

State Police Retirement System

GASB Statements No. 75 Accounting and Financial
Reporting for Postemployment Benefits Other Than
Pensions as of June 30, 2020





February 18, 2021

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, 2020

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, 2020 and June 30, 2021, 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 No. 75 and are not applicable for other purposes, such as determining the plans' 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 performed as of June 30, 2019. The total OPEB liability was rolled forward from the valuation date to the measurement date at June 30, 2020, using generally accepted actuarial principles.

The discount rate used to calculate the total OPEB liability decreased from 5.76% to 5.40% (see information regarding the calculation of the single discount rate in the discussion section of this report). The assumed increase in future health care costs, or trend assumption, was reviewed during the June 30, 2019 valuation process and was updated to better reflect more current expectations relating to anticipated future increases in the medical costs. Also, the June 30, 2020 GASB No. 75 actuarial information reflects the anticipated savings from the repeal of the "Cadillac Tax" and "Health Insurer Fee", which occurred in December of 2019. The assumed load on pre-Medicare premiums to reflect the cost of the Cadillac Tax was removed and the Medicare premiums were reduced by 11% to reflect the repeal of the Health Insurer Fee. There were no other material assumption changes and it is our opinion that these procedures are reasonable and appropriate, and comply with applicable requirements under GASB No. 75.

Senate Bill 249 passed during the 2020 legislative session and changed the funding period for the amortization of the unfunded liability to 30 years as of June 30, 2019. Gains and losses incurring in future years will be amortized over separate 20-year amortization bases. This change does not impact the calculation of the Total OPEB Liability and only impacts the calculation of the contribution rates that would be payable starting July 1, 2020. 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 No. 75.

The fully-insured premiums KRS pays 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 No. 75 requires that the liability associated with this implicit subsidy be included in the calculation of the Total OPEB Liability.

This report is based upon information furnished by the Retirement System, 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 the Retirement System.

This report complements the GASB 74 accounting valuation report as of June 30, 2020, which was provided to KRS for plan accounting purposes, and the "Actuarial Valuation Report as of June 30, 2019", which was provided for plan funding purposes and 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, 2020. Please see the GASB 74 accounting valuation report as of June 30, 2020 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.

Based on guidance issued by GASB in connection with GASB Statement No. 74, the 1% of pay contributions Tier 2 and Tier 3 members contribute to a 401(h) subaccount are considered an OPEB asset. As a result, the reported fiduciary net position includes these 401(h) assets. Additionally, these member contributions and associated investment income are included in the reconciliation of the fiduciary net position.

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.



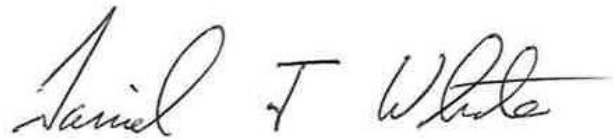
This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

To the best of our knowledge, this report is complete and accurate and is in accordance with generally recognized actuarial practices and methods. All of the undersigned are Enrolled Actuaries, independent actuaries and members of the American Academy of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. They are also experienced in performing valuations for large public retirement systems.

Respectfully submitted,
Gabriel, Roeder, Smith & Company



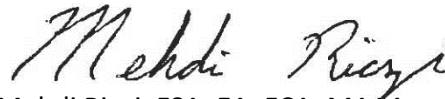
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SECTION 1

EXECUTIVE SUMMARY

Executive Summary

Summary of Principal Results

Actuarial Valuation Date	June 30, 2019
Measurement Date	June 30, 2020
Membership Information	
Number of	
- Inactive employees or beneficiaries currently receiving benefits	1,323
- Inactive employees entitled to but not yet receiving benefits	108
- Active employees	874
- Total	<u>2,305</u>
Covered Payroll ¹	\$ 48,231,070
Net OPEB Liability	
Total OPEB Liability	\$ 339,941,827
Plan Fiduciary Net Position	<u>201,340,037</u>
Net OPEB Liability	\$ 138,601,790
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	59.23%
Net OPEB Liability as a Percentage of Covered Payroll	287.37%
OPEB Expense and Deferred Outflows/(Inflows) of Resources	
GASB 75 OPEB Expense	\$ 21,772,558
Deferred Outflows of Resources	36,611,396
Deferred Inflow of Resources	17,797,438
Development of the Single Discount Rate	
Single Discount Rate	5.40%
Long-Term Expected Rate of Return	6.25%
Long-Term Municipal Bond Rate ²	2.45%

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, 2020.



