# Wyoming Law Enforcement Retirement Fund

## Actuarial Valuation Report
## for the Year Beginning January 1, 2025

P: 720.274.7270 | www.grsconsulting.com

April 14, 2025

Board of Trustees
**Wyoming Law Enforcement Retirement Fund**
6101 Yellowstone Road
Suite 500
Cheyenne, WY 82002

Dear Board of Trustees:

**Subject: Actuarial Valuation as of January 1, 2025**

We are pleased to present the report of the actuarial valuation of the Wyoming Law Enforcement Retirement Fund ("the Fund") for the plan year commencing January 1, 2025. This report describes the current actuarial condition of the Fund, determines the calculated employer contribution rate (the actuarially determined contribution rate), and analyzes changes in this contribution rate from the prior year. Valuations are prepared annually, as of January 1, the first day of the Fund's plan year.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

**Financing Objectives and Funding Policy**

The employer and employee contribution rates are specified in the statute. The purposes of the valuation are to measure the System's funding progress and to determine whether or not the statutory contribution is sufficient to meet the obligations of the Fund. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

**Progress Toward Realization of Financing Objectives**

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. The funded ratio, based upon the assumption of no further cost-of-living adjustment increases, as of January 1, 2025 is 84.39%. As of January 1, 2024, this funded ratio, based on the assumption of no future COLAs and the actuarial value of assets, was 84.0%. On a market value of assets basis, the funded ratio increased from 84.71% as of January 1, 2024 to 86.70% as of January 1, 2025. The funded status alone is not appropriate for assessing the need for future contributions. The funded status is also not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

**Benefit Provisions**

The benefit provisions reflected in this valuation are those, which were in effect on January 1, 2025.W.S. 9-3-454 prohibits benefit changes, including cost-of-living increases, unless the funded ratio stays above 100% plus a margin for adverse experience throughout the life of the benefit change. Therefore, this valuation does not include any liability for future cost-of-living increases.

The benefit provisions are summarized in Appendix B of the report.

**Assumptions and Methods**

Actuarial assumptions and methods are set by the Board, based upon recommendations made by the plan's actuary. The current assumptions used in the actuarial valuation were adopted by the Board at the November 17, 2021 and February 17, 2022 meetings and were first utilized with the January 1, 2022 valuation report. For a detailed description of the experience related to these assumptions, as well as the rationale for any changes, please see our latest Wyoming Retirement System Actuarial Experience Study Report that covered the five-year investigation period ending December 31, 2020. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. Furthermore, the assumptions and methods used in this valuation follow the guidance in the applicable Actuarial Standards of Practice and are expected to have no significant bias.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution amounts and funding periods. The actuarial calculations presented in the report are intended to provide information for rational decision making.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

**Assumptions and Methods (Continued)**

The 9.50% employer contribution and the 9.50% employee contribution are the rates that comply with State law. Pursuant to Senate Enrolled Act No. 50, both the employer and employee contribution rates will increase by 0.90% on July 1, 2025 and again on July 1, 2026 when an ultimate rate of 11.30% is reached. Due to the many factors affecting a retirement system, users of this report should be aware that contributions made at that rate do not necessarily guarantee long-term benefit security.

The actuarially determined employer contribution in Table 1 of this report is determined using the actuarial assumptions and methods disclosed in Appendix A of this report. This report includes risk metrics in Appendix C but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment. We encourage a review and assessment of investment and other significant risks that may have a material effect on the plan's financial condition.

All assumptions and methods are described in Appendix A of our report.

**Data**

Member data for retired, active and inactive members was supplied as of January 1, 2025 by the System's staff. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data.

Asset and financial information as of January 1, 2025 was prepared by the Wyoming Retirement System and is the responsibility of management. Eide Bailly, LLP provided us the asset and financial information and will opine on Wyoming Retirement System's statements.

We relied on the System's staff for the accuracy and completeness of the information.

**Plan Experience**

As part of each valuation, we examine the Fund's experience relative to the assumptions. Experience in a given year will deviate from the assumptions and a gain occurs if the liabilities grow slower than the assumption set anticipates, and a loss occurs if the liabilities grow faster. This past fiscal year the Fund had a total experience loss of approximately $7.5 million due to a contribution loss of $7.1 million and a liability loss of $15.0 million, primarily due to greater than expected salary increases. These losses were partially offset by an investment gain of $14.6 million. The aggregate results of these analyses are disclosed in Tables 4 and 5 under Section III of the report.

**Actuarial Certification**

All of the tables contained in this actuarial valuation report were prepared by Gabriel, Roeder, Smith & Company. Historical information for years prior to 2010 was prepared by the prior actuarial firm and was not subjected to our actuarial review.

We certify that the information presented herein is accurate and fairly portrays the actuarial position of the System as of January 1, 2025.

All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of state law and, where applicable, the Internal Revenue Code and ERISA.

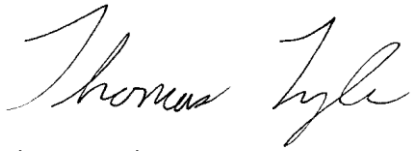
The undersigned are independent actuaries and consultants.

Thomas Lyle and Dana Woolfrey are Enrolled Actuaries and Paul Wood, Thomas Lyle, Dana Woolfrey, and Karli Fehrman are Members of the American Academy of Actuaries, and all four meet all the Qualification Standards of the American Academy of Actuaries.

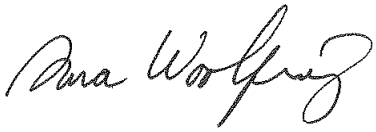
Finally, all of the undersigned are experienced in performing valuations for large public retirement systems.

Respectfully submitted,
**Gabriel, Roeder, Smith & Company**

Paul Wood, ASA, FCA, MAAA
Senior Consultant



Thomas Lyle, FSA, FCA, EA, MAAA
Consultant



Dana Woolfrey, FSA, FCA, EA, MAAA
Senior Consultant

Karli Fehrman, ASA, MAAA
Senior Analyst

# Table of Contents

# SECTION I

## EXECUTIVE SUMMARY

# Executive Summary

| Item | January 1, 2025 No COLA | January 1, 2024 No COLA |
|---|---|---|
| 1. Contributions: | | |
| a. Total normal cost | 16.56% | 16.39% |
| b. Employee contributions* | (9.95%) | (9.05%) |
| c. Other expected contributions | 0.00% | 0.00% |
| d. Net employer normal cost | 6.61% | 7.34% |
| e. Amortization payment | 6.64% | 6.83% |
| f. Administrative expenses | 0.49% | 0.51% |
| g. Actuarially determined contribution | 13.74% | 14.68% |
| h. Statutory contribution* | (9.95%) | (9.05%) |
| i. Shortfall/(surplus) | 3.79% | 5.63% |
| 2. Funding Elements: | | |
| a. Market value of assets (MVA) | $973,634,824 | $896,332,251 |
| b. Actuarial value of assets (AVA) | $947,610,872 | $888,793,032 |
| c. Actuarial accrued liability (AAL) | $1,122,932,463 | $1,058,069,485 |
| d. Unfunded/(overfunded) actuarial accrued liability | $175,321,591 | $169,276,453 |
| 3. Contributions and Ratios: | | |
| a. Actuarially determined contribution | $27,777,078 | $26,972,209 |
| b. Actual contributions | N/A | 18,194,664 |
| *i. Employer* | *N/A* | *17,624,291* |
| *ii. Other* | *N/A* | *570,373* |
| c. Percentage contributed | N/A | 67.46% |
| d. Funded ratio on an actuarial basis (AVA/AAL) | 84.39% | 84.00% |
| e. Funded ratio on a market basis (MVA/AAL) | 86.70% | 84.71% |
| f. Projected payroll | $202,162,140 | $183,734,391 |

*The contribution rates are blended based on Senate Enrolled Act No. 50. Both employee and employer contribution rates will increase by 0.90% on July 1, 2025 and again on July 1, 2026 when an ultimate rate of 11.30% is reached.

# SECTION II

## DISCUSSION

# Contribution Requirements

- Exhibits throughout this report are based primarily, unless stated otherwise, on the assumption of no future cost-of-living adjustments (COLAs).
- W.S. 9-3-454 prohibits benefit changes, including cost-of-living increases, unless the funded ratio stays above 100% plus a margin for adverse experience throughout the life of the benefit change. The actuarial value funded ratio is 84.39% and the market value funded ratio is 86.70%.
- There were no changes to the benefit provisions reflected in this valuation.
- There have not been any changes to the actuarial assumptions or methods since the prior valuation. For a detailed description of the experience related to these assumptions, as well as the rationale for any changes, please see our latest Wyoming Retirement System Actuarial Experience Study Report.
- An Actuarially Determined Contribution (ADC) is calculated as part of this valuation. Because contribution rates are set in statutes, the ADC could be thought of as a metric to which one could compare the statutory rate. The amortization payment for the purpose of calculating the ADC is based upon the following assumptions:
  - The funding period is based on a 30-year closed period for the initial base as of January 1, 2018 and 20-year closed period layers for future gains and losses
  - Amortization payment amounts are calculated in such a way that they will increase as a level percentage of payroll
  - Total payroll increases are assumed at 2.50% per year
  - Future growth in the number of active members is not reflected in the annual valuation
- The analysis of the changes in the ADC is shown in Table 5 under Section III of the report.
- Pursuant to Senate Enrolled Act No. 50, both employee and employer contribution rates will increase by 0.90% on July 1, 2025 and again on July 1, 2026 when an ultimate rate of 11.30% is reached.
- The calculated funding period assuming the new Statutory contribution rates and an open group projection based on a projection of the market value of assets is 21 years. In the January 1, 2024 valuation, the plan was expected to reach full funding in 28 years based on the Statutory rates in effect at that time and a projection of the market value of assets. Projection results were produced under a separate cover.

