



February 17, 2021

Mr. Duncan Baird, Executive Director  
Arkansas Public Employees Retirement System  
One Union National Plaza  
124 West Capitol, Suite 400  
Little Rock, Arkansas 72201

**Re: Actuarial Analysis of Proposed Benefit Changes  
JNL239 Dated 02-04-2021**

Dear Mr. Baird:

As requested, enclosed are the results of a supplemental actuarial valuation related to proposed benefit changes included in JNL239 dated 02-04-2021 for the Arkansas Public Employees Retirement System.

Please call if you have any questions or comments.

Respectfully submitted,

A handwritten signature in black ink that reads "Mita Drazilov". The signature is written in a cursive, flowing style.

Mita D. Drazilov, ASA, FCA, MAAA

A handwritten signature in black ink that reads "David L. Hoffman". The signature is written in a cursive, flowing style.

David L. Hoffman

A handwritten signature in black ink that reads "Heidi G. Barry". The signature is written in a cursive, flowing style.

Heidi G. Barry, ASA, FCA, MAAA

MDD/DLH/HGB:bd  
Enclosure

**Arkansas Public Employees Retirement System**  
**Supplemental Actuarial Valuation**  
**as of June 30, 2020**  
**JNL239 Dated 02-04-2021**

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**Requested By:** Mr. Duncan Baird, Executive Director  
Arkansas Public Employees Retirement System

**Date:** February 17, 2021

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

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This report presents results of an actuarial valuation of proposed benefit changes for 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) as indicated, 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, 2020.** This means that the results of the supplemental valuation indicate what the June 30, 2020 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 20-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). However, the funding policy was created anticipating benefit increases rather than benefit reductions. **If the proposed legislation is enacted, we recommend that the Board's funding policy be modified to incorporate this suggested change to the Amortization Method Section of the funding policy.**

**Given the funded status of APERS and the level of investment risk that the System is currently exposed to, we would suggest that the Board consider keeping the employer contribution rate at the current level in the event this benefit change is enacted.**



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A brief summary of the data used for purposes of the study as of June 30, 2020 is presented below:

Active Member Group	Number	Annual Pay	Average	
			Age	Benefit Service
Non-Contributory	7,880	\$ 391,800,663	53.6 yrs.	21.6 yrs.
Contributory	36,491	1,403,856,832	42.4 yrs.	6.1 yrs.
DROP Participants	1,520	95,469,299	59.8 yrs.	33.0 yrs.

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

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**Present Provision:** For all active members, the final average compensation is the average of the highest **36 months** of covered compensation.

**Proposed Provision:** For a member first hired by a system-covered employer on July 1, 2022, or after, the final average compensation is the average of the highest **60 months** of covered compensation.

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**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 payroll. Payroll includes the payroll for non-contributory and contributory active members as well as DROP participants.

<b>Increase in Employer Contribution Rate</b>	<b>% of Payroll</b>
Normal Cost	0.00%
UAAL* (20-year amortization)	0.00%
<b>Total</b>	<b>0.00%</b>

\* *Unfunded Actuarial Accrued Liability.*

**Notes:**

- 1) Since the proposed benefit change does not affect any of the current members of APERS, there is no initial reduction in the computed employer contribution rate, as shown above. The ultimate effect on employer contributions resulting from the proposed benefit change is a decrease in the employer normal cost of 0.38% of active member payroll. This will occur once all of the active members are covered under the proposed provision.
- 2) Employers are assumed to contribute on DROP payroll. DROP participants do not make member contributions.

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**Additional Comments**

**Comment 1** — The figures shown on the prior page are based on the June 30, 2020 actuarial valuation. Please remember that this change, if adopted, would likely impact the June 30, 2021 valuation since it establishes the Fiscal Year 2024 employer contribution rate. That valuation will likely be completed in the fall of 2021, and is based on member data and financial results as of June 30, 2021, neither of which is available to us at this time.

**Comment 2** — 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 3** — 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 4** — 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 5** — 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 6** — 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.

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**Additional Comments (Concluded)**

**Comment 7** — 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.

**Comment 8** — 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.