

Via Electronic Mail

December 9, 2021

Mr. Brian C. Grinnell
Chief Actuary
State Teachers Retirement System of Ohio
275 East Broad Street
Columbus, Ohio 43215

Re: Mitigating Rate for fiscal years 2023 through 2027 (based on the 6/30/2021 valuation)

Dear Brian:

As requested, we have updated the calculation of the mitigating rate for the Alternative Retirement Plan (ARP) based on the June 30, 2021 Valuation and the Ohio Revised Statutes Sections 3307.514 and 3305.

Based on our understanding of the Statutes and previous calculations prepared by Segal, we have determined that the mitigating rate should decrease from 4.47% to 2.91%. For your reference, we have prepared a table that shows our calculation of the revised 2.91% mitigating rate in Attachment 1.

For purposes of this analysis, we relied on historical information provided by STRS Ohio through June 30, 2016 and other information provided by your legal team which indicated that the Historical Liability component is carried over from the initial study performed by Segal in 2016. We also presumed that the mitigating rate since July 1, 2017 was the 4.47% rate determined by Segal in 2016.

The results were based on the same data, methods, and assumptions as were used in the June 30, 2021 Actuarial Valuation Report.

The results of this analysis rely on future plan experience conforming to the underlying assumptions and methods outlined in this letter. To the extent that the actual plan experience deviates from the underlying assumptions and methods, or there are any changes in plan provisions or applicable laws, the results would vary accordingly.

This letter was prepared exclusively for STRS Ohio for the purposes described herein. Other users of this letter are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

Mr. Brian C. Grinnell

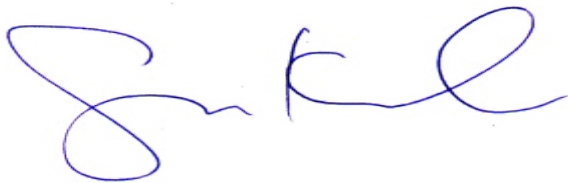
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This letter and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this letter. This letter does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

We look forward to discussing this analysis with you. Please let us know if you have any questions.

Sincerely,
Cheiron



Gene Kalwarski, FSA, MAAA, EA
CEO, Principal Consulting Actuary

Attachment

cc: Lynn Hoover
Mike Noble, FSA
Bonnie Rightnour, FSA

**State Teachers Retirement System of Ohio
 Alternate Retirement Plan Mitigating Rate
 Updated for the June 30, 2021 Valuation**

Item	Amount
1 DB UAL as of June 30, 2021	\$ 20,830,012,194
2 Historical Liability: (initial study)	531,730,572
3 Remaining UAL as of June 30, 2021: [(1) - (2)]	20,298,281,622
4 2021 ARP Payroll	828,273,857
5 2021 DB Payroll	11,610,016,164
6 Total ARP plus DB payrolls: [(4) + (5)]	12,438,290,021
7 Compensation ratio: [(4) / (6)]	6.6591%
8 ARP % of Item 3: [(3) * (7)]	1,351,675,832
9 Estimated 2022 ARP payroll: [1.030 x (4)]	853,122,073
10 30-year Amortization factor	17.8799
11 Perpetual amortization of item 2	2.7900%
12 30-year amortization of item 8: [(8) / (10) / (9)]	8.8613%
13 Computed mitigating rate: [(11) + (12)]	11.6513%
14 Basic mitigating rate: [(13) * .25]	2.9128%
15 Maximum mitigating rate	4.5000%
16 Minimum mitigating rate: [(11) x .25]	0.6975%
17 Final mitigating rate: rounded to 2 decimal places	2.91%