# Supplemental Legislative Retirement Plan of Mississippi

## Annual Valuation Report

## Prepared as of June 30, 2024

CavMac
Actuarial Consulting Services

December 10, 2024

Board of Trustees
Public Employees' Retirement System of Mississippi
429 Mississippi Street
Jackson, MS 39201-1005

Ladies and Gentlemen:

Presented in this report are the results of the annual actuarial valuation of the Supplemental Legislative Retirement Plan of Mississippi (SLRP). The purpose of the valuation is to:

- Measure the System's funding progress as of the valuation date,
- To determine the unfunded actuarial accrued liability amortization period beginning July 1, 2024 using the Fixed Contribution Rate (FCR) of 8.40% of payroll,
- To determine the actuarially determined contribution (ADC) for the fiscal year beginning July 1, 2026 using the assumptions and methods in the Board's Funding Policy,
- To project the System's funding progress for the next thirty years and provide clear reporting and risk analysis of the funding metrics as outlined in the Board's funding policy using a "Signal Light" approach, and
- To assist the Board in determining whether an increase or decrease is needed in the Fixed Contribution Rate.

The results may not be applicable for other purposes. The date of the valuation was June 30, 2024.

The valuation was based upon data, furnished by the Executive Director and the PERS staff, concerning active, inactive and retired members along with pertinent financial information. While not verifying data at the source, the actuary performed tests for consistency and reasonableness. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete, our results may be different and our calculations may need to be revised.The complete cooperation of the PERS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the presentation of valuation results on page 1 and the projection results on page 5. Since none of the funding policy metrics are in the Red Status, we do not recommend an increase in the Fixed Contribution Rate (FCR) of 8.40% of annual compensation at this time. However, if there is any negative experience in the near future, the Fixed Contribution Rate may need to be increased.

No changes were made to the actuarial assumptions or plan provisions since the previous valuation.

The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board. We have reviewed the actuarial methods, including the asset valuation method, and continue to believe they are appropriate for the purpose of determining employer contribution levels.

In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

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; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the system's funded status); and changes in plan provisions or applicable law. An analysis of the potential range of future measurements is provided in Section XI of this report.

This actuarial valuation was performed to determine the adequacy of the Board approved contribution rate to fund the plan. The asset values used to determine unfunded liabilities and funded ratios are not market values but less volatile market related values. A smoothing technique is applied to market values to determine the market related values. The unfunded liability amounts and funded ratios using the market value of assets would be different. The interest rate used for determining liabilities is based on the expected return on assets. Therefore, liability amounts in this report cannot be used to assess a settlement of the obligation.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Edward J. Koebel

Edward J. Koebel, EA, FCA, MAAA
Chief Executive Officer

Ben Mobley

Ben Mobley, ASA, FCA, MAAA
Consulting Actuary

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## SECTION I – EXECUTIVE SUMMARY

1. This report, prepared as of June 30, 2024, presents the results of the annual actuarial valuation of the Plan. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized below. The current valuation and reported benefit amounts reflect any benefit increases granted to retirees as of July 1, 2024.

| VALUATION DATE | June 30, 2024 | June 30, 2023 |
|---|---|---|
| **Investment Return Assumption** | **7.00%** | **7.00%** |
| Active members included in valuation | | |
| Number | 175 | 172 |
| Annual compensation | $ 9,090,777 | $ 8,425,049 |
| Retirees | | |
| Number | 247 | 228 |
| Annual allowances | $ 1,779,151 | $ 1,633,116 |
| Assets | | |
| Market related actuarial value | $ 21,994,000 | $ 21,465,000 |
| Market value of assets (MVA) | $ 21,868,000 | $ 20,830,000 |
| Unfunded actuarial accrued liability (UAAL) | $ 7,441,768 | $ 7,065,466 |
| Funded Ratio based on actuarial value | 74.7% | 75.2% |
| Employer Fixed Contribution Rate (FCR) | | |
| Normal Cost* | 3.22% | 3.21% |
| Accrued liability | 5.18 | 5.19 |
| Total | 8.40% | 8.40% |
| Payment period based on the FCR | 25.5 years | 26.5 years |
| Actuarially Determined Contribution (ADC) Rate | | |
| Normal Cost* | 3.22% | 3.21% |
| Accrued liability | 5.31 | 5.36 |
| Total | 8.53% | 8.57% |
| Amortization Period for ADC | 24.4 years | 25.0 years |
| ADC Ratio to Fixed Contribution Rate | 101.55% | 102.02% |
| Unfunded actuarial accrued liability based on MVA | $ 7,567,768 | $ 7,700,466 |
| Funded Ratio based on market value | 74.3% | 73.0% |

* Includes load for administrative expenses. See Section VI for more contribution rate detail.

2. The valuation balance sheet showing the results and liabilities of the valuation is given in Section III.

3. Comments on the valuation results are provided in Section IV, comments on the experience and actuarial gains and losses during the valuation year are provided in Section V and the rates of contribution payable by employers are provided in Section VI and Section VII.

4. Schedule A of this report presents the development of the assets. The estimated investment return for the plan year ending June 30, 2024 on a market value of assets basis was 10.46% and on actuarial value of assets basis was 7.71%. These can be compared to the assumed rate of return for the same period of 7.00%. The market value of assets basis return may be slightly different than what PERS reports as this estimated return is assuming cash flow as of the middle of the year.

5. Schedule B details the actuarial assumptions and methods employed. There have been no changes since the previous valuation.

6. Schedule C gives a summary of the benefit and contribution provisions of the plan. There have been no changes since the previous valuation.

7. The funded ratio shown in the Summary of Principal Results is the ratio of actuarial value of assets to the actuarial accrued liability. The funded status is different based on the market value of assets. The funded ratio is an indication of progress in funding the promised benefits. Since the ratio is less than 100%, there is a need for additional contributions toward the payment of the unfunded accrued liability. In addition, this funded ratio does not have any relationship to measuring the sufficiency if the plan had to settle its liabilities.

8. The Fixed Contribution Rate (FCR) was increased to 8.40% of annual compensation beginning July 1, 2024. As shown on page 1 of the report, the amortization period to pay off the Unfunded Actuarial Accrued Liability (UAAL) using the FCR of 8.40% is 25.5 years, which is a snapshot view of the UAAL as of the valuation date of June 30, 2024.

9. In addition, as shown on page 1 of the report, the Actuarially Determined Contribution (ADC) Rate for the 2024 valuation year is 8.53% of annual compensation and the ratio of the ADC to the FCR (8.53% to 8.40%) is calculated at 101.55% as of June 30, 2024. Per the Board's Funding Policy, which is provided in Schedule F, this actuarial metric is in the Yellow Status as the ratio is between 100% and 110%.

10. The projection results, shown beginning in Section IX, allow the Board to see a forecast of the System's funding progress over time, allow the Board to review the funding goals and benchmarks outlined in the funding policy, and provide the status of the metrics/targets in the Funding Policy that determines whether or not a contribution rate increase should be recommended. The objective of the current funding policy is to accumulate sufficient assets during a member's employment to fully finance the benefit the member receives throughout retirement. In order to reach that objective, some goals and benchmarks were established as follows:
    - Preservation of the defined benefit structure for providing lifetime benefits to the SLRP membership,
    - Maintain an increasing trend in the funded ratio over the projection period with an ultimate goal of being 100% funded,
    - Ensure benefit improvements are funded through increases in contribution requirements in accordance with Article 14, S 272A, of the Mississippi Constitution,
    - Contribution rate stability as a percentage of payroll (Fixed Contribution Rate – FCR),
    - Require clear reporting and risk analysis of the metrics by the actuary as outlined in Section II of the policy using a "Signal Light" approach to assist the Board in determining whether increases or decreases are needed in the employer contribution rate.

11. For SLRP, if any one of the following metrics are in the Red Signal Light status in conjunction with the annual valuation report and the projection report, the actuary shall determine and recommend to the Board an employer contribution rate increase to consider that is sufficient to get all three metrics back into the Green Signal Light status.

    - Funded Ratio – defined as the actuarial value of assets divided by the actuarial accrued liability. One of the funding goals is to have an increasing funded ratio over the projection period with an ultimate goal of having a 100% funded ratio. The Board sets the Signal Light definition as follows:

| Status | Definition |
|---|---|
| Green | Funded Ratio above 90% in 2047 |
| Yellow | Funded Ratio between 70% and 90% in 2047 |
| Red | Funded Ratio below 70% in 2047 |

- Cash flow as a percentage of assets – defined as the difference between total contributions coming into the trust and the benefit payments made to retirees and beneficiaries going out of the trust as a percentage of beginning year market value of assets. Over the projection period, this percentage will fluctuate from year to year so for Signal Light testing, the net cash flow percentage over the entire projection period will be tested. The Board sets the Signal Light definition as follows:

| Status | Definition |
|---|---|
| Green | Net Cash Flow Percentage above negative 5.25% (-5.25%) during the projection period |
| Yellow | Net Cash Flow Percentage between negative 5.25% (-5.25%) and negative 7.00% (-7.00%) during the projection period |
| Red | Net Cash Flow Percentage below negative 7.00% (-7.00%) during the projection period |

- Actuarially Determined Contribution (ADC) – defined as the contribution requirement determined by the actuary using a contribution allocation procedure based on the principal elements disclosed in Section III of the funding policy:
  1. Actuarial Cost Method
  2. Asset Smoothing Method
  3. Amortization Method

The calculation of the ADC will be determined during the actuarial valuation. The ratio of the ADC to the fixed contribution rate (ADC/FCR) as set by the Funding Policy will be tested. The Board sets the Signal Light definition as follows:

| Status | Definition |
|---|---|
| Green | ADC ratio at or below 100% of fixed contribution rate |
| Yellow | ADC ratio between 100% and 110% of fixed contribution rate |
| Red | ADC ratio above 110% of fixed contribution rate |

12. A summary of the estimated metrics from the projection results for the next five years and in the long-term are shown in the following two tables below. More details will be shown beginning in Section IX but as you can see from the first table below, the funded ratio and cash flow percentage remain relatively stable while the ADC/FCR ratio increases over the next five years.

| Valuation Year | UAAL ($ in Thousands) | Funded Ratio | Cash Flow % | ADC/FCR Ratio |
|---|---|---|---|---|
| 2024 | $7,442 | 74.7% | (4.0)% | 101.6% |
| 2025 | $7,273 | 75.9% | (3.5)% | 101.5% |
| 2026 | $7,890 | 74.5% | (3.7)% | 107.1% |
| 2027 | $7,754 | 75.5% | (4.2)% | 108.8% |
| 2028 | $7,587 | 76.5% | (4.5)% | 112.4% |
| 2029 | $7,599 | 76.8% | (4.4)% | 113.6% |

| Metrics | 2024 Baseline Projection | 2024 Status |
|---|---|---|
| Funding Ratio in 2047 | 86.9% | Yellow |
| Cash Flow as a Percentage of Assets | (5.04)% | Green |
| ADC/FCR Ratio from 2024 Valuation | 101.6% | Yellow |
| ADC/FCR Ratio from 2025 Valuation | 101.5% | Yellow |

As shown above, none of the metrics are in the “Red Status” for the valuation and projections. Therefore, we recommend to the PERS Board that the Fixed Contribution Rate (FCR) continue at a rate of 8.40% of annual compensation for SLRP at this time. However, if there is any negative experience in the near future, the Fixed Contribution Rate may need to be increased. The Board should continue to review the Sensitivity Analysis section of this report during the fiscal year to understand the volatility that may occur in the projections if investment experience is more or less than expected going forward.

13. The table on the following page provides a ten-year history of some pertinent figures.

**Comparative Schedule**

| | Active Members | | | | Retired Lives | | | | Valuation Results ($ thousands) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Valuation Date June 30 | Number | Payroll ($ in thousands) | Average Salary | % increase from previous year | Number | Active/ Retired Ratio | Annual Benefits ($ thousands) | Benefits as % of Payroll | Actuarial Accrued Liability | Valuation Assets | UAAL |
| 2015 | 174 | $6,861 | $39,432 | (0.3)% | 185 | 0.9 | $1,133.6 | 16.5% | $21,213 | $16,098 | $5,115 |
| 2016 | 171 | 6,862 | 40,130 | 1.8 | 207 | 0.8 | 1,277.8 | 18.6 | 21,259 | 16,447 | 4,812 |
| 2017 | 174 | 6,928 | 39,817 | (0.8) | 205 | 0.8 | 1,279.5 | 18.5 | 21,849 | 17,208 | 4,641 |
| 2018 | 174 | 6,833 | 39,270 | (1.4) | 207 | 0.8 | 1,304.5 | 19.1 | 22,319 | 17,945 | 4,374 |
| 2019 | 170 | 6,937 | 40,806 | 3.9 | 215 | 0.8 | 1,372.9 | 19.8 | 22,934 | 18,428 | 4,506 |
| 2020 | 171 | 6,891 | 40,297 | (1.2) | 235 | 0.7 | 1,565.7 | 22.7 | 23,485 | 18,472 | 5,013 |
| 2021 | 173 | 8,030 | 46,414 | 15.2 | 233 | 0.7 | 1,596.8 | 19.9 | 25,402 | 19,980 | 5,422 |
| 2022 | 174 | 8,180 | 47,010 | 1.3 | 230 | 0.8 | 1,614.2 | 19.7 | 26,133 | 20,808 | 5,325 |
| 2023 | 172 | 8,425 | 48,983 | 4.2 | 228 | 0.8 | 1,633.1 | 19.4 | 28,530 | 21,465 | 7,065 |
| 2024 | 175 | 9,091 | 51,947 | 6.1 | 247 | 0.7 | 1,779.2 | 19.6 | 29,436 | 21,994 | 7,442 |

# SECTION II – MEMBERSHIP DATA

Data regarding the membership of the Plan for use as a basis for the valuation were furnished by the Plan's office. The following tables summarize the membership of the Plan as of June 30, 2024 upon which the valuation was based. Detailed tabulations of the data are given in Schedule D.

**Active Members**

| Employers | Number of Employers | Number | Payroll | Group Averages Salary | Age | Benefit Service* |
|---|---|---|---|---|---|---|
| State Agencies | 4 | 175 | $ 9,090,777 | $51,947 | 55.7 | 9.8 |

* Eligibility service is 14.5 years.

Of the 175 active members, 119 are vested and 56 are non-vested.

**Retired Lives**

| Type of Benefit Payment | No. | Annual Benefits | Group Averages Benefit | Age |
|---|---|---|---|---|
| Retirement | 191 | $1,404,372 | $7,353 | 74.4 |
| Disability | 1 | 9,369 | 9,369 | 69.5 |
| Survivor | 55 | 365,410 | 6,644 | 71.6 |
| Total in SLRP | 247 | $1,779,151 | $7,203 | 73.7 |

**Deferred Vested/Inactive Lives**

| Type of Member | No. | Annual Deferred Benefits | Outstanding Balance |
|---|---|---|---|
| Deferred Vested – Benefit Included | 35 | $112,444 | N/A |
| Inactive | 30 | N/A | $174,450 |
| Total in SLRP | 65 | $112,444 | $174,450 |

For the liability in this valuation, deferred vested participants with benefits provided are valued assuming a retirement age of 60 and for inactive members, account balances are multiplied by two to estimate liabilities and interest in the future.

# SECTION III – VALUATION BALANCE SHEET

The following valuation balance sheet shows the assets and liabilities of the retirement plan as of the current valuation date of June 30, 2024 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2023. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date. The development of the actuarial value of assets is presented in Schedule A.

