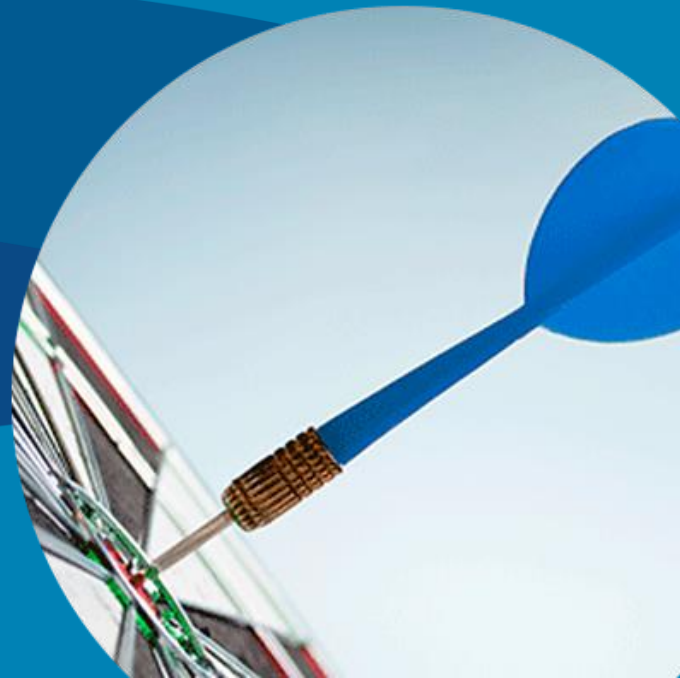




# State Employees' Retirement System of Illinois

Valuation Results as of  
June 30, 2023

October 24, 2023



# Agenda

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- Valuation Results
  - Funded status
  - Change in funded ratio
  - Cash flow comparison
  - Contribution requirements
  - Contribution shortfalls
- Experience Study
- Summary
- Appendix A: Projection Results: Phase-in of investment gains in the Actuarial Value of Assets (AVA) and contribution rate variances due to smoothing of changes in assumptions
- Appendix B: Membership Data

# Valuation Results: Funded Status

## (\$ in Millions)

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|   | <u>June 30, 2023</u> | <u>June 30, 2022</u> |
|---|----------------------|----------------------|
| <b>Actuarial Accrued Liability</b>                      | <b>\$ 53,909</b>     | <b>\$ 52,050</b>     |
| <b>Market Value of Assets (MVA)</b>                     | <b>\$ 23,415</b>     | <b>\$ 22,273</b>     |
| <b>Unfunded Actuarial Accrued Liability - MVA Basis</b> | <b>\$ 30,493</b>     | <b>\$ 29,777</b>     |
| <b>Funded Ratio - MVA Basis</b>                         | <b>43.44%</b>        | <b>42.79%</b>        |
| <b>Actuarial Value of Assets (AVA)</b>                  | <b>\$ 24,072</b>     | <b>\$ 22,893</b>     |
| <b>Unfunded Actuarial Accrued Liability - AVA Basis</b> | <b>\$ 29,836</b>     | <b>\$ 29,157</b>     |
| <b>Funded Ratio - AVA Basis</b>                         | <b>44.65%</b>        | <b>43.98%</b>        |

*Totals may not add due to rounding.*



# Valuation Results:

## Change in Funded Ratio

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### Change in Funded Ratio

|   | <u>June 30, 2023</u> | <u>June 30, 2022</u> | <u>June 30, 2021</u> |
|---|----------------------|----------------------|----------------------|
| <b>Funded Ratio Beginning of Year</b>   | <b>43.98%</b>        | <b>41.14%</b>        | <b>38.67%</b>        |
| <b>Expected <sup>1</sup></b>            | <b>1.21%</b>         | <b>1.45%</b>         | <b>1.59%</b>         |
| <b>Contribution Shortfall</b>           | <b>0.35%</b>         | <b>0.40%</b>         | <b>-0.34%</b>        |
| <b>Liability Experience</b>             | <b>-0.61%</b>        | <b>0.03%</b>         | <b>-0.28%</b>        |
| <b>Plan Provision Changes</b>           | <b>0.00%</b>         | <b>0.14%</b>         | <b>-0.01%</b>        |
| <b>Assumption Changes</b>               | <b>0.00%</b>         | <b>0.73%</b>         | <b>0.02%</b>         |
| <b>Asset Experience (Return on AVA)</b> | <b><u>-0.28%</u></b> | <b><u>0.09%</u></b>  | <b><u>1.49%</u></b>  |
| <b>Funded Ratio End of Year</b>         | <b>44.65%</b>        | <b>43.98%</b>        | <b>41.14%</b>        |
| <b>Return on AVA</b>                    | <b>6.09%</b>         | <b>7.76%</b>         | <b>10.67%</b>        |

<sup>1</sup> Assumes total contributions equal to normal cost plus interest.



