State Police Retirement System

GASB Statements No. 75 Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions as of June 30, 2023

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March 21, 2024

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: GASB 75 Reporting Information for Measurement Period Ending June 30, 2023 – SPRS

Dear Members of the Board:

This report contains information for the **State Police Retirement System (SPRS)** in connection with the Governmental Accounting Standards Board (GASB) Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions." This information can be used by the Commonwealth of Kentucky for fiscal years ending between (and including) June 30, 2023 and June 30, 2024. The information provided herein was prepared for the purpose of assisting the Kentucky Public Pensions Authority (KPPA) and the Commonwealth of Kentucky in compliance with the financial reporting and disclosure requirements of GASB Statement No. 75.

The liability calculations presented in this report were performed for the purpose of satisfying the requirements of GASB Statement No. 75 and are not applicable for other purposes, such as determining the plan's funding requirements. The calculation of 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 Kentucky Retirement Systems only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The total OPEB liability, net OPEB liability, and sensitivity information shown in this report are based on an actuarial valuation date of June 30, 2022. The total OPEB liability was rolled-forward from the valuation date to the plan's fiscal year ending June 30, 2023 using generally accepted actuarial principles.

Actuarial Assumptions

The Board of Trustees adopted new actuarial assumptions on June 5, 2023. These assumptions are documented in the report titled "2022 Actuarial Experience Study for the Period Ending June 30, 2022". Additionally, the single discount rate used to calculate the total OPEB liability changed since the prior year. Additional information regarding the single discount rate is provided in Section 1 of this report. The Total OPEB Liability as of June 30, 2023 is determined using these updated assumptions. It is our opinion that these procedures are reasonable and appropriate, and comply with applicable requirements under GASB Statement No. 75.

Plan Provisions

House Bill 506 passed during the 2023 legislative session and reinstated the Partial Lump Sum Option Form of payment for members who retire on and after January 1, 2024, and adjusted the minimum required separation period before a retiree may become reemployed and continue to receive their retirement allowance to one month for all circumstances. Additional information related to this plan provision change is provided in the Discussion Section of this report.

There were no other material plan provision changes that would materially impact the total OPEB liability since June 30, 2022. It is our opinion that these procedures are reasonable and appropriate, and comply with applicable requirements under GASB Statement No. 75.

Implicit Employer Subsidy for non-Medicare retirees

The fully-insured premiums paid for the Kentucky Employees' Health Plan are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit employer subsidy for the non-Medicare eligible retirees. GASB Statement No. 75 requires that the liability associated with this implicit subsidy be included in the calculation of the Total OPEB Liability.

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 position includes these 401(h) assets. Additionally, the member contributions and associated investment income and administrative expenses are included in the reconciliation of the fiduciary net position.

Additional Disclosures

This report is based upon information furnished by 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. This report complements the GASB 74 accounting valuation report as of June 30, 2023, which was provided for plan accounting purposes, as well as the "Actuarial Valuation Report as of June 30, 2022", which was provided for plan funding purposes and the "2022 Actuarial Experience Study for the Period Ending June 30, 2022", which documents the assumptions used in this report. Together, these reports should be considered as a complete report for the measurement period that ended June 30, 2023. Please see the GASB 74 accounting valuation report as of June 30, 2023 for additional discussion of accounting information and the actuarial valuation report for information regarding the nature of actuarial calculations, participant data, economic and demographic assumptions, and benefit provisions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

To the best of our knowledge, this report is complete and accurate and is in accordance with generally recognized actuarial practices and methods. Mr. White and Ms. Shaw are Enrolled Actuaries. All of the undersigned are 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, all 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.