**VALUATION BALANCE SHEET**
**SHOWING THE ASSETS AND LIABILITIES OF THE**
**SUPPLEMENTAL LEGISLATIVE RETIREMENT PLAN OF MISSISSIPPI**

| | JUNE 30, 2024 | JUNE 30, 2023 |
|---|---|---|
| **ASSETS** | | |
| Current actuarial value of assets: | | |
| Annuity Savings Account | $ 2,473,636 | $ 2,779,013 |
| Annuity Reserve | 4,574,371 | 4,043,564 |
| Employers' Accumulation Account | 14,945,993 | 14,642,423 |
| Total current assets | $ 21,994,000 | $ 21,465,000 |
| Future member contributions to Annuity Savings Account | $ 2,019,366 | $ 1,552,383 |
| Prospective contributions to Employer's Accumulation Account | | |
| Normal contributions | $ 2,156,562 | $ 1,627,961 |
| Unfunded actuarial accrued liability contributions | 7,441,768 | 7,065,466 |
| Total prospective contributions | $ 9,598,330 | $ 8,693,427 |
| Total assets | $ 33,611,696 | $ 31,710,810 |
| **LIABILITIES** | | |
| Present value of benefits payable on account of present retired members and beneficiaries | $ 18,489,360 | $ 16,856,675 |
| Present value of benefits payable on account of inactive members for service rendered before the valuation date | 1,398,320 | 1,289,096 |
| Present value of benefits payable on account of active members | $ 13,724,016 | $ 13,565,039 |
| Total liabilities | $ 33,611,696 | $ 31,710,810 |

### BREAKDOWN OF TOTAL AND ACTUARIAL ACCRUED LIABILITIES
### AS OF JUNE 30, 2024

| | Total Liability | Actuarial Accrued Liability |
|---|---|---|
| Active Members | | |
| Retirement | $ 11,348,488 | $ 8,609,729 |
| Death | 632,649 | 442,288 |
| Disability | 170,024 | 60,038 |
| Termination | 1,572,855 | 436,033 |
| Total | $ 13,724,016 | $ 9,548,088 |
| Retirees | | |
| Retirement | $ 15,139,994 | $ 15,139,994 |
| Survivor | 3,273,002 | 3,273,002 |
| Disability | 76,364 | 76,364 |
| Total | $ 18,489,360 | $ 18,489,360 |
| Deferred Vested Members | 1,049,421 | 1,049,421 |
| Inactive Members | 348,899 | 348,899 |
| Total Actuarial Values | $ 33,611,696 | $ 29,435,768 |
| Actuarial Value of Assets | | 21,994,000 |
| Unfunded Actuarial Accrued Liability | | $ 7,441,768 |

The total liability is the present value of future benefits for all current members as of the valuation date. The accrued liability is the present value of benefits that have been accrued as of the valuation date. Since all inactive members and retirees have accrued their full benefits, the total liability and accrued liability are the same. For actives, the difference between the total liability and the accrued liability is the present value of all future accruals.

# SECTION IV – COMMENTS ON VALUATION

The valuation balance sheet gives the following information with respect to the funds of the Plan as of June 30, 2024.

Total Assets

The Annuity Savings Account is the fund to which are credited contributions made by members together with interest thereon. When a member retires, the amount of his or her accumulated contributions is transferred from the Annuity Savings Account to the Annuity Reserve. The Employer's Accumulation Account is the fund to which are credited employer contributions and investment income, and from which are paid all employer-provided benefits under the plan. The assets credited to the Annuity Savings Account as of the valuation date, which represent the accumulated contributions of members to that date, amounted to $2,473,636. The assets credited to the Annuity Reserve were $4,574,371 and the assets credited to the Employer's Accumulation Account totaled $14,945,993. Current actuarial assets as of the valuation date equaled the sum of these three funds, $21,994,000. Future member contributions to the Annuity Savings Account were valued to be $2,019,366. Prospective contributions to the Employer's Accumulation Account were calculated to be $9,598,330 of which $2,156,562 is attributable to service rendered after the valuation date (normal contributions) and $7,441,768 is attributable to service rendered before the valuation date (unfunded actuarial accrued liability contributions).

Therefore, the balance sheet shows the present value of current and future assets of the Plan to be $33,611,696 as of June 30, 2024.

Total Liabilities

The present value of benefits payable on account of presently retired members and beneficiaries totaled $18,489,360 as of the valuation date. The present value of future benefit payments on behalf of active members amounted to $13,724,016. In addition, the present value of benefits for inactive members, due to service rendered before the valuation date, was calculated to be $1,398,320.

Therefore, the balance sheet shows the present value for all prospective benefit payments under the Plan to be $33,611,696 as of June 30, 2024.

Section 25-11-307(1) of State law requires that active members contribute 3.00% of annual compensation to the Plan.

# SECTION IV – COMMENTS ON VALUATION

Section 25-11-307(2) requires that the State contribute a certain percentage of the annual compensation of members to cover the normal contributions and a certain percentage to cover the accrued liability contributions of the Plan. These individual contribution percentages are established in accordance with an actuarial valuation. Based on the funding policy adopted by the Board in 2023, the employer rate was set at 8.40% of annual compensation beginning July 1, 2024 and the amortization period is calculated on an open basis. Therefore, the amortization period for the June 30, 2024 valuation is 25.5 years, compared to 26.5 years for the previous valuation.

There was a loss on the unfunded actuarial accrued liability for the fiscal year ending June 30, 2024 of approximately $381.0 thousand (shown on the next page) which was primarily due greater than expected salary increases for the year, mortality experience (less deaths than assumed) offset by gains due to less retirements than expected during the year.

See page 15 for a reconciliation of the amortization period. See Schedule E for a complete analysis of the Financial Experience.

Actual experience will never (except by coincidence) match exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Details on the derivation of the experience gain/(loss) for the years ended June 30, 2024 and June 30, 2023 are shown below.

| | | 2024 Valuation $ Thousands | 2023 Valuation $ Thousands |
|---|---|---|---|
| (1) | UAAL* as of beginning of year | $ 7,065.5 | $ 5,325.0 |
| (2) | Total normal cost from last valuation | 441.7 | 423.2 |
| (3) | Total contributions | 939.0 | 884.0 |
| (4) | Interest Rate (Beginning of Year) | 7.00% | 7.55% |
| (5) | Interest accrual: [[(1) + (2)] x (4)] - [(3) x ((4) / 2)] | 492.6 | 400.6 |
| (6) | Expected UAAL before changes: (1) + (2) – (3) + (5) | $ 7,060.8 | $ 5,264.8 |
| (7) | Change due to plan amendments | 0.0 | 0.0 |
| (8) | Change due to actuarial assumptions or methods | 0.0 | 1,573.3 |
| (9) | Expected UAAL after changes: (6) + (7) + (8) | $ 7,060.8 | $ 6,838.1 |
| (10) | Actual UAAL as of end of year | $ 7,441.8 | $ 7,065.5 |
| (11) | Gain/(loss): (9) – (10) | $ (381.0) | $ (227.4) |
| (12) | Gain/(loss) as percent of actuarial accrued liabilities at start of year. | (1.3)% | (0.9)% |

*Unfunded actuarial accrued liability.

| Valuation Date June 30 | Actuarial Gain/(Loss) as a % of Beginning Accrued Liabilities |
|---|---|
| 2019 | (0.2)% |
| 2020 | (2.0) |
| 2021 | (0.4) |
| 2022 | 0.6 |
| 2023 | (0.9) |
| 2024 | (1.3) |

## SECTION VI – FIXED CONTRIBUTION RATE (FCR)

1. The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement Plan. The following table shows the rates of contribution payable by employers as determined from the present valuation for the fiscal year and a comparison to the previous valuation results.

| Contribution for | 2024 Valuation | 2023 Valuation |
|---|---|---|
| **Investment Return Assumption** | **7.00%** | **7.00%** |
| Total Normal Cost: | | |
| Service retirement benefits | 5.62% | 5.60% |
| Disability benefits | 0.15% | 0.15% |
| Survivor benefits | 0.30% | 0.31% |
| Total | 6.07% | 6.06% |
| Less Member Contributions: | 3.00% | 3.00% |
| Employer Normal Cost | 3.07% | 3.06% |
| Administrative Expense Load | 0.15% | 0.15% |
| Total Employer Normal Cost Rate | 3.22% | 3.21% |
| Unfunded Actuarial Accrued Liabilities (25.5 year level % of payroll amortization*) | 5.18% | 5.19% |
| Total Employer Fixed Contribution Rate (FCR) | 8.40% | 8.40% |

*Amortization period a year ago was 26.5 years.

2. The current funding policy has set the employer contribution rate to 8.40% of payroll and kept the amortization period open-ended. Thirty-year projections are completed to determine if an increase or decrease in the employer contribution rate is warranted according to the metrics set forth in the funding policy. Please see Schedule F for the current funding policy.

3. The components of the change in the computed unfunded actuarial accrued liability amortization period from 26.5 years to 25.5 years are as follows:

| | |
|---|---|
| Previously Reported Period | 26.5 years |
| Change due to: | |
| Normal amortization | (1.0) |
| Actuarial experience | 1.6 |
| Net Assumption changes/FCR Change | 0.0 |
| Plan amendments | 0.0 |
| Contribution Shortfall/(Excess) | (1.6) |
| Computed Period | 25.5 years |

1. One of the metrics in the Funding Policy, as shown in Schedule F, is to calculate the Actuarially Determined Contribution (ADC) based on the principal elements of the Amortization Method disclosed in the Funding Policy. The ratio of the ADC to the Fixed Contribution Rate (ADC/FCR) as set by this Funding Policy will be tested with each valuation. The Funding Policy provides that the unfunded actuarial accrued liability as of June 30, 2023 (Transitional UAAL) will be amortized as a level percentage of payroll over a closed 25-year period. In each subsequent valuation, all benefit changes, assumption and method changes, and experience gains and/or losses that have occurred since the previous valuation will combine to determine a New Incremental UAAL. Each New Incremental UAAL will be amortized as a level percentage of payroll over a closed 25-year period from the date it is established.

2. The following table shows the components of the total Unfunded Actuarial Accrued Liability (UAAL) and the derivation of the UAAL Contribution Rate in accordance with the funding policy as of the valuation date:

**TOTAL UAAL AND UAAL CONTRIBUTION RATE**

| Date Established | Original UAAL Balance | Remaining UAAL Balance | Remaining Amortization Period | Amortization Payment |
|---|---|---|---|---|
| June 30, 2023 | $7,065,466 | $7,084,052 | 24 years | $472,357 |
| June 30, 2024 | $357,716 | $357,716 | 25 years | $23,298 |
| Total | | $7,441,768 | | $495,655 |
| Estimated Payroll | | | | $9,331,683 |
| UAAL Amortization Contribution Rate | | | | 5.31% |

3. The calculation of Actuarial Determined Contribution (ADC) for the past two valuations is shown below:

| Funding Policy ADC Metric Test | | |
|---|---|---|
| **Valuation Date June 30** | **2024** | **2023** |
| Actuarially Determined Contribution (ADC) rate | | |
| Normal Cost* | 3.22% | 3.21% |
| Accrued liability | 5.31 | 5.36 |
| Total | 8.53% | 8.57% |
| Fixed Contribution Rate (FCR) | 8.40% | 8.40% |
| Ratio of ADC to FCR | 101.55% | 102.02% |
| Funding Policy Metric Status | Yellow | Yellow |
| Anticipated accrued liability payment period | 24.4 years | 25.0 years |

* Estimated budgeted administrative expenses are included in the normal cost rate

Since the Ratio of ADC to FCR is between 100% and 110% and the Metric Status is in the "Yellow Status" for the 2024 valuation, per the Funding Policy, we recommend no change in the Fixed Contribution Rate of 8.40% of annual compensation at this time. However, if there is any negative experience in the near future, the Fixed Contribution Rate may need to be increased. The Board should continue to review the Sensitivity Analysis section of this report during the fiscal year to understand the volatility that may occur in the projections if investment experience is less than expected going forward.

1. The following supplemental disclosure information is provided for informational purposes only. One such item is a distribution of the number of employees by type of membership, as follows:

**NUMBER OF ACTIVE AND RETIRED PARTICIPANTS**
**AS OF JUNE 30, 2024**

| GROUP | NUMBER |
|---|---|
| Retired participants and beneficiaries currently receiving benefits | 247 |
| Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits | 65 |
| Active Participants | 175 |
| Total | 487 |

2. Another such item is the schedule of funding progress as shown below. As can be seen in column 3 of the table below, the funded ratio has remained in a narrow range since 2017 with a decrease last year due to the assumption changes, including the change in the investment return assumption from 7.55% to 7.00%. In addition, the UAAL as a percentage of payroll, shown in column 6, has increased this valuation.

**SCHEDULE OF FUNDING PROGRESS**

| Plan Year Ended | (1) Actuarial Value of Assets | (2) Actuarial Accrued Liability (AAL) Entry Age | (3) Funded Ratio (1)/(2) | (4) Unfunded AAL (2) – (1) | (5) Annual Covered Payroll | (6) Unfunded AAL as a Percentage of Covered Payroll (4)/(5) |
|---|---|---|---|---|---|---|
| 06/30/2015# | $16,098,000 | $21,213,446 | 75.9% | $5,115,446 | $6,861,166 | 74.6% |
| 06/30/2016 | 16,447,000 | 21,258,800 | 77.4 | 4,811,800 | 6,862,262 | 70.1 |
| 06/30/2017# | 17,208,000 | 21,848,868 | 78.8 | 4,640,868 | 6,928,085 | 67.0 |
| 06/30/2018 | 17,945,000 | 22,318,685 | 80.4 | 4,373,685 | 6,832,961 | 64.0 |
| 06/30/2019# | 18,428,000 | 22,933,853 | 80.4 | 4,505,853 | 6,937,075 | 65.0 |
| 06/30/2020 | 18,472,000 | 23,484,818 | 78.7 | 5,012,818 | 6,890,817 | 72.7 |
| 06/30/2021# | 19,980,000 | 25,402,264 | 78.7 | 5,422,264 | 8,029,670 | 67.5 |
| 06/30/2022 | 20,808,000 | 26,133,030 | 79.6 | 5,325,030 | 8,179,673 | 65.1 |
| 06/30/2023# | 21,465,000 | 28,530,466 | 75.2 | 7,065,466 | 8,425,049 | 83.9 |
| 06/30/2024 | 21,994,000 | 29,435,768 | 74.7 | 7,441,768 | 9,090,777 | 81.9 |

# After change in actuarial assumptions.

3. Additional information as of the latest valuation that went into the calculation of the Actuarially Determined Contribution (ADC) are as follows:

| | |
|---|---|
| Valuation date | 6/30/2024 |
| Actuarial cost method | Entry age |
| Amortization method | Level percentage of payroll, closed |
| Remaining amortization period on ADC basis | 24.4 years |
| Asset valuation method | 5-year smoothed market |
| Actuarial assumptions: | |
| Investment rate of return (discount rate)* | 7.00% |
| Projected salary increases* | 2.65% |
| Cost-of-living adjustments | 3.00% per annum |

** Includes price inflation at 2.40%*

**Solvency Tests**
**($ in Thousands)**

| | Actuarial Accrued Liabilities for | | | | Portions of Accrued Liabilities Covered by Assets | | |
|---|---|---|---|---|---|---|---|
| Valuation Date | (1) Accumulated Employee Contributions Including Allocated Investment Earnings | (2) Retirees and Beneficiaries Currently Receiving Benefits | (3) Active and Inactive Members Employer Financed Portion | Net Assets Available for Benefits | (1) | (2) | (3) |
| 6/30/2015 | $2,862 | $12,329 | $6,023 | $16,098 | 100.0% | 100.0% | 15.1% |
| 6/30/2016 | 2,485 | 13,758 | 5,016 | 16,447 | 100.0 | 100.0 | 4.1 |
| 6/30/2017 | 2,636 | 13,799 | 5,414 | 17,208 | 100.0 | 100.0 | 14.3 |
| 6/30/2018 | 2,693 | 13,840 | 5,786 | 17,945 | 100.0 | 100.0 | 24.4 |
| 6/30/2019 | 2,701 | 14,282 | 5,951 | 18,428 | 100.0 | 100.0 | 24.3 |
| 6/30/2020 | 2,145 | 16,356 | 4,983 | 18,472 | 100.0 | 99.8 | 0.0 |
| 6/30/2021 | 2,331 | 16,275 | 6,796 | 19,980 | 100.0 | 100.0 | 20.2 |
| 6/30/2022 | 2,611 | 16,053 | 7,469 | 20,808 | 100.0 | 100.0 | 28.7 |
| 6/30/2023 | 2,779 | 16,857 | 8,895 | 21,465 | 100.0 | 100.0 | 20.6 |
| 6/30/2024 | 2,474 | 18,489 | 8,473 | 21,994 | 100.0 | 100.0 | 12.2 |

As can be seen from the table above, the SLRP plan assets currently cover 100% of the active member contribution account balances and 100% of the retiree liability as of the valuation date. However, the remaining assets only cover a small percentage of the employer financed active liabilities.