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, 2019	\$ 312,553	\$ 201,206	\$ 111,347
1. Service cost	5,389		5,389
2. Interest	17,600		17,600
3. Benefit changes	0		0
4. Assumption changes	4,578		4,578
5. Difference between expected and actual experience	13,810		13,810
6. Employer contributions ¹		12,873	(12,873)
7. Member contributions		196	(196)
8. Net investment income		1,124	(1,124)
9. Benefit payments ²	(13,988)	(13,988)	0
10. Administrative expense		(71)	71
11. Other changes	0	0	0
12. Net changes	\$ 27,389	\$ 134	\$ 27,255
Balance at June 30, 2020	\$ 339,942	\$ 201,340	\$ 138,602

Notes:

¹ Employer contributions include expected benefits due to the implicit subsidy for members under age 65.

² Benefit payments include expected benefits due to the implicit subsidy for members under age 65.

They are also offset by insurance premiums received from retirees and Medicare Drug Reimbursements.

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 KRS's 2020 Comprehensive Annual Financial 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, 2019. The total OPEB liability was rolled forward from the valuation date to the measurement date at June 30, 2020, using generally accepted actuarial principles.

The discount rate used to calculate the total OPEB liability decreased from 5.76% to 5.40% (see information regarding the calculation of the single discount rate later in this section of the report). The assumed increase in future health care costs, or trend assumption, was reviewed during the June 30, 2019 valuation process and was updated to better reflect more current expectations relating to anticipated future increases in the medical costs. Also, the June 30, 2020 GASB No. 75 actuarial information reflects the anticipated savings from the repeal of the "Cadillac Tax" and "Health Insurer Fee", which occurred in December of 2019. The assumed load on pre-Medicare premiums to reflect the cost of the Cadillac Tax was removed and the Medicare premiums were reduced by 11% to reflect the repeal of the Health Insurer Fee. There were no other material assumption changes and it is our opinion that these procedures are reasonable and appropriate, and comply with applicable requirements under GASB No. 75.



Senate Bill 249 passed during the 2020 legislative session and changed the funding period for the amortization of the unfunded liability to 30 years as of June 30, 2019. Gains and losses incurring in future years will be amortized over separate 20-year amortization bases. This change does not impact the calculation of the Total OPEB Liability and only impacts the calculation of the contribution rates that would be payable starting July 1, 2020. 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 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, 2020.

Single Discount Rate

A single discount rate of 5.40% was used to measure the total OPEB liability as of June 30, 2020. The single discount rate is based on the expected rate of return on OPEB plan investments of 6.25% and a municipal bond rate of 2.45%, as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2020. 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 were projected to be 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 retirement system. However, the cost associated with the implicit employer subsidy is not currently being included in the calculation of the System's actuarial determined contributions, and it is our understanding that any cost associated with the implicit subsidy will not be paid out of the System'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. The future contributions are projected assuming that the full actuarially determined contribution is contributed each future year, calculated in accordance with the current funding policy, as most recently revised by Senate Bill 249, passed during the 2020 legislative session.



Summary of Membership Information

The total OPEB liability described in this report is based on the plan membership as of June 30, 2019:

Membership Status

Inactive plan members currently receiving benefits:	1,323
Inactive plan members entitled to but no yet receiving benefits:	108
Active plan members:	874
Total plan members:	<u>2,305</u>

Note, the membership counts for the health insurance funds are different than the membership counts for the retirement funds 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 maintained by KRS.

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 2020 measurement period, the expected remaining service lives of all employees was 10,511 years and the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the 2020 measurement period was 4.56 years (10,511 total expected remaining service period divided 2,305 plan members).

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, 2020, the Net OPEB Liability is \$138,601,790. 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 4.40%	Current Single Rate Assumption 5.40%	1% Increase 6.40%
\$187,527,969	\$138,601,790	\$99,093,084

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
\$98,159,451	\$138,601,790	\$188,130,912

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 KRS pays 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 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’s 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, 2020) and also for the purpose of the deferred outflow related to contributions made after the measurement date.

	<u>Implicit Subsidy</u>
Fiscal Year ending June 30, 2020	\$ (260,450)
Fiscal Year ending June 30, 2021	\$ 120,318 Estimated

Note, the Commonwealth’s estimated implicit subsidy for the measurement period was a negative \$260,450. In other words, the Commonwealth’s contributions during the measurement period were decreased by \$260,450 for the purposes of GASB Statement Nos. 74 and 75.



