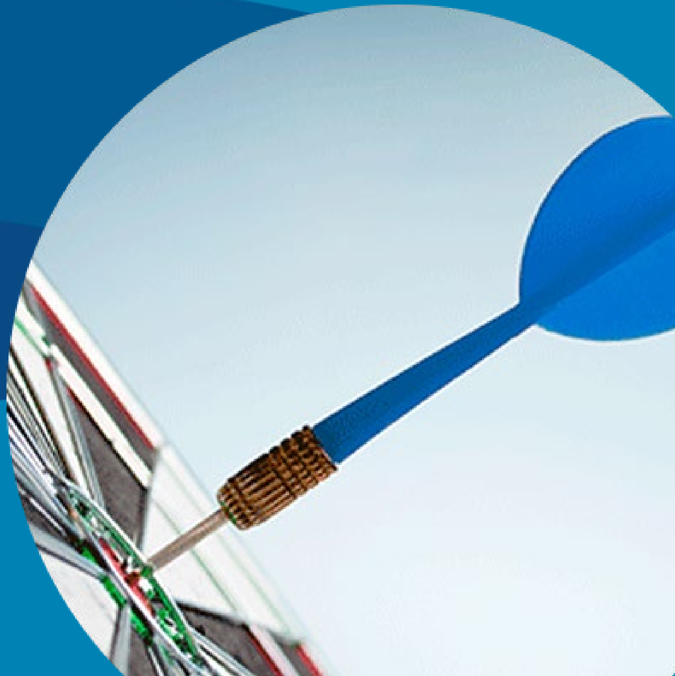
Judges' Retirement System of Illinois

Valuation Results as of June 30, 2022

October 28, 2022



Agenda

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Valuation Results: Funded Status ($ in Millions)

	June 30, 2022	June 30, 2021
Actuarial Accrued Liability	**$2,955.6**	**$2,920.6**
Market Value of Assets (MVA)	**$1,280.6**	**$1,377.1**
Unfunded Actuarial Accrued Liability - MVA Basis	**$1,675.0**	**$1,543.5**
Funded Ratio - MVA Basis	**43.33%**	**47.15%**
Actuarial Value of Assets (AVA)	**$1,309.8**	**$1,227.4**
Unfunded Actuarial Accrued Liability - AVA Basis	**$1,645.8**	**$1,693.2**
Funded Ratio - AVA Basis	**44.32%**	**42.03%**