**Schedule of Active Member Valuation Data**

| Valuation Date | Number of Employers | Active Members: Number | Annual Payroll | Annual Average Pay | % Increase in Average Pay |
|---|---|---|---|---|---|
| 2015 | 5 | 174 | $6,861,166 | $39,432 | (0.3)% |
| 2016 | 5 | 171 | 6,862,262 | 40,130 | 1.8 |
| 2017 | 5 | 174 | 6,928,085 | 39,817 | (0.8) |
| 2018 | 5 | 174 | 6,832,961 | 39,270 | (1.4) |
| 2019 | 5 | 170 | 6,937,075 | 40,806 | 3.9 |
| 2020 | 5 | 171 | 6,890,817 | 40,297 | (1.2) |
| 2021 | 5 | 173 | 8,029,670 | 46,414 | 15.2 |
| 2022 | 4 | 174 | 8,179,673 | 47,010 | 1.3 |
| 2023 | 4 | 172 | 8,425,049 | 48,983 | 4.2 |
| 2024 | 4 | 175 | 9,090,777 | 51,947 | 6.1 |

**Schedule of Number of Retirants Added To and Removed From Rolls***
**Last Ten Fiscal Years**

| | Fiscal Year Ended June 30 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Item | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| Beginning of Year | 187 | 185 | 207 | 205 | 207 | 215 | 235 | 233 | 230 | 228 |
| Added | 8 | 28 | 6 | 6 | 11 | 24 | 3 | 1 | 9 | 28 |
| Removed | (10) | (6) | (8) | (4) | (3) | (4) | (5) | (4) | (11) | (9) |
| End of Year | 185 | 207 | 205 | 207 | 215 | 235 | 233 | 230 | 228 | 247 |

*See Schedule D for a breakdown by type of retirement.

**Schedule of Annual Benefit Payments Added To and Removed From Rolls**
**Last Seven Fiscal Years**

| Year Ending | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|
| Beginning of Year | $1,279,471 | $1,304,548 | $1,372,878 | $1,565,656 | $1,596,810 | $1,614,217 | $1,633,116 |
| Added | 34,983 | 72,406 | 216,379 | 14,393 | 2,970 | 66,878 | 150,895 |
| Removed | (42,480) | (43,651) | (64,124) | (26,951) | (34,377) | (84,837) | (57,548) |
| Benefit increase due to annual COLA | 32,574 | 39,575 | 40,523 | 43,712 | 48,814 | 36,858 | 52,688 |
| Benefit increase due to plan amendments | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| End of Year | $1,304,548 | $1,372,878 | $1,565,656 | $1,596,810 | $1,614,217 | $1,633,116 | $1,779,151 |

**Schedule of Average Benefit Payments**

| | Years of Credited Service | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0-9 | 10-14 | 15-19 | 20-24 | 25 | 26-29 | 30 | 31+ | TOTAL |
| July 1, 2023 to June 30, 2024 | | | | | | | | | |
| Average Monthly Benefit | $198.42 | $287.32 | $463.58 | $565.48 | | $973.07 | | $1,039.15 | $449.09 |
| Average Final Salary | $35,937.36 | $31,089.75 | $20,301.36 | $35,957.26 | | $46,679.04 | | $47,126.32 | $35,196.03 |
| Number of Active Retirants | 8 | 7 | 2 | 7 | | 1 | | 3 | 28 |
| July 1, 2022 to June 30, 2023 | | | | | | | | | |
| Average Monthly Benefit | $435.87 | $232.89 | $639.34 | $1,103.21 | | | | $926.91 | $619.24 |
| Average Final Salary | $39,251.46 | $35,025.72 | $46,070.28 | $58,191.24 | | | | $45,845.00 | $43,397.35 |
| Number of Active Retirants | 2 | 2 | 2 | 1 | | | | 2 | 9 |
| July 1, 2021 to June 30, 2022 | | | | | | | | | |
| Average Monthly Benefit | $123.42 | | | | | | | | $123.42 |
| Average Final Salary | $31,733.04 | | | | | | | | $31,733.04 |
| Number of Active Retirants | 1 | | | | | | | | 1 |
| July 1, 2020 to June 30, 2021 | | | | | | | | | |
| Average Monthly Benefit | $192.21 | | | | | $815.03 | | | $399.82 |
| Average Final Salary | $32,588.76 | | | | | $44,865.25 | | | $36,680.92 |
| Number of Active Retirants | 2 | | | | | 1 | | | 3 |
| July 1, 2019 to June 30, 2020 | | | | | | | | | |
| Average Monthly Benefit | $244.53 | $334.26 | $551.15 | $799.36 | | $969.20 | | $713.07 | $657.06 |
| Average Final Salary | $36,523.16 | $40,009.26 | $32,107.39 | $39,043.63 | | $34,675.32 | | $42,094.84 | $37,017.34 |
| Number of Active Retirants | 3 | 2 | 5 | 7 | | 4 | | 3 | 24 |

## Schedule of Average Benefit Payments

| | Years of Credited Service | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0-9 | 10-15 | 16-20 | 21-24 | 25 | 26-29 | 30 | 31+ | TOTAL |
| July 1, 2018 to June 30, 2019 | | | | | | | | | |
| Average Monthly Benefit | $169.43 | $372.79 | $636.97 | $742.14 | | $738.58 | | $960.08 | $548.53 |
| Average Final Salary | $24,872.76 | $42,782.28 | $42,042.72 | $42,479.52 | | $40,654.56 | | $44,126.04 | $38,076.62 |
| Number of Active Retirants | 3 | 2 | 1 | 2 | | 1 | | 2 | 11 |
| July 1, 2017 to June 30, 2018 | | | | | | | | | |
| Average Monthly Benefit | $33.20 | | $538.18 | $512.85 | | | | $1,284.96 | $485.87 |
| Average Final Salary | $20,839.50 | | $40,100.76 | $41,549.28 | | | | $41,618.04 | $27,732.60 |
| Number of Active Retirants | 2 | | 1 | 2 | | | | 1 | 6 |
| July 1, 2016 to June 30, 2017 | | | | | | | | | |
| Average Monthly Benefit | $180.95 | | $609.42 | $452.29 | $732.45 | | | | $434.72 |
| Average Final Salary | $29,821.02 | | $37,791.24 | $28,377.72 | $40,932.00 | | | | $32,520.12 |
| Number of Active Retirants | 2 | | 1 | 2 | 1 | | | | 6 |
| July 1, 2015 to June 30, 2016 | | | | | | | | | |
| Average Monthly Benefit | $249.59 | $349.70 | $486.61 | $654.27 | $522.12 | | | $1,200.33 | $527.40 |
| Average Final Salary | $36,599.58 | $39,877.51 | $35,210.67 | $39,774.39 | $41,482.12 | | | $42,237.92 | $38,850.14 |
| Number of Active Retirants | 6 | 6 | 4 | 7 | 2 | | | 3 | 28 |
| July 1, 2014 to June 30, 2015 | | | | | | | | | |
| Average Monthly Benefit | $163.64 | $739.53 | $720.77 | | $578.67 | | | $1,032.05 | $607.33 |
| Average Final Salary | $18,636.25 | $68,228.41 | $37,911.50 | | $34,790.50 | | | $42,949.00 | $40,911.48 |
| Number of Active Retirants | 2 | 2 | 2 | | 1 | | | 1 | 8 |

# Section IX – Projection Results

Annual actuarial valuations are performed for SLRP which re-measure the assets and liabilities and the adequacy of the contribution rate. Actuarial projections are also performed every year with sensitivity testing of several factors. SLRP also has experience studies performed every two years to analyze the discrepancies between actuarial assumptions and actual experience and determine if the actuarial assumptions need to be changed. Annual actuarial valuations and projections and periodic experience studies are practical ways to monitor and reassess risk.

As mentioned earlier in the report, the intended purpose of the projection results is to help assess the Plan's funding progress and to provide information to decision makers to help ensure that the applicable pension liabilities and funding mechanisms are managed in a manner that promotes sustainability.

The projection process should be viewed as an enhancement to the actuarial valuation control cycle by providing additional evaluation metrics to assess the need for further, in-depth analysis of the risks to the Plan's sustainability. The actuarial valuation control cycle is a key component of managing a long-term liability whose ultimate value is based upon uncertain future events. As the ultimate value of future cash flows cannot be predicted with certainty, pension liabilities are managed in the short-term through the continuous monitoring of economic and demographic assumptions, with a keen eye on the identification, measurement, and management of risks.

The projection process, like other actuarial modeling, is not intended to provide absolute results. The intended purpose of the projection process is to identify anticipated trends and to compare various outcomes, under a given methodology, rather than predicting certain future events. The results produced by the projection process do not predict the financial condition of the Plan or the Plan's ability to pay benefits in the future and do not provide any guarantee of future financial soundness of the Plan. Because actual experience will not unfold exactly as expected, actual results can be expected to differ from the results presented herein. To the extent actual experience deviates significantly from the assumptions, results could be significantly better or significantly worse than the expected outcome indicated in this report.

***SPECIAL ASSUMPTIONS***

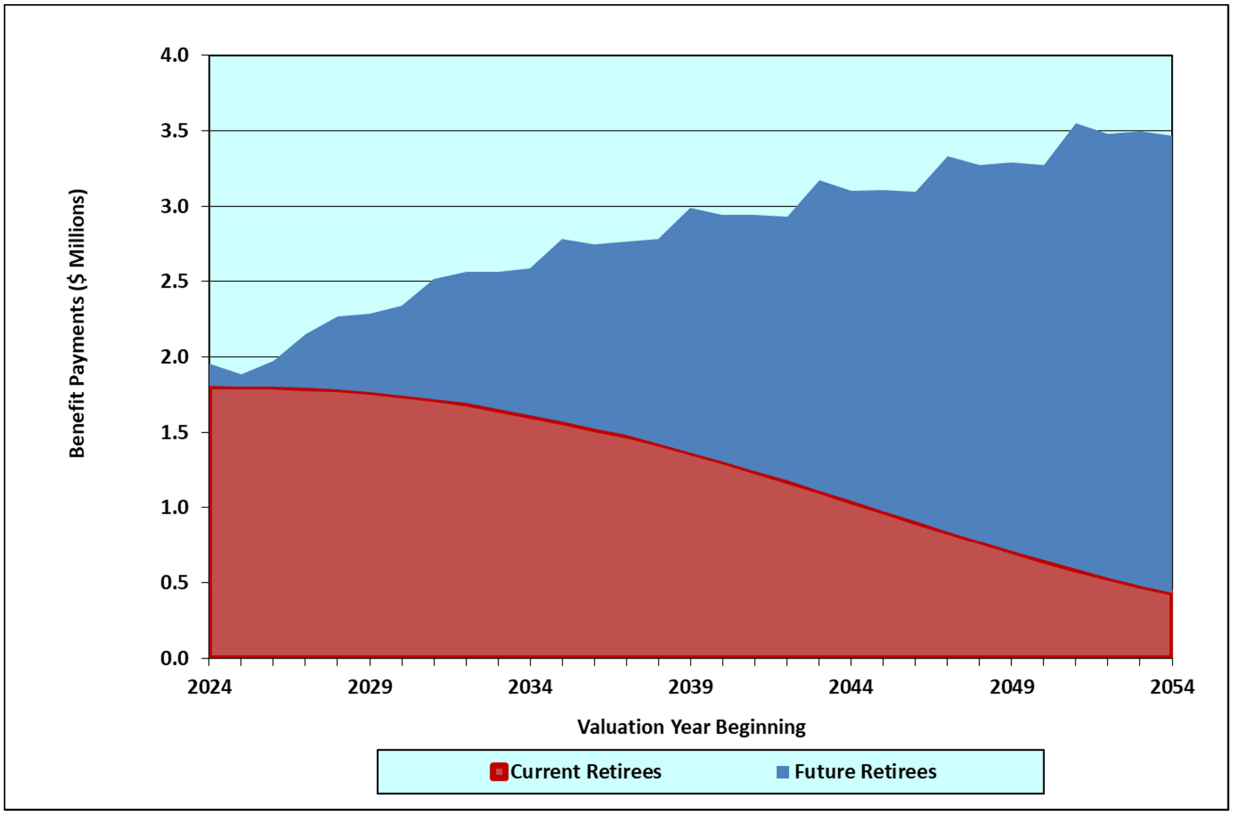
In addition to the regular valuation assumptions used in performing the annual actuarial valuations of SLRP, additional assumptions must be made that are unique to projections. The first of these is what, if any, change in the overall active membership will be anticipated. For this projection study, it was assumed that the number of active members would remain static over the 30-year projection period.

Since we assume active members will leave the system through termination, death, disability, or retirement, we need to make some assumptions as to the composition of new hires that will replace departing members in order to maintain the membership at a constant number. The new entrant profile we developed was based on the new hires over the 4-year period prior to the projection start date of June 30, 2024.

It is important to note that an eligibility service load of 2.50 years was included in the new entrant profile as the census data shows more and more active members in SLRP are entering the Plan with service from the PERS plan. The new entrant profile is summarized in the table below.

| Age | Average Pay | Percent Male | Weight |
|---|---|---|---|
| 30 | $46,000 | 80% | 15% |
| 39 | $47,000 | 80% | 15% |
| 45 | $47,000 | 80% | 25% |
| 52 | $49,000 | 80% | 15% |
| 57 | $46,000 | 80% | 19% |
| 67 | $49,000 | 80% | 11% |

For the projection results presented in this section of the report, it was further assumed that the benefit structure as it exists on June 30, 2024 would remain in place for the following 30 years. The following graph shows the projection of benefit payments of SLRP members. The red area of the graph represents the benefit payments for current retirees and the blue area represents the benefit payments for any future retirees. The jagged outline of this blue area is a result of our assumption that most retirements occur every 4 years (after an election year). SLRP currently pays approximately $1.8 million in benefit payments to its retirees but over the 30-year period, that amount is expected to nearly double.



### *FUTURE MEMBERSHIP*

The following chart and graph show the headcounts of active participants and retired members over the projection period. The actives are broken down into those existing as of June 30, 2024 and those who are hired after June 30, 2024. We have assumed the active membership will continue at the current maximum population of 175 active members over the projected period. As can be seen from the chart below, the retiree and deferred vested headcount begins to drop as retiree deaths outnumber new retirees.

| Member | 2024 | 2029 | 2034 | 2044 | 2047 | 2054 |
|---|---|---|---|---|---|---|
| Active – Existing Employees | 175 | 112 | 71 | 18 | 15 | 5 |
| Active – New Entrants | 0 | 63 | 104 | 157 | 160 | 170 |
| Retired/Deferred Vesteds | 282 | 294 | 281 | 249 | 225 | 205 |
| Total | 457 | 469 | 456 | 424 | 400 | 380 |

### *PROJECTION RESULTS*

The baseline projection results shown below use the same actuarial assumptions as used in the June 30, 2024 actuarial valuation report. In addition, the projection results using a different long-term investment return assumptions for future valuations (6.50%) is included below.