# Valuation Results:

## Cash Flow Comparison (\$ in Millions)

### Cash Flow Comparison

|                        | FYE 2023   | Projected<br>FYE 2024 | Projected<br>FYE 2025 | Projected<br>FYE 2026 | Projected<br>FYE 2027 |
|------------------------|------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Employer Contributions | \$ 2,667   | \$ 2,584              | \$ 2,548              | \$ 2,578              | \$ 2,602              |
| Employee Contributions | \$ 297     | \$ 287                | \$ 290                | \$ 292                | \$ 295                |
| Benefits               | \$ (3,153) | \$ (3,244)            | \$ (3,389)            | \$ (3,522)            | \$ (3,656)            |
| Expenses               | \$ (19)    | \$ (22)               | \$ (23)               | \$ (23)               | \$ (23)               |
| Net Cash Flow          | \$ (208)   | \$ (395)              | \$ (574)              | \$ (675)              | \$ (782)              |

- Benefits and expenses continue to exceed State and employee contributions.
- From 2024 to 2033, the percentage of investment income needed to pay ongoing benefits is projected to increase from approximately 24.5 percent to 53.4 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)

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### FY 2025 State contribution

|               | <u>Amount</u>   | <u>Rate</u>    |
|---------------|-----------------|----------------|
| Basic Funding | \$ 2,548        | 48.798%        |
| Debt Service  | 124             | 2.382%         |
| Total         | <u>\$ 2,672</u> | <u>51.180%</u> |

### Compares to FY 2024 contribution

|               | <u>Amount</u>   | <u>Rate</u>    |
|---------------|-----------------|----------------|
| Basic Funding | \$ 2,584        | 50.276%        |
| Debt Service  | 122             | 2.381%         |
| Total         | <u>\$ 2,706</u> | <u>52.657%</u> |

# Valuation Results:

## Contribution Shortfalls (\$ in millions)

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| <u>2023 Valuation</u>               | <u>Amount</u> | <u>Rate</u>    |
|-------------------------------------|---------------|----------------|
| Actuarially Determined Contribution | \$ 3,144      | 60.207%        |
| Basic funding                       | <u>2,548</u>  | <u>48.798%</u> |
| Shortfall                           | \$ 596        | 11.409%        |
| <br>                                |               |                |
| <u>2022 Valuation</u>               | <u>Amount</u> | <u>Rate</u>    |
| Actuarially Determined Contribution | \$ 2,995      | 58.268%        |
| Basic funding                       | <u>2,584</u>  | <u>50.276%</u> |
| Shortfall                           | \$ 411        | 7.992%         |

- 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, 2023 (applicable for FY 2025), the remaining amortization period is 17 years.

# Experience Study

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- Pursuant to Public Act 99-0232, SERS 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.
- 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.