SECTION 2

ACCOUNTING EXHIBITS

Exhibit 1

Schedule of OPEB Expense as of June 30, 2020

1. Service cost	\$ 5,388,601
2. Interest on the Total OPEB Liability	17,600,177
3. Current period benefit changes	0
4. Member contributions	(195,616)
5. Projected earnings on plan investments	(12,544,392)
6. Administrative expense	71,257
7. Other changes in fiduciary net position	0
8. Recognition of outflows (inflow) of resources - liability experience	(6,284,207)
9. Recognition of outflows (inflow) of resources - assumption changes	18,255,107
10. Recognition of outflows (inflow) of resources - investment experience	<u>(518,369)</u>
12. OPEB Expense	\$ 21,772,558

Exhibit 2

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

	<u>Deferred Outflow of Resources</u>	<u>Deferred Inflow of Resources</u>
	(1)	(2)
1. Differences between expected and actual liability experience	\$ 10,782,075	\$ 13,593,624
2. Changes in assumptions	16,034,483	95,510
3. Differenced between projected and actual earnings on plan investments	9,794,838	4,108,304
4. Employer contributions subsequent to the measurement date ¹	<u>Unknown</u>	<u>-</u>
5. Total	\$ 36,611,396	\$ 17,797,438

Notes:

¹ Employer contributions to the Retirement System made 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, 2020	Recognition Period (Years)	2019-2020	Increase/(Decrease) in OPEB Expense Arising from the Recognition of the Effects of Differences Between Expected and Actual Liability Experience					
					2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	Thereafter
2016-2017	(571,519)	(39,875)	4.30	(132,911)	(39,875)	-	-	-	-	-
2017-2018	(23,320,977)	(6,215,127)	4.09	(5,701,950)	(5,701,950)	(513,177)	-	-	-	-
2018-2019	(14,294,660)	(7,338,622)	4.11	(3,478,019)	(3,478,019)	(3,478,019)	(382,584)	-	-	-
2019-2020	13,810,748	<u>10,782,075</u>	4.56	<u>3,028,673</u>	<u>3,028,673</u>	<u>3,028,673</u>	<u>3,028,673</u>	<u>1,696,056</u>	-	-
		(2,811,549)		(6,284,207)	(6,191,171)	(962,523)	2,646,089	1,696,056	-	-

Differences Between Projected and Actual Earnings on OPEB Plan Investments

Year	Original Outflow/(Inflow)	Deferred Outflow/(Inflow) as of June 30, 2020	Recognition Period (Years)	2019-2020	Increase/(Decrease) in OPEB Expense Arising from the Recognition of the Effects of Differences Between Projected and Actual Earnings on OPEB Plan Investments					
					2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	Thereafter
2016-2017	(9,678,841)	(1,935,769)	5.00	(1,935,768)	(1,935,769)	-	-	-	-	-
2017-2018	(5,431,339)	(2,172,535)	5.00	(1,086,268)	(1,086,268)	(1,086,267)	-	-	-	-
2018-2019	1,099,154	659,492	5.00	219,831	219,831	219,831	219,830	-	-	-
2019-2020	11,419,182	<u>9,135,346</u>	5.00	<u>2,283,836</u>	<u>2,283,836</u>	<u>2,283,836</u>	<u>2,283,836</u>	<u>2,283,838</u>	-	-
		5,686,534		(518,369)	(518,370)	1,417,400	2,503,666	2,283,838	-	-

Effects of Changes of Assumptions

Year	Original Outflow/(Inflow)	Deferred Outflow/(Inflow) as of June 30, 2020	Recognition Period (Years)	2019-2020	Increase/(Decrease) in OPEB Expense Arising from the Recognition of the Effects of Changes of Assumptions					
					2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	Thereafter
2016-2017	57,311,905	3,998,505	4.30	13,328,350	3,998,505	-	-	-	-	-
2017-2018	(358,376)	(95,510)	4.09	(87,622)	(87,622)	(7,888)	-	-	-	-
2018-2019	16,483,114	8,462,134	4.11	4,010,490	4,010,490	4,010,490	441,154	-	-	-
2019-2020	4,577,733	<u>3,573,844</u>	4.56	<u>1,003,889</u>	<u>1,003,889</u>	<u>1,003,889</u>	<u>1,003,889</u>	<u>562,177</u>	-	-
		15,938,973		18,255,107	8,925,262	5,006,491	1,445,043	562,177	-	-



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	\$ 2,215,721
2. Fiscal Year + 2	5,461,368
3. Fiscal Year + 3	6,594,798
4. Fiscal Year + 4	4,542,071
5. Fiscal Year + 5	-
6. Thereafter	-
7. Total	\$ 18,813,958

