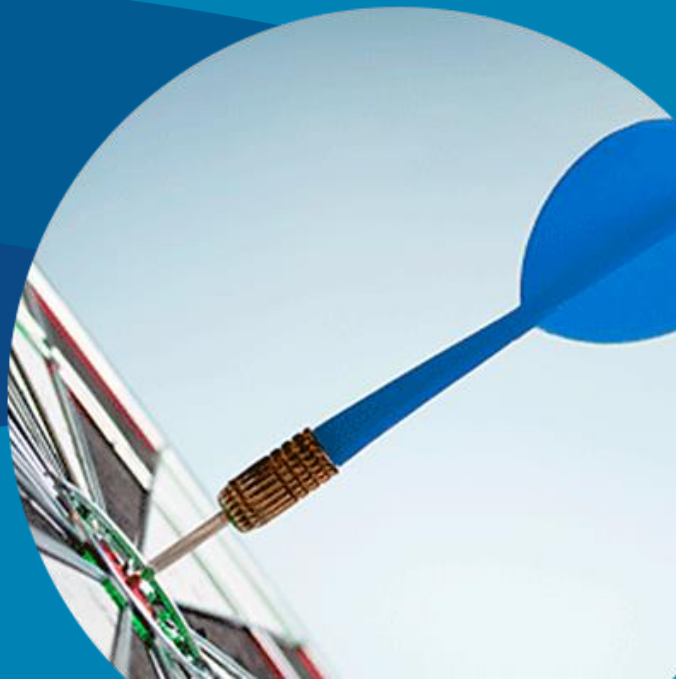
General Assembly Retirement System of Illinois

Valuation Results as of June 30, 2020

October 30, 2020



Agenda

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Valuation Results: Funded Status ($ in Millions)

	June 30, 2020	June 30, 2019
Actuarial Accrued Liability	**$373.5**	**$374.6**
Market Value of Assets (MVA)	**$63.0**	**$59.7**
Unfunded Actuarial Accrued Liability - MVA Basis	**$310.5**	**$314.9**
Funded Ratio - MVA Basis	**16.87%**	**15.94%**
Actuarial Value of Assets (AVA)	**$63.9**	**$60.1**
Unfunded Actuarial Accrued Liability - AVA Basis	**$309.6**	**$314.5**
Funded Ratio - AVA Basis	**17.10%**	**16.03%**

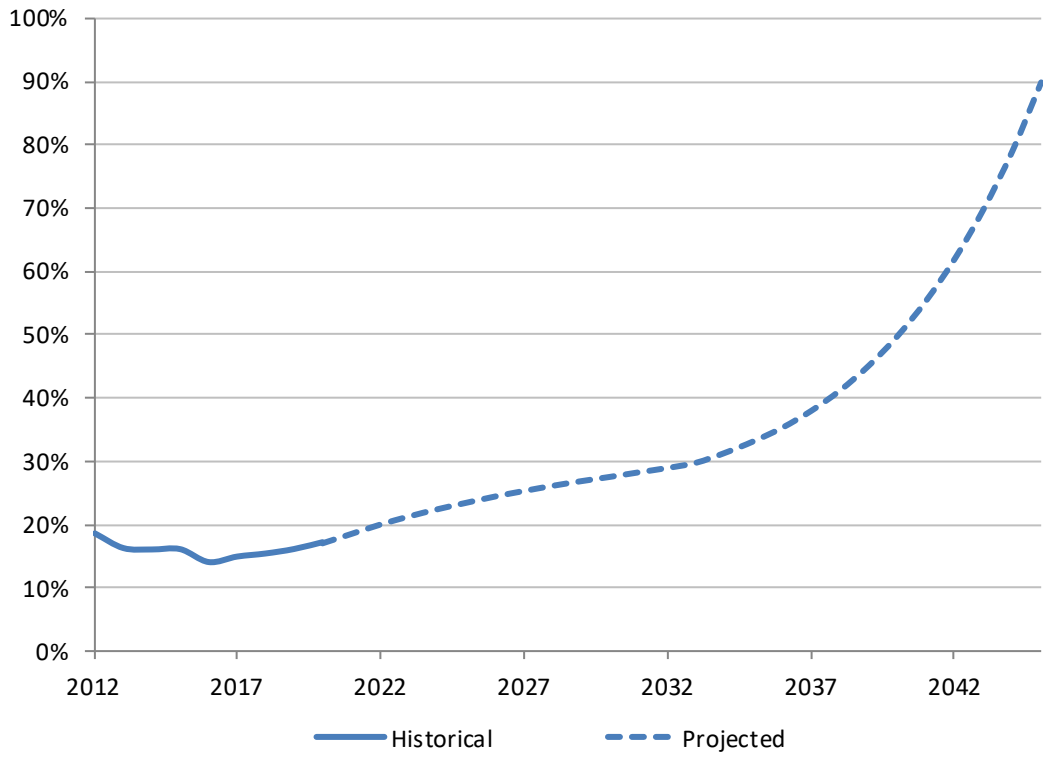
Results may not add due to rounding.

