# County Employees Retirement System

GASB No. 67 Accounting Valuation Report As of June 30, 2022





December 5, 2022

Board of Trustees County Employees Retirement System Perimeter Park West 1260 Louisville Road Frankfort, KY 40601

Re: GASB 67 Reporting - Actuarial Information - County Employees Retirement System

Dear Members of the Board:

This report provided herein contains certain information for the **County Employees Retirement System (CERS)** in connection with the Governmental Accounting Standards Board (GASB) Statement No. 67, "Financial Reporting for Pension Plans" for the fiscal year ending June 30, 2022. A separate report will be provided at a later date with additional accounting information determined in accordance with GASB Statement No. 68, "Accounting and Financial Reporting for Pensions".

The liability calculations presented in this report were performed for the purpose of satisfying the requirements of GASB No. 67 and are not applicable for other purposes, such as determining the plan's funding requirements. The plan's liability for other purposes may produce significantly different results. This report may be provided to parties other than the Board of Trustees of the County Employees Retirement System only in its entirety and only with the permission of the Board.

The total pension liability, net pension liability, and sensitivity information shown in this report are based on an actuarial valuation date of June 30, 2021. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending June 30, 2022 using generally accepted actuarial principles. GASB 67 requires the disclosure of a 10-year history of certain information in the Required Supplementary Information within the annual financial report. The exhibits provided in this report include the applicable information for historical years that were calculated in accordance with this accounting standard. Information disclosed for years prior to June 30, 2017 were prepared by the prior actuary.

#### **Actuarial Assumptions and Plan Provisions**

There have been no actuarial assumption or method changes since June 30, 2021. Additionally, there have been no plan provision changes that would materially impact the total pension liability since June 30, 2021.

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#### **Single Discount Rate**

A single discount rate of 6.25% for the non-hazardous and hazardous plans was used to measure the total pension liability for the fiscal year ending June 30, 2022. This single discount rate was based on the expected rate of return on pension plan investments for each plan. Based on the stated assumptions and the projection of cash flows as of each fiscal year ending, the pension plan's fiduciary net position and future contributions were projected to be sufficient to finance all the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of the projected benefit payments to determine the total pension liability for each plan.

The projection of cash flows used to determine the single discount rate must include an assumption regarding actual employer contributions made each future year. Except where noted below, future contributions are projected assuming that the entire actuarially determined employer contribution is received by each plan each future year, calculated in accordance with the current funding policy. The assumed future employer contributions reflect the provisions of House Bill 362 (passed during the 2018 legislative session) which limit the increases to the employer contribution rates to 12% over the prior fiscal year through June 30, 2028.

#### 401(h) Subaccount

Based on guidance issued by GASB in connection with GASB Statement No. 74, the 1% of pay member contributions for Tier 2 and Tier 3 members to a 401(h) subaccount is considered an OPEB asset. As a result, the reported fiduciary net positions as of June 30, 2017 and later are net of the 401(h) asset balance.

#### **Additional Disclosures**

This report is based upon information, furnished to us by the Kentucky Public Pensions Authority (KPPA), which includes benefit provisions, membership information, and financial data. We did not audit this data and information, but we did apply a number of tests and concluded that it was reasonable and consistent. GRS is not responsible for the accuracy or completeness of the information provided by KPPA. Please see the "Actuarial Valuation Report as of June 30, 2021" for additional discussion of the nature of the actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions. These reports should be considered together as a complete report for the fiscal year ending June 30, 2022.



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To the best of our knowledge, this report is complete and accurate and is in accordance with generally recognized actuarial practices and methods. Both of the undersigned are Enrolled Actuaries, members of the American Academy of Actuaries and meet all of the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. In addition, both are independent of KPPA and are experienced in performing valuations for large public retirement systems. This communication shall not be construed to provide tax advice, legal advice or investment advice.

Sincerely,

Gabriel Roeder Smith & Co.