**Baseline Projection Results (7.00%)**
**($ in Thousands)**

| | 2024 | 2029 | 2034 | 2044 | 2047 | 2054 |
|---|---|---|---|---|---|---|
| Total Payroll | $9,091 | $9,902 | $10,960 | $13,783 | $14,808 | $17,649 |
| UAAL | $7,442 | $7,599 | $7,533 | $6,483 | $5,760 | $2,401 |
| Normal Cost Rate | 3.22% | 3.77% | 4.03% | 4.29% | 4.31% | 4.21% |
| UAAL Rate | 5.18% | 4.63% | 4.37% | 4.11% | 4.09% | 4.19% |
| FCR Rate | 8.40% | 8.40% | 8.40% | 8.40% | 8.40% | 8.40% |
| Funded Ratio | 74.7% | 76.9% | 78.9% | 84.4% | **86.9%** | 95.2% |
| Amortization Period | 25 years | 28 years | 25 years | 15 years | 12 years | 3 years |
| ADC | 8.53% | 9.52% | 10.26% | 12.19% | 12.94% | 6.87% |
| ADC Ratio | 101.6% | 113.3% | 122.2% | 145.1% | 154.1% | 81.8% |
| Cash Flow % | (4.0)% | (4.4)% | (4.6)% | (4.2)% | (4.1)% | (2.9)% |

**Projection Results Assuming 6.50% Long-Term Investment Return**
**($ in Thousands)**

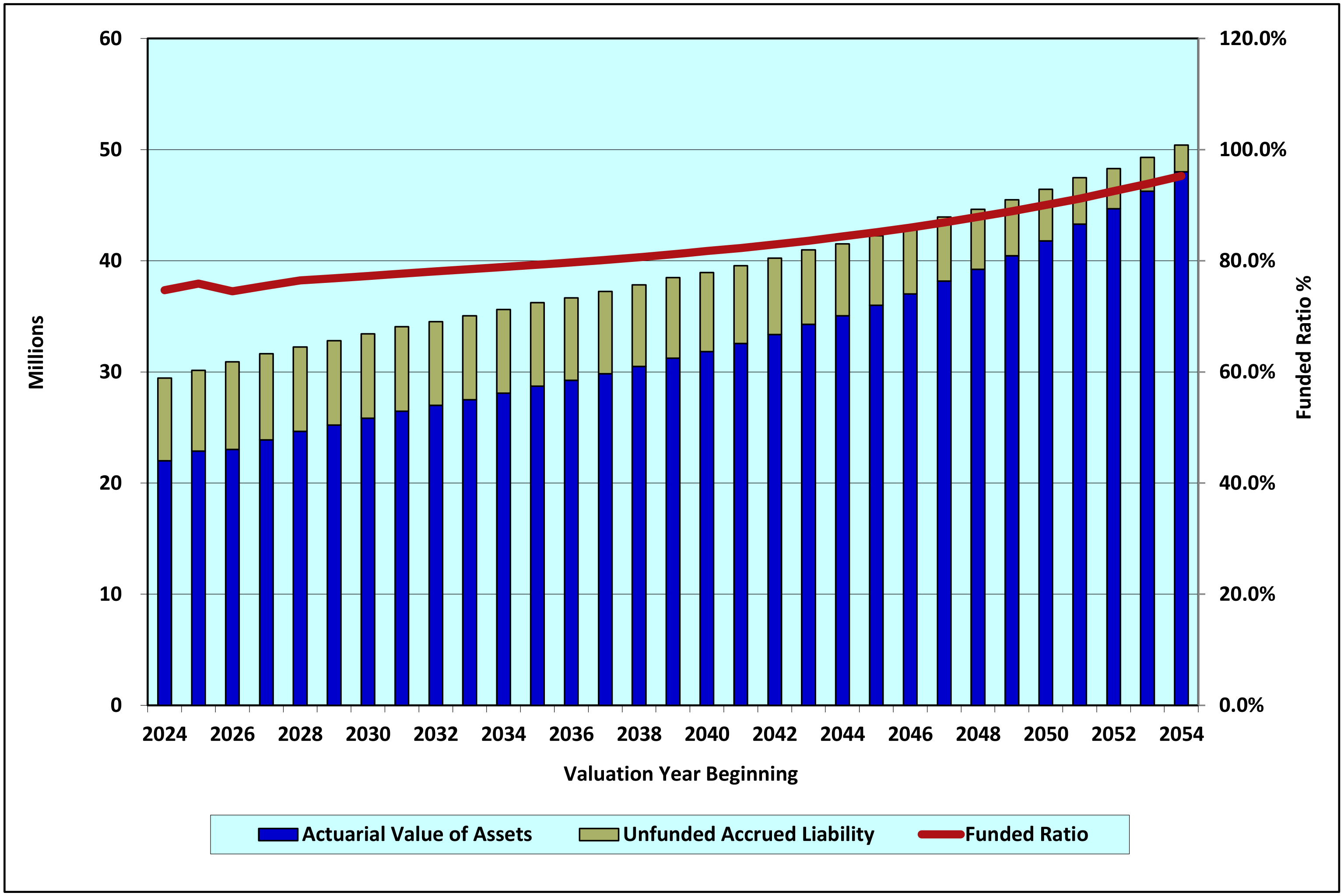
| | 2024 | 2029 | 2034 | 2044 | 2047 | 2054 |
|---|---|---|---|---|---|---|
| Total Payroll | $9,091 | $9,902 | $10,960 | $13,783 | $14,808 | $17,649 |
| UAAL | $8,964 | $9,861 | $10,872 | $13,556 | $14,577 | $17,008 |
| Normal Cost Rate | 3.88% | 4.47% | 4.75% | 5.02% | 5.05% | 4.94% |
| UAAL Rate | 4.52% | 3.93% | 3.65% | 3.38% | 3.35% | 3.46% |
| FCR Rate | 8.40% | 8.40% | 8.40% | 8.40% | 8.40% | 8.40% |
| Funded Ratio | 71.0% | 71.4% | 70.9% | 68.9% | **68.4%** | 67.8% |
| Amortization Period | 32 years | 72 years | 100 years | 100 years | 100 years | 100 years |
| ADC | 9.96% | 11.55% | 13.07% | 17.43% | 19.21% | 12.57% |
| ADC Ratio | 118.6% | 137.5% | 155.6% | 207.5% | 228.7% | 149.7% |
| Cash Flow % | (4.0)% | (4.5)% | (4.9)% | (4.9)% | (5.0)% | (3.8)% |

# SECTION IX – PROJECTION RESULTS

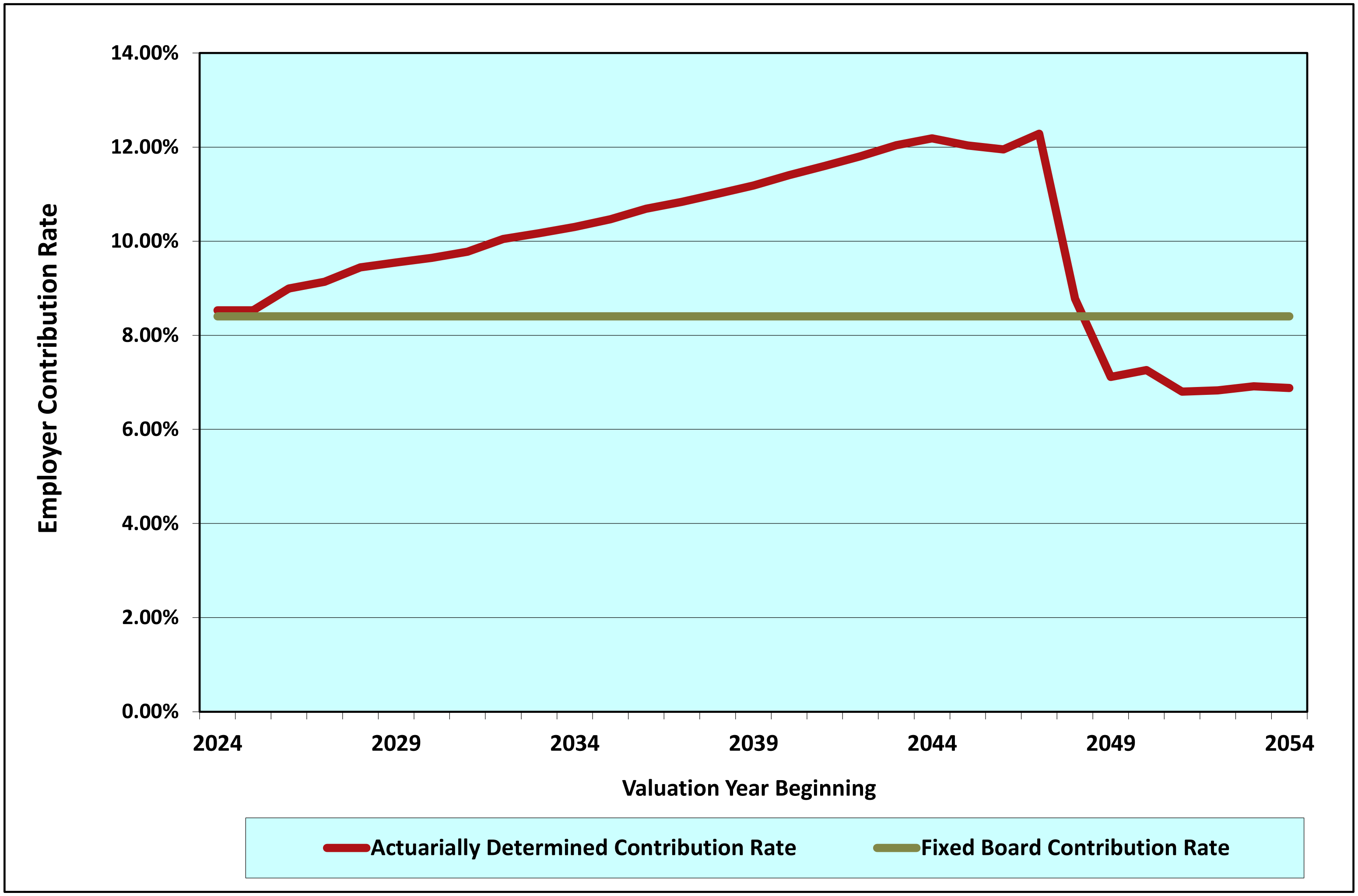
The first graph that follows shows the projection of the Unfunded Accrued Liability (UAL), Actuarial Value of Assets and the Funded Ratio under the baseline valuation (assuming 7.00%) from the amounts shown in the baseline table on the previous page. As you can see from the graph, under the current assumptions, the funded ratio is expected to increase steadily over the entire projection period.

The second graph shows the projection of the calculated Actuarially Determined Contribution (ADC) based on the Board's Funding Policy and the current Fixed Contribution Rate (FCR) of 8.40% under the baseline valuation. As you can see from the graph, the ADC is expected to increase over the next five years as the investment losses from the past valuations are fully recognized. After this initial period, the ADC is then expected to increase even further for the remaining projection period, as the valuation results continue to include contribution deficiency shortfalls due to the difference between the ADC and FCR. The drop in the ADC near the end of the projection period is a result of the initial 2023 UAL base of $7.1 Million being paid off, based on the closed amortization period per the Board's Funding Policy.

**Mississippi PERS – SLRP Plan**
**30 Year Projection of Funded Ratio on Actuarial Asset Value**
**Based on June 30, 2024 Valuation Results**



**Mississippi PERS – SLRP Plan**
**30 Year Projection of the Employer Contribution Rates**
**Based on June 30, 2024 Valuation Results**



### *CASH FLOW PROJECTIONS*

The funded ratio is the primary measure of funded status of a pension plan and, thereby, the most common measurement used for drawing conclusions on funding progress. The funded ratio is the ratio of the actuarial value of assets to the actuarial or accrued liability of the system as calculated by the funding method used in developing system contribution levels. When using the funded ratio in assessing trends over several valuations, we recommend that the basis for determining both the assets and liabilities in the ratio are taken into consideration and reasonable efforts are made to adjust the ratio to reflect these differences when they are known. On a consistent basis, an increasing funded ratio would typically indicate progress in meeting the obligations of the system. In most cases, other measures should also be considered in a trend assessment. These may include the trend in the length of the amortization period, the required contribution rate, percentage of required contributions funded, and the unfunded actuarial liability as a percentage of payroll. Focusing solely on any one measure as the indication of funding progress is an over-simplification of a complex and dynamic system.

Another of those additional metrics is an outlook on the cash flow as a percentage of assets for the System. Most retirement systems are funded with an advance-funding mechanism, meaning contributions and investment earnings are earned during a member's active lifetime in order to pay for the benefit payments during his retirement years. Many mature retirement systems, like SLRP, have negative cash flow, where benefit payments paid out of the trust are more than the contributions being collected by employers and employees.

# SECTION X – CASH FLOW PROJECTIONS

For the fiscal year ending June 30, 2025, we are projecting SLRP to have a negative cash flow of approximately $0.9 Million (benefit payments of $2.0 Million and contributions of $1.1 Million). With a market value of assets of $21.9 Million as of June 30, 2024, the cash flow as a percentage of assets is estimated to be negative 4.00% for the 2025 fiscal year. While the market value of assets is assumed to earn 7.00% each year, the difference between the investment return assumption and the negative cash flow percentage is positive, meaning assets are projected to grow for the 2025 fiscal year. When assets do not earn a positive return enough to cover this negative cash flow percentage, assets are expected to decline for the year. If the negative cash flow percentage does not grow more than the assumed investment return assumption, the System's assets will continue to increase, and sustainability of the plan may be achieved.

The tables on the following pages demonstrate the open group projection of cash flow on the baseline assumption and then a sensitivity analysis, using a one-year return of negative 5.00% for the fiscal year ending June 30, 2025. These results demonstrate the projection of this metric if SLRP experiences one significant bad investment year in one of the next five years without a correction in the market. As can be seen from the table on page 36, the cash flow as a percentage of market value of assets does not at any point get less than negative 5.04% on the baseline assumptions, meaning that SLRP assets should continue to increase as long as all baseline actuarial assumptions are met.

However, if there is a significant negative investment experience in one of the next five years (as seen on the table on page 37), the negative cash flow will be almost as much as the investment experience of the Plan and while the SLRP assets will continue to grow it will not be at the same levels for most of the projection period.

This metric will continue to be monitored as part of the funding policy under the baseline assumptions to ensure the continued growth of SLRP assets during the projection period.

