



February 10, 2021

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 Senate Bill 5 as Engrossed

Dear Mr. Clark:

As requested, enclosed is our Actuarial Analysis of Senate Bill (SB) 5 as Engrossed for members in the Arkansas Local Police and Fire Retirement System (LOPFI).

Please call if you have any questions or comments.

Respectfully submitted,

A handwritten signature in black ink that reads "David L. Hoffman". The signature is written in a cursive style with a large, prominent initial "D".

David L. Hoffman

A handwritten signature in black ink that reads "Heidi G. Barry". The signature is written in a cursive style with a large, prominent initial "H".

Heidi G. Barry, ASA, FCA, MAAA

A handwritten signature in black ink that reads "Casey T. Ahlbrandt-Rains". The signature is written in a cursive style with a large, prominent initial "C".

Casey T. Ahlbrandt-Rains, ASA, MAAA

DLH/HGB/CTA:dj
Enclosure

Arkansas Local Police and Fire Retirement System Actuarial Analysis of Senate Bill 5 as Engrossed as of December 31, 2019

Requested By: Mr. David B. Clark, Executive Director
Arkansas Local Police and Fire Retirement System

Date: February 10, 2021

Submitted By: David L. Hoffman, Heidi G. Barry, ASA, FCA, MAAA
and Casey T. Ahlbrandt-Rains, ASA, MAAA
Gabriel, Roeder, Smith & Company

This report presents results of an actuarial valuation of proposed benefit changes that would result from SB 5 as Engrossed for members covered in the Arkansas Local Police and Fire Retirement System. This supplemental report was requested by the Executive Director.

The date of the valuation was December 31, 2019. This means that the results of the supplemental valuation indicate what the December 31, 2021 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.

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.

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 signing individuals are independent of the plan sponsor.

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.

The actuarial methods and assumptions were the same as those used in the regular valuation as of December 31, 2019. In particular, the economic assumptions used in the supplemental actuarial valuation were net investment return of 7.50% per year and wage inflation of 2.50% per year. The amortization period is 16 years.

Arkansas Local Police and Fire Retirement System Actuarial Analysis of Senate Bill 5 as Engrossed as of December 31, 2019

A brief summary of the data used for purposes of the study as of December 31, 2019 is presented below:

| Active Members | | | |
|----------------|-----------------|------------------|---------|
| Number* | Covered Payroll | Average in Years | |
| | | Age | Service |
| 6,889 | \$367,225,538 | 39.0 | 12.3 |

* Includes 380 DROP participants with payroll of \$23,451,583

| Deferred Vested Members | | |
|-------------------------|-------------|---------|
| Number | Projected | Average |
| | Benefits | Age |
| 4,129 | \$9,910,808 | 42.1 |

It is our understanding that benefits for current DROP or 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.

LOPFI Staff provided the following data which contains 36 participants who retired in 2019 and 2020 with reciprocal service. ***The benefit for these members was estimated to be about 70% higher as a result of the use of the reciprocal system FAP.*** Please see Comment 1 for additional details.

| Number | LOPFI FAP | Reciprocal FAP | Average Paid |
|--------|-------------|----------------|--------------|
| | | | Service |
| 36 | \$82,869.73 | \$155,860.73 | 7.9 years |

Arkansas Local Police and Fire Retirement System

Actuarial Analysis of Senate Bill 5 as Engrossed as of December 31, 2019

Present Provisions:

In establishing eligibility for a benefit from the Arkansas Local Police and Fire Retirement System, the credited service under all reciprocal systems shall be totaled and the total credited service shall be used in determining eligibility for a system benefit.

The final average compensation used shall be that of the reciprocal system which furnishes the highest final salary at the time of retirement.

Proposed Provisions:

For the purpose of reciprocal service credit under the Arkansas Local Police and Fire Retirement System, only an Arkansas statewide defined benefit retirement system that is qualified under the Internal Revenue Code is eligible.

Once a member has vested in the Arkansas Local Police and Fire Retirement System, in establishing the eligibility of the member for a voluntary retirement benefit, early retirement benefit, or duty death benefit from the Arkansas Local Police and Fire Retirement System, the credited service under all reciprocal systems shall be totaled, and the total credited service shall be used in determining the eligibility of the member for a system benefit from the Arkansas Local Police and Fire Retirement System.

The Arkansas Local Police and Fire Retirement System will use the final average pay of the reciprocal system that furnishes the highest final average pay at the time of retirement when i) the member established reciprocity before April 1, 2021, and ii) the member has member contributions on account with the Arkansas Local Police and Fire Retirement System.

For all other members, the final average compensation used shall be that of the Arkansas Local Police and Fire Retirement System.

This bill shall become effective on April 1, 2021.

Actuarial Statement

The proposed change affects the benefits of members who do not establish reciprocity prior to April 1, 2021 and future members. We have assumed that all current active and deferred members, as a result of the proposed change, will establish reciprocity prior to April 1, 2021. We have estimated that the long-term costs of benefits (the normal cost) for members hired after the effective date will be reduced by **0.16%** of payroll if the proposal is implemented and experience materializes as assumed. The reduction is expected to emerge gradually over time. Current active members as of December 31, 2019 were used to estimate the effect on future active members.

Arkansas Local Police and Fire Retirement System Actuarial Analysis of Senate Bill 5 as Engrossed as of December 31, 2019

Comment 1 — There were 36 deferred vested members reported to have retired in 2019 and 2020 for whom the final average pay (FAP) with a reciprocal system was higher than the FAP for their service in LOPFI. *The benefit for those members was estimated to be about 70% higher as a result of the use of the reciprocal system FAP.* This number was about 12% of the total number of vested members who entered payment status during the period. *To estimate the effect of the proposed change we have assumed that future deferred vested liabilities and normal costs will decrease by 8%.* Current active and deferred members are assumed to have established reciprocity prior to April 1, 2021.

Comment 2 — The figures shown on the prior page are based on the December 31, 2019 actuarial valuation. Please remember that this change, if adopted, will be based on member data and financial results as of future dates. Given the relatively small number of individuals in the sample and the limited observation period it may be prudent to allow experience to emerge before this provision is modeled in the actuarial valuation.

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.

Arkansas Local Police and Fire Retirement System Actuarial Analysis of Senate Bill 5 as Engrossed as of December 31, 2019

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.

Comment 9 — 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.