# Calculation of Contribution Rates

The funds available to pay benefits come from two sources, contributions as specified in the statute and investment income on those contributions (the majority of the funds available to pay benefits typically come from investment income). The Fund receives contributions from two sources, employer contributions and member contributions which are both determined as a percentage of pay. An Actuarially Determined Contribution (ADC) is calculated as part of this valuation. Because contribution rates are set in statutes, the ADC could be thought of as a metric to which one could compare the statutory rate. As shown in Table 1 under Section III of the report, the employer contribution rate has three components:

- The normal cost percentage (NC%)
- The amortization percentage (UAAL%)
- The administrative expenses

The NC% is the theoretical amount which would be required to pay the members' benefits if this amount had been contributed from each member's entry date and if the fund's experience exactly followed the actuarial assumptions. The NC% is shown in Table 3 under Section III of the report.

Members are required to make employee contributions and only the excess of the NC% over the member contribution rate is included in the employer contribution rate.

The actuarial accrued liability (AAL) is the difference between (i) the actuarial present value of all future benefits for all current participants of the fund, including active, inactive and retired members, and (ii) the actuarial present value of future normal costs. Thus, the AAL represents the liability associated with past years. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and the actuarial value of assets (AVA). It is the shortfall/excess between the liability associated with prior years (the AAL) and the assets actually accumulated (the AVA). This shortfall/excess can arise from several sources, including actuarial gains and losses, which are caused by differences between actual experience and the plan's assumptions, changes to the plan's actuarial assumptions, and amendments to the benefit provisions.

The UAAL% is the amount required to fund this difference. It is the amount, expressed as a level percentage of payroll, necessary to amortize the UAAL. Amortization bases are established each year and amortized based on the Board's policy. The Board's policy for purposes of calculating the ADC consists of amortizing the unfunded liability as of January 1, 2018, over a closed 30-year period with each subsequent amortization base created as a result of year to year experience changes over individual 20-year closed periods. The Executive Summary shows the UAAL%, called Amortization Payment, compared to that of last year.

Administrative expenses are the average of the actual expenses for the prior two years, with each year projected at 2.50% to the valuation date.

The ADC is calculated for the twelve-month period beginning January 1, 2025. As of January 1, 2025, the statutory employer contribution is within 3.79% of meeting the ADC. This is detailed in the Executive Summary. The calculated ADC under the Board's funding policy can be considered a "Reasonable Actuarially Determined Contribution" as required by the Actuarial Standards of Practice.

# Financial Data and Experience

As of January 1, 2025, the Fund has a total market value of about $974 million. Financial information was received from Eide Bailly, LLP.

Table 7 under Section III of the report shows a reconciliation of the market values between the beginning and end of 2024.

During 2024, the total investment return on the market value of assets (MVA), as reported by Meketa Investment Group, Inc., was 10.54%, as shown in Table 10 under Section III of the report.

In determining the contribution rates and funded status of the Fund, an actuarial value of assets (AVA) is used rather than the market value of assets. The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (or less than) expected investment income. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses. An adjustment is made if the actuarial value is not within 20% of the Market Value. For any year following a year in which the 20% of market value adjustment was applied, the actuarial value is determined as if the adjustment was not applied in the previous year.

The development of the AVA is shown in Table 9 under Section III of the report. The AVA is $948 million. The AVA is 97.33% of the MVA as of December 31, 2024, compared to 99.16% last year. The difference between the AVA and the MVA is the deferred gains and losses. As of January 1, 2024, the total deferred gain was $7.4 million. As of January 1, 2025, the total deferred gain was $26.0 million. Having a deferred gain in the AVA is an indicator that the funded ratio will have an upward “tilt” in the near term, and the ADC will likewise have downward pressure.

In addition to the market return, Table 10 also shows the return on the actuarial value of assets for the Fund. For 2024, this return was 8.46%. Because this is more than the assumed 6.80% investment return for the prior year, an actuarial gain occurred, decreasing the unfunded actuarial accrued liabilities of the Fund by $14.6 million.

# Member Data

Member data as of January 1, 2025 was supplied electronically by the Fund's staff. While we did not audit this data, we did perform various tests to ensure that it was internally consistent, consistent with the prior year's data, and was reasonable overall.

Table 15 under Section III of the report shows the number of members by category (active, inactive, retired, etc.) along with member statistics. Tables 16 through 28 show summaries of certain historical data and include membership statistics.

The total payroll shown on the statistical tables is the amount that was supplied by the Fund, annualized, if necessary. For the cost calculations, the pay amounts were adjusted in accordance with the actuarial assumptions to reflect one year's salary increase.

Total active member payroll increased 10.03%, compared with a 7.17% increase from the prior year.

The average of the final average salaries for participants who retired or became disabled this year is $66,485.

Of the 2,603 active participants, 393 are eligible or will become eligible for normal retirement in 2025, and 501 are eligible or will become eligible for early retirement in 2025.

Changes in payroll are significant because the Fund receives its statutory contributions as a percent of pay. If payroll does not grow at the assumed rate, then fewer contributions will be made to the plan and the funding of the Fund will be delayed. Furthermore, the methodology used in the valuation to amortize the unfunded actuarial accrued liability assumes a growing payroll into the future. If the payroll does not grow at the assumed 2.50% per year average, then the current amortization payments may be understated and the funding position of the Fund will not strengthen as assumed over time. Higher than expected payroll growth, however, has the opposite effect of this and the funded position of the Fund should trend toward 100%. Table 5 under Section III of the report shows, for the past year, payroll for the plan increased more than expected, so the effect is a decrease in the calculated contribution rate of 0.48% of payroll.

# Benefit Provisions

Appendix B of the report includes a more detailed summary of the benefit provisions for the Fund. A brief summary from W.S. 9-3-432 is as follows:

- *Normal Retirement Eligibility*
  - Age 60 with at least four years of service as a law enforcement officer or any age with at least twenty years of service as a law enforcement officer.
- *Normal Retirement Benefit*
  - 2.50% of highest average five-year salary not to exceed 75.0% of highest average five-year salary.
- *Normal Form of Payment*
  - Monthly benefit for life with a lump-sum death benefit equal to the excess (if any) of the employee contributions with interest over the total benefits received.
- *Employee Contributions* are required
  - 9.50% of pay.
- *Post-retirement Cost-of-Living Adjustments (COLAs)*
  - W.S. 9-3-454 prohibits benefit changes, including cost-of-living increases, unless the funded ratio stays above 100% plus a margin for adverse experience throughout the life of the benefit change.

Pursuant to Enrolled Act No. 25, interest crediting for non-vested inactive members on a prospective basis is eliminated beginning July 1, 2019.

# Actuarial Methods and Assumptions

Appendix A of the report includes a summary of the actuarial assumptions and methods used in this valuation. A few highlights are listed as follows:

- Costs are determined using the Entry Age Normal actuarial cost method, calculated as a level percentage of payroll.
- The unfunded actuarial accrued liability is amortized over an effective 19 year closed period as a level percent of payroll. Future valuations will include additional amortization layers on a closed 20-year basis.
- The assumed annual investment return rate is 6.80%, with assumed inflation of 2.25%.
- Payroll is assumed to increase at 2.50% per year.
- Inactive vested participants are assumed to retire at age 60 or the valuation date if over age 60. Those with over 20 years of service are assumed to retire immediately.
- No benefit data is available for all members entitled to deferred benefits. The present value of benefits expected to be paid to vested inactive non-retired members is approximated using the data provided.

The average future lifetime for current pensioners is 23.2 years.

The actuarial assumptions and methods were reviewed in detail as part of the 2021 Experience Study covering the five-year period ending December 31, 2020. Please see Appendix A for a summary of these assumptions.

# GASB and Funding Progress

Governmental Accounting Standards Board Statement Number 67 (GASB 67) contains certain accounting requirements for the Fund. Schedules, notes and required supplementary information are provided under separate cover.

# SECTION III

## SUPPORTING EXHIBITS

# Table 1A

## Calculation of Actuarially Determined Employer Contribution Rate

### (Assumes No Future Cost-Of-Living Increases)

| Item | January 1, 2025 | January 1, 2024 |
|---|---|---|
| 1. Projected valuation payroll | $202,162,140 | $183,734,391 |
| 2. Present value of future pay | $1,479,445,172 | $1,347,302,526 |
| 3. Employer normal cost rate | 6.61% | 7.34% |
| 4. Actuarial accrued liability for active members | | |
| a. Present value of future benefits for active members | $728,037,385 | $667,173,588 |
| b. Less: present value of future employer normal costs | (94,751,281) | (96,172,080) |
| c. Less: present value of future employee contributions | (147,204,795) | (121,930,879) |
| d. Actuarial accrued liability | $486,081,309 | $449,070,627 |
| 5. Total actuarial accrued liability for: | | |
| a. Retirees and beneficiaries | $517,660,833 | $493,666,395 |
| b. Disabled members | 75,878,505 | 73,208,148 |
| *Duty* | *56,275,701* | *53,672,736* |
| *Non-duty* | *19,602,804* | *19,535,412* |
| c. Inactive members | 43,311,816 | 42,124,315 |
| d. Active members (Item 4d) | 486,081,309 | 449,070,627 |
| e. Total | $1,122,932,463 | $1,058,069,485 |
| 6. Actuarial value of assets (Table 9) | $947,610,872 | $888,793,032 |
| 7. Unfunded actuarial accrued liability (UAAL) (Item 5e - Item 6) | $175,321,591 | $169,276,453 |
| 8. Effective UAAL amortization period | 19 years | 20 years |
| 9. Assumed payroll growth rate | 2.50% | 2.50% |
| 10. Actuarially Determined Employer Contribution | | |
| a. UAAL amortization payment as % of pay | 6.64% | 6.83% |
| b. Employer normal cost | 6.61% | 7.34% |
| c. Administrative expense | 0.49% | 0.51% |
| d. Employer contribution (a + b + c) | 13.74% | 14.68% |