Valuation Results:
Change in Funded Ratio

Change in Funded Ratio	
Funded Ratio 6/30/2019	**16.03%**
Expected [1]	**0.13%**
Contribution Shortfall/Excess	**1.08%**
Liability Experience	**0.08%**
Assumption Changes	**0.00%**
Asset Experience (5.15% Return on AVA)	**-0.22%**
Funded Ratio 6/30/2020	**17.10%**

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

Valuation Results:
Historical/Projected Funded Ratios



Valuation Results: Cash Flow Comparison ($ in Millions)

	FYE 2020	Projected FYE 2021	Projected FYE 2022	Projected FYE 2023	Projected FYE 2024
Employer Contribution	$25.8	$27.3	$27.8	$27.2	$26.5
Employee Contribution	$1.2	$1.1	$1.1	$1.1	$1.1
Benefits	($25.8)	($26.9)	($27.6)	($28.1)	($28.6)
Expenses	($0.4)	($0.4)	($0.3)	($0.3)	($0.3)
Net Cash Flow	$0.8	$1.1	$1.0	($0.1)	($1.3)

- In fiscal years 2023 through 2039, benefits are projected to exceed State and employee contributions.
- From 2024 to 2032, the percentage of investment income needed to pay ongoing benefits is projected to increase from approximately 25 percent to 97 percent.
  - This implies that a lower level of investment income is projected to be available for potential asset growth.

Valuation Results:
Contribution Requirements ($ in Millions)

FY 2022 State Contribution	Amount	Rate
Basic Funding	$ 27.8	286.061%

Compares to FY 2021 Contribution	Amount	Rate
Basic Funding	$ 27.3	277.973%

Valuation Results:
Contribution Shortfalls ($ in Millions)

FYE 2022	Amount	Rate
Actuarially Determined Contribution	$ 35.0	359.953%
Basic Funding	27.8	286.061%
Shortfall	$ 7.2	73.892%

FYE 2021	Amount	Rate
Actuarially Determined Contribution	$ 34.4	350.609%
Basic Funding	27.3	277.973%
Shortfall	$ 7.1	72.636%

- The Actuarially Determined Contribution (ADC), is equal to the Normal Cost plus a 20-year level percent of capped payroll closed-period amortization of the Unfunded Actuarial Accrued Liability. As of June 30, 2020, the remaining amortization period is 15 years.