Respectfully submitted,
Gabriel, Roeder, Smith & Company

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Table of Contents

SECTION 1

EXECUTIVE SUMMARY

Executive Summary

Summary of Principal Results

Actuarial Valuation Date		June 30, 2022
Measurement Date		June 30, 2023
Membership Information		
Number of		
- Inactive employees or beneficiaries currently receiving benefits		1,385
- Inactive employees entitled to but not yet receiving benefits		105
- Active employees		840
- Total		2,330
Covered Payroll[1]	$	65,830,379
Net OPEB Liability		
Total OPEB Liability	$	263,449,765
Plan Fiduciary Net Position		248,109,091
Net OPEB Liability	$	15,340,674
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability		94.18%
Net OPEB Liability as a Percentage of Covered Payroll		23.30%
OPEB Expense and Deferred Outflows/(Inflows) of Resources		
GASB 75 OPEB Expense	$	(12,567,677)
Deferred Outflows of Resources		26,654,975
Deferred Inflow of Resources		113,845,269
Development of the Single Discount Rate		
Single Discount Rate		6.02%
Long-Term Expected Rate of Return		6.50%
Long-Term Municipal Bond Rate[2]		3.86%

Notes:

[1] Based on derived compensation using the provided employer contribution information.

[2] Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2023.

Summary of Change in Net OPEB Liability
($ in thousands)

	Total OPEB Liability		Plan Fiduciary Net Position		Net OPEB Liability (1) - (2)	
		(1)		(2)		(3)
Balance at June 30, 2022	$	351,453	$	231,242	$	120,211
1. Service cost		4,092				4,092
2. Interest		19,608				19,608
3. Benefit changes		0				0
4. Assumption changes		404				404
5. Difference between expected and actual experience		(98,425)				(98,425)
6. Employer contributions[1]				8,755		(8,755)
7. Member contributions				348		(348)
8. Net investment income				21,520		(21,520)
9. Benefit payments [1,2]		(13,682)		(13,682)		0
10. Administrative expense				(74)		74
11. Other changes		0		0		0
12. Net changes	$	(88,003)	$	16,867	$	(104,870)
Balance at June 30, 2023	$	263,450	$	248,109	$	15,341

Notes:

[1] Employer contributions and benefit payments include expected benefits due to the implicit subsidy for members under age 65, equal to -$533,552 for fiscal year ending 2023.

[2] Benefit payments are offset by insurance premiums received from retirees, Medicare Drug Reimbursements, and Humana Gain Share Payments, as applicable.

Report Purpose and Scope

GASB Statement No. 75 replaces the requirements of Statements No. 45, Accounting and Financial Reporting by Employers for Postemployments Benefits Other Than OPEBs, as amended, and No. 57, OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans, for OPEB.

The following discussion provides a summary of the information that is required to be disclosed under GASB Statement No. 75. A number of the required disclosure items under this standard are provided in this report. However, certain information, such as notes regarding accounting policies and investments, are not included in this report. As a result, the Commonwealth is responsible for preparing and disclosing the non-actuarial information needed to comply with these accounting standards. Much of this additional information can be readily obtained from KPPA's 2023 Annual Report.

Financial Reporting Overview

GASB 75 requires employers to recognize the net OPEB liability and the OPEB expense on their financial statements. The net OPEB liability is the total OPEB liability, less the amount of the plan's fiduciary net position. In actuarial terms, this is analogous to the accrued liability as measured using the individual entry age normal actuarial cost method less the market value of assets (not the smoothed actuarial value of assets used in the actuarial funding calculations based on the Board's adopted assumptions and methods).

Timing of the Valuation

For the employer's financial reporting purposes, the net OPEB liability and OPEB expense should be measured as of the employer's "measurement date" which may not be earlier than the employer's prior fiscal year-end date. The total OPEB liability, net OPEB liability, and sensitivity information shown in this report are based on an actuarial valuation performed as of June 30, 2022. The total OPEB liability was rolled forward from the valuation date to the measurement date at June 30, 2023, using generally accepted actuarial principles.

The Board of Trustees adopted new actuarial assumptions on June 5, 2023. These assumptions are documented in the report titled "2022 Actuarial Experience Study for the Period Ending June 30, 2022". Additionally, the discount rate used to calculate the total OPEB liability increased from 5.69% to 6.02% for the SPRS insurance plan (see information regarding the calculation of the single discount rate later in this section of the report). The total OPEB liability as of June 30, 2023 is determined using these updated assumptions. It is our opinion that these procedures are reasonable and appropriate, and comply with applicable requirements under GASB Statement No. 75.