Daniel J. White, FSA, EA, MAAA Senior Consultant and Actuary Janie Shaw, ASA, EA, MAAA Consultant and Actuary



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# SECTION 1

**EXHIBIT 1a** 

## Schedule of the Employers' Net Pension Liability – CERS Non-Hazardous Plan (\$ in thousands)

Fiscal Year Ending June 30, (1)	Total Pension Liability (2)	Plan Fiduciary Net Position (3)	L	Employers' Net Pension Liability (Asset) (4) = (2) - (3)	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability (5) = (3) / (2)	Covered Employee Payroll <sup>1</sup> (6)	Net Pension Liability as a Percentage of Covered Employee Payroll (7) = (4) / (6)
2022	\$ 15,192,599	\$ 7,963,586	\$	7,229,013	52.42%	\$ 2,835,173	254.98%
2021	14,941,437	8,565,652		6,375,785	57.33%	2,446,612	260.60%
2020	14,697,244	7,027,327		7,669,917	47.81%	2,462,752	311.44%
2019	14,192,966	7,159,921		7,033,045	50.45%	2,424,796	290.05%
2018	13,109,268	7,018,963		6,090,305	53.54%	2,454,927	248.08%
2017	12,540,545	6,687,237		5,853,308	53.32%	2,376,290	246.32%
2016	11,065,013	6,141,395		4,923,618	55.50%	2,417,187	203.69%
2015	10,740,325	6,440,800		4,299,525	59.97%	2,296,716	187.20%
2014	9,772,522	6,528,146		3,244,376	66.80%	2,272,270	142.78%

#### Note:



<sup>&</sup>lt;sup>1</sup> Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

**EXHIBIT 1b** 

## Schedule of the Employers' Net Pension Liability – CERS Hazardous Plan (\$ in thousands)

Fiscal Year Ending June 30, (1)	Total Pension Liability (2)	Plan Fiduciary Net Position (3)	<u> </u>	Employers' Net Pension Liability (Asset) (4) = (2) - (3)	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability (5) = (3) / (2)	Covered Employee Payroll <sup>1</sup> (6)	Net Pension Liability as a Percentage of Covered Employee Payroll (7) = (4) / (6)
2022	\$ 5,769,691	\$ 2,718,234	\$	3,051,457	47.11%	\$ 666,346	457.94%
2021	5,576,567	2,914,408		2,662,159	52.26%	572,484	465.02%
2020	5,394,732	2,379,704		3,015,028	44.11%	559,551	538.83%
2019	5,176,003	2,413,708		2,762,295	46.63%	553,541	499.02%
2018	4,766,794	2,348,337		2,418,457	49.26%	562,853	429.68%
2017	4,455,275	2,217,996		2,237,279	49.78%	526,559	424.89%
2016	3,726,115	2,010,174		1,715,941	53.95%	526,334	326.02%
2015	3,613,308	2,078,202		1,535,106	57.52%	483,641	317.41%
2014	3,288,826	2,087,002		1,201,824	63.46%	479,164	250.82%

#### Note:



<sup>&</sup>lt;sup>1</sup> Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

### **EXHIBIT 2a**

# Schedule of the Employers' Net Pension Liability – CERS Non-Hazardous Plan

(\$ in thousands)