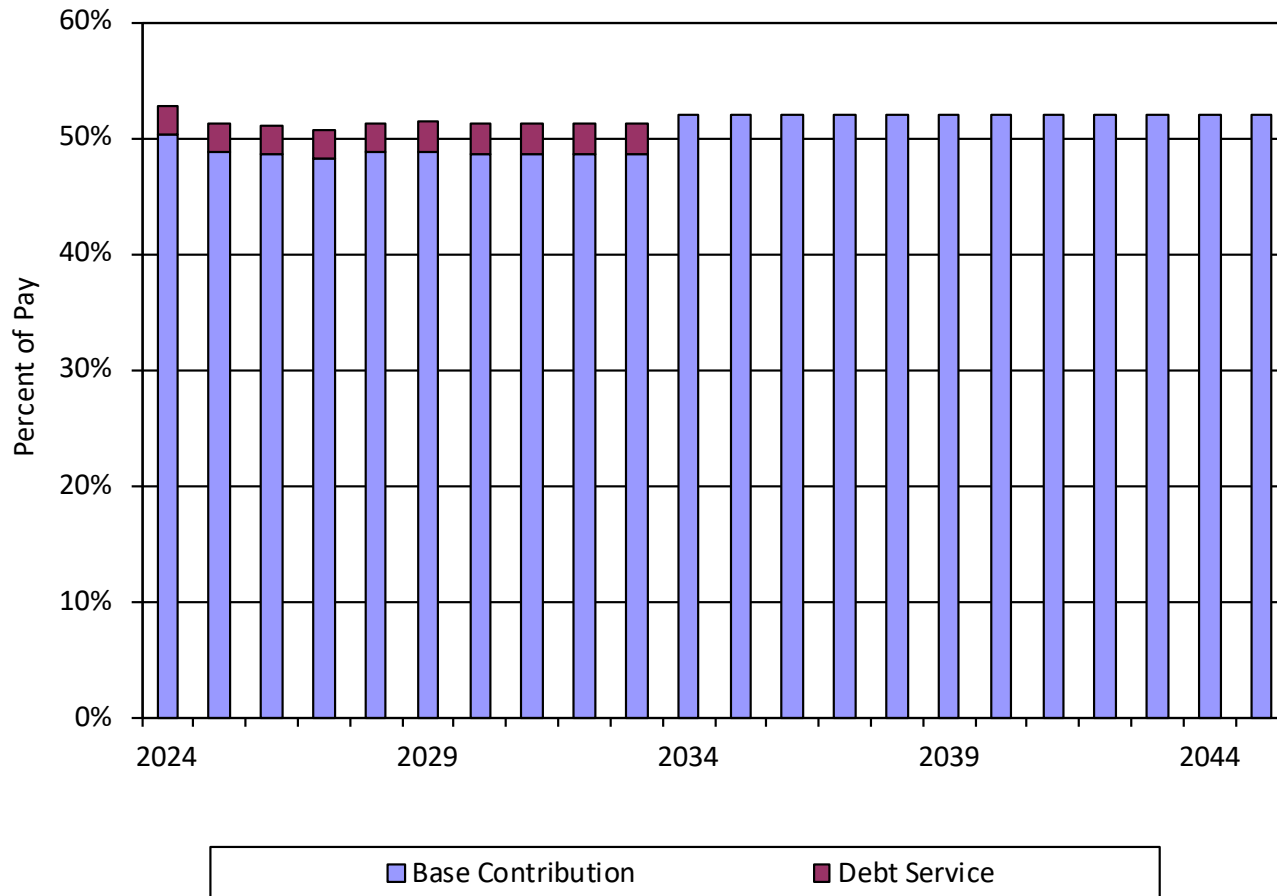
# Summary

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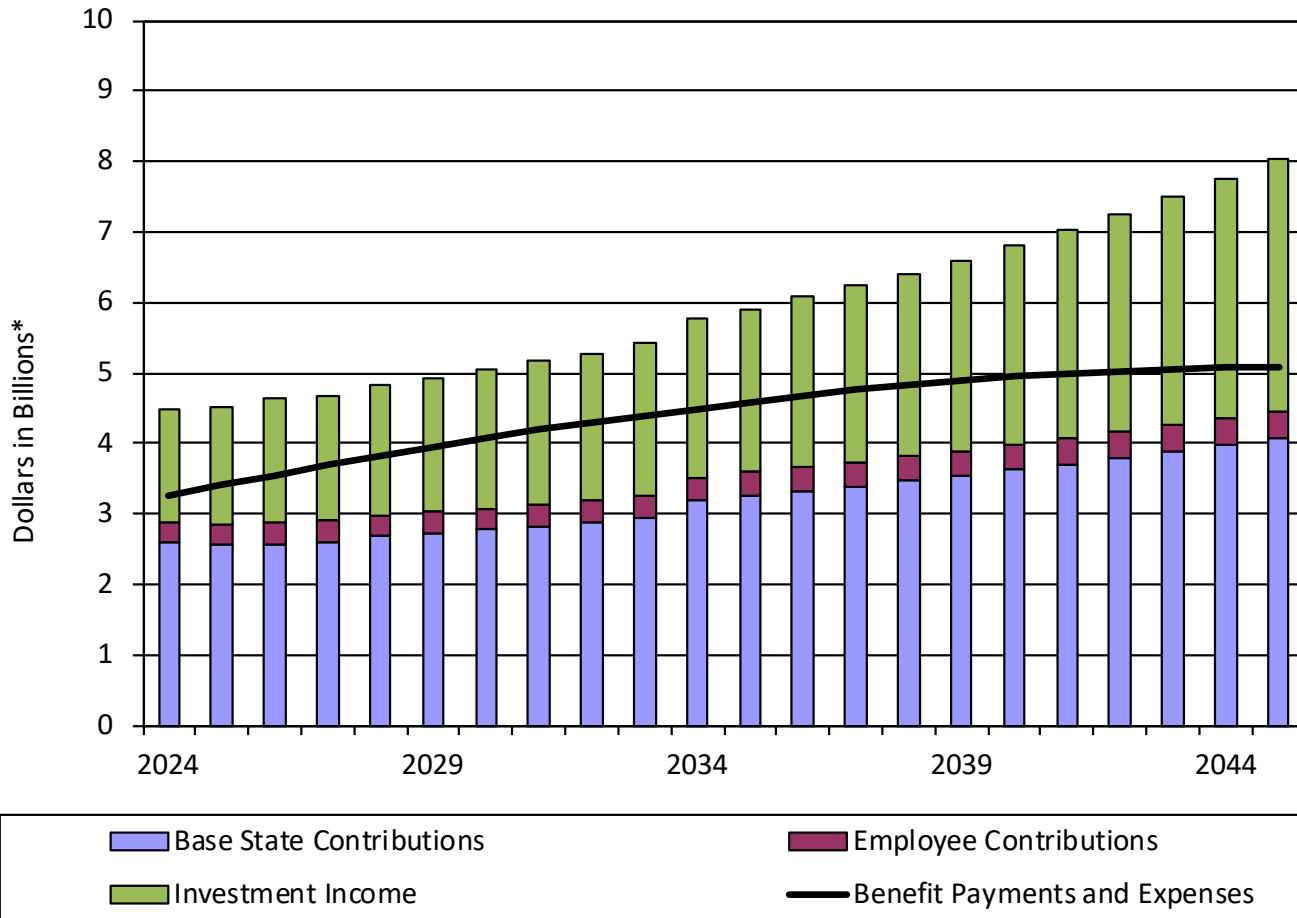
- The State's contribution as a percent of payroll decreased more than projected due to the total payroll increase, however it increased as a dollar amount from last year's projections. Investment and liability losses slowed the funded ratio progress in FY 2023.
- Funded ratio is projected to increase slowly from 44.7% in 2023 to 54.3% in 2033, and then increases rapidly to 90% by 2045.