# Table 1B

## Calculation of UAAL Amortization Payment
### (Assumes No Future Cost-Of-Living Increases)

| | |
|---|---|
| UAAL as of January 1, 2025 | $175,321,591 |
| Total Prior Remaining Amortization Bases as of January 1, 2025 | 167,823,716 |
| **2025 Amortization Base as of January 1, 2025** | **$7,497,875** |
| **2025 Payment (20 years, level percent of pay amortization)** | **$556,697** |

| | | As of January 1, 2025 | | |
|---|---|---|---|---|
| **Base Year** | **Initial Base** | **Remaining Base** | **Years Remaining** | **Amortization Payment** |
| 2025 Experience Loss | $ 7,497,875 | $ 7,497,875 | 20 | $ 556,697 |
| 2024 Experience Loss | 14,840,442 | 14,710,882 | 19 | 1,129,409 |
| 2024 Plan Changes | 305,000 | 302,337 | 19 | 23,212 |
| 2023 Experience Loss | 12,625,835 | 12,373,669 | 18 | 984,891 |
| 2023 Plan Changes | 51,745 | 50,711 | 18 | 4,036 |
| 2022 Experience Gain | (32,736,377) | (31,625,142) | 17 | (2,617,476) |
| 2022 Assumption Changes | 57,271,373 | 55,327,299 | 17 | 4,579,200 |
| 2021 Experience Gain | (4,812,047) | (4,570,326) | 16 | (394,642) |
| 2020 Experience Loss | 14,645,499 | 13,623,930 | 15 | 1,231,983 |
| 2019 Experience Loss | 24,129,271 | 21,890,424 | 14 | 2,081,982 |
| 2018 Experience Loss | 83,395,794 | 85,739,932 | 23 | 5,835,058 |
| **Total** | | **$ 175,321,591** | | **$ 13,414,350** |

# Table 2

## Cost Breakdown

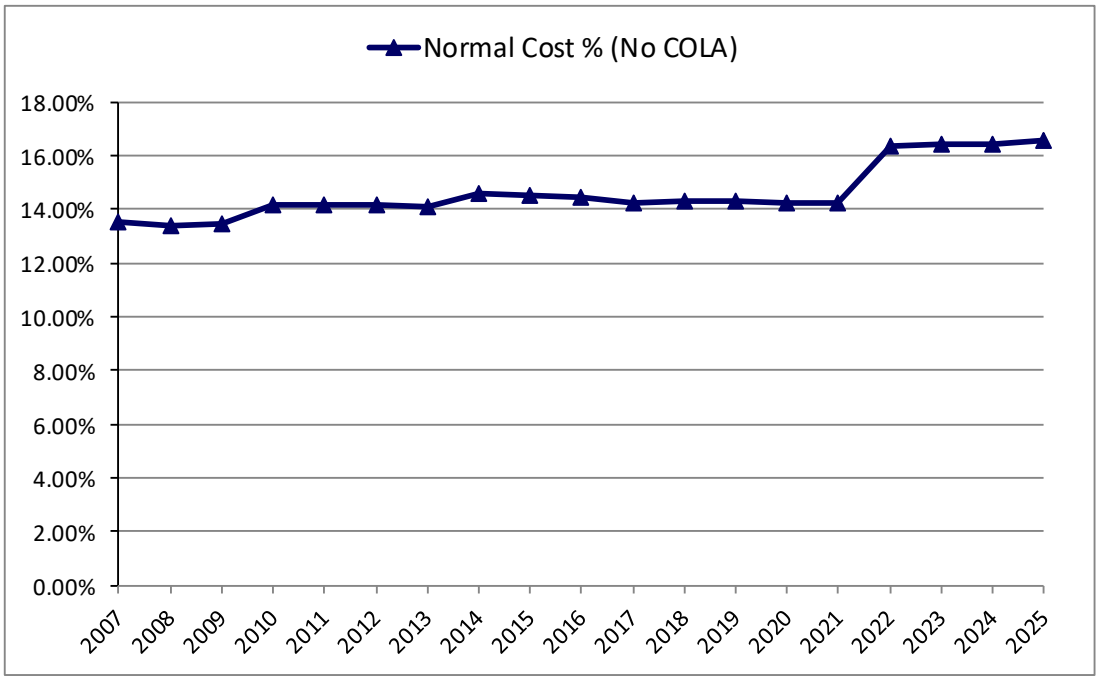
### (Assumes No Future Cost-Of-Living Increases)

| Item | Present Value of Future Normal Costs (1) | Actuarial Accrued Liabilities (2) | Total Present Value of Benefits (3) = (1) + (2) |
|---|---|---|---|
| Age and service allowances based on total service and disability benefits likely to be rendered by present active members | $197,035,712 | $490,790,131 | $687,825,843 |
| Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion) | 5,507,810 | 2,836,630 | 8,344,440 |
| Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members | 39,412,554 | (7,545,452) | 31,867,102 |
| Benefits likely to be paid to vested inactive members | 0 | 36,163,061 | 36,163,061 |
| Benefits to be paid to members due refunds | 0 | 7,148,755 | 7,148,755 |
| Benefits to be paid to current retirees, disabled members, beneficiaries, and future beneficiaries of current retirees | 0 | 593,539,338 | 593,539,338 |
| Total | $241,956,076 | $1,122,932,463 | $1,364,888,539 |
| Actuarial Value of Assets | 0 | 947,610,872 | 947,610,872 |
| Liabilities to be covered by future contributions | $241,956,076 | $175,321,591 | $417,277,667 |

# Table 3

## History of Total Normal Cost
### (Assumes No Future Cost-Of-Living Increases)

| Fiscal Year Ending December 31 | Normal Cost as Percent of Payroll |
|---|---|
| 2007 | 13.56% |
| 2008 | 13.42% |
| 2009 | 13.46% |
| 2010 | 14.14% |
| 2011 | 14.13% |
| 2012 | 14.14% |
| 2013 | 14.12% |
| 2014 | 14.56% |
| 2015 | 14.54% |
| 2016 | 14.46% |
| 2017 | 14.26% |
| 2018 | 14.30% |
| 2019 | 14.31% |
| 2020 | 14.26% |
| 2021 | 14.20% |
| 2022 | 16.38% |
| 2023 | 16.41% |
| 2024 | 16.39% |
| 2025 | 16.56% |



# Table 4

## Calculation of Total Actuarial Gain/(Loss)

### Assumes No Future Cost-Of-Living Increases

| Item | January 1, 2025 |
|---|---|
| 1. Derivation of Experience Gain/(Loss) | |
| a. Unfunded actuarial accrued liability (UAAL) - previous valuation | $169,276,453 |
| b. Normal cost (NC) for fiscal year ending December 31, 2024 | 30,105,152 |
| c. Expected administrative expenses for fiscal year ending December 31, 2024 | 934,400 |
| d. Actuarially determined contribution for fiscal year ending December 31, 2024 | 43,583,604 |
| e. Interest accrual: | |
| (i) For whole year on (a) | 11,510,799 |
| (ii) For half year on (b) + (c) - (d) | (419,484) |
| (iii) Total interest: (e)(i) + (e)(ii) | 11,091,315 |
| f. Change in UAAL due to plan changes | 0 |
| g. Change in UAAL due to assumption change | 0 |
| h. Expected UAAL current year: (a) + (b) + (c) - (d) + (e)(iii) + (f) + (g) | 167,823,716 |
| i. Actual UAAL current year | 175,321,591 |
| j. Experience gain/(loss): (h) - (i) | (7,497,875) |
| k. Experience gain/(loss) as a % of actuarial accrued liability | -0.67% |
| 2. Approximate Portion of Gain/(Loss) Due to Investments (at Actuarial Value) | $14,634,391 |
| 3. Approximate Portion of Gain/(Loss) Due to Contributions and Administrative Expenses higher or lower than expected* | ($7,149,756) |
| 4. Approximate Portion of Gain/(Loss) Due to Liabilities: (1)(j) - (2) - (3) | ($14,982,510) |
| a. Age & service retirements | 2,374,350 |
| b. Non-duty disability retirements | 475,510 |
| c. Duty disability retirements | (399,829) |
| d. Death-in-service | 1,046,153 |
| e. Withdrawal from employment | (3,395,788) |
| f. Rehires | (1,438,357) |
| g. Pay increases | (11,468,725) |
| h. Death after Retirement | (1,617,100) |
| i. Service Purchases | (888,295) |
| j. Other | 329,571 |
| k. Other as a % of actuarial accrued liability | 0.03% |

**Includes $0.9 million in additional employee contributions for service purchases. These additional contributions offset the liability loss due to service purchases.*

# Table 5

## Change in Calculated Contribution Rate Since the Prior Valuation

### Assumes No Future Cost-Of-Living Increases

| Item | January 1, 2025 |
|---|---|
| 1. Calculated contribution rate as of January 1, 2024 | 14.68% |
| 2. Change in contribution rate during year | |
| a. Change in employer normal cost | 0.17% |
| b. Change in employee contributions* | -0.90% |
| c. Assumption changes | 0.00% |
| d. Plan Changes | 0.00% |
| e. Actuarial (gain) loss from investments on actuarial value of assets | -0.58% |
| f. Actuarial (gain) loss from liability sources and administrative expenses | 0.57% |
| g. Difference between contributions made and ADC | 0.28% |
| h. Effect of payroll growing (faster)/slower than assumption | -0.48% |
| i. Other changes | 0.00% |
| j. Total change | -0.94% |
| 3. Calculated contribution rate as of January 1, 2025 | 13.74% |

**Includes the impact of using the blended employee contribution rates for calendar year 2025.*

# Table 6

# Statement of Plan Net Assets

| Assets at Market Value | | |
|---|---|---|
| **Item** | **FYE 2024** | **FYE 2023** |
| 1. Cash and Cash Equivalents (Operating Cash) | $43,468,094 | $35,203,024 |
| 2. Receivables | | |
| a. Insurance premium tax | $0 | $0 |
| b. Buy backs | 0 | 0 |
| c. Employer contributions | 990,481 | 896,479 |
| d. Employee contributions | 989,166 | 895,339 |
| e. Securities sold | 8,702,457 | 20,557,508 |
| f. Accrued interest and dividends | 1,912,070 | 1,754,032 |
| g. Currency contract receivable | 55,962,765 | 53,245,088 |
| h. Other | 38,052 | 34,806 |
| i. Rebate and fee income receivable | 0 | 0 |
| j. Total receivables | $68,594,991 | $77,383,252 |
| 3. Investments, at fair value | $955,822,988 | $866,629,257 |
| 4. Liabilities | | |
| a. Benefits and refunds payable | ($32,214) | ($88,377) |
| b. Securities purchased | (2,866,063) | (1,537,293) |
| c. Administrative and consulting fees payable | (1,443,867) | (1,464,923) |
| d. Currency contract payable | (55,301,887) | (54,682,744) |
| e. Securities lending collateral | (34,607,218) | (25,109,945) |
| f. Total liabilities | ($94,251,249) | ($82,883,282) |
| 5. Total Market Value of Assets Available for Benefits | $973,634,824 | $896,332,251 |