House Bill 506 adjusted the minimum required separation period before a retiree may become reemployed and continue to receive their retirement allowance to one month under all circumstances. This is a minimal change for hazardous members, as the minimum separation period was already one month for members who became reemployed on a full-time basis in a hazardous position. The requirement was previously three months only for members who became reemployed on a part-time basis or in any non-hazardous position. We believe this provision of House Bill 506 will have an insignificant impact on the retirement pattern of hazardous members and therefore have reflected no fiscal impact to the total OPEB liability.

There were no other material plan provision changes and it is our opinion that these procedures are reasonable and appropriate, and comply with applicable requirements under GASB Statement No. 75.

Employer Contributions after the Measurement Date and before the Employer's Fiscal Year End

GASB No. 75 indicates that employer contributions made subsequent to the measurement date of the Net OPEB Liability and prior to the end of the employer's reporting period should be reported by the employer as a deferred outflow of resources. The information contained in this report does not incorporate any contributions made to the plan subsequent to June 30, 2023.

Single Discount Rate

A single discount rates of 6.02% for the SPRS insurance plan was used to measure the total OPEB liability as of June 30, 2023. The single discount rate is based on the expected rate of return on OPEB plan investments of 6.50% and a municipal bond rate of 3.86%, as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2023. Based on the stated assumptions and the projection of cash flows as of each fiscal year ending, the plan's fiduciary net position and future contributions was projected and was sufficient to finance the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on insurance plan investments was applied to all periods of the projected benefit payments paid from the plan. However, the cost associated with the implicit employer subsidy is not currently being included in the calculation of the plan's actuarially determined contributions, and it is our understanding that any cost associated with the implicit subsidy will not be paid out of the plan's trust. Therefore, the municipal bond rate was applied to future expected benefit payments associated with the implicit subsidy.

The projection of cash flows used to determine the single discount rate must include an assumption regarding actual employer contributions made each future year. Future contributions are projected assuming that each participating employer in each insurance plan contributes the actuarially determined employer contribution each future year calculated in accordance with the current funding policy.

Summary of Population Statistics

The total OPEB liability described in this report is based on the plan membership as of June 30, 2022:

Inactive plan members currently receiving benefits:	1,385
Inactive plan members entitled to but not yet receiving benefits:	105
Active plan members:	840
Total plan members:	2,330

Note, the membership counts for the health insurance plan may be different than the membership counts for the pension plan due to differences in vesting provisions and the coordination of the delivery of health insurance benefits to members that have earned service in more than one system operated by KPPA.

Recognition of Deferred Outflows and Inflows of Resources

According to paragraph 86 of GASB Statement No. 75, *differences between expected and actual experience* and *changes in assumptions* are recognized in OPEB expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with OPEB through the OPEB plan (active employees and inactive members) determined as of the beginning of the measurement period.

At the beginning of the 2023 measurement period, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the 2023 measurement period was the following for the SPRS insurance plan.

Total expected remaining service lives of all employees (years):	10,696
Total plan members:	2,330
Average expected remaining service life (years):	4.59

Differences between projected and actual earnings on OPEB plan investments should be recognized in OPEB expense using a systematic and rational method over a closed five-year period. For this purpose, the deferred outflows and inflows of resources are recognized in the OPEB expense as a level dollar amount over the closed period identified above.

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

As of June 30, 2023, the Net OPEB Liability is $15,340,674. Below is a table providing the sensitivity of the Net OPEB Liability to changes in the discount rate. In particular, the table shows the plan's Net OPEB Liability if it were calculated using a single discount rate that is one-percentage point lower or one-percentage point higher than the single discount rate:

1% Decrease 5.02%	Current Single Rate Assumption 6.02%	1% Increase 7.02%
$45,363,135	$15,340,674	($9,776,097)

Below is a table providing the sensitivity of the Net OPEB Liability to changes in the healthcare cost trend rates. In particular, the table shows the plan's Net OPEB Liability if it were calculated using healthcare cost trend rates that are one-percentage point lower or one-percentage point higher:

1% Decrease	Current Healthcare Cost Trend Rate	1% Increase
($5,320,353)	$15,340,674	$40,029,000

