



March 2, 2023

Ms. Amy Fecher, Executive Director
Arkansas Public Employees Retirement System
One Union National Plaza
124 West Capitol Avenue, Suite 400
Little Rock, Arkansas 72201

Re: Actuarial Analysis of Proposed Benefit Changes Senate Bill 179 Dated 1-26-2023

Dear Ms. Fecher:

As requested, enclosed are the results of a supplemental actuarial valuation related to proposed benefit changes for the Arkansas Public Employees Retirement System.

Please let us know if you have any questions or comments.

Sincerely,
Gabriel, Roeder, Smith & Company

A handwritten signature in black ink that reads "Mita Drazilov". The signature is fluid and cursive.

Mita D. Drazilov, ASA, FCA, MAAA

A handwritten signature in black ink that reads "Heidi G. Barry". The signature is fluid and cursive.

Heidi G. Barry, ASA, FCA, MAAA

MDD/HGB:sc
Enclosure

Arkansas Public Employees Retirement System
Supplemental Actuarial Valuation
as of June 30, 2022
Senate Bill 179 Dated 1-26-2023

Requested By: Ms. Amy Fecher, Executive Director
Arkansas Public Employees Retirement System

Date: March 2, 2023

Submitted By: Mita D. Drazilov, ASA, FCA, MAAA and Heidi G. Barry, ASA, FCA, MAAA
Gabriel, Roeder, Smith & Company

This report presents the results of an actuarial valuation of proposed benefit changes for certain law enforcement members of the Arkansas Public Employees Retirement System (APERS). Mita D. Drazilov and Heidi G. Barry are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The date of the valuation was June 30, 2022. This means that the results of the supplemental valuation indicate what the June 30, 2022 valuation would have shown if the proposed benefit changes had been in effect on that date. Supplemental valuations do **not** predict the result of future actuarial valuations. Rather, supplemental valuations give an indication of the probable long-term cost of the **benefit changes only** without comment on the complete end result of the future valuations.

Actuarial assumptions and methods were consistent with those used in the regular actuarial valuation of the Retirement System on the valuation date, unless otherwise noted. Actuarial assumptions are adopted by the Retirement Board of Trustees. In particular, the assumed rate of investment return was 7.15% and payroll was assumed to increase 3.25% per year.

For supplemental actuarial valuation purposes, changes in the Unfunded Actuarial Accrued Liability (UAAL) were amortized over a closed 15-year period. The Board adopted funding policy requires changes in the UAAL due to changes in benefit provisions to be amortized over a closed 15-year period for active members and a closed 5-year period for non-active members (i.e., retired members and deferred members).

Arkansas Public Employees Retirement System
Supplemental Actuarial Valuation
as of June 30, 2022
Senate Bill 179 Dated 1-26-2023

The members affected by the proposal were provided by the Retirement System. Members include certain deputy sheriffs or sheriffs. A brief summary of the data used for purposes of the study as of June 30, 2022 is presented below:

Group	Number	Covered Payroll	Average in Years	
			Age	Service
Affected Contributory Members	2,116	\$ 97,615,817	39.1 yrs.	7.2 yrs.
Affected Non-Contributory Members	<u>337</u>	<u>20,006,220</u>	49.7	22.1
Total	2,453	\$ 117,622,037	40.6	9.2

It is our understanding that benefits for current DROP, inactive and retired members would not be affected by the proposed benefit change. They were excluded from this study.

Arkansas Public Employees Retirement System
Supplemental Actuarial Valuation
as of June 30, 2022
Senate Bill 179 Dated 1-26-2023

Proposed Provisions:

For certain deputy sheriffs or sheriffs, beginning July 1, 2024, a member who retires shall receive a straight life annuity enhancement for each year of credited service equal to twenty-five-hundredths percent (0.25%) of the member's average compensation multiplied by the number of years and fractions of years of actual service rendered as a deputy sheriff or sheriff.

A member who qualifies for the enhanced credit shall be responsible for an additional one and twenty-five-hundredths of one percent (1.25%) contribution of the member's annual compensation for the years and fractions of years that the member qualifies.

Actuarial Information: The financial effects of the proposal are shown below. These financial effects include the computed increase in the employer contribution rate expressed as a % of APERS payroll and as a % of affected payroll. Payroll includes the payroll for non-contributory and contributory active members as well as DROP participants.

Increase in Employer Contribution Rate	% of APERS Payroll	% of Affected Payroll
Normal Cost	0.01%	0.25%
UAAL* (15-year amortization)	0.15%	2.60%
Total	0.16%	2.85%

** Unfunded Actuarial Accrued Liability.*

Notes:

- 1) If the proposed benefit change were effective on the valuation date of June 30, 2022, the unfunded actuarial accrued liability would be increased by \$32.6 million.
- 2) Employers are assumed to contribute on DROP payroll.

Arkansas Public Employees Retirement System
Supplemental Actuarial Valuation
as of June 30, 2022
Senate Bill 179 Dated 1-26-2023

Additional Comments

Comment 1 — The members affected by the proposal were provided by the Retirement System. It was assumed that all service reported was service in a deputy sheriff or sheriff position.

Comment 2 — The figures shown on the prior page are based on the June 30, 2022 actuarial valuation. Please remember that this change, if adopted, would likely impact the June 30, 2023 valuation. That valuation will likely be completed in the fall of 2023, and is based on member data and financial results as of June 30, 2023, neither of which is available to us at this time.

Comment 3 — The calculations are based upon assumptions regarding future events, which may or may not materialize. They are also based upon present and proposed plan provisions that are outlined in this report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in this report.

Comment 4 — If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of this report prior to making such decision.

Comment 5 — This report is intended to describe the financial effect of the proposed plan change. No statement in this report is intended to be interpreted as a recommendation in favor of the change, or in opposition to it.

Comment 6 — In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

Comment 7 — This report is intended to describe the financial effect of the proposed plan change on the Retirement System. Except as otherwise noted, potential effects on other benefit plans were not considered.

Comment 8 — The reader of this report should keep in mind that actuarial calculations are mathematical estimates based on current data and assumptions about future events (which may or may not materialize). Please note that actuarial calculations can and do vary from one valuation year to the next, sometimes significantly if the group valued is very small (less than 30 lives). As a result, the cost impact of a benefit change may fluctuate over time, as the demographics of the group changes.

Arkansas Public Employees Retirement System
Supplemental Actuarial Valuation
as of June 30, 2022
Senate Bill 179 Dated 1-26-2023

Additional Comments (Concluded)

Comment 9 — It was assumed that all active members as of June 30, 2022 would be affected by the changes in eligibility conditions.

Comment 10 — 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 and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.