

FY 2018 State Administered Retirement Systems – Actuarial and Financial Update

The two most commonly discussed statistics in actuarial reports for public pension funds are the Unfunded Liability (UL) and the Funding Level. Below is a summary of the unfunded liability, funding levels, as well as net plan assets for all state-administered retirement systems as of June 30, 2018:

System	2018 Actuarial Statistics (PRELIMINARY)				Plan Net Assets	
	Funding Level (%) *		Unfunded Liability (\$)		Market Value	
	Pension	Retiree Health	Pension	Retiree Health	Pension	Retiree Health
KERS NH	12.9% ↓	36.4% ↑	\$13.656 B	\$1.548 B	\$2.05B	\$0.85B
KERS H	55.5% ↑	130.0% ↑	\$0.513 B	-\$0.118 B	\$0.65B	\$0.51B
CERS NH	52.7% ↓	76.7% ↑	\$6.241 B	\$0.721 B	\$7.09B	\$2.35B
CERS H	48.4% ↑	74.6% ↑	\$2.471 B	\$0.428 B	\$2.36B	\$1.27B
SPRS	27.1% ↑	71.6% ↑	\$0.721 B	\$0.075 B	\$0.27B	\$0.19B
TRS	57.7% ↑	36.3% ↑	\$14.300 B	\$2.127 B	\$19.98B	\$1.19B
LRP	97.8% ↑	196.6% ↑	\$0.002 B	-\$0.022 B	\$0.07B	\$0.04B
JRP	82.9% ↑	158.7% ↑	\$0.064 B	-\$0.031 B	\$0.31B	\$0.09B
Subtotal:			\$37.968B	\$4.728B	\$32.78B	\$6.49B
Combined Total:			\$42.696B		\$39.27B	

↑ or ↓ denotes change in statistic from prior fiscal year * Funding Levels are calculated using an actuarial smoothed market value, with exception of JFRS plans which are GASB values and calculated using actual market values.

NOTE: In addition to the Defined Benefit Plans listed above, JFRS also administers hybrid cash balance plans for JRP and LRP. The plans are managed separately and valuations are conducted independently. As of June 30, 2018 the LRP Hybrid Cash Balance pension and retiree health plans were 98.16% and 83.01% funded respectively. As of June 30, 2018 the JRP Hybrid Cash Balance pension and retiree health plans were 100.35% and 137.48% funded respectively.

ALL PENSION FUNDS		ALL RETIREE HEALTH FUNDS	
TOTAL UAL	TOTAL ASSETS	TOTAL UAL	TOTAL ASSETS
\$37.97B ↑0.43B	\$32.78 B ↑1.78B	\$4.73B ↓1.54B	\$6.49B ↑0.63B

Summary of 2018 Results and Experience

KERS - NH	CERS – NH	TRS
<p>↓ PENSION</p> <ul style="list-style-type: none"> Funding Level: 13.6% to 12.9% UL: \$13.5 B to \$13.6 B <ul style="list-style-type: none"> Negative Experience: \$66 M Plan changes: \$10 M <p>↑ HEALTH FUND:</p> <ul style="list-style-type: none"> Funding Level: 30.7% to 36.4% UL: \$1.9 B to \$1.5 B <ul style="list-style-type: none"> Premium experience: \$329 M 	<p>↓ PENSION:</p> <ul style="list-style-type: none"> Funding Level: 52.8% to 52.7% UL: \$6.0 B to \$6.2 B <ul style="list-style-type: none"> Negative Experience: \$82 M Plan changes: \$16 M <p>↑ HEALTH FUND:</p> <ul style="list-style-type: none"> Funding Level: 66.4% to 76.7% UL: \$1.1 B to \$0.7 B <ul style="list-style-type: none"> Premium experience: \$425 M 	<p>↑ PENSION:</p> <ul style="list-style-type: none"> Funding Level: 56.4% to 57.7% UL: \$14.3 B to \$14.3 B <ul style="list-style-type: none"> Investment Experience: \$298 M Salary Inc. Experience: \$73.1 M Negative Experience: \$172 M Negative Amortization: \$185 M <p>↑ HEALTH FUND:</p> <ul style="list-style-type: none"> Funding Level: 21.9% to 36.3% UL: \$2.7 B to \$2.1 B <ul style="list-style-type: none"> Claims experience: \$660 M