Implicit Subsidy

GASB Statements No. 75 and No. 68 are conceptually very similar in terms of the liability which is recognized on the balance sheet, the expense calculation, and the corresponding deferred outflows and inflows of resources. The main differences between the standards are related to the differences between pension and health care benefits. In particular, there is a concept referred to as the "implicit subsidy" that applies to health plans which utilize a blended premium, which has no counterpart in GASB Statement No. 68. The "implicit" or "hidden" subsidy refers to the difference between the underlying retiree claims costs and the overall health care premiums paid on behalf of retirees. By "overall", we mean the combined employer and retiree portions of the premiums. GASB defines the employer provided OPEB benefit as the difference between the underlying claims costs (or age-adjusted premiums) and the premium contributions made by retirees. If the overall premiums for retirees were developed solely on the claims experience of the retirees, there would be no implicit subsidy and the employer portion of the overall retiree premiums would coincide with GASB's definition of the OPEB benefit. However, the fully-insured premiums paid to the Kentucky Employees' Health Plan are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to all participants, there is an implicit employer subsidy for the non-Medicare eligible retirees.

This is important because the retiree health insurance trust is used to pay the employers' portion of the blended premiums, not the employers' portion of the underlying retiree claims costs. In order to account for the employer provided OPEB benefit, as it is defined by GASB, the payments made by the retiree health insurance trust need to be adjusted to reflect the implicit subsidy (the difference between the retiree claims and the overall premiums). Similarly, the employer contributions need to be adjusted to reflect the cost of the implicit subsidy. It's important to keep in mind that the implicit subsidy is an employer contribution. Because the implicit subsidy does not pass through the trust, it is considered a benefit payment that was paid "as it came due". For plans that use a blended premium structure, Illustrations B1-1 and B1-2 of Implementation Guide No. 2017-3 describe how a portion of the payments made on behalf of the active employees should be reclassified as benefit payments for retiree healthcare to reflect the retirees' underlying claims costs. Adjusting the explicit health care costs for active employees and retirees by the implicit subsidy estimates provided in this report is equivalent to the reclassification described in the Implementation Guide.

To summarize, the distributions from the retiree health insurance trust pay the employers' portion of the blended premiums, not the employers' portion of the underlying retiree claims costs. As a result, the benefit payments and contribution amounts disclosed for GASB Statement Nos. 74 and 75 purposes need to include an adjustment related to the implicit subsidy. This adjustment is needed for contributions made during the measurement period (i.e. fiscal year ending June 30, 2023) and also for the purpose of the deferred outflow related to contributions made after the measurement date.

	Implicit Subsidy	
Fiscal Year ending June 30, 2023	$ (533,552)	
Fiscal Year ending June 30, 2024	$ (587,184)	Estimated

SECTION 2

ACCOUNTING EXHIBITS

Exhibit 1

Schedule of OPEB Expense as of June 30, 2023

1. Service cost	$	4,091,807
2. Interest on the Total OPEB Liability		19,608,424
3. Current period benefit changes		0
4. Member contributions		(348,086)
5. Projected earnings on plan investments		(14,307,230)
6. Administrative expense		73,823
7. Other changes in fiduciary net position		0
8. Recognition of outflows (inflow) of resources - liability experience		(21,775,104)
9. Recognition of outflows (inflow) of resources - assumption changes		1,367,147
10. Recognition of outflows (inflow) of resources - investment experience		(1,278,458)
11. OPEB Expense	$	(12,567,677)

Exhibit 2

Outstanding Balance of Deferred Outflows and Inflows of Resources to be Recognized in Future Years

	Deferred Outflow of Resources	Deferred Inflow of Resources
	(1)	(2)
1. Differences between expected and actual liability experience	$ 1,696,056	$ 81,782,460
2. Changes in assumptions	6,990,266	11,157,065
3. Differenced between projected and actual earnings on plan investments	17,968,653	20,905,744
4. Employer contributions subsequent to the measurement date[1]	Unknown	-
5. Total	$ 26,654,975	$ 113,845,269

Notes:

[1] Employer contributions made to the SPRS insurance plan after the measurement date and up to the fiscal year end should be reported as a deferred outflow of resources.