**Mississippi PERS**
**30-year Open Group Projection of Cash Flow**
**SLRP Plan**
**Based on June 30, 2024 Valuation Results**

**Projection of Cash Flow**

Contribution Methodology: Employee and Employer Contributions
Investment Return Methodology: As Programmed

| Valuation Year Beginning July 1 | Expected Short-term Investment Return | Valuation Annual Payroll | Market Value of Assets July 1 | Total Contributions | Projected Benefit Payments | Ratio of Cash Flow to MVA | Expected Investment Return | Net Cash Flow | Market Value of Assets June 30 | Valuation Year Ending June 30 |
|---|---|---|---|---|---|---|---|---|---|---|
| 2024 | 7.00% | 9,331,683 | 21,868,000 | 1,082,289 | (1,956,507) | -4.00% | 1,500,680 | 626,462 | 22,494,462 | 2025 |
| 2025 | 7.00% | 9,519,645 | 22,494,462 | 1,104,088 | (1,888,216) | -3.49% | 1,547,632 | 763,505 | 23,257,966 | 2026 |
| 2026 | 7.00% | 9,735,113 | 23,257,966 | 1,129,078 | (1,976,953) | -3.65% | 1,598,884 | 751,010 | 24,008,976 | 2027 |
| 2027 | 7.00% | 9,922,956 | 24,008,976 | 1,150,864 | (2,150,797) | -4.16% | 1,646,223 | 646,290 | 24,655,266 | 2028 |
| 2028 | 7.00% | 9,901,862 | 24,655,266 | 1,148,418 | (2,267,577) | -4.54% | 1,687,361 | 568,202 | 25,223,468 | 2029 |
| 2029 | 7.00% | 10,134,758 | 25,223,468 | 1,175,429 | (2,288,930) | -4.41% | 1,727,329 | 613,828 | 25,837,296 | 2030 |
| 2030 | 7.00% | 10,366,492 | 25,837,296 | 1,202,306 | (2,343,136) | -4.42% | 1,769,357 | 628,527 | 26,465,822 | 2031 |
| 2031 | 7.00% | 10,605,201 | 26,465,822 | 1,229,991 | (2,518,666) | -4.87% | 1,808,267 | 519,592 | 26,985,415 | 2032 |
| 2032 | 7.00% | 10,701,911 | 26,985,415 | 1,241,208 | (2,567,108) | -4.91% | 1,843,357 | 517,456 | 27,502,871 | 2033 |
| 2033 | 7.00% | 10,960,270 | 27,502,871 | 1,271,172 | (2,566,887) | -4.71% | 1,880,618 | 584,903 | 28,087,774 | 2034 |
| 2034 | 7.00% | 11,229,260 | 28,087,774 | 1,302,370 | (2,585,915) | -4.57% | 1,921,980 | 638,435 | 28,726,209 | 2035 |
| 2035 | 7.00% | 11,501,679 | 28,726,209 | 1,333,965 | (2,780,614) | -5.04% | 1,961,058 | 514,408 | 29,240,618 | 2036 |
| 2036 | 7.00% | 11,670,873 | 29,240,618 | 1,353,588 | (2,747,860) | -4.77% | 1,998,869 | 604,597 | 29,845,214 | 2037 |
| 2037 | 7.00% | 11,963,465 | 29,845,214 | 1,387,523 | (2,768,249) | -4.63% | 2,041,657 | 660,931 | 30,506,145 | 2038 |
| 2038 | 7.00% | 12,254,677 | 30,506,145 | 1,421,297 | (2,781,170) | -4.46% | 2,088,640 | 728,768 | 31,234,913 | 2039 |
| 2039 | 7.00% | 12,557,964 | 31,234,913 | 1,456,473 | (2,987,206) | -4.90% | 2,133,774 | 603,041 | 31,837,954 | 2040 |
| 2040 | 7.00% | 12,788,498 | 31,837,954 | 1,483,210 | (2,945,392) | -4.59% | 2,178,346 | 716,164 | 32,554,118 | 2041 |
| 2041 | 7.00% | 13,112,432 | 32,554,118 | 1,520,780 | (2,941,723) | -4.36% | 2,229,896 | 808,953 | 33,363,071 | 2042 |
| 2042 | 7.00% | 13,442,873 | 33,363,071 | 1,559,104 | (2,932,954) | -4.12% | 2,288,144 | 914,295 | 34,277,366 | 2043 |
| 2043 | 7.00% | 13,782,786 | 34,277,366 | 1,598,528 | (3,170,438) | -4.59% | 2,345,329 | 773,418 | 35,050,784 | 2044 |
| 2044 | 7.00% | 14,075,431 | 35,050,784 | 1,632,468 | (3,104,035) | -4.20% | 2,402,921 | 931,354 | 35,982,138 | 2045 |
| 2045 | 7.00% | 14,438,929 | 35,982,138 | 1,674,627 | (3,106,159) | -3.98% | 2,469,493 | 1,037,961 | 37,020,100 | 2046 |
| 2046 | 7.00% | 14,807,982 | 37,020,100 | 1,717,430 | (3,096,856) | -3.73% | 2,543,944 | 1,164,517 | 38,184,617 | 2047 |
| 2047 | 7.00% | 15,185,374 | 38,184,617 | 1,761,200 | (3,330,821) | -4.11% | 2,618,916 | 1,049,295 | 39,233,912 | 2048 |
| 2048 | 7.00% | 15,544,229 | 39,233,912 | 1,802,820 | (3,274,351) | -3.75% | 2,695,741 | 1,224,210 | 40,458,122 | 2049 |
| 2049 | 7.00% | 15,948,660 | 40,458,122 | 1,849,726 | (3,290,599) | -3.56% | 2,782,491 | 1,341,618 | 41,799,739 | 2050 |
| 2050 | 7.00% | 16,357,514 | 41,799,739 | 1,897,144 | (3,271,404) | -3.29% | 2,878,696 | 1,504,437 | 43,304,176 | 2051 |
| 2051 | 7.00% | 16,781,955 | 43,304,176 | 1,946,371 | (3,552,421) | -3.71% | 2,976,031 | 1,369,982 | 44,674,157 | 2052 |
| 2052 | 7.00% | 17,201,748 | 44,674,157 | 1,995,059 | (3,477,033) | -3.32% | 3,076,199 | 1,594,224 | 46,268,382 | 2053 |
| 2053 | 7.00% | 17,648,603 | 46,268,382 | 2,046,885 | (3,497,361) | -3.13% | 3,188,879 | 1,738,403 | 48,006,785 | 2054 |
| 2054 | 7.00% | 18,107,383 | 48,006,785 | 2,100,094 | (3,470,960) | -2.86% | 3,313,306 | 1,942,440 | 49,949,225 | 2055 |

# SECTION X – CASH FLOW PROJECTIONS

**Mississippi PERS**
**30-year Open Group Projection of Cash Flow**
**SLRP Plan**
**Based on June 30, 2024 Valuation Results**

**Projection of Cash Flow**

**Contribution Methodology:** Employee and Employer Contributions
**Investment Return Methodology:** As Programmed

| Valuation Year Beginning July 1 | Expected Short-term Investment Return | Valuation Annual Payroll | Market Value of Assets July 1 | Total Contributions | Projected Benefit Payments | Ratio of Cash Flow to MVA | Expected Investment Return | Net Cash Flow | Market Value of Assets June 30 | Valuation Year Ending June 30 |
|---|---|---|---|---|---|---|---|---|---|---|
| 2024 | -5.00% | 9,331,683 | 21,868,000 | 1,082,289 | (1,956,507) | -4.00% | (1,071,264) | (1,945,482) | 19,922,518 | 2025 |
| 2025 | 7.00% | 9,519,645 | 19,922,518 | 1,104,088 | (1,888,216) | -3.94% | 1,367,596 | 583,469 | 20,505,986 | 2026 |
| 2026 | 7.00% | 9,735,113 | 20,505,986 | 1,129,078 | (1,976,953) | -4.13% | 1,406,245 | 558,371 | 21,064,357 | 2027 |
| 2027 | 7.00% | 9,922,956 | 21,064,357 | 1,150,864 | (2,150,797) | -4.75% | 1,440,099 | 440,166 | 21,504,523 | 2028 |
| 2028 | 7.00% | 9,901,862 | 21,504,523 | 1,148,418 | (2,267,577) | -5.20% | 1,466,809 | 347,650 | 21,852,173 | 2029 |
| 2029 | 7.00% | 10,134,758 | 21,852,173 | 1,175,429 | (2,288,930) | -5.10% | 1,491,339 | 377,838 | 22,230,011 | 2030 |
| 2030 | 7.00% | 10,366,492 | 22,230,011 | 1,202,306 | (2,343,136) | -5.13% | 1,516,847 | 376,017 | 22,606,027 | 2031 |
| 2031 | 7.00% | 10,605,201 | 22,606,027 | 1,229,991 | (2,518,666) | -5.70% | 1,538,081 | 249,406 | 22,855,434 | 2032 |
| 2032 | 7.00% | 10,701,911 | 22,855,434 | 1,241,208 | (2,567,108) | -5.80% | 1,554,259 | 228,358 | 23,083,792 | 2033 |
| 2033 | 7.00% | 10,960,270 | 23,083,792 | 1,271,172 | (2,566,887) | -5.61% | 1,571,282 | 275,567 | 23,359,359 | 2034 |
| 2034 | 7.00% | 11,229,260 | 23,359,359 | 1,302,370 | (2,585,915) | -5.49% | 1,590,991 | 307,446 | 23,666,805 | 2035 |
| 2035 | 7.00% | 11,501,679 | 23,666,805 | 1,333,965 | (2,780,614) | -6.11% | 1,606,900 | 160,250 | 23,827,056 | 2036 |
| 2036 | 7.00% | 11,670,873 | 23,827,056 | 1,353,588 | (2,747,860) | -5.85% | 1,619,920 | 225,648 | 24,052,703 | 2037 |
| 2037 | 7.00% | 11,963,465 | 24,052,703 | 1,387,523 | (2,768,249) | -5.74% | 1,636,181 | 255,455 | 24,308,158 | 2038 |
| 2038 | 7.00% | 12,254,677 | 24,308,158 | 1,421,297 | (2,781,170) | -5.59% | 1,654,781 | 294,909 | 24,603,067 | 2039 |
| 2039 | 7.00% | 12,557,964 | 24,603,067 | 1,456,473 | (2,987,206) | -6.22% | 1,669,545 | 138,812 | 24,741,879 | 2040 |
| 2040 | 7.00% | 12,788,498 | 24,741,879 | 1,483,210 | (2,945,392) | -5.91% | 1,681,621 | 219,439 | 24,961,318 | 2041 |
| 2041 | 7.00% | 13,112,432 | 24,961,318 | 1,520,780 | (2,941,723) | -5.69% | 1,698,400 | 277,457 | 25,238,775 | 2042 |
| 2042 | 7.00% | 13,442,873 | 25,238,775 | 1,559,104 | (2,932,954) | -5.44% | 1,719,443 | 345,594 | 25,584,369 | 2043 |
| 2043 | 7.00% | 13,782,786 | 25,584,369 | 1,598,528 | (3,170,438) | -6.14% | 1,736,819 | 164,908 | 25,749,277 | 2044 |
| 2044 | 7.00% | 14,075,431 | 25,749,277 | 1,632,468 | (3,104,035) | -5.71% | 1,751,816 | 280,249 | 26,029,526 | 2045 |
| 2045 | 7.00% | 14,438,929 | 26,029,526 | 1,674,627 | (3,106,159) | -5.50% | 1,772,811 | 341,279 | 26,370,806 | 2046 |
| 2046 | 7.00% | 14,807,982 | 26,370,806 | 1,717,430 | (3,096,856) | -5.23% | 1,798,493 | 419,066 | 26,789,872 | 2047 |
| 2047 | 7.00% | 15,185,374 | 26,789,872 | 1,761,200 | (3,330,821) | -5.86% | 1,821,283 | 251,662 | 27,041,534 | 2048 |
| 2048 | 7.00% | 15,544,229 | 27,041,534 | 1,802,820 | (3,274,351) | -5.44% | 1,842,275 | 370,744 | 27,412,278 | 2049 |
| 2049 | 7.00% | 15,948,660 | 27,412,278 | 1,849,726 | (3,290,599) | -5.26% | 1,869,282 | 428,409 | 27,840,686 | 2050 |
| 2050 | 7.00% | 16,357,514 | 27,840,686 | 1,897,144 | (3,271,404) | -4.94% | 1,901,562 | 527,303 | 28,367,989 | 2051 |
| 2051 | 7.00% | 16,781,955 | 28,367,989 | 1,946,371 | (3,552,421) | -5.66% | 1,930,498 | 324,449 | 28,692,437 | 2052 |
| 2052 | 7.00% | 17,201,748 | 28,692,437 | 1,995,059 | (3,477,033) | -5.17% | 1,957,479 | 475,504 | 29,167,942 | 2053 |
| 2053 | 7.00% | 17,648,603 | 29,167,942 | 2,046,885 | (3,497,361) | -4.97% | 1,991,848 | 541,372 | 29,709,314 | 2054 |
| 2054 | 7.00% | 18,107,383 | 29,709,314 | 2,100,094 | (3,470,960) | -4.61% | 2,032,483 | 661,617 | 30,370,931 | 2055 |

***SENSITIVITY ANALYSIS***

Measuring pension obligations and actuarially determined contributions requires the use of assumptions regarding future economic and demographic experience. Whenever assumptions are made about future events, there is risk that actual experience will differ from expected. Actuarial valuations include the risk that actual future measurements will deviate from expected future measurements due to actual experience that is different than the actuarial assumptions. The primary areas of risk in this actuarial valuation are.

- Investment Risk – the potential that actual investment returns will be different than expected.

- Longevity and Other Demographic Risks – the potential that mortality or other demographic experience will be different than expected.

- Interest Rate Risk – to the extent market rates of interest affect the expected return on assets, there is a risk of change to the discount rate which determines the present value of liabilities and actuarial valuation results.

- Contribution Risk – the potential that actual contributions are different than the fixed contribution rates.

- Liquidation Risk – the potential that the plan (or all covered employment) ended on the valuation date and all of the accrued benefits had to be paid with cash-flow matched bonds.

### *Investment Risk*

In this section of the report, we will demonstrate the variability in achieving funding goals based on sensitivity around the three key variables listed above. Earlier in this section, we reviewed the projections if the long-term investment return assumption was lowered to rates below 7.00% (6.50%). In this section, we keep the long-term investment return assumption at 7.00% but review the sensitivity of short-term investment returns as a single year event (and then 7.00% for all years thereafter) and simulate the next 10-year periods of return (and then 7.00% for all years thereafter).

**Projected Funded Ratio in 2047**

| Single Year Event | 2024 Valuation | 2023 Valuation |
|---|---|---|
| • 1.00% for the next fiscal year | 73.9% | 64.3% |
| • 3.00% for the next fiscal year | 78.2% | 69.0% |
| • 5.00% for the next fiscal year | 82.6% | 73.7% |
| • **7.00% for the next fiscal year (Baseline)** | **86.9%** | **78.4%** |
| • 9.00% for the next fiscal year | 91.2% | 83.1% |
| • 11.00% for the next fiscal year | 95.5% | 87.8% |
| • 13.00% for the next fiscal year | 99.9% | 92.5% |
| • Simulate 2008 loss using -15% for the next fiscal year | 39.4% | 26.8% |
| **Average Returns over next 10-Year Period (Simulated returns using mean and standard deviations from PERS' Investment Consultant's Capital Market Assumptions)*** | **2024 Valuation** | **2023 Valuation** |
| • 6.00% | 69.1% | 59.7% |
| • 7.00% | 87.0% | 78.6% |
| • 8.00% | 110.5% | 104.0% |

*** 6.00% Average Returns over the next 10-Year Period: 7.04%, 10.32%, 2.25%, 5.45%, 8.52%, 0.00%, 5.44%, 11.49%,-7.04%, 18.53%*
*7.00% Average Returns over the next 10-Year Period: 3.61%, 20.67%,-0.02%, 11.58%,-4.84%, 8.13%, 18.10%, 2.04%, 0.83%, 12.67%*
*8.00% Average Returns over the next 10 Year Period: 9.00%, 9.01%, 16.24%, 4.84%, 16.62%, 6.78%,-3.74%, 6.19%, 18.57%,-1.19%*

As can be seen from the projected funded ratios on the table above, the sensitivity of short-term investment returns does have a significant impact to the funding of SLRP in the long-term, especially another repeat of the Great Recession of 2008. We believe it demonstrates the importance of these continued projection reports and the continued monitoring of this sensitivity analysis because short-term differences in investment returns can have a major impact on the projection of funded ratios.

***Demographic Risk***

While actual investment returns compared to that assumed is the most critical driver of funding, many other assumptions are used in the actuarial projections to review sensitivity, such as population growth and wage inflation. Variances in these other assumptions over the long-term may also have an impact on the funding of the Plan.

Since SLRP has a set number of active legislative members and should remain static over the projection period, we have not reviewed the sensitivity around this assumption.

### *Assumption Risk*

We also performed a sensitivity analysis for the wage inflation assumption. As a result of the experience study presented in April 2023, the Board kept the wage inflation assumption at 2.65%, which is 0.25% above the price inflation of 2.40%. Wage inflation is a major component of the underlying salary increase assumptions, as well as the amortization of the Unfunded Accrued Liability which is based on the level percent of payroll amortization methodology.

In the table below, the second scenario lowers the discount rate to 6.75% but does not change the price inflation or wage inflation. The third scenario lowers the price and wage inflation by 0.30% and lowers the discount rate to 6.75%.

