

March 23, 2023

Mr. David B. Clark, Executive Director Arkansas Local Police and Fire Retirement System 620 West 3rd, Suite 200 Little Rock, Arkansas 72201-2212

Re: Actuarial Analysis of House Bill (HB) 1243

Dear Mr. Clark:

As requested, enclosed is our Actuarial Analysis of House Bill 1243 for members in the Arkansas Local Police and Fire Retirement System (LOPFI).

Please call if you have any questions or comments.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Heidi G. Barry, ASA, FCA, MAAA

Heidi & Barry

Cary T. Albert Pins

Casey T. Ahlbrandt-Rains, ASA, MAAA

HGB/CTA:rmn Enclosure

Requested By: Mr. David B. Clark, Executive Director

Arkansas Local Police and Fire Retirement System

Date: March 23, 2023

Submitted By: Heidi G. Barry, ASA, FCA, MAAA and

Casey T. Ahlbrandt-Rains, ASA, MAAA Gabriel, Roeder, Smith & Company

Submitted in this report are results of an actuarial valuation proposed benefit changes that would result from HB 1243, which phases in a reduction in service-based retirement eligibility from 28 years to 25 years, for members covered in the Arkansas Local Police and Fire Retirement System. The analysis was requested by the Executive Director.

The results shown in this report are based on an investment return assumption of 6.15% and a wage inflation assumption of 3.00%. A baseline valuation was performed using these assumptions to measure the effects of the proposed benefit changes. These economic assumptions were prescribed by the System's Executive Director to be used for this study. We believe these assumptions to be reasonable for the purposes of this analysis. See the 2017-2022 Experience Study dated September 7, 2021 for further discussion regarding reasonable economic assumptions. Note that these economic assumptions differ from those used in the most recent annual valuation. All other actuarial methods and assumptions were the same as those used in the annual actuarial valuation as of December 31, 2021.

The date of the study was as of December 31, 2021. This supplemental valuation does not predict the result of the December 31, 2022 valuation or of any other future actuarial valuation. (Future activities can affect future valuation results in an unpredictable manner.) Rather, the supplemental valuation gives an indication of the probable effect of the proposed changes on future valuations without comment on the complete end result of the future valuations.

This report is intended to describe the financial effect of the proposed plan changes. No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them. GRS is not responsible for unauthorized use of this report.

Heidi G. Barry and Casey T. Ahlbrandt-Rains are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries required to render the actuarial opinions contained herein.

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 the 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 the report.



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.

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 the report prior to making such decision.



Summary of Actuarial Valuation Data for Active Paid Service Members as of December 31, 2021

A brief summary of the data used for purposes of the study as of December 31, 2021 is presented below:

Paid Active Members*					
			Average in Years		
Number	Covered Payroll		Age	Service	
6,834	\$	383,278,946	38.7	12.2	

^{*} Includes 367 DROP records attributable to 280 DROP participants with a payroll of \$23,122,628.

It is our understanding that benefits for current DROP, deferred and retired members would not be affected by the proposed benefit change. They were excluded from this study. However, DROP payroll is used in the determination of the employer contribution rate since employers contribute for members participating in the DROP. Therefore, DROP payroll is used in the analysis.



Proposed Benefit Provision Changes

Current and Future Active Paid Service Members

The proposed provision changes would amend retirement eligibility, as set forth in Sections 24-10-102, 24-10-607, 24-10-701 and 24-10-703 of Arkansas Code of 1987, as described below.

Current Provisions

Voluntary Retirement Eligibility: The normal retirement age is age 60 for a member with less than 20 years credited service, age 55 for a member with at least 20 years credited service or any age for a member with **28** or more years of credited service.

Catastrophic Disability Benefit: A catastrophic duty disability retiree shall receive an annuity based on a minimum of **28** years of accrued paid service credit.

Deferred Retirement Option Plan (DROP): Paid service members who have attained age 55 with at least 20 years of service or members with at least 28 years of service may participate. A participant with 28 years of service will receive 75% of his or her accrued benefit at time of DROP election while in the DROP, payable into the participant's DROP account. A participant with less than 28 years of service will receive 72% of his or her accrued benefit at time of DROP election while in the DROP, payable into the participant's DROP account.

