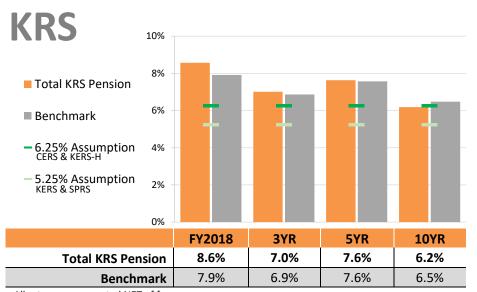
FISCAL YEAR PERFORMANCE

JUNE2018 PROVIDED BY LRC STAFF



Kentucky Retirement Systems (KRS) administers five state and county pension plans. The combined **KRS Pension Fund posted a return of 8.6% (net of fees) for the 2018 fiscal year**, exceeding both its benchmark and assumed rate of return. All asset classes provided positive absolute results for the twelve month period, with U.S. equity (\uparrow 14.5%), Private Equity (\uparrow 14.5%), and Real Estate (\uparrow 11.2%) asset classes being the strongest performers during the year.

Performance above the benchmark was primarily driven by notable positive manager performance within the real estate (+411 bps) and Non-US equity (+302 bps) portfolios. These positive factors were partially offset by below benchmark returns out of U.S equity (-26 bps) and private equity (-229 bps.)



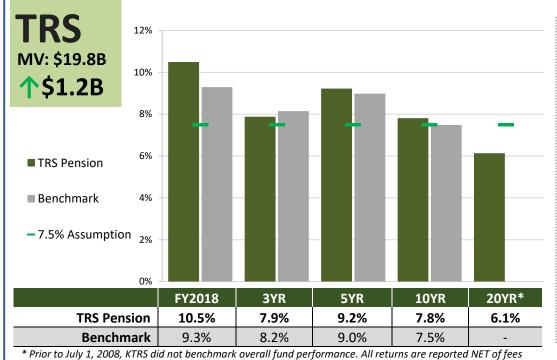
KRS continues to transition pension portfolios

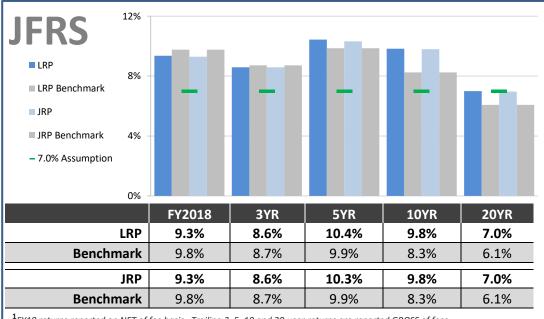
to new target allocations. Over the twelve month period, staff reduced both public equity (\downarrow 11.5%) and absolute return (\downarrow 1.9%), while adding primarily to fixed income assets (\uparrow 13.3%). Allocations as of the end of the fiscal year are shown above.

All returns are reported NET of fees

Returns and current portfolio allocations for each of the five underlying pension plans administered by KRS are provided below. For the year, returns ranged from 18.8% (CERS) to 17.5% (SPRS), with return differences due to allocation differences and cash flow activity during the quarter. Trailing period performance for each plan is show in the table below.

PLAN	I FY	2018 3YR 5YR 10YR 20YR CURRENT ALLOCATIONS													
KERS	7	.5%	6.2%	7.2%	6.0%	5.8%	KERS	14.6%	18.5%	32	7%	6.2% 8.0)% 3.4%	11.8	3% 4.8%
Benchmark	7	7.2%	6.5%	7.2%	6.3%	5.9%		1.070	10.370		,,,,	0.270		11.0	
KERS - H	8	8.7%	7.1%	7.7%	6.2%	5.9%	KERS-H		21.59	6	30.4%	5.1%	8.6%	3.5% 9	.4% <mark>3.6%</mark>
Benchmark	8	8.2%	6.9%	7.5%	6.5%	6.0%									
SPRS	7	.7%	6.1%	7.0%	5.9%	5.8%	SPRS		19.1%		35.0%	<mark>5.1%</mark>	8.6%	3.8% 8.	.0% <mark>4.8%</mark>
Benchmark	7	7.7%	6.5%	7.3%	6.3%	5.9%									
CERS	8	8.8%	7.2%	7.7%	6.2%	5.9%	CERS-H		21.79	%	29.4%	<mark>5.4%</mark>	8.9%	3.5% 9	.4% <mark>3.7%</mark>
Benchmark	8	8.2%	6.9%	7.5%	6.5%	6.0%									
CERS - H	8	8.8%	7.2%	7.7%	6.2%	5.9%	CERS	18.0%	21.69	%	29.7%	<mark>5.6%</mark>	8.7%	3.7% 9).2% 3 <mark>.5</mark> %
Benchmark	8	8.2%	6.9%	7.5%	6.5%	6.0%	US Equit	y 📕 Non-US Ec	quity Fixed Incom	e 🗖 Absolute Return	Real Ret	urn Real Estate	Priva ⁴	te Equity	y <mark>=</mark> Cash
KERS NON HAZ	MV: \$2.0B ↓\$44M	KERS HAZ		и∨: \$651M ↑\$45M			мv:: \$34		CERS HAZ	MV: \$2.		SPRS IAZ		•	268M





¹FY18 returns reported on NET of fee basis. Trailing 3, 5, 10 and 20-year returns are reported GROSS of fees

LRP DB PLAN

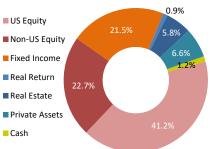


The **TRS Pension Fund posted a return of 10.5% (net of fees) for the 2018 fiscal year,** which outperformed both its policy benchmark and assumed rate of return. All assets classes, with the exception of timberland, posted positive returns during for the year, with the private equity (**19.5%**), U.S. equity (**14.7%**), and Non-US equity (**12.9%**) asset classes leading the way.

Performance relative to the benchmark was primarily driven by above benchmark performance by managers within the Non-U.S. (+515 basis

points), Non-Core Real Estate (+552 bps) and the additional categories (+123 bps) asset classes. This performance was slightly offset by underperformance within the timberland portfolio.

No major asset allocation changes were made during the year. From the same point twelve months



prior, the portfolio had a slightly higher allocation to Non-US equity (\uparrow 1.2%) and private equity (\uparrow 0.9%), which was offset by less Fixed Income (\downarrow 1.3%) and Cash (\downarrow 0.8%).

The **Judicial Form Retirement System (JFRS)** administers the Judicial and Legislators' Retirement Plans (JRP and LRP). Both plans are invested in a similar manner and historically performance has been comparable.

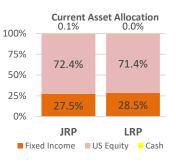
The JFRS portfolios both returned just over 9.3% (net of fees) for the 2018 fiscal year, which exceeded their assumed rate of return, but fell just short of their performance benchmarks.

Absolute performance was driven by strong results from U.S. equity (13.2%) markets.

Underperformance relative to benchmark was primarily driven by manager underperformance (-115 bps) within the plans U.S. equity portfolio. A slight overweight to equity along with

MV: \$397.6M

1525.8M



modest manager outperformance from fixed income portfolios both served to partial offset the negative relative performance.

Both plans continue to target an allocation of 70/30 to U.S. Equity and Fixed income assets. Both portfolios were rebalanced back to targets during the fiscal year, which saw the equity allocation reduced from prior year. Current allocations are shown above.