Change in the Net Pension Liability	_	2022		2021		2020		2019	_	2018	2017			2016	2015		2014	
Total pension liability																		
Service Cost	\$	272,250	\$	280,165	\$	280,092	\$	254,643	\$	254,169	\$	193,082	\$	209,101	\$	207,400	\$	192,482
Interest		906,401		892,309		861,720		794,935		760,622		803,555		780,587		733,002		710,526
Benefit Changes		0		4,106		0		0		15,708		0		0		0		0
Difference between actual and expected experience		(49,439)		(91,776)		173,345		87,377		279,401		(208,015)		0		49,966		0
Assumption Changes		0		0		0		727,351		0		1,388,800		0		606,293		0
Benefit Payments		(878,050)		(840,611)		(810,879)		(780,608)		(741,177)		(701,891)		(665,000)		(628,858)		(597,136)
Net Change in Total Pension Liability	\$	251,162	\$	244,193	\$	504,278	\$	1,083,698	\$	568,723	\$	1,475,532	\$	324,687	\$	967,803	\$	305,872
Total Pension Liability - Beginning	\$	14,941,437	\$	14,697,244	\$	14,192,966	\$	13,109,268	\$	12,540,545	\$	11,065,013	\$	10,740,325	\$	9,772,522	\$	9,466,650
Total Pension Liability - Ending (a)	\$	15,192,599	\$	14,941,437	\$	14,697,244	\$	14,192,966	\$	13,109,268	\$	12,540,545	\$	11,065,013	\$	10,740,325	\$	9,772,522
Plan Fiduciary Net Position <sup>1</sup>																		
Contributions - Employer	\$	606,807	\$	472,228	\$	475,416	\$	393,453	\$	358,017	\$	333,554	\$	284,105	\$	298,565	\$	324,231
Contributions - Member <sup>2</sup>		186,648		165,698		168,994		159,064		160,370		150,715		141,674		140,311		128,568
Refunds of contributions to members		(19,789)		(13,862)		(14,918)		(14,387)		(14,608)		(14,430)		(13,753)		(13,523)		(14,286)
Retirement benefits		(858,261)		(826,749)		(795,960)		(766,221)		(726,569)		(687,461)		(651,246)		(615,335)		(582,850)
Net Investment Income <sup>2</sup>		(494,801)		1,762,739		56,178		390,664		573,829		825,900		(40,800)		110,568		895,530
Administrative Expense		(22,670)		(21,729)		(22,304)		(21,659)		(19,592)		(19,609)		(19,385)		(18,212)		(18,615)
Other		0		0		0		44 5		361 <sup>5</sup>		(42,827) 4		0		10,280		0
Net Change in Plan Fiduciary Net Position	\$	(602,066)	\$	1,538,325	\$	(132,594)	\$	140,958	\$	331,808	\$	545,843	\$	(299,405)	\$	(87,346)	\$	732,578
Plan Fiduciary Net Position - Beginning	\$	8,565,652	\$	7,027,327	\$	7,159,921	\$	7,018,963	\$	6,687,237	\$	6,141,395	\$	6,440,800	\$	6,528,146	\$	5,795,568
Prior Year Adjustment		0_		0		0_		0_		(82)		0		0		0		0
Plan Fiduciary Net Position - Ending (b)	\$	7,963,586	\$	8,565,652	\$	7,027,327	\$	7,159,921	\$	7,018,963	\$	6,687,237	\$	6,141,395	\$	6,440,800	\$	6,528,146
Net Pension Liability - Ending (a) - (b) Plan Fiduciary Net Position as a Percentage	\$	7,229,013	\$	6,375,785	\$	7,669,917	\$	7,033,045	\$	6,090,305	\$	5,853,308	\$	4,923,618	\$	4,299,525	\$	3,244,376
of the Total Pension Liability		52.42%		57.33%		47.81%		50.45%		53.54%		53.32%		55.50%		59.97%		66.80%
Covered Employee Payroll <sup>3</sup>	\$	2,835,173	\$	2,446,612	Ś	2,462,752	Ś		\$	2,454,927	ċ	2,376,290	Ś	2,417,187	ċ	2,296,716	Ś	2,272,270
Net Pension Liability as a Percentage of	ş	, ,	ş	, ,	Ş	, ,	Ş		Ş	, ,	Ş		Ş		Ş	, ,	Ş	, ,
Covered Employee Payroll		254.98%		260.60%		311.44%		290.05%		248.08%		246.32%		203.69%		187.20%		142.78%

#### Notes:

<sup>&</sup>lt;sup>5</sup> Northern Trust Settlement



 $<sup>^{1}\,</sup>$  Does not include 401(h) assets for fiscal years 2017 and later. Assets totaled \$98,760,000 as of June 30, 2022

