800.521.0498 | P: 248.799.9000 | www.grsconsulting.com

February 10, 2023

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

Re: Actuarial Analysis of Senate Bill (SB) 77

Dear Ms. Fecher:

As requested, enclosed is our Actuarial Analysis of SB 77 for the Arkansas Judicial Retirement System.

Please call if you have any questions or comments.

Respectfully submitted,
Gabriel, Roeder, Smith & Company

Mita D. Drazilov, ASA, FCA, MAAA

Heidi G. Barry, ASA, FCA, MAAA

MDD/HGB:sc
Enclosure

Arkansas Judicial Retirement System
Actuarial Analysis of SB 77
as of June 30, 2022

Requested By:	Ms. Amy Fecher, Executive Director Arkansas Judicial Retirement System
Date:	February 10, 2023
Submitted By:	Mita D. Drazilov, ASA, FCA, MAAA and Heidi G. Barry, ASA, FCA, MAAA Gabriel, Roeder, Smith & Company

This report presents results of an actuarial valuation of proposed benefit changes for members of the Arkansas Judicial Retirement System.

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 5.50% 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).

A brief summary of active member data used for purposes of the study as of June 30, 2022 is presented below:

Group	No.	Valuation Pay	Averages		
			Age	Eligibility Service	Pay
Tier One	8	$ 1,470,595	68.6 yrs.	31.8 yrs.	$183,824
Tier Two	137	$ 24,788,517	57.7	12.7	$180,938

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.

Arkansas Judicial Retirement System
Actuarial Analysis of SB 77
as of June 30, 2022

Present Benefits:

Compulsory Retirement

Tier 1	Tier 2
Any judge or justice who attains 70 years of age during a term of office to which he has been elected may complete the term without forfeiting rights to retirement benefits. Any judge or justice who is not eligible to retire at age 70 may continue to serve as judge until completion of the term in which there has accrued sufficient credited service to retire. Otherwise, judges or justices must retire by their 70th birthday or lose their retirement benefits.	Any judge or justice who attains 70 years of age during a term of office to which he has been elected may complete the term without forfeiting rights to retirement benefits. Any judge or justice who is not eligible to retire at age 70 may continue to serve as judge until completion of the term in which there has accrued sufficient credited service to retire. Otherwise, judges or justices must retire by their 70th birthday or lose their retirement benefits.

Proposed Benefits:

Compulsory Retirement

Tier 1	Tier 2
None.	None.

Actuarial Information: The financial effects of the proposal are shown below. These financial effects include the computed increase(decrease) in the employer contribution rate expressed as a % of payroll.

Increase(Decrease) in Employer Contribution Rate	% of Payroll
Normal Cost	(0.98)%
UAAL* (15-year amortization)	(1.60)%
Total	**(2.58)%**

** Unfunded Actuarial Accrued Liability.*

Note: We have no data or experience on which to project how this change would affect behavior of members. The results above are very dependent on the assumptions we have made regarding future member behavior. Please see the Appendix for revised assumptions.

Additional Comments

Comment 1 — The decrease in unfunded actuarial accrued liabilities resulting from this proposed benefit change is approximately $5.3 million. Based on the current funding policy, the decrease in unfunded actuarial accrued liabilities for active members was amortized over 15 years. This results in a decrease in the employer contribution rate of 2.58% of total payroll.

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 be effective July 1, 2023, and would impact the June 30, 2024 valuation. That valuation will likely be completed in the fall of 2024, and is based on member data and financial results as of June 30, 2024, 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.

Additional Comments (Concluded)

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.

Normal Retirement

1) For ages under 70, a 4% probability of retirement is used.
2) For ages 70 and over:
    a. If the future year of consideration is an odd year, then a 4% probability of retirement is used.
    b. If the future year of consideration is an even year,
        i. For members under the age of **76**, a **33%** probability of retirement is used.
        ii. For members with ages **76** or older, a 100% probability of retirement is used.

For Tier One, a member was assumed eligible to retire at age 50 with 20 years of service, or at age 65 with 10 years of service. A member was assumed eligible to retire early at age 62 with 14 years of service.

For Tier Two, a member was assumed eligible to retire at age 50 with 20 years of service, or at age 65 with 8 years of service. A member was assumed eligible to retire early at age 62 with 8 years of service.

Proposed Assumptions

Normal Retirement

1) A 4% probability of retirement is used.
2) For ages 70 and over:
    a. If the future year of consideration is an odd year, then a 4% probability of retirement is used.
    b. If the future year of consideration is an even year,
        i. For members under the age of 76, a **26%** probability of retirement is used.
        ii. For members with ages 76 through 79, a 67% probability of retirement is used.
        iii. For members with ages **80** or older, a 100% probability of retirement is used.

For Tier One, a member was assumed eligible to retire at age 50 with 20 years of service, or at age 65 with 10 years of service. A member was assumed eligible to retire early at age 62 with 14 years of service.

For Tier Two, a member was assumed eligible to retire at age 50 with 20 years of service, or at age 65 with 8 years of service. A member was assumed eligible to retire early at age 62 with 8 years of service.