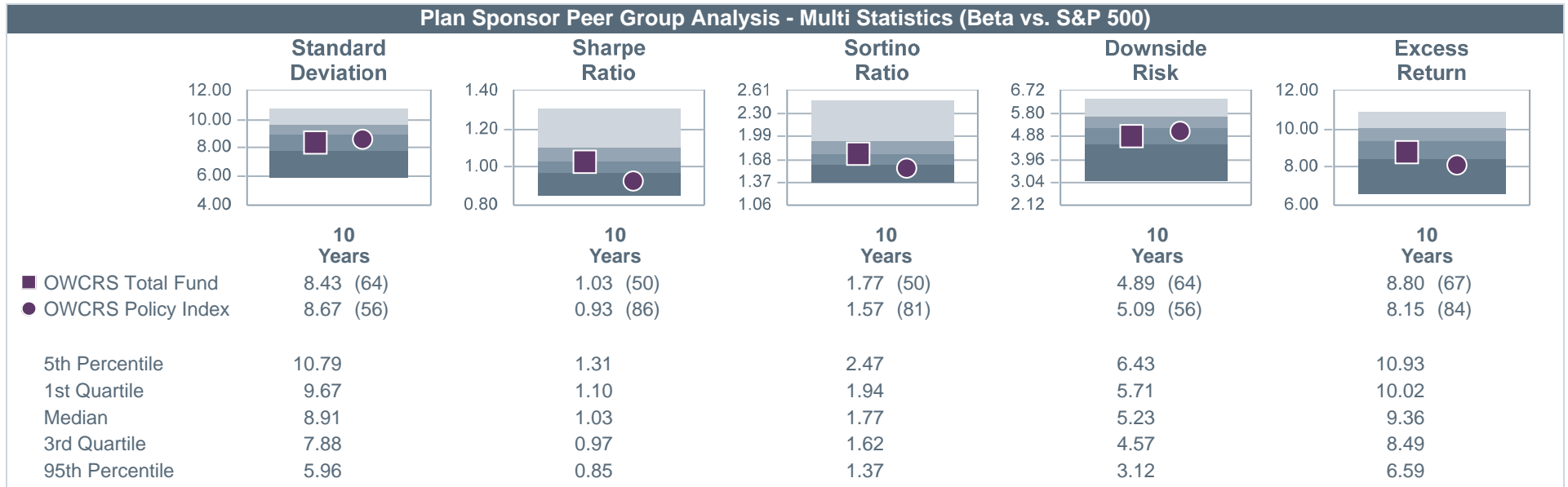
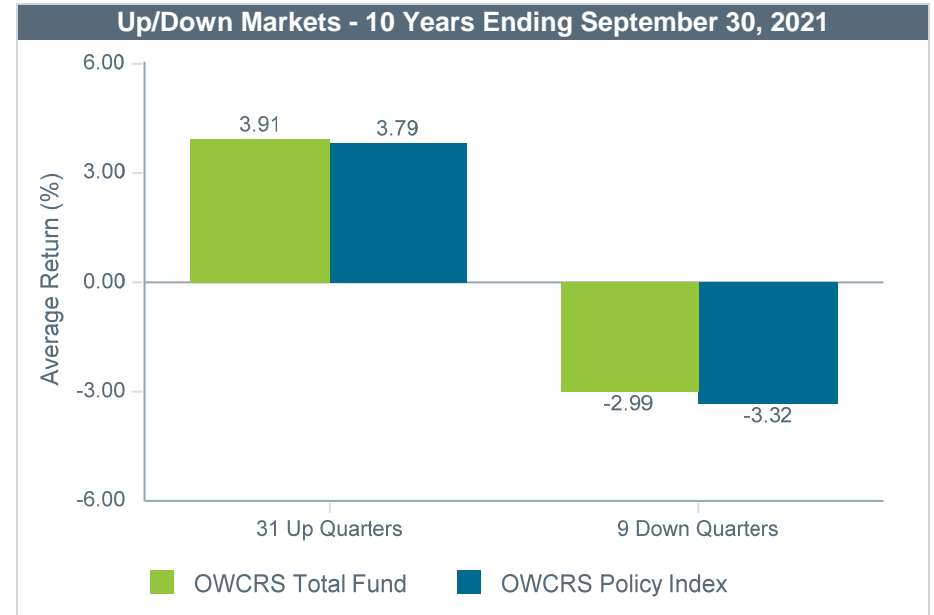
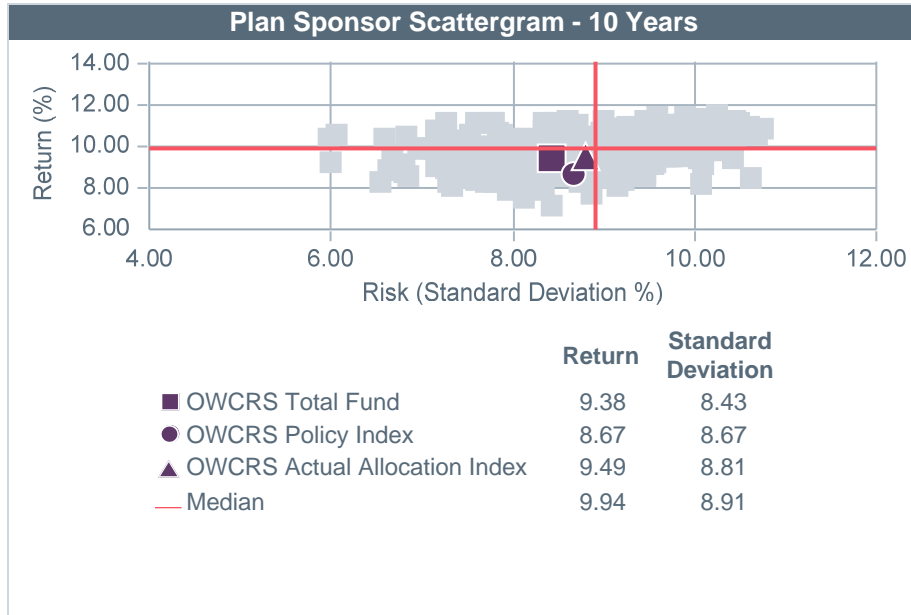
Performance shown is gross of fees. Parentheses contain percentile ranks. Please see the Addendum for custom index definitions and additional comments.