<sup>&</sup>lt;sup>2</sup> Does not include 401(h) contributions or associated investment income for fiscal years 2017 and later For fiscal year 2022, 401(h) contributions equaled -\$60,000; and associated investment return equaled -\$6,196,000

<sup>&</sup>lt;sup>3</sup> Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later

<sup>&</sup>lt;sup>4</sup> Adjustment due to 401(h) plan asset balance being considered an OPEB asset under GASB 74 for fiscal years 2017 and later

### **EXHIBIT 2b**

# Schedule of the Employers' Net Pension Liability – CERS Hazardous Plan

(\$ in thousands)

Change in the Net Pension Liability		2022		2021		2020		2019	019 2018			2017		2016	2015		2014	
Total pension liability																		
Service Cost	Ś	109,683	Ś	109,350	Ś	109,887	Ś	77,426	Ś	81,103	Ś	58,343	\$	66,249	Ś	71,934	Ś	66,761
Interest	,	338,799	,	327,963	,	314,762	*	289,741	*	270,694	,	270,860	,	262,886	•	247,008	,	238,665
Benefit Changes		0		333		0		0		2,172		0		0		0		0
Difference between actual and expected experience		56,197		38,850		73,696		27,364		205,882		92,588		0		41,935		0
Assumption Changes		0		0		0		276,541		0		536,667		0		166,849		0
Benefit Payments		(311,555)		(294,661)		(279,616)		(261,863)		(248,332)		(229,299)		(216,327)		(203,244)		(192,299)
Net Change in Total Pension Liability	\$	193,124	\$	181,835	\$	218,729	\$	409,209	\$	311,519	\$	729,159	\$	112,807	\$	324,482	\$	113,127
Total Pension Liability - Beginning	\$	5,576,567	\$	5,394,732	\$	5,176,003	\$	4,766,794	\$	4,455,275	\$	3,726,115	\$	3,613,308	\$	3,288,826	\$	3,175,699
Total Pension Liability - Ending (a)	\$	5,769,691	\$	5,576,567	\$	5,394,732	\$	5,176,003	\$	4,766,794	\$	4,455,275	\$	3,726,115	\$	3,613,308	\$	3,288,826
Plan Fiduciary Net Position <sup>1</sup>																		
Contributions - Employer	\$	222,028	\$	172,205	\$	168,443	\$	138,053	\$	127,660	\$	115,947	\$	105,713	\$	108,071	\$	115,240
Contributions - Member <sup>2</sup>		69,565		62,367		63,236		58,661		61,089		60,101		52,972		47,692		43,722
Refunds of contributions to members		(5,766)		(4,662)		(3,814)		(2,854)		(4,214)		(2,315)		(2,879)		(3,111)		(2,664)
Retirement benefits		(305,789)		(289,999)		(275,802)		(259,009)		(244,118)		(226,984)		(213,448)		(200,134)		(189,635)
Net Investment Income <sup>2</sup>		(174,217)		596,641		15,914		132,232		191,324		270,473		(9,020)		37,104		288,490
Administrative Expense		(1,995)		(1,848)		(1,981)		(1,726)		(1,504)		(1,421)		(1,366)		(1,288)		(1,721)
Other		0		0		0		14 5		111 5		(7,979) 4		0		2,865		0
Net Change in Plan Fiduciary Net Position	\$	(196,174)	\$	534,704	\$	(34,004)	\$	65,371	\$	130,348	\$	207,822	\$	(68,028)	\$	(8,801)	\$	253,432
Plan Fiduciary Net Position - Beginning	\$	2,914,408	\$	2,379,704	\$	2,413,708	\$	2,348,337	\$	2,217,996	\$	2,010,174	\$	2,078,202	\$	2,087,002	\$	1,833,570
Prior Year Adjustment		0		0		0		0		(7)		0		0		0		0
Plan Fiduciary Net Position - Ending (b)	\$	2,718,234	\$	2,914,408	\$	2,379,704	\$	2,413,708	\$	2,348,337	\$	2,217,996	\$	2,010,174	\$	2,078,202	\$	2,087,002
Net Pension Liability - Ending (a) - (b)	\$	3,051,457	\$	2,662,159	\$	3,015,028	\$	2,762,295	\$	2,418,457	\$	2,237,279	\$	1,715,941	\$	1,535,106	\$	1,201,824
Plan Fiduciary Net Position as a Percentage																		
of the Total Pension Liability		47.11%		52.26%		44.11%		46.63%		49.26%		49.78%		53.95%		57.52%		63.46%
Covered Employee Payroll <sup>3</sup> Net Pension Liability as a Percentage of	\$	666,346	\$	572,484	\$	559,551	\$	553,541	\$	562,853	\$	526,559	\$	526,334	\$	483,641	\$	479,164
Covered Employee Payroll		457.94%		465.02%		538.83%		499.02%		429.68%		424.89%		326.02%		317.41%		250.82%