# Table 7

# Reconciliation of Plan Net Assets

| Assets at Market Value | | | |
|---|---|---|---|
| | **Item** | **FYE 2024** | **FYE 2023** |
| A. | Market Value of Assets at Beginning of Year | $896,332,251 | $806,217,227 |
| B. | Contribution Income: | | |
| | 1. Contributions | | |
| | a. Employee | $17,623,490 | $15,607,538 |
| | b. Employer | 17,624,291 | 15,606,067 |
| | c. Other | 1,458,668 | 1,410,341 |
| | d. Total | $36,706,449 | $32,623,946 |
| | 2. Investment Income | | |
| | a. Interest, dividends, and other income | $19,398,189 | $19,479,836 |
| | b. Net appreciation | 78,745,646 | 93,149,422 |
| | c. Investment expenses | (5,198,734) | (4,722,424) |
| | d. Net investment income | $92,945,101 | $107,906,834 |
| | 3. Securities Lending | | |
| | a. Gross income | $1,903,681 | $1,938,415 |
| | b. Deductions | (1,817,706) | (1,829,826) |
| | c. Net investment income | $85,975 | $108,589 |
| | 4. Benefits and Refunds | | |
| | a. Refunds | ($2,673,964) | ($3,455,442) |
| | b. Regular monthly benefits | (48,785,344) | (46,131,432) |
| | c. Total | ($51,459,308) | ($49,586,874) |
| | 5. Administrative and Miscellaneous Expenses | ($975,644) | ($937,471) |
| C. | Market Value of Assets at End of Year | $973,634,824 | $896,332,251 |

# Table 8

## Progress of Fund Through December 31, 2024

| Plan Year Ending December 31 | Employer Contributions* | Employee Contributions* | Administrative Expenses | Net Investment Income** | Benefit Payments | Transfers | Actuarial Value of Assets |
|---|---|---|---|---|---|---|---|
| Total | $313,695,402 | $288,238,264 | ($9,899,460) | $704,499,625 | ($596,217,670) | $8,655,176 | |
| 2003 | $7,229,011 | $8,646,962 | ($67,842) | $9,479,413 | ($6,475,594) | - | $204,892,219 |
| 2004 | 12,902,452 | 8,415,620 | (83,082) | 12,318,566 | (7,747,280) | - | 230,698,495 |
| 2005 | 11,155,211 | 8,185,299 | (138,060) | 16,938,900 | (10,532,309) | $8,655,176 | 264,962,712 |
| 2006 | 34,228,475 | 9,114,022 | (101,237) | 25,935,590 | (11,170,034) | - | 322,969,528 |
| 2007 | 10,591,387 | 10,072,138 | (113,629) | 34,419,422 | (13,215,795) | - | 364,723,051 |
| 2008 | 11,861,638 | 11,267,854 | (158,229) | (46,711,706) | (15,036,756) | - | 325,945,852 |
| 2009 | 11,779,557 | 11,867,348 | (184,662) | 4,176,581 | (16,785,935) | - | 389,358,007 |
| 2010 | 13,166,633 | 12,811,136 | (219,040) | 13,106,593 | (18,656,300) | - | 409,567,029 |
| 2011 | 13,497,836 | 12,838,756 | (345,446) | 7,312,027 | (20,667,243) | - | 422,202,959 |
| 2012 | 13,364,655 | 12,963,835 | (416,632) | 12,335,269 | (23,214,588) | - | 437,235,498 |
| 2013 | 13,558,586 | 13,043,663 | (470,177) | 49,168,273 | (25,717,983) | - | 486,817,860 |
| 2014 | 13,496,913 | 13,928,652 | (414,331) | 42,034,212 | (27,320,442) | - | 528,542,864 |
| 2015 | 12,706,883 | 15,397,475 | (442,876) | 31,040,707 | (30,119,285) | - | 557,125,768 |
| 2016 | 13,730,305 | 14,442,190 | (544,008) | 37,077,027 | (31,364,891) | - | 590,466,391 |
| 2017 | 13,614,406 | 13,691,494 | (631,865) | 42,084,105 | (33,662,493) | - | 625,562,038 |
| 2018 | 13,781,011 | 13,846,377 | (664,066) | 24,801,449 | (35,984,464) | - | 641,342,345 |
| 2019 | 14,270,844 | 14,671,686 | (623,912) | 39,362,935 | (37,276,954) | - | 671,746,944 |
| 2020 | 14,893,513 | 15,860,479 | (721,782) | 60,916,180 | (40,386,827) | - | 722,308,507 |
| 2021 | 14,567,813 | 15,246,586 | (781,274) | 81,537,331 | (43,306,822) | - | 789,572,141 |
| 2022 | 14,990,494 | 16,904,076 | (864,195) | 56,962,251 | (46,529,493) | - | 831,035,274 |
| 2023 | 16,113,114 | 16,510,832 | (937,471) | 75,658,157 | (49,586,874) | - | 888,793,032 |
| 2024 | 18,194,664 | 18,511,785 | (975,644) | 74,546,343 | (51,459,308) | - | 947,610,872 |

* Employer contributions include other funding sources and employee contributions may include member redeposits and member service purchase contributions

** Net of investment expenses

# Table 9

# Development of Actuarial Value of Assets

| Item | FYE 2024 | FYE 2023 |
|---|---|---|
| 1. Actuarial value of assets, beginning of year (before corridor) | $888,793,032 | $831,035,274 |
| 2. Market value, end of year | $973,634,824 | $896,332,251 |
| 3. Market value, beginning of year | $896,332,251 | $806,217,227 |
| 4. Non-investment/administrative net cash flow: | | |
| a. Employee contributions | $17,623,490 | $15,607,538 |
| b. Employer contributions | 17,624,291 | 15,606,067 |
| c. Other contributions | 1,458,668 | 1,410,341 |
| d. Refund of employee accounts | (2,673,964) | (3,455,442) |
| e. Retirement benefits | (48,785,344) | (46,131,432) |
| f. Administrative expenses | (975,644) | (937,471) |
| g. Total net cash flow: [sum of (4a) through (4f)] | ($15,728,503) | ($17,900,399) |
| 5. Investments and securities lending: | | |
| a. Interest and dividends on investments | $19,398,189 | $19,479,836 |
| b. Gross income from securities lending | 1,903,681 | 1,938,415 |
| c. Fees and expenses | (7,016,440) | (6,552,250) |
| d. Total net income: [sum of (5a) through (5c)] | $14,285,430 | $14,866,001 |
| 6. Investment income: | | |
| a. Actual market return: (2) - (3) - (4g) - (5d) | $78,745,646 | $93,149,422 |
| b. Assumed rate of return | 6.80% | 6.80% |
| c. Assumed amount of return | 46,139,188 | 39,358,166 |
| d. Amount subject to phase-in: (6a) - (6c) | $32,606,458 | $53,791,256 |
| 7. Phase-in recognition of investment income: | | |
| a. Current year: 0.20 * (6d) | $6,521,292 | $10,758,251 |
| b. First prior year | 10,758,251 | (24,023,510) |
| c. Second prior year | (24,023,510) | 15,711,058 |
| d. Third prior year | 15,711,058 | 5,154,634 |
| e. Fourth prior year | 5,154,634 | 13,833,557 |
| f. Total recognition | $14,121,725 | $21,433,990 |
| **8. Actuarial value of assets, end of year** | | |
| a. Preliminary actuarial value of assets, end of year: (1) + (4g) + (5d) + (6c) + (7f) | $947,610,872 | $888,793,032 |
| b. Upper corridor limit: 120% * (2) | 1,168,361,789 | 1,075,598,701 |
| c. Lower corridor limit: 80% * (2) | 778,907,859 | 717,065,801 |
| d. Actuarial value of assets, end of year | $947,610,872 | $888,793,032 |
| 9. Difference between market and actuarial value of assets | $26,023,952 | $7,539,219 |
| **10. Actuarial rate of return** | 8.46% | 9.20% |
| **11. Market rate of return*** | 10.54% | 13.84% |
| **12. Ratio of actuarial value to market value of assets** | 97.33% | 99.16% |

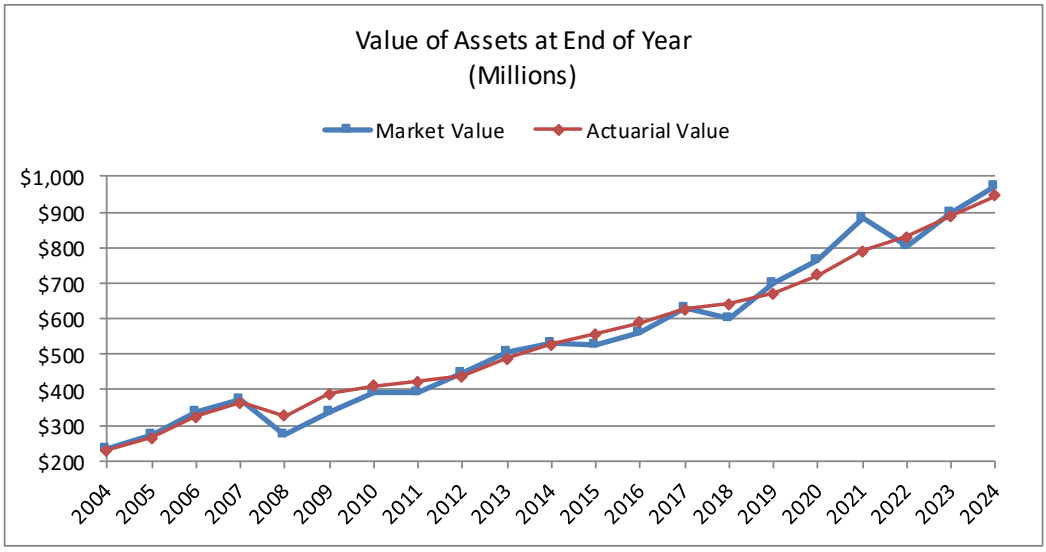
* Current year market rate of return is based on unaudited data and is supplied by the plan's investment

