



# Public Pension Oversight Board

December 14 Meeting

**KENTUCKY RETIREMENT SYSTEMS**

**DAVID EAGER, EXECUTIVE DIRECTOR**



# Agenda

- Summary of June 30, 2020 Valuation Results
- Projection Information
- Summary of Actuarial Audit



# Unfunded Actuarial Accrued Liability

## Change from June 30, 2019 to June 30, 2020

\$ Billions	2019 Valuation			2020 Valuation			Change In UAAL
	Pension	Insurance	Combined	Pension	Insurance	Combined	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
KERS Non-Hazardous	\$14.26	\$1.74	\$16.00	\$14.03	\$1.47	\$15.50	<b>\$(0.50)</b>
KERS Hazardous	0.55	(0.10)	0.45	0.57	(0.11)	0.46	<b>0.01</b>
CERS Non-Hazardous	7.31	1.04	8.35	7.39	0.73	8.12	<b>(0.23)</b>
CERS Hazardous	2.87	0.42	3.29	2.98	0.38	3.36	<b>0.07</b>
SPRS	0.76	0.08	0.84	0.76	0.07	0.83	<b>(0.01)</b>
<b>Total</b>	<b>\$25.75</b>	<b>\$3.18</b>	<b>\$28.93</b>	<b>\$25.73</b>	<b>\$2.54</b>	<b>\$28.27</b>	<b>\$(0.66)</b>



# Funded Ratio

Change from June 30, 2019 to June 30, 2020

	2019 Valuation		2020 Valuation		Change In Funded Ratio	
	Pension	Insurance	Pension	Insurance	Pension	Insurance
(1)	(2)	(3)	(4)	(5)	(6)	(7)
KERS Non-Hazardous	13.4%	36.3%	14.2%	42.7%	<b>0.8%</b>	<b>6.4%</b>
KERS Hazardous	54.8%	123.1%	55.3%	126.0%	<b>0.5%</b>	<b>2.9%</b>
CERS Non-Hazardous	49.1%	70.7%	49.4%	78.5%	<b>0.3%</b>	<b>7.8%</b>
CERS Hazardous	45.3%	75.8%	45.1%	78.2%	<b>(0.2)%</b>	<b>2.4%</b>
SPRS	27.0%	71.3%	28.1%	75.0%	<b>1.1%</b>	<b>3.7%</b>



# Employer Contribution Rates

## Change from FYE 2021 to FYE 2022

Fund	Actuarially Determined Rates 2019 Valuation (FYE 2021)			Actuarially Determined Rates 2020 Valuation (FYE 2022)			FYE 2021 Board Certified Rates	FYE 2022 Board Certified Rates
	Pension	Insurance	Combined	Pension	Insurance	Combined		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
KERS Non-Hazardous	73.28%	11.15%	<b>84.43%</b>	75.32%	9.71%	<b>85.03%</b>	<b>84.43%</b>	<b>85.03%</b>
KERS Hazardous	36.00%	0.00%	<b>36.00%</b>	33.43%	0.00%	<b>33.43%</b>	<b>36.00%</b>	<b>33.43%</b>
CERS Non-Hazardous	23.81%	5.43%	<b>29.24%</b>	23.88%	4.17%	<b>28.05%</b>	<b>24.06%</b>	<b>26.95%</b>
CERS Hazardous	42.02%	9.86%	<b>51.88%</b>	43.23%	8.73%	<b>51.96%</b>	<b>39.58%</b>	<b>44.33%</b>
SPRS	123.79%	19.69%	<b>143.48%</b>	127.99%	18.07%	<b>146.06%</b>	<b>143.48%</b>	<b>146.06%</b>

Actuarially determined rates from the 2019 valuation reflect changes from SB249, passed during the 2020 legislative session