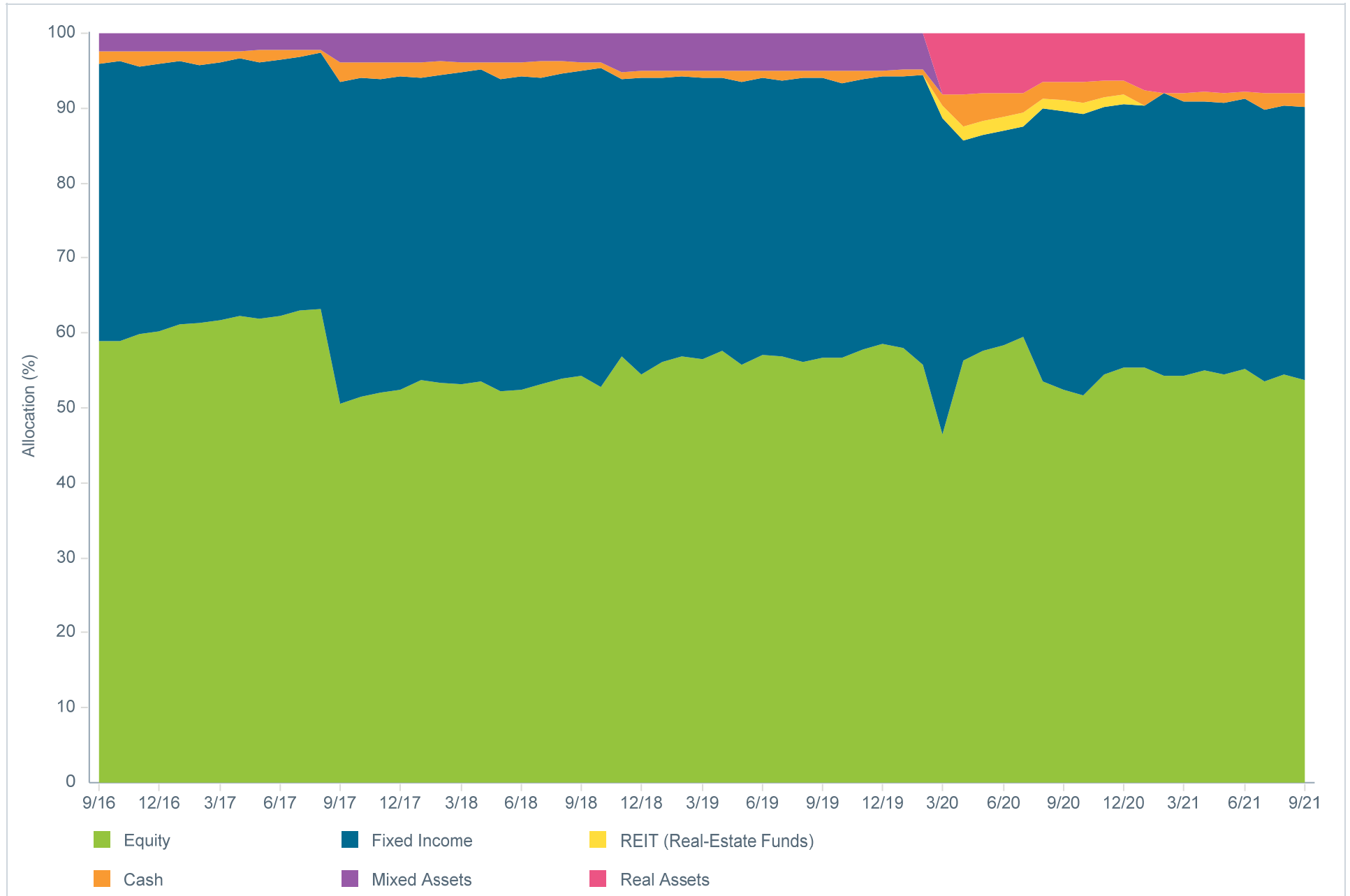




Performance shown is gross of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution calculation.