# Table 10

# History of Investment Returns

| Plan Year | Market Value | Actuarial Value |
|---|---|---|
| (1) | (2) | (3) |
| 2004 | 11.54% | 5.82% |
| 2005 | 8.22% | 7.08% |
| 2006 | 12.63% | 9.23% |
| 2007 | 7.44% | 10.54% |
| 2008 | -29.63% | -12.67% |
| 2009 | 23.72% | 17.23% |
| 2010 | 13.80% | 3.34% |
| 2011 | -0.90% | 1.77% |
| 2012 | 14.05% | 2.91% |
| 2013 | 13.53% | 11.24% |
| 2014 | 4.70% | 8.64% |
| 2015 | -0.26% | 5.89% |
| 2016 | 7.60% | 6.68% |
| 2017 | 14.20% | 7.17% |
| 2018 | -3.52% | 3.99% |
| 2019 | 18.72% | 6.18% |
| 2020 | 11.03% | 9.14% |
| 2021 | 17.19% | 11.40% |
| 2022 | -6.99% | 7.29% |
| 2023 | 13.84% | 9.20% |
| 2024 | 10.54% | 8.46% |
| **Average returns:** | | |
| Last five years: | 8.78% | 9.09% |
| Last ten years: | 7.89% | 7.52% |

The market returns above are gross of investment expenses and were provided by the plan's investment consultant. The actuarial returns above are based on the financial information provided by the plan's auditors.



# Table 11

## Solvency Test

| Valuation Date January 1 | Total Active Member Contributions (1) | Inactive and Pensioner Liability (2) | Active Accrued Liability (3) | Actuarial Value of Assets | Percentage of Liabilities Covered by Assets | | |
|---|---|---|---|---|---|---|---|
| | | | | | (1) | (2) | (3) |
| 2005 | $61,842,876 | $87,958,000 | $110,225,000 | $230,698,495 | 100% | 100% | 73.4% |
| 2006 | 66,827,791 | 109,836,100 | 119,969,000 | 264,962,712 | 100% | 100% | 73.6% |
| 2007 | 72,004,612 | 130,672,200 | 128,806,000 | 322,969,528 | 100% | 100% | 93.4% |
| 2008 | 74,889,713 | 163,621,400 | 141,901,000 | 364,723,051 | 100% | 100% | 88.9% |
| 2009 | 82,306,146 | 173,849,000 | 134,790,000 | 325,945,852 | 100% | 100% | 51.8% |
| 2010 | 92,241,086 | 166,797,234 | 121,992,468 | 389,358,007 | 100% | 100% | 100.0% |
| 2011 | 100,333,051 | 186,200,382 | 123,626,373 | 409,567,029 | 100% | 100% | 99.5% |
| 2012 | 106,871,965 | 210,366,572 | 123,266,327 | 422,202,959 | 100% | 100% | 85.2% |
| 2013 | 116,002,787 | 229,727,100 | 127,814,770 | 437,235,498 | 100% | 100% | 71.6% |
| 2014 | 121,915,804 | 260,467,214 | 144,399,452 | 486,817,860 | 100% | 100% | 72.3% |
| 2015 | 128,198,774 | 286,399,991 | 149,642,588 | 528,542,864 | 100% | 100% | 76.1% |
| 2016 | 133,911,728 | 309,474,214 | 153,470,235 | 557,125,768 | 100% | 100% | 74.1% |
| 2017 | 137,264,555 | 335,396,840 | 155,423,417 | 590,466,391 | 100% | 100% | 75.8% |
| 2018 | 140,028,844 | 389,301,860 | 179,627,128 | 625,562,038 | 100% | 100% | 53.6% |
| 2019 | 140,663,665 | 421,538,730 | 187,322,490 | 641,342,345 | 100% | 100% | 42.2% |
| 2020 | 142,463,869 | 453,526,381 | 198,964,475 | 671,746,944 | 100% | 100% | 38.1% |
| 2021 | 146,445,081 | 485,587,766 | 208,779,989 | 722,308,507 | 100% | 100% | 43.2% |
| 2022 | 147,980,630 | 531,045,121 | 253,527,752 | 789,572,141 | 100% | 100% | 43.6% |
| 2023 | 149,380,012 | 565,766,400 | 270,986,798 | 831,035,274 | 100% | 100% | 42.8% |
| 2024 | 148,301,236 | 608,998,858 | 300,769,391 | 888,793,032 | 100% | 100% | 43.7% |
| 2025 | 156,337,182 | 636,851,154 | 329,744,127 | 947,610,872 | 100% | 100% | 46.8% |

*Effective January 1, 2010, liabilities are calculated assuming no future cost-of-living increases.*

# Table 12

## Schedule of Funding Progress

| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|
| Valuation Date January 1 | Actuarial Value of Assets | Actuarial Accrued Liability (AAL) | Unfunded AAL (UAAL) [(3) - (2)] | Funded Ratio [(2)/(3)] | Covered Payroll | UAAL as a Percentage of Covered Payroll [(4)/(6)] |
| 2003 | $186,080,269 | $206,395,100 | $20,314,831 | 90.16% | $79,217,700 | 25.64% |
| 2004 | 204,892,219 | 236,441,300 | 31,549,081 | 86.66% | 84,242,600 | 37.45% |
| 2005 | 230,698,495 | 260,025,800 | 29,327,305 | 88.72% | 89,351,600 | 32.82% |
| 2006 | 264,962,712 | 296,633,400 | 31,670,688 | 89.32% | 98,070,700 | 32.29% |
| 2007 | 322,969,528 | 331,483,200 | 8,513,672 | 97.43% | 108,350,000 | 7.86% |
| 2008 | 364,723,051 | 380,413,100 | 15,690,049 | 95.88% | 119,165,000 | 13.17% |
| 2009 | 325,945,852 | 390,945,700 | 64,999,848 | 83.37% | 132,701,500 | 48.98% |
| 2010 | 389,358,007 | 381,030,788 | (8,327,219) | 102.19% | 149,481,383 | -5.57% |
| 2011 | 409,567,029 | 410,159,806 | 592,777 | 99.86% | 154,652,284 | 0.38% |
| 2012 | 422,202,959 | 440,504,864 | 18,301,905 | 95.85% | 155,481,933 | 11.77% |
| 2013 | 437,235,498 | 473,544,657 | 36,309,158 | 92.33% | 157,764,488 | 23.01% |
| 2014 | 486,817,860 | 526,782,470 | 39,964,610 | 92.41% | 154,071,943 | 25.94% |
| 2015 | 528,542,864 | 564,241,353 | 35,698,489 | 93.67% | 156,791,728 | 22.77% |
| 2016 | 557,125,768 | 596,856,177 | 39,730,409 | 93.34% | 161,357,314 | 24.62% |
| 2017 | 590,466,391 | 628,084,812 | 37,618,421 | 94.01% | 160,072,828 | 23.50% |
| 2018 | 625,562,038 | 708,957,832 | 83,395,794 | 88.24% | 155,696,162 | 53.56% |
| 2019 | 641,342,345 | 749,524,885 | 108,182,540 | 85.57% | 159,747,760 | 67.72% |
| 2020 | 671,746,944 | 794,954,725 | 123,207,781 | 84.50% | 164,757,930 | 74.78% |
| 2021 | 722,308,507 | 840,812,836 | 118,504,329 | 85.91% | 170,284,524 | 69.59% |
| 2022 | 789,572,141 | 932,553,503 | 142,981,362 | 84.67% | 165,440,506 | 86.42% |
| 2023 | 831,035,274 | 986,133,210 | 155,097,936 | 84.27% | 171,443,834 | 90.47% |
| 2024 | 888,793,032 | 1,058,069,485 | 169,276,453 | 84.00% | 183,734,391 | 92.13% |
| 2025 | 947,610,872 | 1,122,932,463 | 175,321,591 | 84.39% | 202,162,140 | 86.72% |

*Effective January 1, 2010, liabilities are calculated assuming no future cost-of-living increases.*

# Table 13

## Schedule of Contributions from the Employer(s) and Other Contributing Entities

| (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|
| Fiscal Year Ending December 31 | Actuarially Determined Contribution | | Employer Contributions* | | Percentage of Actuarially Determined Contributions Contributed |
| | % of Payroll | Amount | % of Payroll | Amount | [(5)/(3)] |
| 2004 | 7.95% | $6,693,300 | 15.32% | $12,902,452 | 192.77% |
| 2005 | 8.81% | 7,873,900 | 12.48% | 11,155,211 | 141.67% |
| 2006 | 7.28% | 7,138,000 | 34.90% | 34,228,475 | 479.52% |
| 2007 | 7.21% | 7,810,100 | 9.78% | 10,591,387 | 135.61% |
| 2008 | 7.62% | 9,084,200 | 9.95% | 11,861,638 | 130.57% |
| 2009 | 8.60% | 11,413,400 | 8.88% | 11,779,557 | 103.21% |
| 2010 | 5.37% | 8,029,651 | 8.81% | 13,166,633 | 163.98% |
| 2011 | 5.69% | 8,806,599 | 8.73% | 13,497,836 | 153.27% |
| 2012 | 6.37% | 9,899,466 | 8.60% | 13,364,655 | 135.00% |
| 2013 | 7.01% | 11,071,525 | 8.59% | 13,558,586 | 122.46% |
| 2014 | 7.67% | 11,812,078 | 8.76% | 13,496,913 | 114.26% |
| 2015 | 7.47% | 11,708,248 | 8.10% | 12,706,883 | 108.53% |
| 2016 | 7.48% | 12,063,684 | 8.76% | 13,730,305 | 113.82% |
| 2017 | 7.26% | 11,623,441 | 8.51% | 13,614,406 | 117.13% |
| 2018 | 9.31% | 14,493,422 | 8.61% | 13,781,011 | 95.08% |
| 2019 | 10.48% | 16,754,321 | 8.92% | 14,270,844 | 85.18% |
| 2020 | 11.07% | 18,231,644 | 9.04% | 14,893,513 | 81.69% |
| 2021 | 10.75% | 18,309,732 | 8.55% | 14,567,813 | 79.56% |
| 2022 | 14.26% | 23,603,760 | 9.06% | 14,990,494 | 63.51% |
| 2023 | 14.81% | 25,384,165 | 9.40% | 16,113,114 | 63.48% |
| 2024 | 14.68% | 26,972,209 | 9.90% | 18,194,664 | 67.46% |
| 2025 | 13.74% | 27,777,078 | - | - | - |

*Effective January 1, 2010, liabilities are calculated assuming no future cost-of-living increases.*

*Includes other funding sources but excludes member redeposits and member service purchase contributions.

