FY 2021 STATE ADMINISTERED RETIREMENT SYSTEMS – ACTUARIAL AND FINANCIAL UPDATE

2021 ACTUARIAL STAT AND FINANCIAL SUMMARY

The two most commonly discussed statistics in actuarial reports for public pension funds are the <u>Unfunded Liability</u> (UL) and the <u>Funding Level</u>. Below is a summary of the unfunded liability, funding levels, as well as the net plan assets financial statements for each of the state-administered retirement systems.

	ACTUARIAL: 2021 VALUATION STATISTICS				FINANCIALS: PLAN NET ASSETS		
	FUNDING LEVEL (%) *		UNFUNDED LIABILITY (\$)		MARKET VALUE (6/30/21)		
	Pension	Retiree Health	Pension	Retiree Health	Pension	Retiree Health	
KERS NONHAZ	16.8% ↑	50.2% ↑	\$13.585 B	\$1.283 B	\$3.085 B	\$1.353 B	
KERS HAZ	60.4% ↑	135.5% ↑	\$0.513 B	(\$0.151 B)	\$0.875 B	\$0.625 B	
SPRS	30.7% \uparrow	82.0% ↑	\$0.730 B	\$0.049 B	\$0.358 B	\$0.246 B	
CERS NONHAZ	51.8% ↑	85.4% ↑	\$7.179 B	\$0.503 B	\$8.671 B	\$3.142 B	
CERS HAZ	46.7% \uparrow	84.3% ↑	\$3.001 B	\$0.276 B	\$2.934 B	\$1.608 B	
TRS**	57.2%↓	60.0% 🔱	\$16.957 B	\$1.384 B	\$25.936 B	\$2.301 B	
LRP	108.9%	362.6% ↑	(\$0.007 B)	(\$0.041 B)	\$0.098 B	\$0.071 B	
JRP	94.7% \uparrow	272.5% ↑	\$0.020 B	<u>(\$0.068 B)</u>	\$0.448 B	\$0.134 B	
	Subtotal:		\$41.979 B	\$3.234 B	\$42.405 B	\$9.479 B	
Combined Total:			\$45.214 B		\$51.866 B		

^{*\(\}gamma\) denotes change in statistic from prior actuarial valuation. Funding Levels & Unfunded Liabilities are calculated using an actuarial value of assets (different from market value of assets reported above) that smooths individual year asset gains and losses over a 5 year period.

ALL SYSTEMS: UN	FUNDED LIABILITIES	ALL SYSTEMS: NET PLAN ASSETS		
PENSION UL	RETIREE HEALTH UL	<u>PENSION</u>	RETIREE HEALTH	
\$41.979 B 1.4 B	\$3.234 B ↓0.3 B	\$42.405 B 18.4 B	\$9.479 B ^2.2 B	

2021 vs. 2020 ACTUARIAL VALUATION STAT COMPARISON FOR 3 LARGEST SYSTEMS

Three of the state-administered retirement systems, KERS nonhazardous, CERS nonhazardous, and TRS, account for 90% of all unfunded liabilities (UL). Below is a comparison of the 2020 and 2021 actuarial valuation statistics for these 3 systems and the primary factors that resulted in the year over year changes.

KERS NONHAZ	CERS NONHAZ	TRS**	
↑ PENSION FUND	↑ PENSION FUND	↓ PENSION FUND	
• Funding Level: 14.2% to 16.8%	• Funding Level: 49.4% to 51.8%	 Funding Level: 58.4% to 57.2% 	
• UL: \$14.026 B to \$13.585 B	• UL: \$7.390 B to \$7.179 B	 UL: \$14.786 B to \$16.957 B 	
Investments > assumption	Investments > assumption	Change in assumptions**	
		Investments > assumption**	
↑ RETIREE HEALTH FUND	↑ RETIREE HEALTH FUND	↓ RETIREE HEALTH FUND	
• Funding Level: 42.7% to 50.2%	• Funding Level: 78.5% to 85.4%	 Funding Level: 61.7% to 60.0% 	
• UL: \$1.469 B to \$1.283 B	• UL: \$0.731 B to \$0.503 B	• UL: \$1.057 B to \$1.384 B	
Investments > assumption	Investments > assumption	Change in assumptions**	
Premium growth < assumption	Premium growth < assumption	Investments > assumption**	
		Premium growth < assumption	

^{**}For TRS, unfunded liabilities increased as a result of changes in assumptions that were incorporated into the 2021 valuation, which were partially offset by investment returns in excess of assumptions. The impact of the TRS assumption changes on employer costs to the pension fund will be phased-in over the next 5 years as the positive investment experience is phased-in according to the asset smoothing method. JRP/LRP modified assumptions in this valuation as well.

RECENT ACTUARIAL STAT TRENDS

Below is the 5 year trend of actuarial stats for KERS NH, KERS H, CERS NH, CERS H, and TRS.