Experience Study

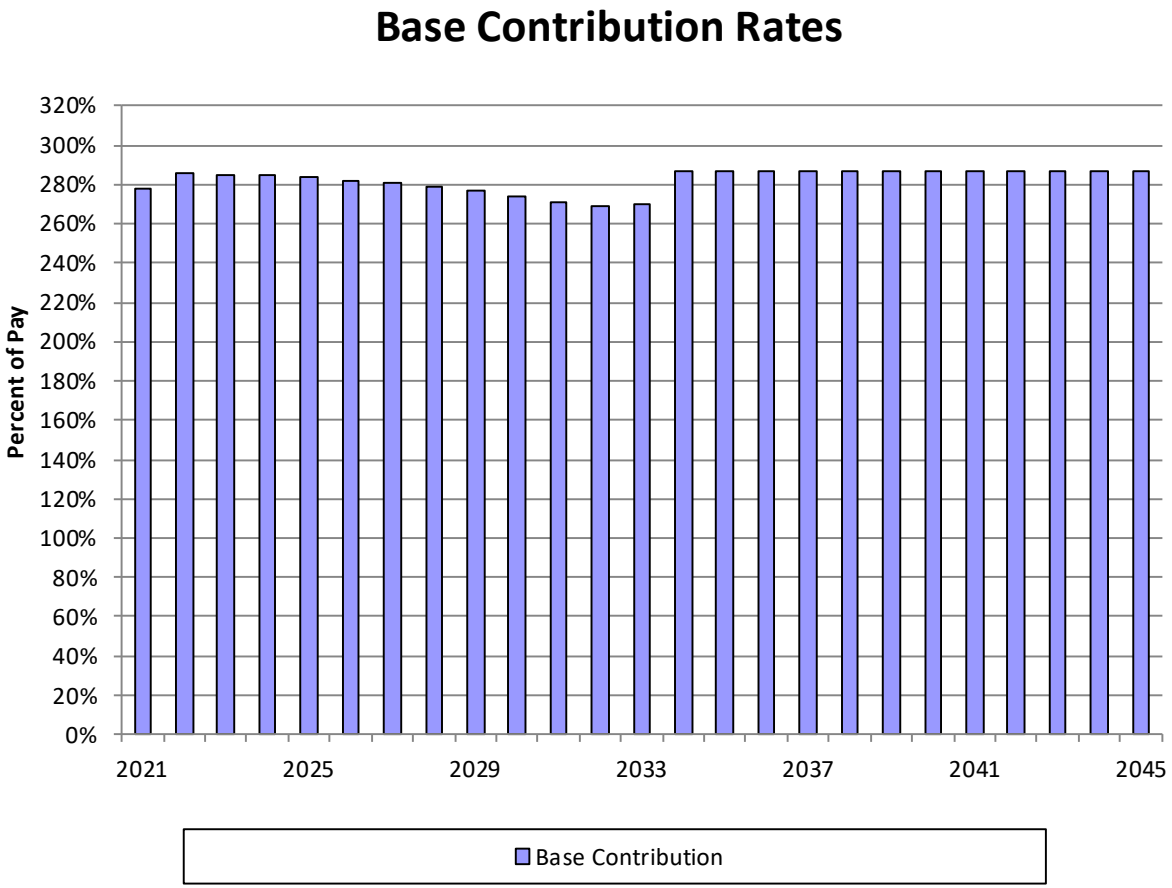
- Pursuant to Public Act 99-0232, GARS is required to conduct an actuarial experience review once every three years. Under this schedule, an experience review for the period from July 1, 2018 through June 30, 2021, will be performed after completion of the June 30, 2021, actuarial valuation with expected implementation of the recommended assumptions beginning with the June 30, 2022, actuarial valuation.

Summary

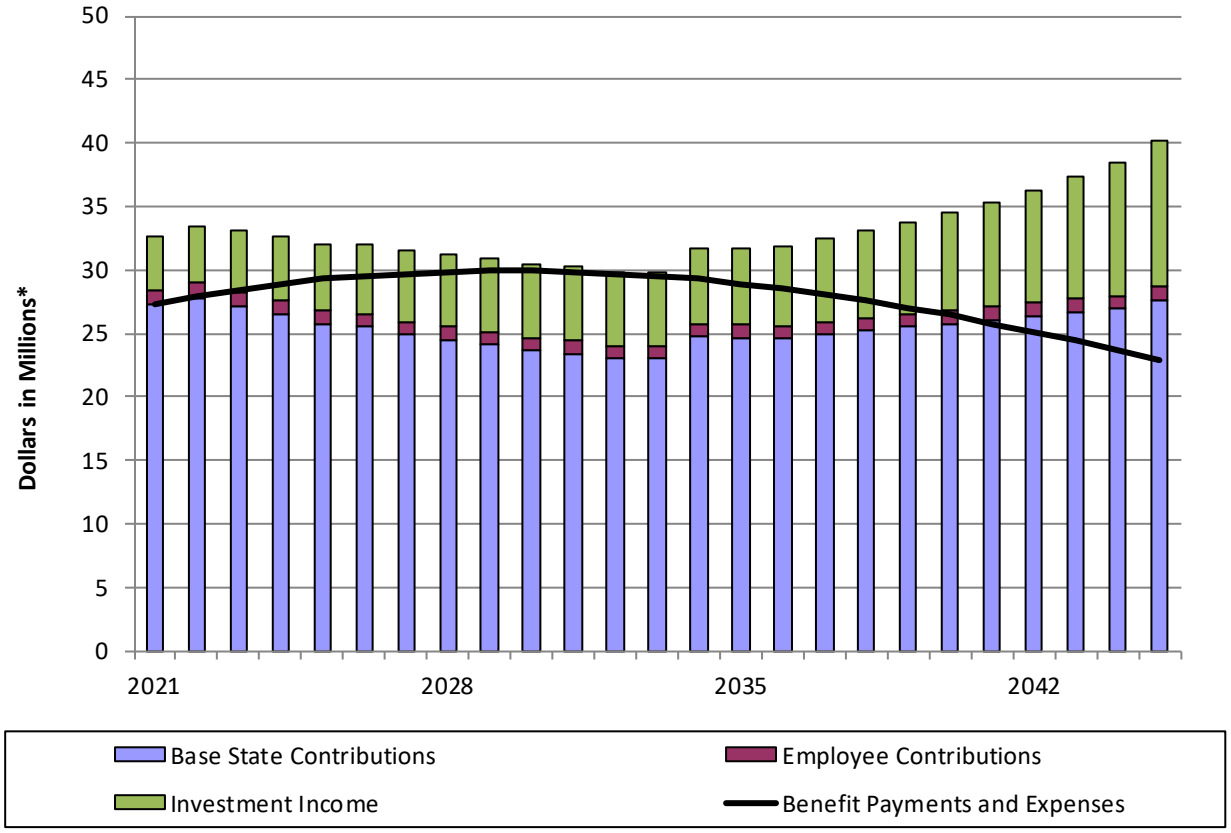
- Investment losses and the continued phase-in of the impact of assumption changes increased the State's contribution requirement.
- Funded ratio is projected to increase slowly from 17.1% in 2020 to 29.9% in 2033, and then increase rapidly to 90% by 2045.