# Table 14

## Reconciliation of Participant Data

| | Active Participants | Vested Former Participants | Retired Participants | Disableds | Beneficiaries | Participants Due Refunds | Total |
|---|---|---|---|---|---|---|---|
| **Number as of January 1, 2024** | **2,495** | **537** | **1,340** | **182** | **172** | **1,345** | **6,071** |
| New participants | 350 | - | - | - | 10 | 74 | 434 |
| Vested terminations | (56) | 56 | - | - | - | - | - |
| Retirements | (63) | (8) | 71 | - | - | - | - |
| Disability | (4) | (3) | - | 7 | - | - | - |
| Deceased with beneficiary | (2) | (1) | (9) | (1) | 14 | (1) | - |
| Deceased without beneficiary | - | (1) | (9) | (2) | (5) | (1) | (18) |
| Due refunds | (107) | - | - | - | - | 107 | - |
| Lump sum payoffs | (39) | (31) | - | - | - | (45) | (115) |
| Rehires/return to active | 31 | (9) | - | - | - | (22) | - |
| Certain period expired | - | - | - | - | (1) | - | (1) |
| Reclassifications | (2) | - | - | - | - | - | (2) |
| Dropped Records | - | (1) | - | - | - | - | (1) |
| Data corrections | - | (1) | - | - | - | - | (1) |
| **Number as of January 1, 2025** | **2,603** | **538** | **1,393** | **186** | **190** | **1,457** | **6,367** |

# Table 15

# Demographic Statistics

| | January 1 | | |
|---|---|---|---|
| | 2025 | 2024 | Change |
| Active Participants | | | |
| Number | 2,603 | 2,495 | 4.3% |
| *Vested* | *1,649* | *1,666* | |
| *Not vested* | *954* | *829* | |
| Average age (years) | 39.36 | 39.63 | -0.7% |
| Average service (years) | 8.74 | 8.92 | -2.0% |
| Average entry age (years) | 30.62 | 30.71 | -0.3% |
| Total payroll* | $202,162,140 | $183,734,391 | 10.0% |
| Average payroll* | $77,665 | $73,641 | 5.5% |
| Total employee contributions with interest | $156,337,182 | $148,301,236 | 5.4% |
| Average employee contributions with interest | $60,060 | $59,439 | 1.0% |
| Vested Former Participants | | | |
| Number | 538 | 537 | 0.2% |
| Average age (years) | 45.43 | 44.97 | 1.0% |
| Total employee contributions with interest | $27,370,963 | $26,912,526 | 1.7% |
| Average employee contributions with interest | $50,875 | $50,116 | 1.5% |
| Service Retirees | | | |
| Number | 1,393 | 1,340 | 4.0% |
| Average age (years) | 65.46 | 65.15 | 0.5% |
| Total annual benefits | $40,017,448 | $38,170,355 | 4.8% |
| Average annual benefit | $28,728 | $28,485 | 0.9% |
| Disability Retirees | | | |
| Number | 186 | 182 | 2.2% |
| Average age (years) | 57.68 | 57.26 | 0.7% |
| Total annual benefits | $6,041,413 | $5,807,130 | 4.0% |
| Average annual benefit | $32,481 | $31,907 | 1.8% |
| Beneficiaries | | | |
| Number | 190 | 172 | 10.5% |
| Average age (years) | 64.86 | 66.92 | -3.1% |
| Total annual benefits | $3,677,386 | $3,264,719 | 12.6% |
| Average annual benefit | $19,355 | $18,981 | 2.0% |
| Participants Due Refunds | | | |
| Number | 1,457 | 1,345 | 8.3% |
| Total Refunds Due | $7,148,755 | $6,694,563 | 6.8% |

* Projected payroll for the upcoming valuation year

# Table 16

## Distribution of Male Active Members by Age and by Years of Service

Average Age = 39.5 Average Service = 9.1

| Age Last Birthday | | Whole Years of Service at Valuation Date | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 Plus | Totals |
| **Less than 20** | Count | 15 | - | - | - | - | - | - | 15 |
| | Avg. Salary | $53,883 | - | - | - | - | - | - | $53,883 |
| **20-24** | Count | 137 | 2 | - | - | - | - | - | 139 |
| | Avg. Salary | $59,716 | * | - | - | - | - | - | $59,954 |
| **25-29** | Count | 193 | 60 | 1 | - | - | - | - | 254 |
| | Avg. Salary | 65,204 | $76,151 | * | - | - | - | - | 67,823 |
| **30-34** | Count | 120 | 113 | 40 | - | - | - | - | 273 |
| | Avg. Salary | 64,084 | 78,488 | $82,958 | - | - | - | - | 72,812 |
| **35-39** | Count | 81 | 101 | 127 | 53 | - | - | - | 362 |
| | Avg. Salary | 66,495 | 81,843 | 85,235 | $91,160 | - | - | - | 80,963 |
| **40-44** | Count | 57 | 46 | 65 | 100 | 18 | - | - | 286 |
| | Avg. Salary | 68,860 | 83,963 | 88,514 | 92,330 | $92,668 | - | - | 85,461 |
| **45-49** | Count | 57 | 35 | 34 | 69 | 31 | 3 | - | 229 |
| | Avg. Salary | 69,728 | 79,107 | 85,575 | 87,332 | 97,856 | * | - | 82,891 |
| **50-54** | Count | 30 | 17 | 22 | 45 | 40 | 14 | 1 | 169 |
| | Avg. Salary | 66,808 | 78,270 | 79,772 | 85,425 | 99,570 | 108,729 | * | 86,039 |
| **55-59** | Count | 22 | 10 | 16 | 24 | 19 | 9 | 5 | 105 |
| | Avg. Salary | 70,205 | 75,298 | 90,152 | 88,287 | 89,867 | 103,910 | $100,245 | 85,740 |
| **60-64** | Count | 13 | 4 | 9 | 17 | 10 | 5 | 3 | 61 |
| | Avg. Salary | 64,779 | 93,865 | 83,201 | 87,285 | 79,824 | 90,999 | * | 81,027 |
| **65-69** | Count | 1 | 1 | - | - | 1 | - | 1 | 4 |
| | Avg. Salary | * | * | - | - | * | - | * | 99,087 |
| **70 & Over** | Count | 1 | - | - | 2 | - | - | - | 3 |
| | Avg. Salary | * | - | - | * | - | - | - | * |
| **Totals** | Count | **727** | **389** | **314** | **310** | **119** | **31** | **10** | **1,900** |
| | Avg. Salary | **$64,714** | **$79,760** | **$85,433** | **$89,257** | **$95,061** | **$102,653** | **$99,246** | **$77,925** |

*Average Salary represents annualized salary earned in 2024 and is not shown for cells with counts less than or equal to three participants*

# Table 17

## Distribution of Female Active Members by Age and by Years of Service

Average Age = 39.1 Average Service = 7.8

| Age Last Birthday | | Whole Years of Service at Valuation Date | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 Plus | Totals |
| **Less than 20** | Count | 5 | - | - | - | - | - | - | 5 |
| | Avg. Salary | $44,588 | - | - | - | - | - | - | $44,588 |
| **20-24** | Count | 59 | 1 | - | - | - | - | - | 60 |
| | Avg. Salary | $56,319 | * | - | - | - | - | - | $56,490 |
| **25-29** | Count | 82 | 18 | 1 | - | - | - | - | 101 |
| | Avg. Salary | 63,440 | $81,659 | * | - | - | - | - | 66,617 |
| **30-34** | Count | 68 | 38 | 14 | - | - | - | - | 120 |
| | Avg. Salary | 59,706 | 75,748 | $80,052 | - | - | - | - | 67,160 |
| **35-39** | Count | 48 | 29 | 22 | 12 | - | - | - | 111 |
| | Avg. Salary | 65,711 | 78,597 | 81,107 | $89,691 | - | - | - | 74,722 |
| **40-44** | Count | 34 | 15 | 19 | 22 | 4 | - | - | 94 |
| | Avg. Salary | 62,940 | 67,571 | 74,195 | 87,843 | $86,989 | - | - | 72,806 |
| **45-49** | Count | 27 | 16 | 13 | 21 | 7 | 3 | - | 87 |
| | Avg. Salary | 56,031 | 77,786 | 75,484 | 79,830 | $88,244 | * | - | 72,332 |
| **50-54** | Count | 8 | 6 | 14 | 18 | 8 | 3 | - | 57 |
| | Avg. Salary | 63,141 | 70,253 | 81,375 | 77,426 | 78,705 | * | - | 76,478 |
| **55-59** | Count | 8 | 5 | 3 | 12 | 5 | 1 | 1 | 35 |
| | Avg. Salary | 61,363 | 72,035 | * | 77,075 | 79,155 | * | * | 73,920 |
| **60-64** | Count | 3 | 1 | 7 | 4 | 6 | 3 | 2 | 26 |
| | Avg. Salary | * | * | 66,768 | 69,264 | 78,661 | * | * | 71,519 |
| **65-69** | Count | 1 | 1 | 1 | 1 | - | - | - | 4 |
| | Avg. Salary | * | * | * | * | - | - | - | 67,205 |
| **70 & Over** | Count | - | - | - | - | 1 | 1 | 1 | 3 |
| | Avg. Salary | - | - | - | - | * | * | * | * |
| **Totals** | Count | **343** | **130** | **94** | **90** | **31** | **11** | **4** | **703** |
| | Avg. Salary | **$60,699** | **$75,806** | **$77,446** | **$81,765** | **$82,379** | **$85,077** | **$92,978** | **$69,950** |