# Calculated Contributions

## Change from FYE 2021 to FYE 2022

\$ Millions	2019 Valuation (FYE 2021)			2020 Valuation (FYE 2022)			Change In \$
	Pension	Insurance	Combined	Pension	Insurance	Combined	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
KERS Non-Hazardous <sup>1</sup>	\$1,053	\$160	\$1,213	\$1,045	\$134	\$1,179	<b>\$(34)</b>
KERS Hazardous	54	0	54	57	0	57	<b>3</b>
CERS Non-Hazardous <sup>2</sup>	496	122	618	596	109	705	<b>87</b>
CERS Hazardous <sup>2</sup>	172	54	226	206	51	257	<b>31</b>
SPRS	59	9	68	59	8	67	<b>(1)</b>

<sup>1</sup> The KERS non-hazardous amount for FYE 2021 does not reflect a \$102M reduction in contributions due to the maintenance of a lower contribution rate for the Quasi agencies.

<sup>2</sup> The CERS contribution amounts reflect the effect of the contribution rate phase-in provision.



# Projection Information – KERS Non-Haz

## KERS Non-Hazardous Fund

### (Pension & Retiree Health Combined)

Valuation Year	2020	2021	2025	2030	2040	20-YR Total (\$)
Contribution Fiscal Year	FYE2022	FYE2023	FYE2027	FYE2032	FYE2042	YR 100% Funded
<b>CURRENT</b>	\$1,168 M	\$1,165 M	\$1,153 M	\$1,134 M	\$1,144 M	\$22,793 M
<i>2020 Valuation Projections</i>	85.0% of Pay	85.3% of Pay	85.8% of Pay	85.4% of Pay	84.2% of Pay	
	18.1% Funded	19.1% Funded	24.6% Funded	31.7% Funded	53.1% Funded	2049
	\$15.5B UAL	\$15.4B UAL	\$14.4B UAL	\$12.7B UAL	\$7.6B UAL	

**Note:** The projection is based on the results of the June 30, 2020 actuarial valuation and assumes that all actuarial assumptions are realized, including the assumed annual asset return of 5.25% for the retirement fund and 6.25% for the insurance fund. The total active population is assumed to decrease 2% each year for each of the next 30 years.

The contribution rate established in the Commonwealth's biennium budget is assumed to be equal to the full actuarially determined contribution rate. The 2020 legislative session did not set the employer contribution rates for FYE 2022. Employer contribution rates for FYE 2022 are assumed to be based on the June 30, 2020 actuarial valuation.





# Projection Information – CERS Non-Haz

## CERS Non-Hazardous Fund

(Pension & Retiree Health Combined)

Valuation Year	2020	2021	2025	2030	2040	20-YR Total (\$)
Contribution Fiscal Year	FYE2022	FYE2023	FYE2027	FYE2032	FYE2042	YR 100% Funded
<b>CURRENT</b>	\$705 M	\$737 M	\$781 M	\$819 M	\$991 M	\$16,485 M
<i>2020 Valuation Projections</i>	27.0% of Pay	27.6% of Pay	27.0% of Pay	25.5% of Pay	24.4% of Pay	
	54.9% Funded	55.6% Funded	58.2% Funded	63.3% Funded	77.0% Funded	2049
	\$8.1B UAL	\$8.2B UAL	\$8.5B UAL	\$8.1B UAL	\$5.6B UAL	