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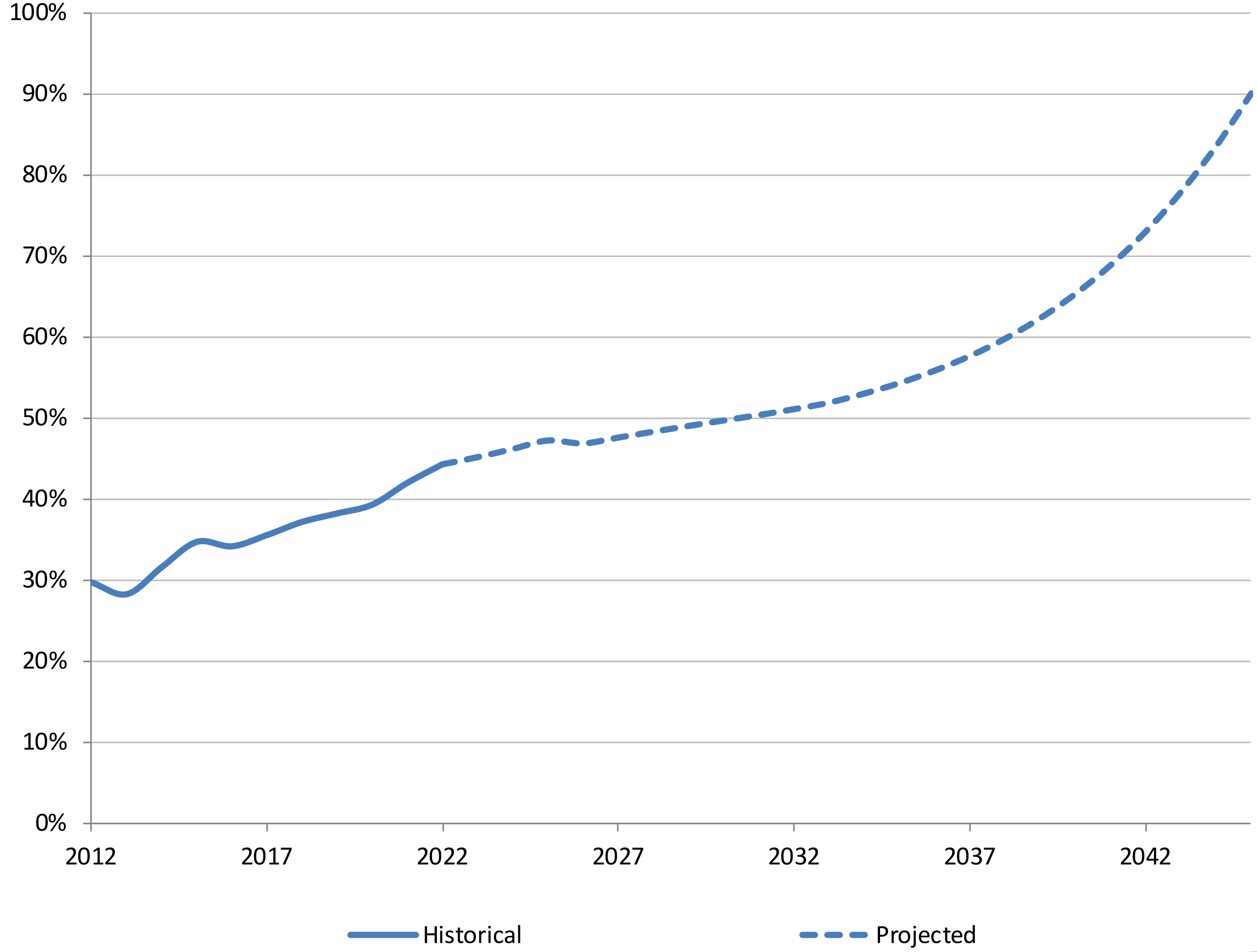
Valuation Results:
Change in Funded Ratio

	June 30, 2022	June 30, 2021	June 30, 2020
Funded Ratio Beginning of Year	42.03%	39.34%	38.26%
Expected [1]	0.99%	1.17%	1.33%
Contribution Shortfall	0.56%	0.19%	-0.01%
Liability Experience	-0.24%	-0.21%	0.06%
Assumption Changes	0.48%	0.00%	0.00%
Asset Experience (Return on AVA)	0.50%	1.54%	-0.30%
Funded Ratio End of Year	44.32%	42.03%	39.34%
Return on AVA	7.71%	10.53%	5.72%

[1] *Assumes total contributions equal to normal cost plus interest.*

Valuation Results: Historical/Projected Funded Ratios



Valuation Results: Cash Flow Comparison ($ in Millions)

	FYE 2022	Projected FYE 2023	Projected FYE 2024	Projected FYE 2025	Projected FYE 2026
Employer Contribution	**$156.0**	**$142.7**	**$147.8**	**$146.9**	**$146.6**
Employee Contribution	**$14.6**	**$13.7**	**$13.9**	**$14.1**	**$14.2**
Benefits	**($181.2)**	**($194.7)**	**($202.7)**	**($210.8)**	**($218.5)**
Expenses	**($1.1)**	**($1.2)**	**($1.1)**	**($1.1)**	**($1.1)**
Net Cash Flow	**($11.7)**	**($39.5)**	**($42.1)**	**($50.9)**	**($58.8)**

- Benefits and expenses continue to exceed State and employee contributions.
- From 2023 to 2033, the percentage of investment income needed to pay ongoing benefits is projected to increase from approximately 47 percent to 96 percent.
  - This implies that a lower level of investment income is projected to be available for potential asset growth.

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Valuation Results:
Contribution Requirements ($ in Millions)

FY 2024 State Contribution	Amount	Rate
Basic Funding	$ 147.8	95.600%

Compares to FY 2023 Contribution	Amount	Rate
Basic Funding	$ 142.7	91.911%

Valuation Results: Contribution Shortfalls ($ in Millions)

FY 2024	Amount	Rate
Annual Determined Contribution	$ 174.7	112.954%
Basic Funding	147.8	95.600%
Difference	$ 26.9	17.354%

FY 2023	Amount	Rate
Annual Determined Contribution	$ 174.9	112.663%
Basic Funding	142.7	91.911%
Difference	$ 32.2	20.752%

The Actuarially Determined Contribution (ADC), is equal to the Normal Cost plus a 25-year level percent of capped payroll closed-period amortization of the Unfunded Actuarial Accrued Liability. As of June 30, 2022, the remaining amortization period is 18 years.