Exhibit 3

Summary of Deferred Outflows and Inflows of Resources Arising from Current and Prior Reporting Periods

Differences Between Expected and Actual Liability Experience

Year	Original Outflow/(Inflow)	Deferred Outflow/(Inflow) as of June 30, 2023	Recognition Period (Years)	Increase/(Decrease) in OPEB Expense Arising from the Recognition of the Effects of Differences Between Expected and Actual Liability Experience 2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	Thereafter
2016-2017	(571,519)	-	4.30	-	-	-	-	-	-	-
2017-2018	(23,320,977)	-	4.09	-	-	-	-	-	-	-
2018-2019	(14,294,660)	-	4.11	(382,584)	-	-	-	-	-	-
2019-2020	13,810,748	1,696,056	4.56	3,028,673	1,696,056	-	-	-	-	-
2020-2021	(6,317,768)	(1,772,612)	4.17	(1,515,052)	(1,515,052)	(257,560)	-	-	-	-
2021-2022	(5,952,904)	(3,027,644)	4.07	(1,462,630)	(1,462,630)	(1,462,630)	(102,384)	-	-	-
2022-2023	(98,425,715)	(76,982,204)	4.59	(21,443,511)	(21,443,511)	(21,443,511)	(21,443,511)	(12,651,671)	-	-
		(80,086,404)		(21,775,104)	(22,725,137)	(23,163,701)	(21,545,895)	(12,651,671)	-	-

Differences Between Projected and Actual Earnings on OPEB Plan Investments

Year	Original Outflow/(Inflow)	Deferred Outflow/(Inflow) as of June 30, 2023	Recognition Period (Years)	Increase/(Decrease) in OPEB Expense Arising from the Recognition of the Effects of Differences Between Projected and Actual Earnings on OPEB Plan Investments 2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	Thereafter
2016-2017	(9,678,841)	-	5.00	-	-	-	-	-	-	-
2017-2018	(5,431,339)	-	5.00	-	-	-	-	-	-	-
2018-2019	1,099,154	-	5.00	219,830	-	-	-	-	-	-
2019-2020	11,419,182	2,283,838	5.00	2,283,836	2,283,838	-	-	-	-	-
2020-2021	(37,839,590)	(15,135,836)	5.00	(7,567,918)	(7,567,918)	(7,567,918)	-	-	-	-
2021-2022	26,141,357	15,684,815	5.00	5,228,271	5,228,271	5,228,271	5,228,273	-	-	-
2022-2023	(7,212,385)	(5,769,908)	5.00	(1,442,477)	(1,442,477)	(1,442,477)	(1,442,477)	(1,442,477)	-	-
		(2,937,091)		(1,278,458)	(1,498,286)	(3,782,124)	3,785,796	(1,442,477)	-	-

Effects of Changes of Assumptions

Year	Original Outflow/(Inflow)	Deferred Outflow/(Inflow) as of June 30, 2023	Recognition Period (Years)	Increase/(Decrease) in OPEB Expense Arising from the Recognition of the Effects of Changes of Assumptions 2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	Thereafter
2016-2017	57,311,905	-	4.30	-	-	-	-	-	-	-
2017-2018	(358,376)	-	4.09	-	-	-	-	-	-	-
2018-2019	16,483,114	-	4.11	441,154	-	-	-	-	-	-
2019-2020	4,577,733	562,177	4.56	1,003,889	562,177	-	-	-	-	-
2020-2021	21,783,864	6,112,020	4.17	5,223,948	5,223,948	888,072	-	-	-	-
2021-2022	(21,936,837)	(11,157,065)	4.07	(5,389,886)	(5,389,886)	(5,389,886)	(377,293)	-	-	-
2022-2023	404,111	316,069	4.59	88,042	88,042	88,042	88,042	51,943	-	-
		(4,166,799)		1,367,147	484,281	(4,413,772)	(289,251)	51,943	-	-

Exhibit 4

Summary of Deferred Outflows and Inflows of Resources Arising from Current and Prior Reporting Periods

	Period		Amount
	(1)		(2)
1.	Fiscal Year + 1	$	(23,739,142)
2.	Fiscal Year + 2		(31,359,597)
3.	Fiscal Year + 3		(18,049,350)
4.	Fiscal Year + 4		(14,042,205)
5.	Fiscal Year + 5		-
6.	Thereafter		-
7.	**Total**	**$**	**(87,190,294)**

Exhibit 5

Schedule of Changes in the Employers' Net OPEB Liability
($ in thousands)