**Projected Funded Ratio in 2047**

| Scenario | Price Inflation | Discount Rate | Wage Inflation | 2024 Valuation | 2023 Valuation |
|---|---|---|---|---|---|
| **1 - Baseline** | 2.40% | 7.00% | 2.65% | **86.9%** | **78.4%** |
| 2 | 2.40% | 6.75% | 2.65% | 77.2% | 68.5% |
| 3 | 2.10% | 6.75% | 2.35% | 74.2% | 64.4% |

***Contribution Risk***

To demonstrate the contribution risk of making the Fixed Contribution Rates (FCR) for SLRP, we have calculated the projected funded ratio if the FCRs were 1% higher or 1% lower than the current rates for all future years.

**Projected Funded Ratio in 2047**

| Change in Fixed Contribution Rate (FCR) | 2024 Valuation | 2023 Valuation |
|---|---|---|
| • Baseline | **86.9%** | **78.4%** |
| • 1.00% increase in FCR | 100.0% | 92.5% |
| • 1.00% decrease in FCR | 73.8% | 64.2% |

Over a long projection period, gains and losses due to population growth and wage inflation assumptions will be relatively concentrated around the expected value of these assumptions. So, the impact of the sensitivity around these baseline assumptions is small when compared to the investment return assumption.

***Liquidation Risk***

Under the revised Actuarial Standards of Practice (ASOP) No. 4 effective for valuations after February 15, 2023, we must now include a low-default-risk obligation measure of the Fund's liability in our funding valuation report. This is an informational disclosure as described below and would not be appropriate for assessing the funding progress or health of this plan.

This measure uses the unit credit cost method and reflects all the assumptions and provisions of the funding valuation except that the discount rate is derived from considering low-default-risk fixed income securities. We considered the FTSE Pension Discount Curve based on market bond rates published by the Society of Actuaries as of June 30, 2024 and with the 30-year spot rate used for all durations beyond 30. Using these assumptions, we calculate a low-default-risk obligation measure liability of approximately $31,809,000.

This amount approximates the termination liability if the plan (or all covered employment) ended on the valuation date and all of the accrued benefits had to be paid with cash-flow matched bonds. This assurance of funded status and benefit security is typically more relevant for corporate plans than for governmental plans since governments rarely have the need or option to completely terminate a plan.

## SECTION XII – PROJECTION SUMMARY

Utilizing the metrics based on the funding policy for SLRP and with a fixed contribution rate as a percentage of annual compensation of 8.40% of payroll, the projection results for 2024 for SLRP show that two of the three funding policy metrics are in the Yellow Status, therefore, we do not recommend an increase in the Fixed Contribution Rate (FCR) of 8.40% of annual compensation at this time. However, if there is any negative experience in the near future, the Fixed Contribution Rate may need to be increased.

| Metrics | 2024 Baseline Projection | 2024 Status |
|---|---|---|
| Funding Ratio in 2047 | 86.9% | Yellow |
| Cash Flow as a Percentage of Assets | (5.04)% | Green |
| ADC/FCR Ratio from 2023 Valuation | 101.6% | Yellow |
| ADC/FCR Ratio from 2024 Valuation | 101.5% | Yellow |

# Schedule A – Development of Assets

($ thousands)

| Valuation Date June 30: | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|---|---|
| A. | Actuarial Value Beginning of Year | $20,808 | $21,465 | | | | |
| B. | Market Value End of Year | 20,830 | 21,868 | | | | |
| C. | Market Value Beginning of Year | 20,139 | 20,830 | | | | |
| D. | Cash Flow | | | | | | |
| | D1. Contributions | 884 | 939 | | | | |
| | D2. Other Revenue | 0 | 0 | | | | |
| | D3. Benefit Payments | (1,658) | (2,010) | | | | |
| | D4. Refunds | 0 | 0 | | | | |
| | D5. Administrative Expenses | (13) | (13) | | | | |
| | D6. Net | (787) | (1,084) | | | | |
| E. | Investment Income | | | | | | |
| | E1. Market Total: B.-C.-D6. | 1,478 | 2,122 | | | | |
| | E2. Assumed Rate | 7.55% | 7.00% | | | | |
| | E3. Amount for Immediate Recognition | 1,491 | 1,532 | | | | |
| | E4. Amount for Phased-In Recognition | ( 13) | 590 | | | | |
| F. | Phased-In Recognition of Investment Income | | | | | | |
| | F1. Current Year: 0.20*E4. | (3) | 118 | | | | |
| | F2. First Prior Year | (733) | (3) | 118 | | | |
| | F3. Second Prior Year | 873 | (733) | (3) | 118 | | |
| | F4. Third Prior Year | (169) | 873 | (733) | (3) | 118 | |
| | F5. Fourth Prior Year | (15) | (174) | 875 | (733) | (1) | 118 |
| | F6. Total Recognized Investment Gain | (47) | 81 | 257 | (618) | 117 | 118 |
| G. | Actuarial Value End of Year: A. + D6. + E3. + F6. | $21,465 | $21,994 | | | | |
| H. | Difference Between Market & Actuarial Values | $( 635) | $(126) | $(383) | $235 | $118 | $0 |

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

| | Asset Summary<br>June 30, 2024<br>($ in Thousands) | |
|---|---|---|
| | **Market Value** | **Actuarial Value** |
| (1) Assets as of June 30, 2023 | $20,830 | $21,465 |
| (2) Contributions and Misc. Revenue | 939 | 939 |
| (3) Investment Increment | 2,122 | 1,613 |
| (4) Benefit Payments | (2,010) | (2,010) |
| (5) Refunds | 0 | 0 |
| (6) Administrative Expenses | (13) | (13) |
| (7) Assets as of June 30, 2024 (1)+(2)+(3)+(4)+(5)+(6) | $21,868 | $21,994 |
| (8) Net Investment Return* [ 2 x (3) ] / [ (7) + (1) – (3) ] | 10.46% | 7.71% |

* Calculated assuming middle of year cash flow experience.

# Schedule B – Actuarial Assumptions and Methods

**The assumptions and methods used in the valuation are based on the results of the experience Investigation for the four-year period ending June 30, 2022, dated April 21, 2023, and adopted by the Board on August 22, 2023. The combined effect of the assumptions is expected to have no significant bias.**

INTEREST RATE: 7.00% per annum, compounded annually (net of investment expenses only). The expected return on assets consists of 2.40% price inflation and 4.60% real rate of return.

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed rates of separation from active service are as follows:

| | Annual Rate of | | |
|---|---|---|---|
| | Death* | | |
| Age | Male | Female | Disability** |
| 20 | 0.0483% | 0.0126% | 0.020% |
| 25 | 0.0567 | 0.0189 | 0.025 |
| 30 | 0.0630 | 0.0259 | 0.035 |
| 35 | 0.0714 | 0.0350 | 0.055 |
| 40 | 0.0893 | 0.0483 | 0.085 |
| 45 | 0.1218 | 0.0665 | 0.115 |
| 50 | 0.1764 | 0.0917 | 0.150 |
| 55 | 0.2594 | 0.1274 | 0.175 |
| 60 | 0.3980 | 0.1757 | 0.200 |
| 65 | 0.6353 | 0.2429 | 0.000 |
| 70 | 1.1655 | 0.4739 | 0.000 |
| 75 | 2.1389 | 0.9247 | 0.000 |

* Adjusted Base rates.
** 93% are presumed to be non-duty related, and 7% are assumed to be duty related.

WITHDRAWAL AND VESTING: 15% in an election year, 2% in a non-election year.

SERVICE RETIREMENT: 30% in an election year, 3.5% in a non-election year. All members are assumed to retire no later than age 80.

It is assumed that a member will be granted 2.5 years of service credit for unused leave at termination of employment.

SALARY INCREASES: 2.65% per annum, for all ages.

DEATH AFTER RETIREMENT:

***Service Retirees****

| Membership Table | Adjustment to Rates | Projection Scale |
|---|---|---|
| PubS.H-2010(B) Retiree | Male: 95% up to age 60, 110% for ages 61 to 75, and 101% for ages above 77<br>Female: 84% up to age 72, 100% for ages above 76 | MP-2020 |

***Contingent Annuitants****

| Membership Table | Adjustment to Rates | Projection Scale |
|---|---|---|
| PubS.H-2010(B) Contingent Annuitant | Male: 97% for all ages<br>Female: 110% for all ages | MP-2020 |

***Disabled Retirees****

| Membership Table | Adjustment to Rates | Projection Scale |
|---|---|---|
| PubG.H-2010 Disabled | Male: 134% for all ages<br>Female: 121% for all ages | MP-2020 |

* Please note that none of the recommended tables have any setbacks or setforwards.

Representative values of the assumed rates of death after retirement are as follows:

| | Rates of Death After Retirement* | | | | | |
|---|---|---|---|---|---|---|
| | Service Retirees | | Contingent Annuitants | | Disabled Retirees | |
| Age | Male | Female | Male | Female | Male | Female |
| 45 | 0.2983% | 0.0983% | 0.7692% | 0.5104% | 1.4660% | 1.1919% |
| 50 | 0.4190% | 0.1638% | 0.8837% | 0.6556% | 2.2780% | 1.7956% |
| 55 | 0.5197% | 0.2738% | 1.0156% | 0.7843% | 2.9855% | 2.1078% |
| 60 | 0.7771% | 0.4578% | 1.2397% | 1.0131% | 3.6475% | 2.4684% |
| 65 | 1.3211% | 0.7652% | 1.6286% | 1.4157% | 4.5426% | 2.9730% |
| 70 | 2.1758% | 1.2785% | 2.4153% | 1.9998% | 5.8129% | 3.8127% |
| 75 | 3.8566% | 2.3659% | 3.7209% | 3.0052% | 7.6661% | 5.2683% |
| 80 | 6.2640% | 4.2530% | 5.7734% | 4.7289% | 10.8125% | 7.7779% |
| 85 | 11.0605% | 7.3240% | 9.2228% | 7.8562% | 15.7785% | 11.9947% |
| 90 | 17.6902% | 12.6470% | 14.6577% | 13.4530% | 22.7224% | 17.5353% |

* Adjusted Base Rates

PAYROLL GROWTH: 2.65% per annum, compounded annually.

ADMINISTRATIVE EXPENSES: 0.15% of payroll.

TIMING OF DECREMENTS AND PAY INCREASES: Middle of Year.

ASSUMED INTEREST RATE ON EMPLOYEE CONTRIBUTIONS: 2.00%

MARRIAGE ASSUMPTION: 85% married with the husband three years older than his wife.

MAXIMUM COVERED EARNINGS ASSUMPTION GROWTH: 2.65%

MODIFIED CASH REFUND: Benefits were valued with a six-year certain period for retirees and a five year certain period for active members to estimate the value of the modified cash refund feature.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule A. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

AMORTIZATION METHOD FOR ACTUARIALLY DETERMINED CONTRIBUTION (ADC): Level Percentage of Payroll Method using closed amortization periods as follows:

a. Existing UAAL on June 30, 2023 – 25 years.
b. Annual future actuarial experience gains and losses, assumption changes or benefit enhancements or reductions – 25 years from the date of the valuation.

VALUATION METHOD: The valuation is prepared on the projected benefit basis, which is used to determine the present value of each member's expected benefit payable at retirement, disability, or death. The calculations are based on the member's age, years of service, sex, compensation, expected future salary increases, and an assumed future interest earnings rate (currently 7.00%). The calculations consider the probability of a member's death or termination of employment prior to becoming eligible for a benefit and the probability of the member terminating with a service, disability, or survivor's benefit. The present value of the expected benefits payable to active members is added to the present value of the expected future payments to current benefit recipients to obtain the present value of all expected benefits payable to the present group of members and survivors.

The employer contributions required to support the benefits of SLRP are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.

Under the entry age normal cost method, the actuarial present value of each member's projected benefits is allocated on a level basis over the member's compensation between the entry age of the member and the assumed exit ages. The portion of the actuarial present value allocated to the valuation year is called the normal cost. The actuarial present value of benefits allocated to prior years of service is called the actuarial accrued liability. The unfunded actuarial accrued liability represents the difference between the actuarial accrued liability and the actuarial value of assets as of the valuation date. The unfunded actuarial accrued liability is calculated each year and reflects experience gains/losses. The accrued liability contribution amortizes the balance of the unfunded actuarial accrued liability over a period of years from the valuation date.

The following summary presents the main benefit and contribution provisions of the Plan in effect June 30, 2024 as interpreted in preparing the actuarial valuation.

**DEFINITIONS**

**Average Compensation**

Average annual covered earnings of an employee during the four highest years of service. To determine the four highest years, PERS considers these scenarios:

- Four highest fiscal years of earned compensation;
- Four highest calendar years of earned compensation;
- Combination of four highest fiscal and calendar years of earned compensation that do not overlap; or
- Final 48 months of earned compensation prior to termination of employment.

**Covered Earnings**

Gross salary not in excess of the maximum amount on which contributions were required.

**Fiscal Year**

Year commencing on July 1 and ending June 30.

**Eligibility Service**

Service while a contributing member of PERS plus additional service as described below. (OLD: Eligibility service" is all service in PERS, including that credited for SLRP service.)

**Credited Service**

Service while a contributing member of SLRP plus additional service as described below. (OLD: "Creditable service" includes only SLRP service.)

**Unused Sick and Vacation Leave**

Service credit is provided at no charge to members for unused sick and vacation time that has accrued at the time of retirement. A payment of up to 240 hours of leave may be used the Average Compensation definition.

**Additional Service**

Additional service credit may be granted for service prior to July 1, 1989, including active duty military service.

**Attribution**

Attribution period for the normal cost is based on entry into PERS even for members who first participated in SLRP at a later age than PERS.

The maximum covered earnings for employers and employees over the last ten years are as follows:

**EMPLOYER AND EMPLOYEE RATES OF CONTRIBUTION AND MAXIMUM COVERED EARNINGS**

| Fiscal Date From | Fiscal Date To | Employer Rate | Employee Rate | Maximum Covered Earnings |
|---|---|---|---|---|
| 7/1/2014 | 6/30/2015 | 7.40% | 3.00% | $260,000 |
| 7/1/2015 | 6/30/2017 | 7.40 | 3.00 | $265,000 |
| 7/1/2017 | 6/30/2018 | 7.40 | 3.00 | $270,000 |
| 7/1/2018 | 6/30/2019 | 7.40 | 3.00 | $275,000 |
| 7/1/2019 | 6/30/2020 | 7.40 | 3.00 | $280,000 |
| 7/1/2020 | 6/30/2021 | 7.40 | 3.00 | $285,000 |
| 7/1/2021 | 6/30/2022 | 7.40 | 3.00 | $290,000 |
| 7/1/2022 | 6/30/2023 | 7.40 | 3.00 | $305,000 |
| 7/1/2023 | 6/30/2024 | 7.40 | 3.00 | $330,000 |
| 7/1/2024 | 6/30/2025 | 8.40 | 3.00 | $345,000 |

## BENEFITS

**Superannuation Retirement**

Condition for Retirement

(a) A retirement allowance is paid upon the request of any member who retires and has attained age 60 and completed at least eight years* of membership service under PERS. A retirement allowance may also be paid upon the completion of at least 25 years of creditable service under PERS for members hired prior to July 1, 2011, or upon the completion of 30 years of creditable service for members hired on or after July 1, 2011.

(b) Any member who withdraws from service prior to his or her attainment of age 60 and who has completed at least eight years* of ,membership service under PERS is entitled to receive, in lieu of a refund of his or her accumulated contributions, a retirement allowance commencing at age 60.

Amount of Allowance

The annual retirement allowance payable to a member who retires under condition (a) above is equal to:

1. A member's annuity which is the actuarial equivalent of the member's accumulated contributions at the time of his or her retirement, plus

2. An employer's annuity which, together with the member's annuity, is equal to 1% of his or her average compensation for each of the first 25 years of creditable service plus 1.25% for each year of creditable service over 25 years.