APPENDIX A: PROJECTION RESULTS

Projection Results: Phase-in of Investment Losses in the AVA and Contribution Rate Variances Due to Smoothing of Changes in Assumptions: Contributions – Rate

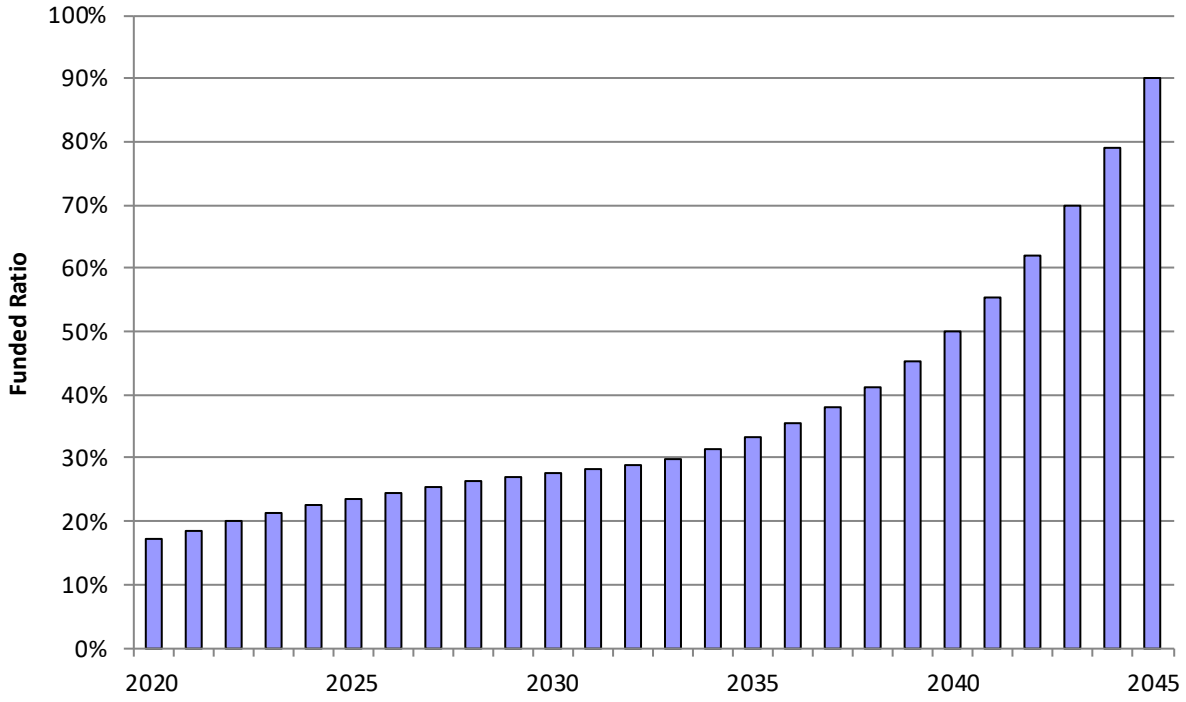


Projection Results: Phase-in of Investment Losses in the AVA and Contribution Rate Variances Due to Smoothing of Changes in Assumptions: Cash Flow Comparison