	2023	2022	2021	2020	2019	2018	2017
Total OPEB liability							
1. Service Cost	$ 4,092	$ 5,605	$ 5,218	$ 5,389	$ 4,816	$ 6,087	$ 4,147
2. Interest (on the Total OPEB Liability)	19,608	18,592	17,984	17,600	17,724	18,432	17,993
3. Benefit Changes	0	4,975	101	0	0	34	0
4. Difference between expected and actual experience	(98,425)	(5,952)	(6,318)	13,810	(14,295)	(23,320)	(573)
5. Changes of assumptions	404	(21,937)	21,784	4,578	16,483	(358)	57,312
6. Benefit payments[1,2]	(13,682)	(14,729)	(13,812)	(13,988)	(13,187)	(13,097)	(12,123)
7. Net change in total OPEB liability	$ (88,003)	$ (13,446)	$ 24,957	$ 27,389	$ 11,541	$ (12,222)	$ 66,756
8. Total OPEB liability – beginning	**$ 351,453**	**$ 364,899**	**$ 339,942**	**$ 312,553**	**$ 301,012**	**$ 313,234**	**$ 246,478**
9. Total OPEB liability – ending	**$ 263,450**	**$ 351,453**	**$ 364,899**	**$ 339,942**	**$ 312,553**	**$ 301,012**	**$ 313,234**
Plan fiduciary net position							
1. Contributions – employer[2]	$ 8,755	$ 9,343	$ 9,381	$ 12,873	$ 12,623	$ 8,535	$ 7,862
2. Contributions – member	348	230	209	196	176	155	131
3. Net investment income	21,520	(10,847)	50,289	1,124	10,815	16,470	21,627
4. Benefit payments[1,2]	(13,682)	(14,729)	(13,812)	(13,988)	(13,187)	(13,097)	(12,123)
5. Administrative Expense	(74)	(73)	(89)	(71)	(69)	(62)	(66)
6. Other	0	0	0	0	1 [4]	8 [4]	0
7. Net change in plan fiduciary net position	$ 16,867	$ (16,076)	$ 45,978	$ 134	$ 10,359	$ 12,009	$ 17,431
8. Plan fiduciary net position – beginning	**$ 231,242**	**$ 247,318**	**$ 201,340**	**$ 201,206**	**$ 190,847**	**$ 178,838**	**$ 161,407**
9. Plan fiduciary net position – ending	**$ 248,109**	**$ 231,242**	**$ 247,318**	**$ 201,340**	**$ 201,206**	**$ 190,847**	**$ 178,838**
Net OPEB liability	**$ 15,341**	**$ 120,211**	**$ 117,581**	**$ 138,602**	**$ 111,347**	**$ 110,165**	**$ 134,396**
Plan fiduciary net position as a percentage of the total OPEB liability	94.18%	65.80%	67.78%	59.23%	64.38%	63.40%	57.09%
Covered-employee payroll[3]	$ 65,830	$ 48,600	$ 47,155	$ 48,231	$ 48,780	$ 50,064	$ 48,873
Net OPEB liability as a percentage of covered employee payroll	23.30%	247.35%	249.35%	287.37%	228.26%	220.05%	274.99%

Notes:

[1] Benefit payments are offset by insurance premiums received from retirees, Medicare Drug Reimbursements, and Humana Gain Share Payments, as applicable.

[2] Employer contributions and benefit payments include expected benefits due to the implicit subsidy for members under age 65, equal to -$533,552 for fiscal year ending 2023.

[3] Based on derived compensation using the provided employer contribution information.

[4] Northern Trust Settlement

Exhibit 6

Schedule of the Employers' Contributions
($ in thousands)

Fiscal Year Ending[1]	Actuarially Determined Contribution[2]	Total Employer Contributions[3]	Contribution Deficiency (Excess)	Covered Employee Payroll[4]	Actual Contributions as a Percentage of Covered Payroll
2023	$ 9,289	$ 9,289	$ 0	$ 65,830	14.11%
2022	8,782	8,782	0	48,600	18.07%
2021	9,285	9,285	0	47,155	19.69%
2020	13,133	13,133	0	48,231	27.23%
2019	13,283	13,288	(5)	48,780	27.24%
2018	9,062	9,397	(335)	50,064	18.77%
2017	9,222	9,222	0	48,873	18.87%
2016	8,553	10,237	(1,684)	45,551	22.47%
2015	9,890	10,382	(492)	45,765	22.69%
2014	20,879	14,493	6,386	44,616	32.48%

Notes:

[1] Data for years prior to 2018 are based on contribution data provided in the 2017 CAFR, based on calculations provided by the prior actuary.