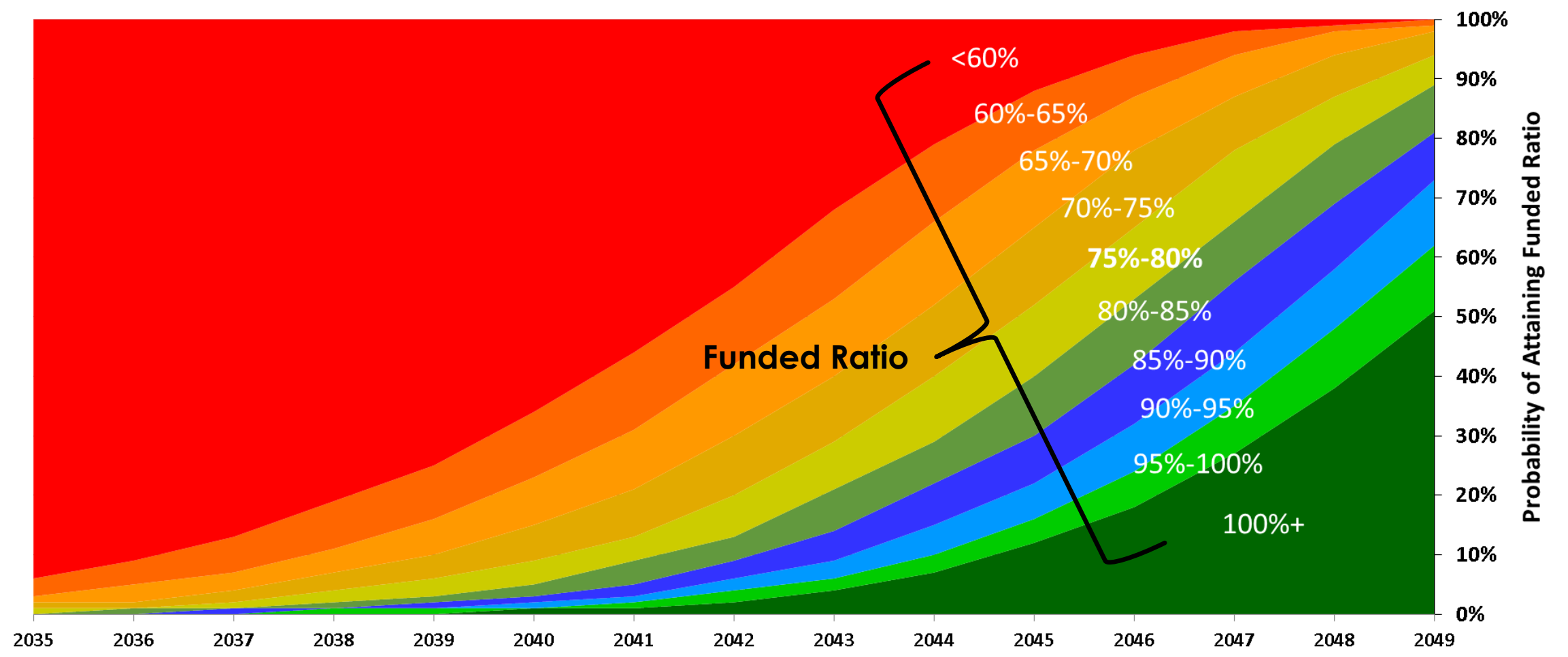
**Note:** The projection is based on the results of the June 30, 2020 actuarial valuation and assumes that all actuarial assumptions are realized, including the assumed annual asset return of 6.25%. New active members are assumed to be hired to replace the current active members as they are assumed to terminate employment or retire. The total active population is assumed to remain constant through the entire projection.

The Board-certified contribution rate paid by employers is assumed to be equal to the full actuarially determined contribution rate, except as allowed by SB 249 (passed during the 2020 legislative session), which set the employer contribution rates for FYE 2021 equal to the rates for FYE 2020, and House Bill 362 (passed during the 2018 legislative session), which limits the certified contribution rate to a 12% increase from the prior year for the period of July 1, 2018 to June 30, 2028.





# Stochastic Projection Illustration – KERS Non-Haz





# Summary of Actuarial Audit Findings

- KRS Requires an Actuarial Audit Performed Every Five Years
  - Segal Consulting performed an audit of the 2018 experience study and 2019 valuation report
- Summary of Findings
  - 2019 valuation results are reasonable, based on appropriate assumptions, and the reports comply with the Actuarial Standards of Practice
  - Suggested additional analysis and disclosure regarding risk
    - Suggestion is consistent with planned Stress Test Analysis to be performed on the 2020 actuarial valuation