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Experience Study

- Pursuant to Public Act 99-0232, JRS is required to conduct an actuarial experience review once every three years.
  - Most recent study completed in 2022 based on the period July 1, 2018 through June 30, 2021, and effective for the 2022 valuation.
    - Included updates to most demographic assumptions
    - Impact on the 2022 valuation
      - Decrease actuarial accrued liability by $32.7 million
      - Decreased employer normal cost by $454 thousand
      - Decreased the FY 2024 statutory contribution rate by approximately 0.66% of capped payroll (or about $1.1 million)
- Under this schedule, an experience review for the period from July 1, 2021 through June 30, 2024, will be performed after completion of the June 30, 2024, actuarial valuation with expected implementation of the recommended assumptions beginning with the June 30, 2025, actuarial valuation.

Summary

- Investment gains increased the funded ratio and decreased the State's contribution requirement.
- Funded ratio is projected to increase slowly from 44.3% in 2022 to 52.0% in 2033, and then increases rapidly to 90% by 2045.
- Updated actuarial assumptions decreased the System's liabilities by 1.1%.

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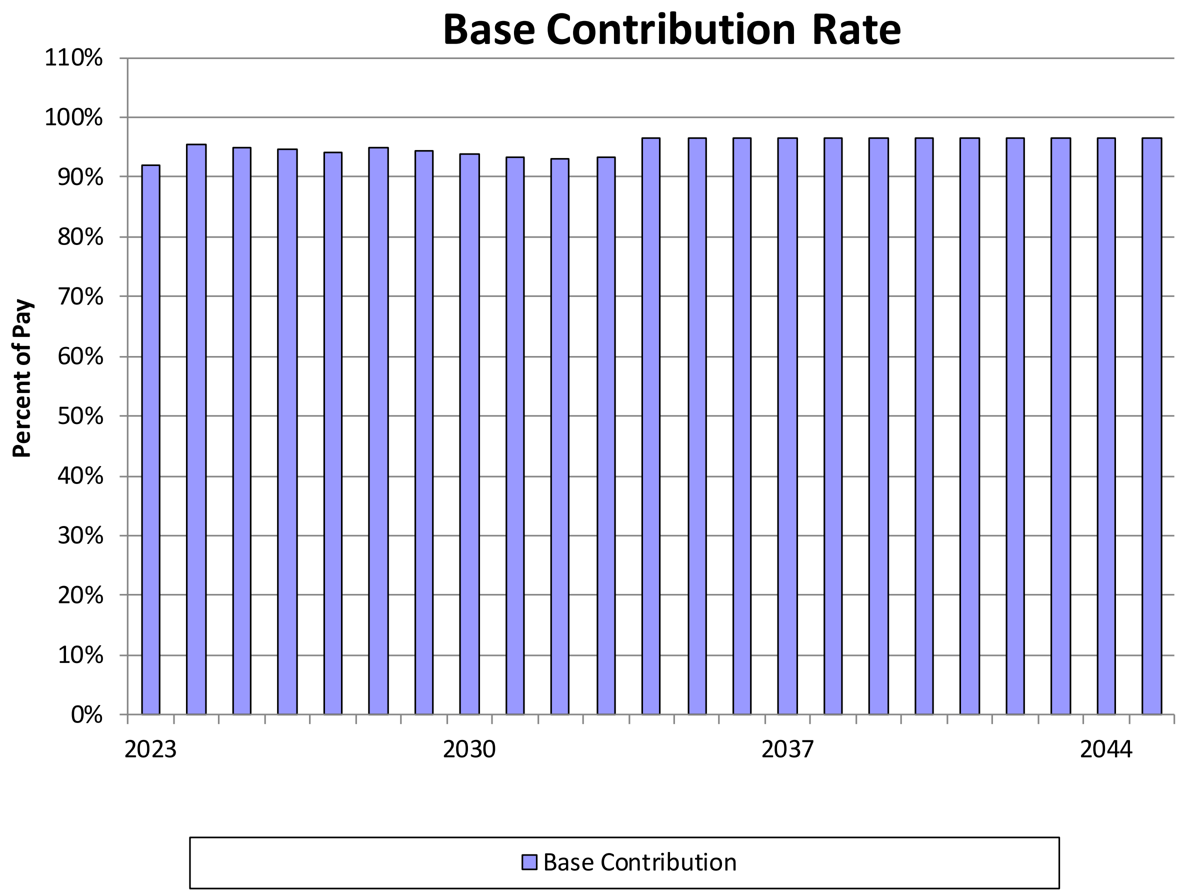
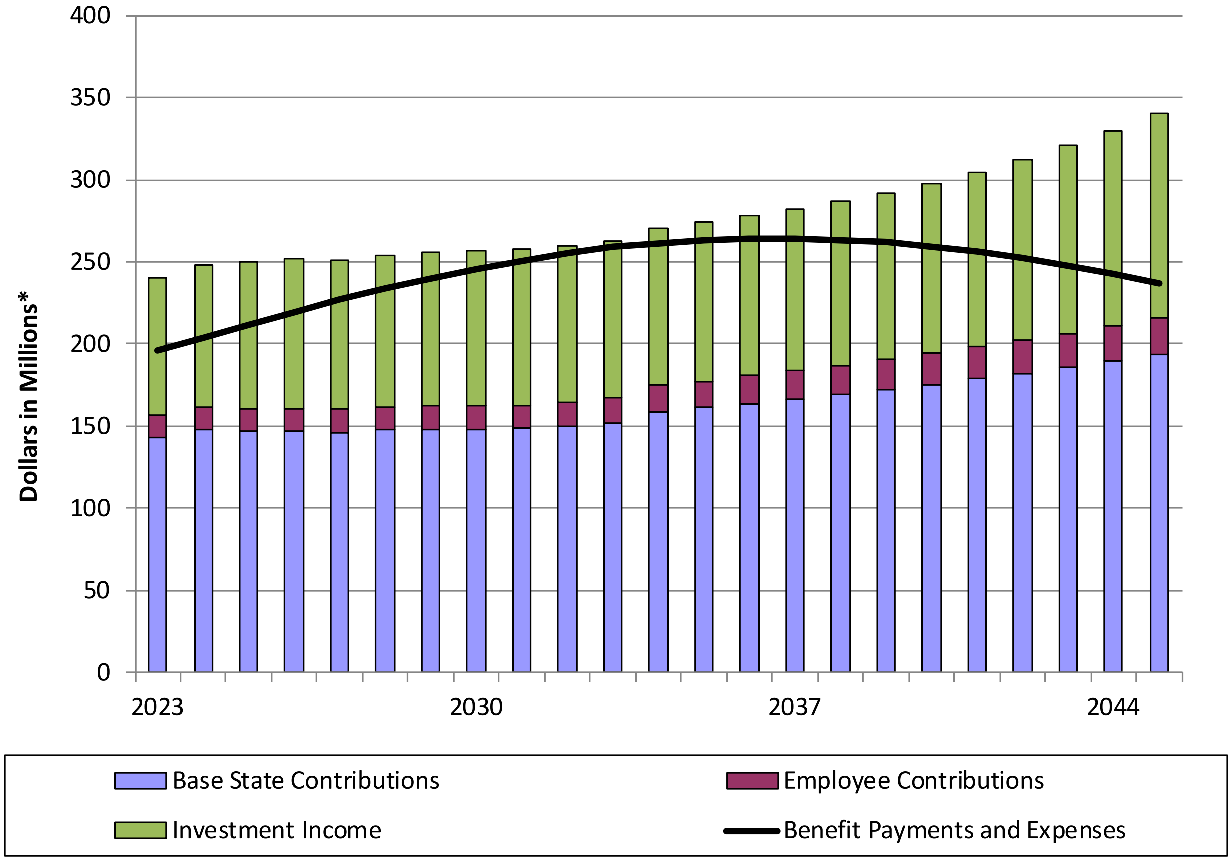
APPENDIX A: PROJECTION RESULTS