The minimum allowance is $60 per year of creditable service.

**Disability Retirement**

| | |
|---|---|
| Condition for Retirement | A retirement allowance is paid to a member who is totally and permanently disabled, as determined by the Board of Trustees, and has accumulated eight or more years* of membership service under PERS.<br><br>* four years for those who entered PERS before July 1, 2007. |
| Amount of Allowance | For those who were active members prior to July 1, 1992, and did not elect the benefit structure outlined below, the annual disability retirement allowance payable is equal to a superannuation retirement allowance if the member has attained age 60, otherwise it is equal to a superannuation retirement allowance calculated as follows:<br><br>1. A member's annuity equal to the actuarial equivalent of his or her accumulated contributions at the time of retirement, plus<br><br>2. An employer's annuity equal to the amount that would have been payable had the member continued in service to age 60.<br><br>For those who become active members after June 30, 1992, and for those who were active members prior to July 1, 1992, who so elected, the following benefits are payable:<br><br>1. A temporary allowance equal to the greater of (a) 40% of average compensation plus 10% for each dependent child up to a maximum of 2, or (b) the member's accrued allowance. This temporary allowance is paid for a period of time based on the member's age at disability, as follows: |

| Age at Disability | Duration |
|---|---|
| 60 and earlier | to age 65 |
| 61 | to age 66 |
| 62 | to age 66 |
| 63 | to age 67 |
| 64 | to age 67 |
| 65 | to age 68 |
| 66 | to age 68 |
| 67 | to age 69 |
| 68 | to age 70 |
| 69 and later | one year |

For those hired prior to July 1, 2011, the minimum allowance is $60 per year of service credit.

2. A deferred allowance commencing when the temporary allowance ceases equal to the greater of (a) the allowance the member would have received based on service to the termination age of the temporary allowance, but not more than 20% of average compensation, or (b) the member's accrued allowance.

   For those hired prior to July 1, 2011, the minimum allowance is $60 per year of service credit.

   Effective July 1, 2004, a temporary benefit can be paid out of a member's accumulated contribution balance while the member is awaiting a determination for eligibility for disability benefits. Future disability payments, if any, would be offset by advanced payments made from the member's accumulated contributions.

**Accidental Disability Retirement**

| | |
|---|---|
| Condition for Retirement | A retirement allowance is paid to a member who is totally and permanently disabled in the line of performance of duty. |
| Amount of Allowance | The annual accidental disability retirement allowance is equal to the allowance payable on disability retirement but not less than 25% of average compensation. There is no minimum benefit. |

**Accidental Death Benefit**

| | |
|---|---|
| Condition for Benefit | A retirement allowance is paid to a spouse and/or dependent children upon the death of an active member in the line of performance of duty. |
| Amount of Allowance | The annual retirement allowance is equal to 25% of average compensation payable to the spouse and 12-1/2% of average compensation payable to one dependent child or 25% to two or more children until age 19 (23 if a full time student). There is no minimum benefit. |

**Ordinary Death Benefit**

| | |
|---|---|
| Condition for Benefit | Upon the death of a member who has completed at least eight years* of membership service, a benefit is payable, in lieu of a refund of the member's accumulated contributions, to his or her spouse, if said spouse has been married to the member for not less than one year.<br><br>* four years for those who entered the system before July 1, 2007. |
| Amount of Allowance | The annual retirement allowance payable to the lawful spouse of a vested member who dies is equal to the greater of (i) the allowance that would have been payable had the member retired and elected Option 2, reduced by an actuarially determined factor based on the number of years the member lacked in qualifying for unreduced benefits, or (ii) a lifetime benefit equal to 20% of the deceased |

member's average compensation, but not less than $25 per month.

In addition, a benefit is payable to dependent children until age 19 (23 if a full time student). The benefit is equal to the greater of 5% of average compensation or $25 per month for each dependent child up to 3.

**Return of Contributions**

Upon the withdrawal of a member without a retirement benefit, his or her contributions are returned to him or her, together with accumulated regular interest thereon.

Upon the death of a member before retirement, his or her contributions, together with the full accumulated regular interest thereon, are paid to his or her designated beneficiary, if any, otherwise, to his or her estate provided no other survivor benefits are payable.

Effective July 1, 2016, the interest rate on employee contributions shall be calculated based on the money market rate as published by the Wall Street Journal on December 31 of each preceding year with a minimum rate of one percent and a maximum rate of five percent.

**Normal Form of Benefit**

The normal form of benefit is an allowance payable during the life of the member with the provision that upon his or her death the excess of his or her total contributions at the time of retirement over the total retirement annuity paid to him or her will be paid to his or her designated beneficiary.

**Optional Benefits**

A member upon retirement may elect to receive his or her allowance in one of the following forms which are computed to be actuarially equivalent to the applicable retirement allowance.

Option 1. Reduced allowance with the provision that if the pensioner dies before he receives the value of the member's annuity as it was at the time of retirement, the balance shall be paid to his or her beneficiary.

Option 2. Upon his or her death, his or her reduced retirement allowance shall be continued throughout the life of, and paid to, his or her beneficiary.

Option 3. Upon his or her death, 50% of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary and the other 50% of his or her reduced retirement allowance to some other designated beneficiary.

Option 4. Upon his or her death, 75% of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary.

Option 4A. Upon his or her death, 50% of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary.

Option 4B. A reduced retirement allowance shall be continued throughout the life of the pensioner, but with the further guarantee of payment to the pensioner or his or her beneficiary for a specified number of years certain.

Option 4C. A member may elect any option with the added provision that the member shall receive, so far as possible, the same total amount annually (considering both SLRP and Social Security benefits) before and after the earliest age at which the member becomes eligible for a Social Security benefit. This option was only available to those who retired prior to July 1, 2004.

A member who elects Option 2, Option 4 or Option 4A at retirement may revert to the normal form of benefit if the designated beneficiary predeceases the retired member or if the member divorces the designated beneficiary.

A member who elects the normal form of benefit or Option 1 at retirement may select Option 2, Option 4 or Option 4A to provide beneficiary protection to a new spouse if married at retirement.

A member who has at least 28 years of creditable service* under PERS can select a partial lump-sum option at retirement. Under this option, the retiree has the option of taking a partial lump-sum distribution equal to either 12, 24, or 36 times the base maximum monthly benefit. With each lump-sum amount, the base maximum monthly benefit will be actuarially reduced. A member selecting the partial lump-sum option may also select any of the regular options except Option 1, the prorated single-life annuity, and Option 4-C, the Social Security leveling provision. The benefit is then calculated using the new reduced maximum benefit as a starting point in applying the appropriate option factors for the reduction.

*or at least age 63 with four years of membership service for those who entered PERS before July 1, 2007.

**Post-Retirement Adjustments In Allowances**

The allowances of retired members are adjusted annually by an amount equal to (a) 3% of the annual retirement allowance for each full fiscal year of retirement prior to the year in which the member reaches age 55, plus (b) 3% compounded for each year thereafter beginning with the fiscal year in which the member turns age 55*.

*Age 60 for members hired on or after July 1, 2011.

A prorated portion of the annual adjustment will be paid to the member, beneficiary, or estate of any member or beneficiary who is receiving the annual adjustment in a lump sum, but whose benefits are terminated between July 1 and December 1.

## RECONCILIATION OF DATA RECEIVED FROM PERS

| Reconciliation of Data received from PERS | Active File | | | Pensioner File | | | Total |
|---|---|---|---|---|---|---|---|
| | Active | Inactive | Deferred Vested | Retirees | Disableds | Survivors | |
| From PERS | 198 | 30 | 35 | 196 | 1 | 58 | 518 |
| Return to Active | | | | | | | |
| Refunded | (2) | | | | | | (2) |
| Deceased | | | | (5) | | (2) | (7) |
| Deceased with Beneficiary | | | | | | 1 | 1 |
| Certain Period End | | | | | | (2) | (2) |
| Inactive | | | | | | | |
| Deferred Vested | | | | | | | |
| Duplicate* | | | | | | | |
| Retired | (21) | | | | | | (21) |
| For Valuation | 175 | 30 | 35 | 191 | 1 | 55 | 487 |

*Also included in Pensioner File

## STATUS RECONCILIATION FROM 2023 TO 2024

| | Actives | Retirees | Disableds | Survivors | Deferred Vested | Inactive | Total |
|---|---|---|---|---|---|---|---|
| As of June 30, 2023 | 172 | 176 | 1 | 51 | 33 | 27 | 460 |
| Retirement | (16) | 20 | | | (3) | (1) | |
| Disabled | | | | | | | |
| Death with Survivor | (1) | (5) | | 8 | | | 2 |
| Terminated Vested | (8) | | | | 8 | | |
| Terminated Non-Vested | (3) | | | | (3) | 6 | |
| Rehired | | | | | | | |
| Refunded | | | | | | (2) | (2) |
| Death No Survivor | | | | (2) | | | (2) |
| Benefit Ended | | | | (2) | | | (2) |
| Removed/Cleanup | | | | | | | |
| New | 31 | | | | | | 31 |
| As of June 30, 2024 | 175 | 191 | 1 | 55 | 35 | 30 | 487 |

**Retirants & Beneficiaries as of June 30, 2024**
**Tabulated by Year of Retirement**

| Valuation Year of Retirement Ending June 30 | No. | Total Annual Benefits, excluding COLA | COLA | Total Annual Benefits | Average Monthly Total Benefit |
|---|---|---|---|---|---|
| 2024 | 21 | $149,140 | $0 | $149,140 | $592 |
| 2023 | 6 | 41,080 | 263 | 41,343 | 574 |
| 2022 | 5 | 22,930 | 6,674 | 29,604 | 493 |
| 2021 | 4 | 18,153 | 908 | 19,061 | 397 |
| 2020 | 26 | 210,542 | 24,406 | 234,948 | 753 |
| 2019 | 7 | 41,467 | 5,450 | 46,917 | 559 |
| 2018 | 6 | 30,647 | 5,427 | 36,074 | 501 |
| 2017 | 6 | 32,976 | 6,849 | 39,825 | 553 |
| 2016 | 25 | 151,912 | 34,133 | 186,045 | 620 |
| 2015 | 5 | 35,146 | 9,216 | 44,362 | 739 |
| 2014 | 5 | 21,980 | 7,193 | 29,173 | 486 |
| 2013 | 15 | 59,095 | 20,227 | 79,322 | 441 |
| 2012 | 27 | 169,351 | 65,291 | 234,642 | 724 |
| 2011 | 3 | 5,193 | 2,324 | 7,517 | 209 |
| 2010 | 4 | 18,656 | 8,669 | 27,325 | 569 |
| 2009 | 5 | 25,467 | 13,055 | 38,522 | 642 |
| 2008 | 13 | 57,861 | 31,672 | 89,533 | 574 |
| 2007 | 1 | 4,417 | 2,671 | 7,088 | 591 |
| 2006 | 6 | 21,944 | 14,605 | 36,549 | 508 |
| 2005 | 5 | 15,970 | 11,056 | 27,026 | 450 |
| 2004 | 11 | 54,731 | 41,213 | 95,944 | 727 |
| 2003 | 0 | 0 | 0 | 0 | 0 |
| 2002 | 3 | 9,092 | 7,944 | 17,036 | 473 |
| 2001 | 7 | 22,011 | 20,801 | 42,812 | 510 |
| 2000 | 9 | 30,034 | 25,872 | 55,906 | 518 |
| 1999 | 3 | 13,512 | 13,519 | 27,031 | 751 |
| 1998 | 1 | 1,097 | 1,200 | 2,297 | 191 |
| 1997 | 3 | 9,560 | 10,351 | 19,911 | 553 |
| 1996 | 2 | 4,441 | 5,424 | 9,865 | 411 |
| 1995 | 1 | 1,058 | 1,363 | 2,421 | 202 |
| 1994 | 0 | 0 | 0 | 0 | 0 |
| 1993 | 4 | 12,530 | 16,501 | 29,031 | 605 |
| 1992 | 7 | 27,202 | 39,836 | 67,038 | 798 |
| 1991 | 0 | 0 | 0 | 0 | 0 |
| 1990 | 1 | 2,203 | 3,640 | 5,843 | 487 |
| TOTAL | 247 | $1,321,398 | $457,753 | $1,779,151 | $600 |

**Schedule of Retired Members by Type of Retirement**

**Benefits Payable June 30, 2024**

| Amount of Original Monthly Benefit | Number of Rets. | Ret Type 1* | Ret Type 2* | Ret Type 3* |
|---|---|---|---|---|
| $1 – $100 | 13 | 10 | | 3 |
| 101 – 200 | 49 | 34 | | 15 |
| 201 – 300 | 34 | 30 | | 4 |
| 301 – 400 | 41 | 31 | | 10 |
| 401 – 500 | 24 | 17 | 1 | 6 |
| 501 – 600 | 21 | 11 | | 10 |
| 601 – 700 | 19 | 17 | | 2 |
| 701 – 800 | 15 | 12 | | 3 |
| 801 – 900 | 8 | 7 | | 1 |
| 901 – 1,000 | 9 | 9 | | |
| Over 1,000 | 14 | 13 | | 1 |
| Totals | 247 | 191 | 1 | 55 |

*Type of Retirement
1 – Retirement for Age & Service
2 – Disability Retirement
3 – Survivor Payment

### Schedule of Retired Members by Type of Option
### Benefits Payable June 30, 2024

| Amount of Original Monthly Benefit | Number of Rets. | Life | Option 1 | Option 2 | Option 3 | Option 4 | Option 4A | Option 4B | Option 4C* | PLSO* 1 Year | PLSO* 2 Years | PLSO* 3 Years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $1 – $100 | 13 | 7 | | 4 | | | | 1 | 1 | | | |
| 101 – 200 | 49 | 22 | 1 | 18 | 5 | 2 | | 1 | | 3 | | 6 |
| 201 – 300 | 34 | 17 | 1 | 11 | 1 | 1 | 1 | 2 | | 1 | | 2 |
| 301 – 400 | 41 | 24 | | 12 | | | 1 | 4 | | 2 | | 6 |
| 401 – 500 | 24 | 11 | 1 | 8 | 1 | | | 3 | | | 2 | 4 |
| 501 – 600 | 21 | 6 | | 6 | 3 | | 2 | 4 | | | 1 | 10 |
| 601 – 700 | 19 | 10 | | 8 | | | 1 | | | | 2 | 3 |
| 701 – 800 | 15 | 7 | | 7 | | 1 | | | | 1 | 1 | 3 |
| 801 – 900 | 8 | 4 | | 2 | | 1 | 1 | | | | | 3 |
| 901 – 1,000 | 9 | 2 | 1 | 3 | | 1 | | 2 | | | 1 | 2 |
| Over 1,000 | 14 | 8 | | 4 | | 1 | 1 | | | 2 | 1 | 3 |
| Totals | 247 | 118 | 4 | 83 | 10 | 7 | 7 | 17 | 1 | 9 | 8 | 42 |

<u>Option Selected</u>

| | | |
|---|---|---|
| Life | - | Return of Contributions |
| Opt. 1 | - | Return of Value of Member's Annuity |
| Opt. 2 | - | 100% Survivorship |
| Opt. 3 | - | 50%/50% Dual Survivorship |
| Opt. 4 | - | 75% Survivorship |
| Opt. 4A | - | 50% Survivorship |
| Opt. 4B | - | Years Certain & Life |
| Opt. 4C | - | Social Security Leveling* |
| Opt. 5 | - | Pop-Up |
| PLSO | - | Partial Lump Sum* (Reflects reduced monthly benefit) |