# 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



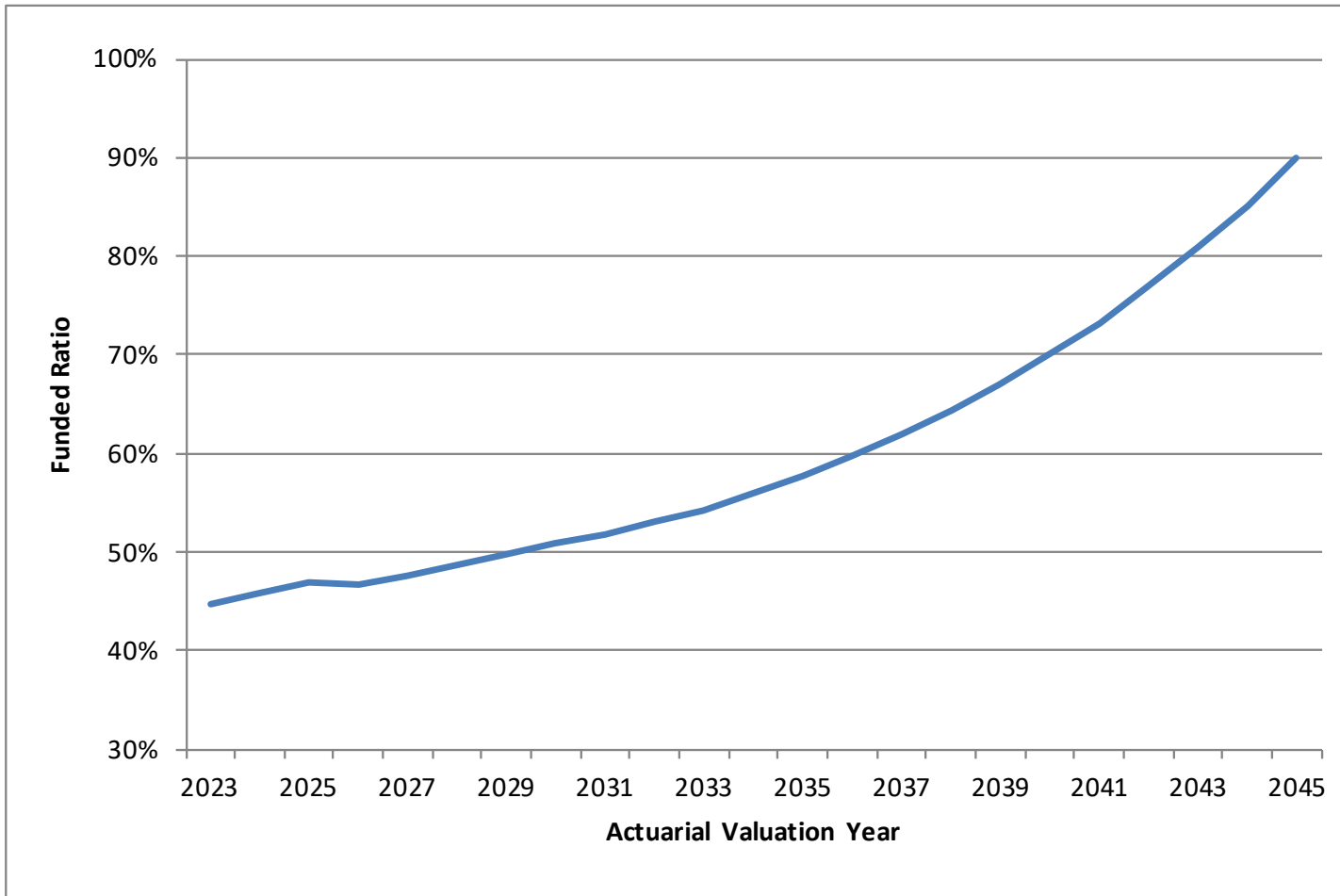
# Projection Results: Phase-in of investment gains/losses in the AVA and Contribution Rate Variances due to Smoothing of Changes in Assumptions: Cash Flow Comparison



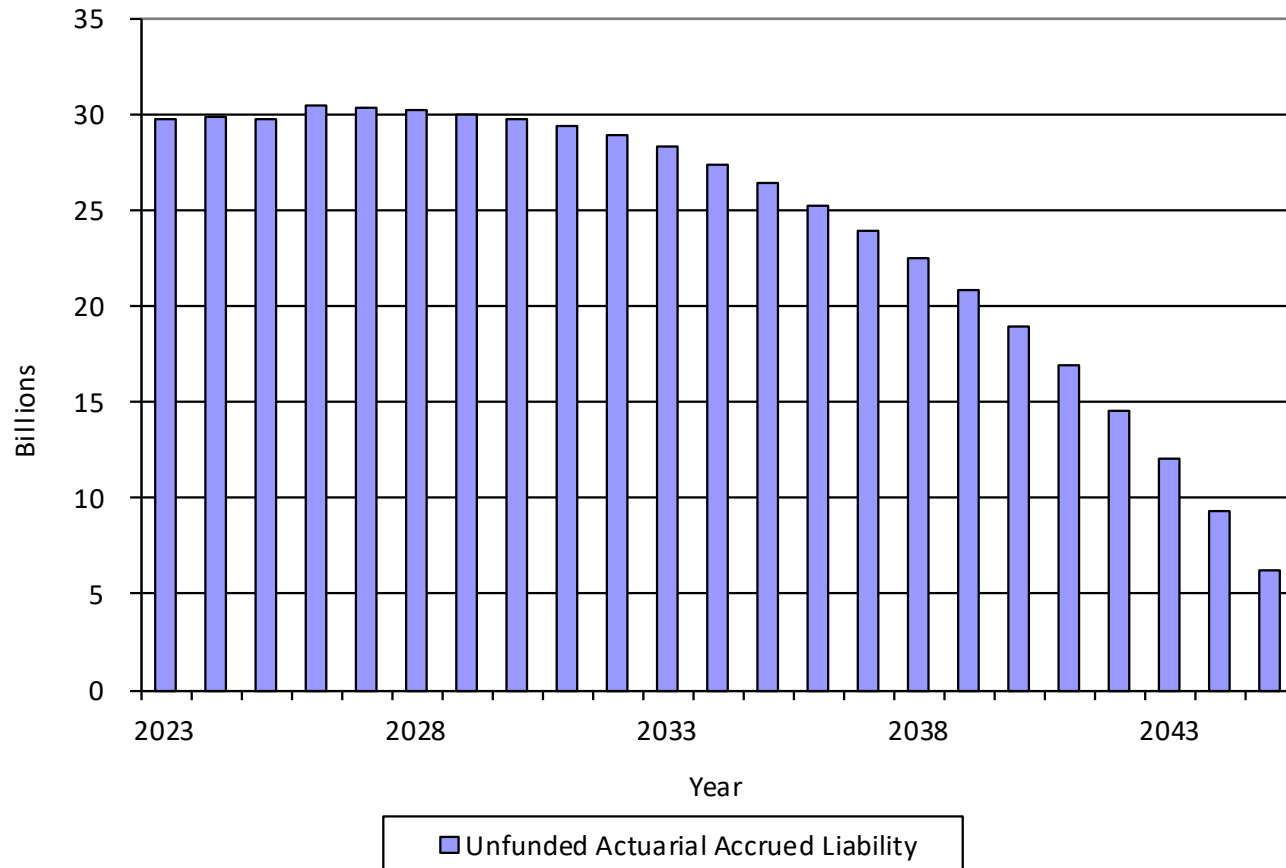
*\*Future dollar amounts are based on assumed inflationary increases.*