Projection Results: Phase-in of investment gains/losses in the AVA and Contribution Rate Variances due to Smoothing of Changes in Assumptions: Contributions – Rate

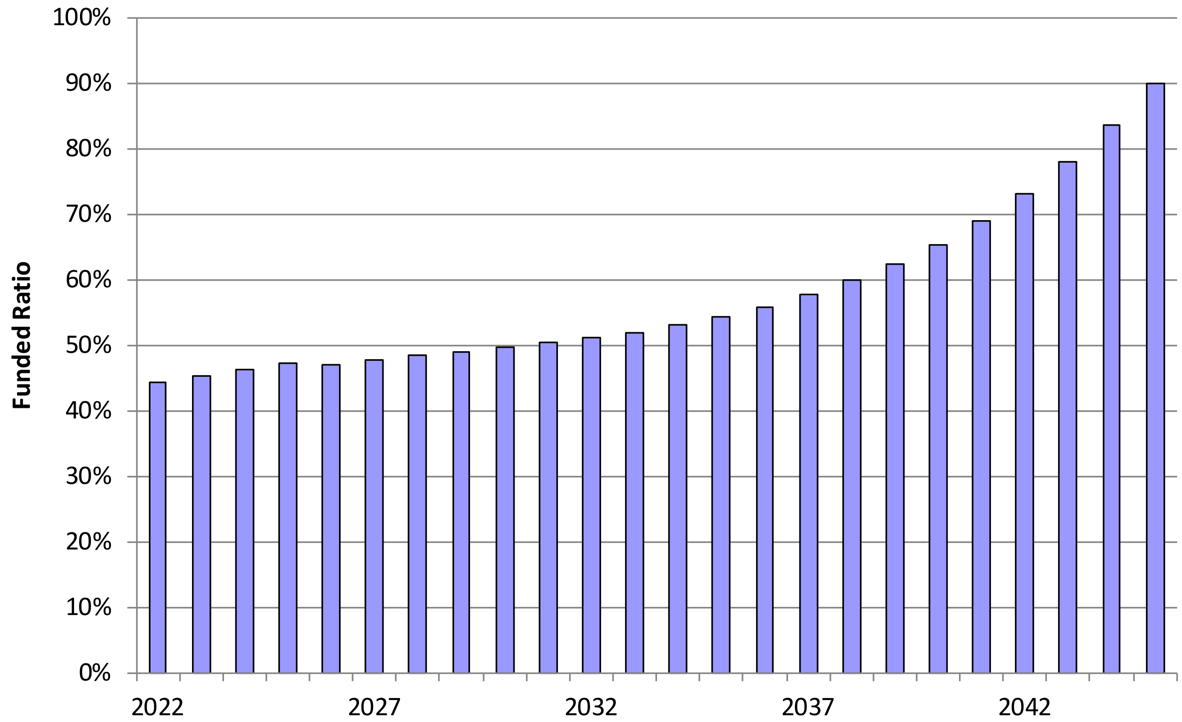


Projection Results: Phase-in of investment gains/losses in the AVA and Contribution Rate Variances due to Smoothing of Changes in Assumptions: Cash Flow Comparison