<sup>&</sup>lt;sup>5</sup> Northern Trust Settlement



 $<sup>^{1}</sup>$  Does not include 401(h) assets for fiscal years 2017 and later. Assets totaled \$18,694,000 as of June 30, 2022

 $<sup>^{2}</sup>$  Does not include 401(h) contributions or associated investment income for fiscal years 2017 and later For fiscal year 2022, 401(h) contributions equaled -\$104,000; and associated investment return equaled -\$1,215,000

<sup>&</sup>lt;sup>3</sup> Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later

<sup>&</sup>lt;sup>4</sup> Adjustment due to 401(h) plan asset balance being considered an OPEB asset under GASB 74 for fiscal years 2017 and later

### **EXHIBIT 3a**

# Schedule of Employers' Contributions – CERS Non-Hazardous Plan

(\$ in thousands)

_	Fiscal Year Ending	Det	tuarially termined tribution <sup>1</sup>	Total mployer ntributions	-	ontribution Deficiency (Excess)	Covered Employee Payroll <sup>2</sup>	Actual Contributions as a Percentage of Covered Payroll
	2022	\$	636,071	\$ 606,807	\$	29,264	\$ 2,835,173	21.40%
	2021		582,538	472,228		110,310	2,446,612	19.30%
	2020		554,612	475,416		79,196	2,462,752	19.30%
	2019		529,575	393,453		136,122	2,424,796	16.23%
	2018		355,473	358,017		(2,544)	2,454,927	14.58%
	2017		331,492	333,554		(2,062)	2,376,290	14.04%
	2016		282,767	284,106		(1,339)	2,417,187	11.75%
	2015		297,715	298,566		(851)	2,296,716	13.00%
	2014		324,231	324,231		0	2,272,270	14.27%
	2013		294,914	294,914		0	2,236,277	13.19%

#### Notes:



<sup>&</sup>lt;sup>1</sup> Actuarially determined contribution for fiscal year ending 2022 is based on the contribution rate calculated with the June 30, 2020 actuarial valuation.