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KERS	UL\$B
NONHAZ	Level %
KERS	UL\$B
HAZ	Level %
SPRS	UL\$B
SPKS	Level %
CERS	UL\$B
NONHAZ	Level %
CERS	UL\$B
HAZ	Level %
TRS	UL\$B
IKS	Level %

		PENSION		
2017	2018	2019	2020	2021
\$13.468	\$13.656	\$14.260	\$14.026	\$13.585
13.6%	12.9% U	13.4%	14.2%	16.8%
\$0.514	\$0.513	\$0.555	\$0.574	\$0.513
54.1%	55.5%	54.8% U	55.3%	60.4%
\$0.706	\$0.721	\$0.763	\$0.757	\$0.730
27.0%	27.1%	27.0%	28.1%	30.7%
\$6.039	\$6.241	\$7.307	\$7.390	\$7.179
52.8% U	52.7% U	49.1% U	49.4%	51.8%
\$2.411	\$2.471	\$2.870	\$2.983	\$3.001
48.1% U	48.4%	45.3% U	45.1% U	46.7%
\$14.305	\$14.300	\$14.523	\$14.786	\$16.957
56.4%	57.7%	58.1%	58.4%	57.2% U

INSURANCE						
2017	2018	2019	2020	2021		
\$1.859	\$1.548	\$1.742	\$1.469	\$1.283		
30.7%	36.4%	36.3% U	42.7%	50.2%		
(\$0.074)	(\$0.118)	(\$0.099)	(\$0.111)	(\$0.151)		
117.6% U	130.0%	123.1% U	126.0%	135.5%		
\$0.096	\$0.075	\$0.079	\$0.069	\$0.049		
65.2% U	71.6%	71.3%	75.0%	82.0%		
\$1.128	\$0.721	\$1.045	\$0.731	\$0.503		
66.4%	76.7%	70.7% U	78.5%	85.4%		
\$0.592	\$0.428	\$0.419	\$0.379	\$0.276		
66.9%	74.6%	75.8%	78.2%	84.3%		
\$2.706	\$2.127	\$1.691	\$1.057	\$1.384		
26.7%	36.3%	46.0%	61.7%	60.0%		

CASH FLOW & CHANGE IN PLAN ASSETS (IN MILLIONS)

Below is a summary of contributions, investment gains, and total payouts for KERS NH, CERS NH, and TRS.

	PENSION			RETIREE HEALTH			
	KERS NH	CERS NH	TRS	KERS NH	CERS NH	TRS	
Fund Assets Beginning of Year	\$2,362.2	\$7,110.9	\$20,717.0	\$1,006.5	\$2,498.1	1,616.7	
Employee Contributions	\$90.2	\$165.7	\$327.8	\$6.3	\$13.6	\$187.6	
Employer Contributions	1,134.2	472.2	1,147.0	182.0	124.7	184.9	
Investment Income	50.6	135.7	257.6	18.5	41.0	3.7	
Other	<u>0</u>	<u>0</u>	<u>0</u>	<u>22.0</u>	<u>26.4</u>	<u>120.8</u>	
Total Cash Inflows	\$1,275.0	\$773.6	\$1,732.4	\$228.8	\$205.7	\$497.0	
Less: Total Payouts	\$1,030.0	\$862.4	\$2,273.2	\$122.3	\$140.6	\$312.6	
Net Cash Flow Before Asset Gains	\$245.0	(\$88.8)	(\$540.8)	\$106.5	\$65.1	\$184.4	
Plus: Asset Gains or (Losses)	\$477.8	\$1,648.5	\$5,759.3	\$240.1	\$578.6	\$499.5	
Fund Assets End of Year	\$3,085.0	\$8,670.6	\$25,935.8	\$1,353.1	\$3,141.8	\$2,300.5	
Net Change in Plan Assets	\$722.8	\$1,559.7	\$5,218.8	\$346.6	\$643.7	\$683.8	

PENSION FUND ASSET CHANGES

Asset growth significantly up, driven primarily by investment returns

The KERS NH, CERS NH, and TRS pension funds experienced significant asset growth in FY 21, with the three pension funds recording an investment return of 22.6%, 25.7%, and 29.6% respectively. While the CERS NH and TRS pension funds did have negative cash flows before asset gains, the significant investment gains resulted in overall asset gains to the KERS NH, CERS NH, and TRS pension funds of \$722.8, \$1,559.7, and \$5,218.8 million in FY 21.

RETIREE HEALTH FUND ASSET CHANGES

The KERS NH, CERS NH, and TRS retiree health funds experienced significant asset growth in FY 21, with the three retiree health funds recording positive cash flows across each fund and an investment return of 25.2%, 24.8%, and 31.1% respectively. Overall asset gains to the KERS NH, CERS NH, and TRS retiree health funds were \$346.6, \$643.7, and \$683.8 million in FY 21.