Recent Actuarial Trends

Below is a summary of the unfunded liability and funding levels of KERS NH, CERS NH, and TRS over the past five years:

		PENSION					RETIREE HEALTH				
		2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
KERS NONHAZ	UL \$	\$9.13	\$10.01	\$11.11	\$13.47	\$13.66	\$1.61	\$1.72	\$1.71	\$1.86	\$1.55
	Level %	21.0%	19.0%	16.0%	13.6%	12.9%	27.9%	28.8%	30.3%	30.7%	36.4%
CERS NONHAZ	UL \$	\$3.66	\$4.27	\$4.54	\$6.04	\$6.24	\$0.79	\$0.91	\$0.91	\$1.13	\$0.72
	Level %	62.6%	60.3%	59.0%	52.8%	52.7%	70.0%	68.7%	69.6%	66.4%	76.7%
TRS	UL \$	\$14.01	\$13.93	\$14.53	\$14.31	\$14.30	\$2.69	\$2.89	\$2.84	\$2.71	\$2.13
	Level %	53.6%	55.3%	54.6%	56.4%	57.7%	15.9%	18.1%	21.9%	26.7%	36.3%

Pension: The KERS and CERS plans have continued to experience growth in UL, but this growth slowed during 2018. The majority of the recent growth has been driven by assumption changes (2015, 2016, and 2017). The TRS pension plans total unfunded liability has grown since 2014, but the past two fiscal years have resulted in a slight decline and asset growth has led to improved funding levels.

Retiree Health: Across both KRS and TRS, the funding health of the retiree health plans has improved. While the KERS and CERS plans did experience UL growth in 2015 and 2017 (assumption changes), better than expected experience relative to premiums has helped reduce the total UL and funding levels have improved. The TRS retiree health plan has followed a similar trend, with significant improvement recently as a result of strong cash flow and better than expected experience relative to claims.

Cash Flow and Change in Plan Assets

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
■ Employee Contributions	\$105.0	\$160.4	\$319.1	\$5.8	\$10.8	\$130.8
■ Employer Contributions	689.1	358.0	1,048.7	136.6	125.3	187.1
■ Investment Income	34.9	101.5	379.2	11.5	26.9	7.9
■ Asset Gains/(Losses)	<u>113.0</u>	<u>477.2</u>	<u>1,574.1</u>	<u>49.9</u>	<u>170.7</u>	<u>69.0</u>
Total Additions	\$942.0	\$1,097.1	\$3,321.0	\$203.8	\$333.7	\$394.7
▲ Total Payouts	\$991.7	\$760.8	\$2,047.1	\$132.7	\$136.6	\$162.8
Net Increase or (Decrease)	(\$49.7)	\$336.3	\$1,273.9	\$71.1	\$197.1	\$231.9

PENSION

Cash Flow, Investment Gains drive results

Cash flow across three major plans was negative (not including asset gains), but strong investment gains contributed to an increase in total assets for CERS and TRS. KERS posted solid results, but gains did not exceed negative cash flow. Below is summary of key drivers in asset growth during fiscal year:

KERS NH

↓\$49.7 million from FY17
Less contributions (lower payroll growth), less investment income/gains

CERS NH

↑\$366.3 million from FY17
Slightly higher negative cash flow, but 8.8% Investment return led to asset growth.

TRS

↑\$1.2 Billion from FY17
Key factors included state contributions and 10.5% Investment return

HEALTH

Consistent cash flow and positive returns during the FY drove asset growth for plans.

KERS NH:

8.8% return during FY

CERS NH:

9.2% return during FY

TRS:

8.5% return during FY