[2] Actuarially determined contribution for fiscal year ending 2023 is based on the contribution rates calculated with the June 30, 2021 actuarial valuation.

[3] Employer contributions do not include the expected implicit subsidy included in exhibit 5.

[4] Based on derived compensation using the provided employer contribution information for fiscal years 2018 and later.

Notes to Schedule of Employers' Contributions for FYE 2023

The actuarially determined contribution effective for fiscal year ending 2023 that is documented in the schedule on the previous page was calculated as of June 30, 2021. Based on the June 30, 2021 actuarial valuation report, the actuarial methods and assumptions used to calculate the required contributions are below.

Determined by the Actuarial Valuation as of:	June 30, 2021
Actuarial Cost Method:	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
Amortization Method:	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*
Payroll Growth Rate	0.00%
Investment Return:	6.25%
Inflation:	2.30%
Salary Increases:	3.55% to 16.05% for SPRS members, 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
Healthcare Trend Rates: Pre-65	Initial trend starting at 6.30% at January 1, 2023 and gradually decreasing to an ultimate trend rate of 4.05% over a period of 13 years. The 2022 premiums were known at the time of the valuation and were incorporated into the liability measurement.
Healthcare Trend Rates: Post-65	Initial trend starting at 6.30% at January 1, 2023 and gradually decreasing to an ultimate trend rate of 4.05% over a period of 13 years. The 2022 premiums were known at the time of the valuation and were incorporated into the liability measurement.

SECTION 3

DOCUMENTATION OF SUPPORT FOR INVESTMENT RETURN ASSUMPTION

Long-Term Expected Investment Return

The long-term expected rate of return was determined by using a building block method in which best estimate ranges of expected future real rates of returns are developed for each asset class. The ranges are combined by weighting the expected future real rate of return by the target asset allocation percentage. The target allocation and best estimates of arithmetic real rate of return for each major asset class is summarized in the table below. The current long-term inflation assumption is 2.50% per annum.

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Equity		
Public Equity	43.50%	5.90%
Private Equity	10.00%	11.73%
Fixed Income		
Core Fixed Income	10.00%	2.45%
Specialty Credit	15.00%	3.65%
Cash	1.50%	1.39%
Inflation Protected		
Real Estate	10.00%	4.99%
Real Return	10.00%	5.15%
Expected Real Return	**100.00%**	**5.56%**
Long Term Inflation Assumption		**2.50%**
Expected Nominal Return for Portfolio		**8.06%**

Source: Kentucky Public Pensions Authority

SECTION 4

DEVELOPMENT OF BASELINE CLAIMS COST

Development of Baseline Claims Cost

For non-Medicare retirees, the initial per capita costs were developed using retiree claims experience for calendar years 2020 through 2022. The claims were projected on an incurred claim basis, adjusted for prescription drug rebates, and loaded for administrative expense. The per capita costs shown in the table below also include HRA contributions for retirees on the CDHP plans. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. The fully-insured premiums paid to the Kentucky Employees' Health Plan are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit employer subsidy for the non-Medicare eligible retirees.

For Medicare retirees, the initial per capita costs were estimated based on the plan premiums effective January 1, 2023, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees.

Age graded and sex distinct premiums are utilized by this valuation. These costs are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. The age/sex specific costs more accurately reflect the health care utilization and cost at that age.

For those not eligible for Medicare (as of January 1, 2023)		
Age	**Male**	**Female**
40	$373.36	$606.68
50	605.22	745.56
60	1,028.58	1,012.80
64	1,250.79	1,180.40

For those eligible for Medicare (as of January 1, 2023)		
Age	**Male**	**Female**
65	$78.14	$73.71
75	91.43	89.21
85	96.68	97.82

Blake Orth is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Blake Orth

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