<sup>&</sup>lt;sup>2</sup> Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

### **EXHIBIT 3b**

### Schedule of Employers' Contributions – CERS Hazardous Plan (\$ in thousands)

Actuarially Determined Contribution <sup>1</sup>	Total Employer Contributions	Contribution Deficiency (Excess)	Covered Employee Payroll <sup>2</sup>	Actual Contributions as a Percentage of Covered Payroll
\$ 269,542	\$ 222,028	\$ 47,514	\$ 666,346	33.32%
240,558	172,205	68,353	572,484	30.08%
206,922	168,443	38,479	559,551	30.10%
197,559	138,053	59,506	553,541	24.94%
124,953	127,660	(2,707)	562,853	22.68%
114,316	115,947	(1,631)	526,559	22.02%
104,952	105,713	(761)	526,334	20.08%
107,514	108,071	(557)	483,641	22.35%
115,240	115,240	0	479,164	24.05%
120,140	120,140	0	461,673	26.02%
	Determined Contribution <sup>1</sup> \$ 269,542 240,558 206,922 197,559 124,953 114,316 104,952 107,514 115,240	Determined Contribution¹         Employer Employer Contributions           \$ 269,542         \$ 222,028           240,558         172,205           206,922         168,443           197,559         138,053           124,953         127,660           114,316         115,947           104,952         105,713           107,514         108,071           115,240         115,240	Determined Contribution¹         Employer Contributions         Deficiency (Excess)           \$ 269,542         \$ 222,028         \$ 47,514           240,558         172,205         68,353           206,922         168,443         38,479           197,559         138,053         59,506           124,953         127,660         (2,707)           114,316         115,947         (1,631)           104,952         105,713         (761)           107,514         108,071         (557)           115,240         115,240         0	Determined Contribution¹         Employer Contributions         Deficiency (Excess)         Employee Payroll²           \$ 269,542         \$ 222,028         \$ 47,514         \$ 666,346           240,558         172,205         68,353         572,484           206,922         168,443         38,479         559,551           197,559         138,053         59,506         553,541           124,953         127,660         (2,707)         562,853           114,316         115,947         (1,631)         526,559           104,952         105,713         (761)         526,334           107,514         108,071         (557)         483,641           115,240         115,240         0         479,164

#### Notes:



<sup>&</sup>lt;sup>1</sup> Actuarially determined contribution for fiscal year ending 2022 is based on the contribution rate calculated with the June 30, 2020 actuarial valuation.

<sup>&</sup>lt;sup>2</sup> Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

# Notes to Schedule of Employers' Contributions for FYE 2022

The actuarially determined contributions effective for fiscal year ending 2022 that are documented in the schedules on the previous pages were calculated as of June 30, 2020. Based on the June 30, 2020 actuarial valuation report, the actuarial methods and assumptions used to calculate these contribution rates are below:

Item	CERS Non-Hazardous Plan	CERS Hazardous Plan
Determined by the Actuarial Valuation as of:	June 30, 2020	June 30, 2020
Actuarial Cost Method:	Entry Age Normal	Entry Age Normal
Asset Valuation Method:	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized
Amortization Method:	Level Percent of Pay	Level Percent of Pay
Amortization Period:	30-year closed period at June 30, 2019 Gains/losses incurring after 2019 will be amortized over separate closed 20-year amortization bases	30-year closed period at June 30, 2019 Gains/losses incurring after 2019 will be amortized over separate closed 20-year amortization bases
Payroll Growth Rate	2.00%	2.00%
Investment Return:	6.25%	6.25%
Inflation:	2.30%	2.30%
Salary Increases:	3.30% to 10.30%, varies by service	3.55% to 19.05%, varies by service
Mortality:	System-specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from MP-2014 mortality improvement scale using a base year of 2019	System-specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from MP-2014 mortality improvement scale using a base year of 2019
Phase-In provision:	Board certified rate is phased into the actuarially determined rate in accordance with HB 362 enacted in 2018	Board certified rate is phased into the actuarially determined rate in accordance with HB 362 enacted in 2018



### **EXHIBIT 4**

# Sensitivity of the Net Pension Liability to Changes in the Discount Rate

(\$ in thousands)

Table 1. Sensitivity of the Net Pension Liability to Changes in the Discount Rate for CERS (Non-Hazardous)

	1.00%		Current	1.00%
Decrease			Discount Rate	Increase
(5.25%)			(6.25%)	(7.25%)
\$	9,035,370	\$	7,229,013	\$ 5,735,007

Table 2. Sensitivity of the Net Pension Liability to Changes in the Discount Rate for CERS (Hazardous)

1.00%			Current	1.00%
Decrease			Discount Rate	Increase
(5.25%)			(6.25%)	(7.25%)
\$	3,801,089	\$	3,051,457	\$ 2,440,928

