



## Cavanaugh Macdonald

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July 1, 2022

Senator Jimmy Higdon, Co-Chair  
Representative James Tipton, Co-Chair  
Public Pension Oversight Board (PPOB)  
State Capitol  
700 Capitol Avenue  
Frankfort, KY 40601

**Re: Request from the Public Pension Oversight Board**

Dear Senator Higdon and Representative Tipton:

We are writing in response to the June 7, 2022 memorandum from the Public Pension Oversight Board (PPOB) to Mr. Gary Harbin regarding the cost of the sick leave program for members of the Teachers' Retirement System (TRS) of Kentucky.

***Background***

In preparing the annual actuarial valuation of TRS, Cavanaugh Macdonald Consulting LLC. (CMC) calculates the Actuarially Determined Employer Contribution (ADEC) required to fund the full cost of all expected future benefit payments, including those due to the sick leave program. The total annual ADEC is equal to (1) the employer normal cost, plus (2) an annual payment to amortize the unfunded actuarial accrued liability (UAAL) over a period of years, which is determined based on the TRS funding policy.

The employer normal cost represents the annual cost of additional retirement benefits that accrue each year for all active members. From the total ADEC, we subtract out the portion covered by the statutory contribution rates and any payments expected to be made by special appropriations, to determine the required increase necessary to fund the full ADEC. The Legislature substantially funded the ADEC in fiscal years 2017 and 2018 and began fully funding the ADEC in fiscal year 2019 and thereafter.

For members of TRS3, sick leave benefits that are applied to retirement benefits are capped at 300 days. For TRS4 members, sick leave payouts cannot be used to increase their retirement annuity.



### ***Responses to Questions***

The questions that the PPOB asked, and our responses, are as follows:

- 1. The total actuarial accrued liability, unfunded liability, and total employer/state costs (annual and projected over the next 10 years) for the TRS sick leave program for current and former teachers (including retirees). We need to know what the cost of this program is in total and an explanation of where those costs are generated (direct payments, ADEC, employer contributions, fixed rate, etc.);*

Based on the June 30, 2021 actuarial valuation of TRS, our estimate of the actuarial accrued liability (AAL) due to the sick leave program is approximately \$787.6 million. Since the Legislature has paid off the entire outstanding balance of sick leave benefits for retired members of \$380 million in 2022, we estimate that there would be a remaining AAL of \$407.6 million due to the sick leave for active members that will be funded through the ADEC annually.

Since the UAAL is equal to the AAL minus the assets held by the System, and since assets are not allocated to individual components of TRS benefits, there is not a precise measure of what the UAAL is due to sick leave. However, based on the funding history described in the second paragraph of the background section of this letter, the \$407.6 million is essentially part of the plan's total UAAL and is amortized in accordance with the TRS funding policy. Funding, except for special appropriations, is applied to total plan liabilities, not allocated to each individual source of the liability.

In addition to the AAL of \$407.6 million, there is a portion of the annual normal cost for active members to cover the cost of annual sick leave accruals equal to approximately 0.40% of payroll (or approximately \$15.7 million) for active members hired before January 1, 2022 (a small portion of this 0.40% of payroll represents the cost for sick leave as *service* credit, which is not paid by the state, but other employers like universities). The Appendix attached to this letter shows the estimated annual dollar cost of funding the normal cost and UAAL payments for sick leave over the next 30 years. These payment streams are the ones required going forward. As seen from the Appendix, these payments will eventually decline sharply as the UAAL is paid off and TRS4 members, for whom there is no sick leave liability for the state, replace the earlier tier members.



2. *Whether or not the state budgeted more than was actuarially needed for sick leave in the upcoming biennium (2022-2024). For this purpose, that would include direct appropriation to TRS specifically for sick leave or from other sources like the ADEC, fixed rate, etc.;*

The Legislature recently made a contribution to TRS to cover all sick leave benefits for retired members through the biennium ending June 30, 2024 and to cover all past ad hoc Cost-of-Living Adjustments (COLAs) before 2008.

The breakdown of this contribution was as follows:

- \$380 million for sick leave benefits
- \$99 million for past ad hoc COLAs
- \$479 million for both in total

As mentioned in #1 above, the cost of the sick leave benefits for future retirees is now included in the ADEC that is budgeted for and contributed each biennium. The June 30, 2021 actuarial valuation determined the ADEC that is expected to be made during the fiscal year ending June 30, 2024 (the second year of this biennium). The ADEC calculated during the 2021 valuation includes the cost of annual sick leave accruals equal to approximately 0.40% of payroll for active members hired before January 1, 2022. It also includes an amortization payment for the portion of the actuarial accrued liability due to the sick leave program that is not covered by current assets. Therefore, we believe that the State adequately budgeted the amount actuarially needed for the sick leave program for active members.

Now, with the payment of the \$380 million described above, the \$39 million that was appropriated by the Legislature for each of the next two years of the biennium for sick leave benefits are additional contributions that can be credited to reduce the total plan's UAAL in the future.

3. *Confirmation that the sick leave benefits for the new benefit tier enacted by HB 258 will not result in costs to the state.*

Based on the provisions of the law, the sick leave program will not apply to new members hired after January 1, 2022, therefore there would be no cost to the State for sick leave for these members. In addition, based on the provisions of HB258, costs from the State are fixed at 10% of payroll and the State will not have any responsibility of any future UAAL, including any that may occur due to sick leave.



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The undersigned, Edward J. Koebel and Alisa Bennett, are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

If you have any questions, please do not hesitate to contact us.

Sincerely,

A handwritten signature in blue ink that reads 'Edward J. Koebel'.

Edward J. Koebel, EA, FCA, MAAA  
Chief Executive Officer

A handwritten signature in blue ink that reads 'Alisa Bennett'.

Alisa Bennett, FSA, EA, FCA, MAAA  
President

A handwritten signature in blue ink that reads 'Cathy Turcot'.

Cathy Turcot  
Principal and Managing Director



**Appendix**  
**30-Year Projection of Estimated Contributions Needed**  
**for Sick Leave Costs for TRS**  
**as of June 30, 2021 Valuation**  
**(\$ in thousands)**

<b>Valuation Year</b>	<b>Fiscal Year End</b>	<b>Ongoing Normal Costs for Sick Leave</b>	<b>Amortization of UAAL allocated for Sick Leave</b>	<b>Total Estimated Contributions</b>
2021	2024	\$15,708	\$30,619	\$46,327
2022	2025	15,222	31,461	46,683
2023	2026	14,707	32,326	47,033
2024	2027	14,159	33,215	47,374
2025	2028	13,575	34,129	47,704
2026	2029	13,406	35,067	48,473
2027	2030	12,791	36,031	48,822
2028	2031	12,149	37,022	49,171
2029	2032	11,482	38,040	49,522
2030	2033	11,253	39,087	50,340
2031	2034	11,011	40,161	51,172
2032	2035	10,274	41,266	51,540
2033	2036	9,504	42,401	51,905
2034	2037	8,702	43,567	52,269
2035	2038	8,386	44,765	53,151
2036	2039	8,055	45,996	54,051
2037	2040	7,158	47,261	54,419
2038	2041	6,781	48,560	55,341
2039	2042	6,382	49,896	56,278
2040	2043	5,363	51,268	56,631
2041	2044	4,899	0	4,899
2042	2045	4,406	0	4,406
2043	2046	3,885	0	3,885
2044	2047	3,330	0	3,330
2045	2048	2,742	0	2,742
2046	2049	2,131	0	2,131
2047	2050	1,455	0	1,455
2048	2051	750	0	750
2049	2052	389	0	389
2050	2053	200	0	200