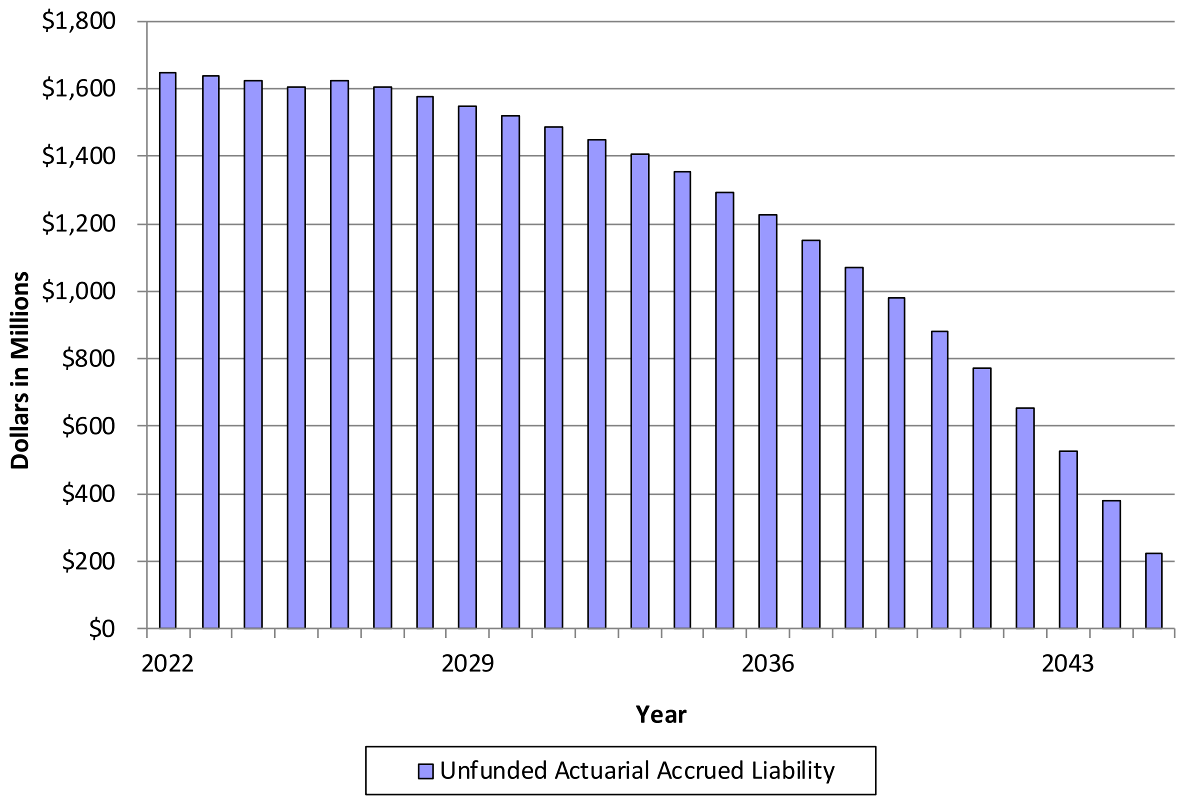


**Future dollar amounts are based on assumed inflationary increases.*

Projection Results: Phase-in of investment gains/losses in the AVA and Contribution Rate Variances due to Smoothing of Changes in Assumptions: Funded Ratio



Projection Results: Phase-in of investment gains/losses in the AVA and Contribution Rate Variances due to Smoothing of Changes in Assumptions: Unfunded Actuarial Accrued Liability



APPENDIX B: MEMBERSHIP DATA

Active Members

	June 30, 2022	June 30, 2021
Number as of Valuation Date	940	944
Covered Uncapped Payroll for Fiscal Year	$200.34 Million	$197.89 Million
Average Annual Earnings	$213,128	$209,634

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Current Benefit Recipients

	June 30, 2022	June 30, 2021
Retirees	973	951
Disabled	0	0
Survivors	350	347
Total	1,323	1,298
Total Benefits	$183.66M	$175.35M
Average Benefits	$138,817	$135,089

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QUESTIONS

Disclosures

- Circular 230 Notice: Pursuant to regulations issued by the IRS, to the extent this presentation concerns tax matters, it is not intended or written to be used, and cannot be used, for the purpose of (i) avoiding tax-related penalties under the Internal Revenue Code or (ii) marketing or recommending to another party any tax-related matter addressed within. Each taxpayer should seek advice based on the individual's circumstances from an independent tax advisor.
- This presentation shall not be construed to provide tax advice, legal advice or investment advice.
- The actuaries submitting this presentation (Alex Rivera, FSA, EA, MAAA, Heidi G. Barry, ASA, FCA, MAAA and Jeffrey T. Tebeau, FSA, EA, MAAA) are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.
- The primary purpose of the actuarial valuation is to measure the financial position of JRS.

Disclosures

- The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The major actuarial assumptions used in this analysis were provided by and are the responsibility of JRS. We are unable to judge the reasonableness of some of these assumptions without performing a substantial amount of additional work beyond the scope of the assignment.
- Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.
- This is one of multiple documents comprising the actuarial report for the JRS actuarial valuation. Additional information regarding actuarial assumptions and methods, and important additional disclosures are provided in the full actuarial valuation report as of June 30, 2022.
- If you need additional information to make an informed decision about the contents of this presentation, or if anything appears to be missing or incomplete, please contact us before relying on this presentation.