*Average Salary represents annualized salary earned in 2024 and is not shown for cells with counts less than or equal to three participants*

# Table 18

## Distribution of Total Active Members by Age and by Years of Service

Average Age = 39.4 Average Service = 8.7

| Age Last Birthday | | Whole Years of Service at Valuation Date | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 Plus | Totals |
| **Less than 20** | Count | 20 | - | - | - | - | - | - | 20 |
| | Avg. Salary | $51,559 | - | - | - | - | - | - | $51,559 |
| **20-24** | Count | 196 | 3 | - | - | - | - | - | 199 |
| | Avg. Salary | $58,694 | * | - | - | - | - | - | 58,909 |
| **25-29** | Count | 275 | 78 | 2 | - | - | - | - | 355 |
| | Avg. Salary | 64,678 | $77,422 | * | - | - | - | - | 67,480 |
| **30-34** | Count | 188 | 151 | 54 | - | - | - | - | 393 |
| | Avg. Salary | 62,501 | 77,799 | $82,205 | - | - | - | - | 71,086 |
| **35-39** | Count | 129 | 130 | 149 | 65 | - | - | - | 473 |
| | Avg. Salary | 66,203 | 81,119 | 84,625 | $90,889 | - | - | - | 79,498 |
| **40-44** | Count | 91 | 61 | 84 | 122 | 22 | - | - | 380 |
| | Avg. Salary | 66,648 | 79,932 | 85,275 | 91,521 | $91,636 | - | - | 82,330 |
| **45-49** | Count | 84 | 51 | 47 | 90 | 38 | 6 | - | 316 |
| | Avg. Salary | 65,326 | 78,693 | 82,784 | 85,581 | 96,085 | $88,319 | - | 79,984 |
| **50-54** | Count | 38 | 23 | 36 | 63 | 48 | 17 | 1 | 226 |
| | Avg. Salary | 66,036 | 76,179 | 80,395 | 83,139 | 96,093 | 105,425 | * | 83,627 |
| **55-59** | Count | 30 | 15 | 19 | 36 | 24 | 10 | 6 | 140 |
| | Avg. Salary | 67,847 | 74,211 | 88,567 | 84,549 | 87,635 | 103,741 | $95,684 | 82,785 |
| **60-64** | Count | 16 | 5 | 16 | 21 | 16 | 8 | 5 | 87 |
| | Avg. Salary | 61,925 | 89,212 | 76,011 | 83,852 | 79,388 | 85,987 | $86,024 | 78,186 |
| **65-69** | Count | 2 | 2 | 1 | 1 | 1 | - | 1 | 8 |
| | Avg. Salary | * | * | * | * | * | - | * | 83,146 |
| **70 & Over** | Count | 1 | - | - | 2 | 1 | 1 | 1 | 6 |
| | Avg. Salary | * | - | - | * | * | * | * | 77,485 |
| **Totals** | Count | **1,070** | **519** | **408** | **400** | **150** | **42** | **14** | **2,603** |
| | Avg. Salary | **$63,427** | **$78,770** | **$83,593** | **$87,572** | **$92,440** | **$98,050** | **$97,455** | **$75,771** |

*Average Salary represents annualized salary earned in 2024 and is not shown for cells with counts less than or equal to three participants*

# Table 19

## Distribution of Male Deferred Members by Age and by Years of Service

Average Age = 45.6 Average Service = 7.9

| Age Last Birthday | Whole Years of Service at Valuation Date | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 Plus | Totals |
| Less than 20 | - | - | - | - | - | - | - | - |
| 20-24 | - | - | - | - | - | - | - | - |
| 25-29 | 4 | 5 | - | - | - | - | - | 9 |
| 30-34 | 6 | 30 | - | - | - | - | - | 36 |
| 35-39 | 12 | 38 | 8 | - | - | - | - | 58 |
| 40-44 | 22 | 39 | 12 | 1 | - | - | - | 74 |
| 45-49 | 13 | 24 | 12 | 5 | - | - | - | 54 |
| 50-54 | 4 | 24 | 20 | 2 | - | - | - | 50 |
| 55-59 | 8 | 28 | 9 | 4 | - | - | - | 49 |
| 60-64 | - | 5 | 2 | - | - | - | - | 7 |
| 65-69 | - | 3 | 4 | - | - | - | - | 7 |
| 70 & Over | - | - | - | - | - | - | - | - |
| **Totals** | **69** | **196** | **67** | **12** | **-** | **-** | **-** | **344** |

# Table 20

## Distribution of Female Deferred Members by Age and by Years of Service

Average Age = 45.2 Average Service = 8.1

| Age Last Birthday | Whole Years of Service at Valuation Date | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 Plus | Totals |
| Less than 20 | - | - | - | - | - | - | - | - |
| 20-24 | - | - | - | - | - | - | - | - |
| 25-29 | 5 | 7 | - | - | - | - | - | 12 |
| 30-34 | 6 | 11 | - | - | - | - | - | 17 |
| 35-39 | 10 | 24 | 6 | - | - | - | - | 40 |
| 40-44 | 9 | 8 | 6 | 5 | - | - | - | 28 |
| 45-49 | 3 | 19 | 2 | 6 | - | - | - | 30 |
| 50-54 | 2 | 19 | 4 | 3 | - | - | - | 28 |
| 55-59 | 4 | 9 | 13 | 4 | - | - | - | 30 |
| 60-64 | 1 | 6 | 1 | - | - | - | - | 8 |
| 65-69 | - | 1 | - | - | - | - | - | 1 |
| 70 & Over | - | - | - | - | - | - | - | - |
| **Totals** | **40** | **104** | **32** | **18** | **-** | **-** | **-** | **194** |

# Table 21

## Distribution of Total Deferred Members by Age and by Years of Service

Average Age = 45.4 Average Service = 8.0

| Age Last Birthday | Whole Years of Service at Valuation Date | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 Plus | Totals |
| Less than 20 | - | - | - | - | - | - | - | - |
| 20-24 | - | - | - | - | - | - | - | - |
| 25-29 | 9 | 12 | - | - | - | - | - | 21 |
| 30-34 | 12 | 41 | - | - | - | - | - | 53 |
| 35-39 | 22 | 62 | 14 | - | - | - | - | 98 |
| 40-44 | 31 | 47 | 18 | 6 | - | - | - | 102 |
| 45-49 | 16 | 43 | 14 | 11 | - | - | - | 84 |
| 50-54 | 6 | 43 | 24 | 5 | - | - | - | 78 |
| 55-59 | 12 | 37 | 22 | 8 | - | - | - | 79 |
| 60-64 | 1 | 11 | 3 | - | - | - | - | 15 |
| 65-69 | - | 4 | 4 | - | - | - | - | 8 |
| 70 & Over | - | - | - | - | - | - | - | - |
| **Totals** | **109** | **300** | **99** | **30** | **-** | **-** | **-** | **538** |

# Table 22

## Schedule of Pension Recipients Added to and Removed from Rolls

| Fiscal Year Ending December 31 | Added to Rolls* | | Removed from Rolls | | Total | | Percent Increase in Annual Pension Benefits | Average Annual Pension Benefit |
|---|---|---|---|---|---|---|---|---|
| | Count | Annual Pension Benefits | Count | Annual Pension Benefits | Count | Annual Pension Benefits | | |
| 2008 | 72 | $1,651,841 | 11 | ($9,251) | 610 | $13,605,759 | 13.91% | $22,305 |
| 2009 | 55 | 1,154,341 | 9 | (65,125) | 656 | 14,694,975 | 8.01% | 22,401 |
| 2010 | 75 | 1,881,618 | 12 | (109,159) | 719 | 16,467,434 | 12.06% | 22,903 |
| 2011 | 93 | 2,330,905 | 7 | (101,024) | 805 | 18,697,315 | 13.54% | 23,226 |
| 2012 | 54 | 1,418,567 | 7 | (62,989) | 852 | 20,052,893 | 7.25% | 23,536 |
| 2013 | 77 | 2,048,141 | 12 | (155,942) | 917 | 21,945,092 | 9.44% | 23,931 |
| 2014 | 98 | 2,598,158 | 14 | (250,849) | 1,001 | 24,292,401 | 10.70% | 24,268 |
| 2023 | 83 | 2,229,651 | 14 | (234,679) | 1,070 | 26,287,373 | 8.21% | 24,568 |
| 2016 | 91 | 2,618,016 | 14 | (239,572) | 1,147 | 28,665,817 | 9.05% | 24,992 |
| 2017 | 83 | 2,325,313 | 28 | (478,242) | 1,202 | 30,512,888 | 6.44% | 25,385 |
| 2018 | 89 | 2,817,707 | 17 | (254,449) | 1,274 | 33,076,146 | 8.40% | 25,962 |
| 2019 | 111 | 3,086,125 | 22 | (461,992) | 1,363 | 35,700,279 | 7.93% | 26,192 |
| 2020 | 106 | 3,212,958 | 27 | (487,974) | 1,442 | 38,425,263 | 7.63% | 26,647 |
| 2021 | 114 | 3,265,415 | 34 | (515,154) | 1,522 | 41,175,524 | 7.16% | 27,054 |
| 2022 | 114 | 3,294,318 | 29 | (577,522) | 1,607 | 43,892,320 | 6.60% | 27,313 |
| 2023 | 117 | 3,895,912 | 30 | (546,027) | 1,694 | 47,242,205 | 7.63% | 27,888 |
| 2024 | 102 | 3,108,198 | 27 | (614,157) | 1,769 | 49,736,246 | 5.28% | 28,115 |