Performance shown is gross of fees. Calculation is based on quarterly 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:** OPERS'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:** OFPRS'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:** OPPRS's passive, policy index is calculated monthly and currently consists of 65% MSCI ACW Index (USD) (Net), 20% Bloomberg US Universal Bond Index, and 15% NCREIF ODCE Index (AWA) (Net) (Monthly). From 07/01/2020 through 01/31/2021, it consisted 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.
- **OPPRS Real Assets Blended Index:** is calculated monthly and current consists of 100% NCREIF ODCE Index (AWA) (Net) (Monthly). From 01/01/2016 through 08/31/2019, it consisted of 67% NCREIF ODCE Index (AWA) (Net) (Monthly) and 33% Bloomberg Commodity Index (TR). From 08/01/2014 through 12/31/2015, it consisted of 50% NCREIF ODCE Index (AWA) (Net) (Monthly) and 50% Bloomberg Commodity Index (TR). Prior to 08/01/2014, the index consisted of 100% NCREIF ODCE Index (AWA) (Net) (Monthly).
- **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:** OLERS's passive, policy index is calculated monthly and currently consists of 35% S&P 500 Index (Cap Weighted), 10% Russell 2000 Index, 20% MSCI ACW ex US Index (USD) (Net), 20% Bloomberg US Agg Bond Index, and 15% NCREIF ODCE Index (AWA) (Net) (Monthly). From 07/01/2020 through 01/31/2021, it consisted 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.
- **URSJJ Policy Index:** URSJJ's passive, policy index is calculated monthly and currently consists of 40% URSJJ US Equity Custom Index, 28% MSCI ACW ex US Index (USD) (Net), and 32% URSJJ Fixed Income Index. Performance prior to 07/01/2020 was calculated by the prior investment consultant.
- **URSJJ 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.
- **URSJJ 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:** OWCRS'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.

- **Vanguard Spl Sm Cap Val Index** consists of S&P Sm Cap 600 Val Index through 05/16/03; MSCI US Sm Cap Val Index through 04/16/13; and CRSP US Sm Cap Val Index thereafter.

## 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&amp;P</u>	<u>Moody's</u>	<u>Explanation</u>	<u>S&amp;P</u>	<u>Moody's</u>	<u>Explanation</u>
<b>Higher Credit Quality – Investment Grade</b>			<b>Lower Credit Quality – Below Investment Grade</b>		
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., 1<sup>st</sup> quartile, 2<sup>nd</sup> quartile, 3<sup>rd</sup> quartile, and 4<sup>th</sup> quartile). The median observation is where the 2<sup>nd</sup> quartile and 3<sup>rd</sup> 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.

**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 4<sup>th</sup> 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>
<b><u>Liquid Investments</u></b>		<b><u>Less Liquid Investments</u></b>	
T-Bills and Treasuries	100	Fixed Income Plus Sector	50
Cash Equivalents	98	Stable Value (Plan Sponsor Directed)	50
TIPS	95	Hedge Funds of Funds	35
US Large Cap Equity	95		
Diversified Real Return	93		
Stable Value (Participant Directed)	91		
Global Equity	90	<b><u>Not Liquid Investments</u></b>	
Non-US Large Cap Equity	90	Core Real Estate	25
Global Tactical Asset Allocation	88	Core Plus Real Estate	15
MLPs	85	Non-Core Real Estate	5
US Mid Cap Equity	85	Private Equity Funds of Funds	5
US SMid Cap Equity	85		
US Small Cap Equity	85		
REITs	85		
Non-US Small Cap Equity	85		
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.



## Glossary

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

**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.

PORTLAND

BOISE

CHICAGO

NEW YORK

**Disclaimer of Warranties and Limitation of Liability** - This document was prepared by RVK, Inc. (RVK) and may include information and data from some or all of the following sources: client staff; custodian banks; investment managers; specialty investment consultants; actuaries; plan administrators/record-keepers; index providers; as well as other third-party sources as directed by the client or as we believe necessary or appropriate. RVK has taken reasonable care to ensure the accuracy of the information or data, but makes no warranties and disclaims responsibility for the accuracy or completeness of information or data provided or methodologies employed by any external source. This document is provided for the client's internal use only and does not constitute a recommendation by RVK or an offer of, or a solicitation for, any particular security and it is not intended to convey any guarantees as to the future performance of the investment products, asset classes, or capital markets.