Exhibit 5

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

	2020	2019	2019	2018
Total OPEB liability				
1. Service Cost	\$ 5,389	\$ 4,816	\$ 6,087	\$ 4,147
2. Interest (on the Total OPEB Liability)	17,600	17,724	18,432	17,993
3. Benefit Changes	0	0	34	0
4. Difference between expected and actual experience	13,810	(14,295)	(23,320)	(573)
5. Changes of assumptions	4,578	16,483	(358)	57,312
6. Benefit payments ¹	<u>(13,988)</u>	<u>(13,187)</u>	<u>(13,097)</u>	<u>(12,123)</u>
7. Net change in total OPEB liability	\$ 27,389	\$ 11,541	\$ (12,222)	\$ 66,756
8. Total OPEB liability – beginning	\$ 312,553	\$ 301,012	\$ 313,234	\$ 246,478
9. Total OPEB liability – ending	\$ 339,942	\$ 312,553	\$ 301,012	\$ 313,234
Plan fiduciary net position				
1. Contributions – employer ²	\$ 12,873	\$ 12,623	\$ 8,535	\$ 7,862
2. Contributions – member	196	176	155	131
3. Net investment income	1,124	10,815	16,470	21,627
4. Benefit payments ¹	(13,988)	(13,187)	(13,097)	(12,123)
5. Administrative Expense	(71)	(69)	(62)	(66)
6. Other	<u>0</u>	<u>1</u> ⁴	<u>8</u> ⁴	<u>0</u>
7. Net change in plan fiduciary net position	\$ 134	\$ 10,359	\$ 12,009	\$ 17,431
8. Plan fiduciary net position – beginning	\$ 201,206	\$ 190,847	\$ 178,838	\$ 161,407
9. Plan fiduciary net position – ending	\$ 201,340	\$ 201,206	\$ 190,847	\$ 178,838
Net OPEB liability	\$ 138,602	\$ 111,347	\$ 110,165	\$ 134,396
Plan fiduciary net position as a percentage of the total OPEB liability	59.23%	64.38%	63.40%	57.09%
Covered-employee payroll³	\$ 48,231	\$ 48,780	\$ 50,064	\$ 48,873
Net OPEB liability as a percentage of covered employee payroll	287.37%	228.26%	220.05%	274.99%

Notes:

¹ Benefit payments include expected benefits due to the implicit subsidy for members under age 65. They are also offset by insurance premiums received from retirees, Medicare Drug Reimbursements, and Humana Gain Share Payments (in applicable years).

² Employer contributions include expected benefits due to the implicit subsidy for members under age 65.

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
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%
2013	27,234	16,829	10,405	45,256	37.19%
2012	28,247	11,960	16,287	48,373	24.72%
2011	25,773	11,051	14,722	48,693	22.70%

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 2020 is based on the contribution rate calculated with the June 30, 2017 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

The actuarially determined contribution rate effective for fiscal year ending 2020 that is documented in the schedule on the previous page was calculated as of June 30, 2017. Based on the June 30, 2017 actuarial valuation report, the actuarial methods and assumptions used to calculate this contribution rate is below:

Item	SPRS
Determined by the Actuarial Valuation as of:	June 30, 2017
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:	26 Years, Closed
Payroll Growth Rate:	0.00%
Investment Return:	6.25%
Inflation:	2.30%
Salary Increases:	3.05% to 15.55% varies by service
Mortality:	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females)
Healthcare Trend Rates (Pre-65)	Initial trend starting at 7.25% at January 1, 2019 and gradually decreasing to an ultimate trend rate of 4.05% over a period of 13 years. The 2018 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 5.10% at January 1, 2019 and gradually decreasing to an ultimate trend rate of 4.05% over a period of 11 years. The 2018 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 2.30% per annum.

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Growth	62.50%	
US Equity	18.75%	4.50%
Non-US Equity	18.75%	5.25%
Private Equity	10.00%	6.65%
Specialty Credit/High Yield	15.00%	3.90%
Liquidity	14.50%	
Core Bonds	13.50%	-0.25%
Cash	1.00%	-0.75%
Diversifying Strategies	23.00%	
Real Estate	5.00%	5.30%
Opportunistic	3.00%	2.25%
Real Return	15.00%	3.95%
Expected Real Return	100.00%	3.96%
Long Term Inflation Assumption		2.30%
Expected Nominal Return for Portfolio		6.26%

Source: Kentucky Retirement Systems