*Included in other options

**Retirant and Beneficiary Information June 30, 2024**
**Tabulated by Attained Ages**

| Attained Age | Service Retirement | | Disability Retirement | | Survivors and Beneficiaries | | Total | |
|---|---|---|---|---|---|---|---|---|
| | No. | Annual Benefits | No. | Annual Benefits | No. | Annual Benefits | No. | Annual Benefits |
| Under 20 | | | | | | | | |
| 20 – 24 | | | | | | | | |
| 25 – 29 | | | | | 1 | $1,751 | 1 | $1,751 |
| 30 – 34 | | | | | | | | |
| 35 – 39 | | | | | 2 | $9,404 | 2 | $9,404 |
| 40 – 44 | | | | | 1 | $7,845 | 1 | $7,845 |
| 45 – 49 | 1 | $2,074 | | | 1 | $1,386 | 2 | $3,460 |
| 50 – 54 | | | | | 2 | $5,498 | 2 | $5,498 |
| 55 – 59 | 6 | $32,312 | | | 6 | $35,626 | 12 | $67,938 |
| 60 – 64 | 20 | $124,966 | | | 1 | $8,854 | 21 | $133,820 |
| 65 – 69 | 35 | $257,130 | 1 | $9,369 | 4 | $31,292 | 40 | $297,791 |
| 70 – 74 | 41 | $290,537 | | | 12 | $77,093 | 53 | $367,630 |
| 75 – 79 | 43 | $324,078 | | | 4 | $36,498 | 47 | $360,576 |
| 80 – 84 | 23 | $182,150 | | | 11 | $89,611 | 34 | $271,761 |
| 85 – 89 | 16 | $131,952 | | | 9 | $51,278 | 25 | $183,230 |
| 90 – 94 | 5 | $33,352 | | | 1 | $9,274 | 6 | $42,626 |
| 95 | 1 | $25,821 | | | | | 1 | $25,821 |
| 96 | | | | | | | | |
| 97 | | | | | | | | |
| 98 | | | | | | | | |
| 99 | | | | | | | | |
| 100 & Over | | | | | | | | |
| Totals | 191 | $1,404,372 | 1 | $9,369 | 55 | $365,410 | 247 | $1,779,151 |

Average Age: 73.7 years
Average Age at Retirement: 61.4 years

**Total Active Member Data as of June 30, 2024**
**Tabulated by Attained Ages and Years of Service**

| Attained Age | Completed Years of Service | | | | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Under 1 | 1 to 4 | 5 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30 to 34 | 35 & Over | No. | Payroll |
| Under 25 | | | | | | | | | | | $ - |
| 25 to 29 | 2 | | | | | | | | | 2 | 106,748 |
| 30 to 34 | | 2 | 2 | 1 | | | | | | 5 | 248,303 |
| 35 to 39 | 9 | 2 | 2 | | | | | | | 13 | 649,249 |
| 40 to 44 | 3 | 5 | 2 | 2 | | | | | | 12 | 601,010 |
| 45 to 49 | 6 | 9 | 8 | 3 | 1 | 1 | | | | 28 | 1,430,398 |
| 50 to 54 | 5 | 2 | 7 | 9 | 1 | 2 | | | | 26 | 1,401,943 |
| 55 to 59 | 2 | 5 | 7 | 7 | 2 | 2 | | | | 25 | 1,291,386 |
| 60 to 64 | 2 | 7 | 5 | 6 | 2 | 2 | | | | 24 | 1,230,089 |
| 65 to 69 | 1 | 4 | 2 | 1 | 2 | 2 | | 3 | | 15 | 776,167 |
| 70 & Over | 1 | 2 | 2 | 6 | 5 | 1 | 1 | 4 | 3 | 25 | 1,355,484 |
| Total Count | 31 | 38 | 37 | 35 | 13 | 10 | 1 | 7 | 3 | 175 | $ 9,090,777 |

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

| | |
|---|---|
| Age: | 55.7 years |
| Benefit Service: | 9.8 years |
| Eligibility Service: | 14.5 years |
| Annual Pay: | $51,947 |

# SCHEDULE E – ANALYSIS OF FINANCIAL EXPERIENCE

**Gains & Losses in Accrued Liabilities**
**Resulting from Difference Between**
**Assumed Experience & Actual Experience**
**($ Thousands)**

| Type of Activity | $ Gain (or Loss) For Year Ending 6/30/2024 | $ Gain (or Loss) For Year Ending 6/30/2023 |
|---|---|---|
| **Age & Service Retirements.** If members retire at older ages, there is a gain. If younger ages, a loss. | $ 277.4 | $ 19.8 |
| **Disability Retirements.** If disability claims are less than assumed, there is a gain. If more claims, a loss. | 7.6 | 11.1 |
| **Death-in Service Benefits.** If survivor claims are less than assumed, there is a gain. If more claims, there is a loss. | 8.0 | 3.7 |
| **Withdrawal From Employment.** If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss. | 26.0 | 29.2 |
| **Pay Increases.** If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. | (278.0) | (169.5) |
| **New Members.** Additional unfunded actuarial accrued liability will produce a loss. | (303.9) | 0 |
| **Investment Income.** If there is a greater investment income than assumed, there is a gain. If less income, a loss. | 33.0 | (97.0) |
| **Death After Retirement.** If retirants live longer than assumed, there is a loss. If not as long, a gain. | (77.1) | 21.5 |
| **Other.** Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, etc. | (74.0) | (46.2) |
| **Gain (or Loss) During Year From Financial Experience** | $ (381.0) | $ (227.4) |
| **Non-Recurring Items.** Adjustments for plan amendments, software changes, assumption changes, or method changes. | 0.0 | (1,573.3) |
| **Composite Gain (or Loss) During Year** | $ ( 381.0) | $ (1,800.7) |

# SCHEDULE F – FUNDING POLICY OF SLRP

The purpose of the funding policy is to state the overall funding goals and objectives for the Supplemental Legislative Retirement Plan of Mississippi (SLRP), and to document both the metrics that will be used to measure progress toward achieving those goals, and the methods and assumptions employed to develop the metrics. The employer contribution rate for SLRP will be set based on the metrics, assumptions and methods outlined in Section II and III of this policy.

## I. Funding Goals and Objectives

The objective in requiring employer and member contributions to SLRP is to accumulate sufficient assets during a member's employment to fully finance the benefits the member will receive in retirement. In meeting this objective, SLRP will strive to meet the following goals:

- Preservation of the defined benefit structure for providing lifetime benefits to the SLRP membership,
- Contribution rate stability as a percentage of payroll (Fixed Contribution Rate – FCR),
- Maintain an increasing trend in the funded ratio over the projection period with an ultimate goal of being 100% funded,
- Require clear reporting and risk analysis of the metrics by the actuary as outlined in Section II of this policy using a "Signal Light" approach to assist the Board in determining whether increases or decreases are needed in the employer contribution rate, and
- Ensure benefit improvements are funded through increases in contribution requirements in accordance with Article 14, S 272A, of the Mississippi Constitution.

## II. Metrics

To track progress in achieving the outlined funding goals and objectives and to assist the Board in making a determination whether an increase or decrease in the employer contribution rate for SLRP should be considered, certain metrics will be measured annually in conjunction with information provided in the actuarial valuation and projection report. As part of the annual valuation and projection reports, each metric will be calculated and assigned a "Signal Light" with the following definitions:

| Status | Definition |
|---|---|
| Green | Plan passes metric and SLRP funding goals, and objectives are achieved |
| Yellow | Plan passes metric but a warning is issued that negative experience may lead to failing status |
| Red | Plan fails metric and SLRP must consider contribution increases |

If any one of the metrics are in the Red Signal Light status in conjunction with the annual valuation report and the projection report, the actuary will determine and recommend to the Board an employer contribution rate increase to consider that is sufficient enough to get all three metrics back into the Green Signal Light status. The employer contribution rate increase would be effective beginning July 1st, 18 months following the completion of the projection report (e.g., if the projection report in 2024 deems an increase to be considered, then it would be effective for July 1, 2026).
The following metrics will be measured:

- **Funded Ratio** – Funded Ratio is defined as the actuarial value of assets divided by the actuarial accrued liability. One of the funding goals is to have an increasing funded ratio over the projection period with an ultimate goal of having a 100 percent funded ratio. The Board sets the Signal Light definition as follows:

| Status | Definition |
|---|---|
| Green | Funded Ratio above 90% in 2047 |
| Yellow | Funded Ratio between 70% and 90% in 2047 |
| Red | Funded Ratio below 70% in 2047 |

- **Cash flow as a percentage of assets** – Cash flow as a percentage of assets is defined as the difference between total contributions coming into the trust and the benefit payments made to retirees and beneficiaries going out of the trust as a percentage of beginning year market value of assets. Over the projection period, this percentage will fluctuate from year to year so for Signal Light testing, the net cash flow percentage over the entire projection period will be tested. The Board sets the Signal Light definition as follows:

| Status | Definition |
|---|---|
| Green | Net Cash Flow Percentage above negative 5.25% (-5.25%) during the projection period |
| Yellow | Net Cash Flow Percentage between negative 5.25% (-5.25%) and negative 7.00% (-7.00%) during the projection period |
| Red | Net Cash Flow Percentage below negative 7.00% (-7.00%) during the projection period |

- **Actuarially Determined Contribution (ADC)** – ADC is defined as the contribution requirement determined by the actuary using a contribution allocation procedure based on the principal elements disclosed in Section III of this funding policy:

    1. Actuarial Cost Method
    2. Asset Smoothing Method
    3. Amortization Method

    The calculation of the ADC will be determined during the actuarial valuation and not during the projection report. The ratio of the ADC to the fixed contribution rate (ADC/FCR) as set by this Funding Policy will be tested. The Board sets the Signal Light definition as follows:

| Status | Definition |
| --- | --- |
| Green | ADC ratio at or below 100% of fixed contribution rate at valuation date |
| Yellow | ADC ratio between 100% and 110% of fixed contribution rate at valuation date |
| Red | ADC ratio above 110% of fixed contribution rate at valuation date |

If all of the metrics are in the Greed Signal Light status in conjunction with the annual valuation report and the projection report and the following additional criteria is met for two consecutive valuation and projection cycles, the actuary may recommend to the Board an employer contribution rate decrease to consider. The additional criteria is based on the actuary's long-term investment return assumption recommended by the actuary in the most recent experience study and is as follows:

- Funded Ratio in 2047 is above 110%,
- Cash Flow as a percentage of assets is above negative 3.5% during the projection period, and
- ADC Ratio is below 90% for all years of the projection period.

### III. Assumptions and Methods

Each year, the actuary will perform an actuarial valuation and projection report for funding purposes. During the process, the actuary shall calculate all the metrics listed in Section II of this funding policy and SLRP's Signal Light status for each metric. The following three major components of a funding valuation will be used:

- **Actuarial Cost Method** – This component determines the attribution method upon which the cost/liability of the retirement benefits are allocated to a given period, defining the normal cost or annual accrual rate associated with projected benefits. The Entry Age Normal Cost Method

(EAN) is to be used for determination of the normal cost rate and the actuarial accrued liability for purposes of calculating the Actuarial Determined Contribution (ADC).

- **Asset Valuation Method** – This component dictates the method by which the asset value, used in the determination of the Unfunded Actuarial Accrued Liability (UAAL) and Funded Ratio, is determined. The asset valuation method to be used shall be a five-year smoothed market value of assets. The difference between the actual market value investment returns and the expected market investment returns is recognized equally over a five-year period.

- **Amortization Method** – This component prescribes, in terms of duration and pattern, the systematic manner in which the difference between the accrued liability and the actuarial value of assets is reduced. For purposes of calculating the ADC metric, the following amortization method assumptions are used**:**
    - I. Once established for any component of the UAAL, the amortization period for that component will be closed and will decrease by one year annually.
    - II. The amortization payment will be determined on a level percentage of pay basis.
    - III. The length of the amortization periods will be as follows:
        - a. Existing UAAL on June 30, 2023 – 25 years.
        - b. Annual future actuarial experience gains and losses, assumption changes or benefit enhancements or reductions – 25 years from the date of the valuation.
    - IV. If any future annual actuarial valuation indicates that SLRP has a negative UAAL, the ADC shall be set equal to the Normal Cost.

- **Actuarial Assumptions** – The actuarial assumptions are used to develop the annual and projected actuarial metrics, as well as the ADC rates. The actuarial assumptions are derived and proposed by the actuary and adopted by the PERS' Board in conformity with the *Actuarial Standards of Practice*. The actuarial assumptions for this funding policy were developed using the experience for the four-year period ending June 30, 2022 (State of Mississippi Retirement Systems Experience Investigation for the Four-Year Period Ending June 30, 2022). The long-term investment return assumption adopted by the PERS' Board in conjunction with the experience investigation is 7.00 percent.

### IV. Governance Policy/Process

Below is a list of specific actuarial and funding related studies, the frequency at which they should be commissioned by the Board and additional responsibilities related to each:

- **Actuarial Valuation (performed annually)** – The Board is responsible for the review of SLRP's annual actuarial valuation report, which provides the annual funded ratio and the calculation of the ADC.

- **Projection Report (performed annually)** – The Board is responsible for the review of SLRP's 30-year projection report, which will include the actuarial metrics and Signal Light status for each metric over a 30-year period.

- **Experience Analysis (performed every two years on a rolling four-year)** – The Board is responsible for ensuring that an experience analysis is performed as prescribed, review of the results of the study, and approving the actuarial assumptions and methodologies to be used for all actuarial purposes relating to the defined benefit pension plan.

- **Actuarial Audit (performed at least every five years)** – The Board is responsible for the review of an audit report performed by a new actuarial firm to provide a critique of the reasonableness of the actuarial methods and assumptions in use and the resulting actuarially computed liabilities and contribution rates.

- **Funding Policy Review (performed at least annually)** – The Board is responsible for the periodic review of this policy, but at least annually following the Projection Report and biennially following the Experience Analysis.

## V. Glossary of Funding Policy Terms

- **Actuarial Accrued Liability (AAL):** The AAL is the value at a particular point in time of all past normal costs. This is the amount of assets the plan would have today if the current plan provisions, actuarial assumptions, and participant data had always been in effect, contributions equal to the normal cost had been made, and all actuarial assumptions had been met.

- **Actuarial Cost Method:** The actuarial cost method allocates a portion of the total cost (present value of benefits) to each year of service, both past service and future service.

- **Actuarial Determined Contribution (ADC):** The potential payment to the plan as determined by the actuary using a contribution allocation procedure that, if contributed consistently and combined with investment earnings, would be sufficient to pay promised benefits in full over the long term. The ADC may or may not be the amount actually paid by the plan sponsor or other contributing entity.

- **Asset Values**:
  - **Actuarial Value of Assets (AVA):** The AVA is the market value of assets less the deferred investment gains or losses not yet recognized by the asset smoothing method.
  - **Market Value of Assets (MVA):** The MVA is the fair value of assets of the plan as reported in the plan's audited financial statements.

- **Entry Age Normal Actuarial Cost Method (EAN):** The EAN actuarial cost method is a funding method that calculates the normal cost as a level percentage of pay or level dollar amount over the working lifetime of the plan's members.

- **Funded Ratio:** The funded ratio is the ratio of the plan assets to the plan's actuarial accrued liabilities.
  - **Actuarial Value Funded Ratio:** is the ratio of the AVA to the AAL.

- **Normal Cost**: The normal cost is the cost allocated under the actuarial cost method to each year of active member service.

- **Present Value of Benefits (PVB) or total cost:** The PVB is the value at a particular point in time of all projected future benefit payments for current plan members. The future benefit payments and the value of those payments are determined using actuarial assumptions regarding future events. Examples of these assumptions are estimates of retirement and termination patterns, salary increases, investment returns, etc.

- **Surplus:** A surplus refers to the positive difference, if any, between the AVA and the AAL.

- **Unfunded Actuarial Accrued Liability (UAAL):** The UAAL is the portion of the AAL that is not currently covered by the AVA. It is the positive difference between the AAL and the AVA.

- **Valuation Date:** The valuation date is the annual date upon which an actuarial valuation is performed; meaning that the trust assets and liabilities of the plan are valued as of that date. SLRP's annual valuation date is June 30.