Proposed Provisions

Voluntary Retirement Eligibility: The normal retirement age is age 60 for a member with less than 20 years credited service, age 55 for a member with at least 20 years credited service or any age if the member has: (i) Twenty-seven (27) years of credited service, if the member retires after December 31, 2023, and before January 1, 2025; (ii) Twenty-six (26) years of credited service, if the member retires after December 31, 2024, and before January 1, 2026; or (iii) Twenty-five (25) years of credited service, if the member retires on January 1, 2026, or later.

Catastrophic Disability Benefit: A catastrophic duty disability retiree shall receive an annuity based on a minimum of: (i) Twenty-seven (27) years of credited service after December 31, 2023, and before January 1, 2025; (ii) Twenty-six (26) years of credited service after December 31, 2024, and before January 1, 2026; or (iii) Twenty-five (25) years of credited service on January 1, 2026, or later.

Deferred Retirement Option Plan (DROP) Eligibility: Paid service members who have attained age 55 with at least 20 years of service or members with at least: (i) Twenty-seven (27) years of credited service, if the member retires after December 31, 2023, and before January 1, 2025; (ii) Twenty-six (26) years of credited service, if the member retires after December 31, 2024, and before January 1, 2026; or (iii)



Twenty-five (25) years of credited service, if the member retires on January 1, 2026, or later may participate. A participant with less than twenty-six (26) years of service will receive 72% of his or her accrued benefit at time of DROP election while in the DROP, payable into the participant's DROP account. Seventy-five percent (75%) of the member's monthly retirement benefit that would have been payable had the member elected to cease employment and receive a service retirement shall be paid into the member's plan account if, at the time the member elects to participate in the Local Police and Fire Deferred Retirement Option Plan, the member has at least twenty (20) years of service but less than: (A) Twenty-seven (27) years of service, if the member retires after December 31, 2023, and before January 1, 2025; (B) Twenty-six (26) years of service, if the member retires after December 31, 2024, and before January 1, 2026; (C) Twenty-five (25) years of service, if the member 1 retires on January 1, 2026, or later.



Results of Actuarial Analysis

The impact to the *employer* contribution rates for paid service members resulting from the proposed benefit provisions is shown below:

	As % of Active Member Payroll [#] Amortization Period of UAAL Increase		
Increase in Employer Contribution Rate	10 Years	5 Years	
Normal Cost	0.78%	0.78%	
UAAL	1.50%	2.80%	
Total	2.28%	3.58%	

^{*} As a percent of active member payroll, including DROP participant payroll.

The proposed benefit provision applies to current and future active paid service members. The actuarial accrued liability for active paid service members increases by approximately \$49 million as a result of this change. The results above are based on an underlying baseline scenario which assumes a discount rate of 6.15% and wage inflation of 3.00%.

After the 10 or 5-year period ends, the employer contribution rate would be reduced by the UAAL% increase shown in the table above.



Comments

Comment 1

At the request of the Executive Director, the results shown in this report are based on an actuarial analysis which assumes an investment return assumption of 6.15% (with a corresponding wage inflation assumption of 3.00%) for all the baseline and impact scenarios.

Comment 2

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 3

The underlying demographic and economic assumptions used for this analysis, except where otherwise noted, are based on an actuarial experience study covering the period from January 1, 2017 through December 31, 2020. This analysis is based on valuation data and demographic assumptions as of December 31, 2021 in addition to the economic assumptions discussed in Comment 1. We cannot predict what impact the proposed provisions will have under a different set of assumptions.

Comment 4

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 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

Changes in service-based retirement eligibility are assumed to influence retirement behavior among those members affected. The table below shows the assumed retirement rates for each scenario of the actuarial analysis. To the extent that experience varies from the assumptions below, costs may be different than shown herein. We will monitor experience and adjust assumptions as needed.

	Assumed Service-Based Rates of Retirement			
Years of Service	Current Assumption	Proposed Assumption		
25		30 %		
26		20		
27		15		
28	30 %	15		
29	20	10		
30	15	10		
31	15	10		
32	15	10		
33	25	20		
34	100	100		