# 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

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|  | <u>June 30, 2023</u>   | <u>June 30, 2022</u>   |
|--|------------------------|------------------------|
| <b>Number as of Valuation Date</b>     | <b>61,651</b>          | <b>61,056</b>          |
| <b>Covered Payroll for Fiscal Year</b> | <b>\$5.051 Billion</b> | <b>\$4.820 Billion</b> |
| <b>Average Annual Earnings</b>         | <b>\$81,929</b>        | <b>\$78,949</b>        |



# Active Members

| Active Membership                 |        |                                   |                                     |  |
|-----------------------------------|--------|-----------------------------------|-------------------------------------|--|
| Fiscal Year<br>Ending<br>June 30, | Total  | Annual<br>Change in<br>Membership | % Annual<br>Change in<br>Membership | Covered<br>Payroll<br>(\$ in Millions) |
| 2013                              | 61,545 |                                   |                                     | \$4,236.19                             |
| 2014                              | 62,844 | 1,299                             | 2.11%                               | 4,416.15                               |
| 2015                              | 63,273 | 429                               | 0.68%                               | 4,453.68                               |
| 2016                              | 61,317 | (1,956)                           | -3.09%                              | 4,284.36                               |
| 2017                              | 60,612 | (705)                             | -1.15%                              | 4,195.78                               |
| 2018                              | 61,397 | 785                               | 1.30%                               | 4,243.74                               |
| 2019                              | 62,026 | 629                               | 1.02%                               | 4,601.38                               |
| 2020                              | 62,621 | 595                               | 0.96%                               | 4,523.88                               |
| 2021                              | 62,253 | (368)                             | -0.59%                              | 4,705.25                               |
| 2022                              | 61,056 | (1,197)                           | -1.92%                              | 4,820.28                               |
| 2023                              | 61,651 | 595                               | 0.97%                               | 5,050.98                               |
| <b>Total Change</b>               |        | <b>106</b>                        | <b>0.03%</b>                        |  |

# Current Benefit Recipients

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|                                       | <u>June 30, 2023</u>   | <u>June 30, 2022</u>   |
|---------------------------------------|------------------------|------------------------|
| <b>Retirees</b>                       | <b>64,289</b>          | <b>63,319</b>          |
| <b>Survivors</b>                      | <b>12,177</b>          | <b>11,912</b>          |
| <b>Disabled</b>                       | <b>1,570</b>           | <b>1,687</b>           |
| <b>Eligible for Deferred Benefits</b> | <b>153</b>             | <b>152</b>             |
| <b>Total</b>                          | <b>78,189</b>          | <b>77,070</b>          |
| <b>Total Benefits</b>                 | <b>\$3.158 Billion</b> | <b>\$3.015 Billion</b> |
| <b>Average Benefits</b>               | <b>\$40,384</b>        | <b>\$39,115</b>        |



# QUESTIONS

# Disclosures

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- 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 SERS.

# Disclosures

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- 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 SERS. 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 SERS 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, 2023.
- 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.