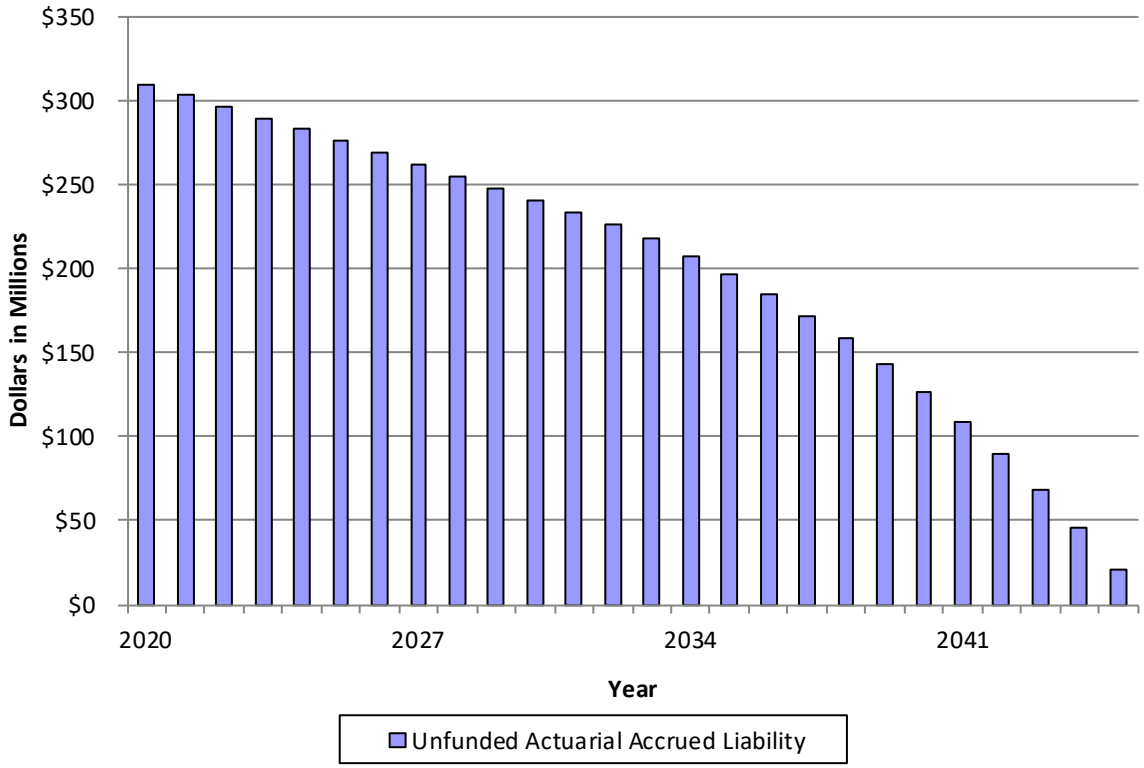


**Future dollar amounts are based on assumed inflationary increases.*

Projection Results: Phase-in of Investment Losses in the AVA and Contribution Rate Variances Due to Smoothing of Changes in Assumptions: Funded Ratio



Projection Results: Phase-in of Investment 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, 2020	June 30, 2019
Number as of Valuation Date	124	126
Covered Uncapped Payroll for Fiscal Year	$10.185 Million	$10.159 Million
Average Annual Earnings	$ 82,136	$ 80,629

Current Benefit Recipients

	June 30, 2020	June 30, 2019
Retirees	318	323
Survivors	109	106
QILDRO	11	12
Total	438	441
Total Benefits	$25.31M	$25.01M
Average Benefits	$57,791	$56,712

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, FCA, 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 GARS.

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 GARS. 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 GARS 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, 2020.
- 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.