* Includes cost-of-living increases

# Table 23

## Retired and Disabled Members by Option Code

| | Count | | | Monthly Benefit | | |
|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total |
| **Option Code*** | | | | | | |
| **1** | 240 | 152 | 392 | $613,625 | $310,438 | $924,063 |
| **2** | 537 | 79 | 616 | 1,384,328 | 161,251 | 1,545,579 |
| **2P** | 228 | 45 | 273 | 582,450 | 100,188 | 682,638 |
| **3** | 41 | 13 | 54 | 103,524 | 31,527 | 135,052 |
| **3P** | 40 | 12 | 52 | 101,793 | 29,014 | 130,807 |
| **4** | 26 | 14 | 40 | 67,360 | 29,070 | 96,431 |
| **5** | 42 | 24 | 66 | 83,367 | 54,854 | 138,220 |
| **Other**** | 84 | 2 | 86 | 180,901 | 4,548 | 185,449 |
| **Total** | **1,238** | **341** | **1,579** | **$3,117,347** | **$720,891** | **$3,838,238** |
| **Beneficiaries** | **14** | **176** | **190** | **$12,275** | **$294,174** | **$306,449** |
| **Grand Total** | **1,252** | **517** | **1,769** | **$3,129,622** | **$1,015,065** | **$4,144,687** |

*See optional forms of payment in Appendix B

**66.67% joint and survivor option for grandfathered employees

***Of the 78 new retirees and disabled members, 4 elected a self-funded COLA

# Table 24

## Pensioners by Monthly Benefit and Option Code

| Males | Option Code | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Benefit Amount** | **1** | **2** | **2P** | **3** | **3P** | **4*** | **5** | **Other** | **Total** |
| **Under $200** | 2 | 2 | - | - | - | - | - | - | 4 |
| **$200-$399** | 8 | 10 | 5 | 1 | - | 7 | 4 | - | 35 |
| **$400-$599** | 6 | 17 | 10 | 3 | 2 | 5 | 4 | - | 47 |
| **$600-$799** | 12 | 14 | 6 | - | 2 | 1 | 3 | 1 | 39 |
| **$800-$999** | 7 | 11 | 9 | - | - | 2 | 3 | 2 | 34 |
| **$1,000-$1,499** | 16 | 31 | 13 | 3 | 6 | - | 7 | 6 | 82 |
| **$1,500-$1,999** | 19 | 68 | 27 | 5 | 4 | - | 2 | 26 | 151 |
| **$2,000-$2,499** | 37 | 109 | 42 | 4 | 7 | 4 | 5 | 28 | 236 |
| **$2,500 & over** | 133 | 275 | 116 | 25 | 19 | 16 | 19 | 21 | 624 |
| **Total** | **240** | **537** | **228** | **41** | **40** | **35** | **47** | **84** | **1,252** |
| **Females** | | | | | | | | | |
| **Benefit Amount** | **1** | **2** | **2P** | **3** | **3P** | **4*** | **5** | **Other** | **Total** |
| **Under $200** | 1 | - | - | - | - | - | 4 | - | 5 |
| **$200-$399** | 7 | 2 | 1 | - | - | 3 | 10 | - | 23 |
| **$400-$599** | 9 | 6 | 1 | - | - | 3 | 11 | - | 30 |
| **$600-$799** | 8 | 3 | 2 | - | - | - | 16 | - | 29 |
| **$800-$999** | 9 | 4 | 1 | 1 | 2 | 2 | 8 | - | 27 |
| **$1,000-$1,499** | 19 | 6 | 4 | - | 1 | 1 | 50 | - | 81 |
| **$1,500-$1,999** | 18 | 11 | 5 | 4 | 2 | 2 | 28 | 1 | 71 |
| **$2,000-$2,499** | 27 | 22 | 13 | 3 | 2 | 2 | 21 | - | 90 |
| **$2,500 & over** | 54 | 25 | 18 | 5 | 5 | 7 | 46 | 1 | 161 |
| **Total** | **152** | **79** | **45** | **13** | **12** | **20** | **194** | **2** | **517** |
| **Males & Females** | | | | | | | | | |
| **Benefit Amount** | **1** | **2** | **2P** | **3** | **3P** | **4*** | **5** | **Other** | **Total** |
| **Under $200** | 3 | 2 | - | - | - | - | 4 | - | 9 |
| **$200-$399** | 15 | 12 | 6 | 1 | - | 10 | 14 | - | 58 |
| **$400-$599** | 15 | 23 | 11 | 3 | 2 | 8 | 15 | - | 77 |
| **$600-$799** | 20 | 17 | 8 | - | 2 | 1 | 19 | 1 | 68 |
| **$800-$999** | 16 | 15 | 10 | 1 | 2 | 4 | 11 | 2 | 61 |
| **$1,000-$1,499** | 35 | 37 | 17 | 3 | 7 | 1 | 57 | 6 | 163 |
| **$1,500-$1,999** | 37 | 79 | 32 | 9 | 6 | 2 | 30 | 27 | 222 |
| **$2,000-$2,499** | 64 | 131 | 55 | 7 | 9 | 6 | 26 | 28 | 326 |
| **$2,500 & over** | 187 | 300 | 134 | 30 | 24 | 23 | 65 | 22 | 785 |
| **Total** | **392** | **616** | **273** | **54** | **52** | **55** | **241** | **86** | **1,769** |

**Includes 15 beneficiaries who are receiving a certain only benefit.*

# Table 25

# Pensioners by Age and Option Code

Average Age Male = 64.4 Average Age Female = 65.1 Average Age Total = 64.6

| Males | Option Code | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Age Last Birthday | 1 | 2 | 2P | 3 | 3P | 4* | 5 | Other | Total |
| Under 50 | 27 | 48 | 33 | 4 | 2 | 10 | 3 | - | 127 |
| 50-54 | 22 | 51 | 25 | 4 | 3 | 2 | 4 | - | 111 |
| 55-59 | 41 | 69 | 27 | 6 | 4 | 4 | 4 | 1 | 156 |
| 60-64 | 31 | 93 | 34 | 8 | 9 | 6 | 7 | 1 | 189 |
| 65-69 | 43 | 123 | 42 | 4 | 8 | 5 | 11 | 17 | 253 |
| 70-74 | 35 | 86 | 37 | 6 | 9 | 3 | 11 | 22 | 209 |
| 75-79 | 28 | 51 | 21 | 7 | 3 | 4 | 5 | 27 | 146 |
| 80-84 | 12 | 13 | 8 | 1 | 1 | 1 | 2 | 10 | 48 |
| 85 & over | 1 | 3 | 1 | 1 | 1 | - | - | 6 | 13 |
| **Total** | **240** | **537** | **228** | **41** | **40** | **35** | **47** | **84** | **1,252** |
| **Females** | | | | | | | | | |
| Age Last Birthday | 1 | 2 | 2P | 3 | 3P | 4* | 5 | Other | Total |
| Under 50 | 17 | 2 | 6 | 3 | 1 | 6 | 14 | - | 49 |
| 50-54 | 14 | 7 | 6 | 2 | 2 | 2 | 8 | - | 41 |
| 55-59 | 16 | 5 | 8 | 1 | 2 | - | 14 | - | 46 |
| 60-64 | 20 | 21 | 8 | 3 | 3 | 4 | 25 | - | 84 |
| 65-69 | 37 | 26 | 8 | 2 | 2 | 5 | 33 | - | 113 |
| 70-74 | 27 | 13 | 7 | 2 | - | 2 | 43 | 1 | 95 |
| 75-79 | 14 | 5 | 2 | - | 2 | - | 29 | - | 52 |
| 80-84 | 5 | - | - | - | - | 1 | 19 | 1 | 26 |
| 85 & over | 2 | - | - | - | - | - | 9 | - | 11 |
| **Total** | **152** | **79** | **45** | **13** | **12** | **20** | **194** | **2** | **517** |
| **Males & Females** | | | | | | | | | |
| Age Last Birthday | 1 | 2 | 2P | 3 | 3P | 4* | 5 | Other | Total |
| Under 50 | 44 | 50 | 39 | 7 | 3 | 16 | 17 | - | 176 |
| 50-54 | 36 | 58 | 31 | 6 | 5 | 4 | 12 | - | 152 |
| 55-59 | 57 | 74 | 35 | 7 | 6 | 4 | 18 | 1 | 202 |
| 60-64 | 51 | 114 | 42 | 11 | 12 | 10 | 32 | 1 | 273 |
| 65-69 | 80 | 149 | 50 | 6 | 10 | 10 | 44 | 17 | 366 |
| 70-74 | 62 | 99 | 44 | 8 | 9 | 5 | 54 | 23 | 304 |
| 75-79 | 42 | 56 | 23 | 7 | 5 | 4 | 34 | 27 | 198 |
| 80-84 | 17 | 13 | 8 | 1 | 1 | 2 | 21 | 11 | 74 |
| 85 & over | 3 | 3 | 1 | 1 | 1 | - | 9 | 6 | 24 |
| **Total** | **392** | **616** | **273** | **54** | **52** | **55** | **241** | **86** | **1,769** |

**Includes 15 beneficiaries who are receiving a certain only benefit.*

# Table 26

## Pensions Awarded in 2024 by Option Code

Average Age = 54.6

| Males & Females | Option Code | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Benefit Amount** | **1** | **2** | **2P** | **3** | **3P** | **4** | **5** | **Other** | **Total** |
| **Under $200** | - | - | - | - | - | - | - | - | 0 |
| **$200-$399** | 1 | - | - | - | - | - | - | 5 | 6 |
| **$400-$599** | - | 2 | - | - | - | - | - | 4 | 6 |
| **$600-$799** | 1 | 2 | 1 | - | - | - | 1 | - | 5 |
| **$800-$999** | - | - | - | - | - | 1 | 1 | - | 2 |
| **$1,000-$1,499** | - | 2 | 1 | - | - | - | 7 | - | 10 |
| **$1,500-$1,999** | 1 | 2 | 1 | - | - | - | - | - | 4 |
| **$2,000-$2,499** | 3 | 5 | 2 | 1 | - | - | 3 | - | 14 |
| **$2,500 & over** | 18 | 13 | 9 | 1 | 2 | 2 | 10 | - | 55 |
| **Total** | **24** | **26** | **14** | **2** | **2** | **3** | **22** | **9** | **102** |
| **Males & Females** | | | | | | | | | |
| **Age Last Birthday** | **1** | **2** | **2P** | **3** | **3P** | **4** | **5** | **Other** | **Total** |
| **Under 50** | 6 | 6 | 6 | - | 1 | - | 6 | 9 | 34 |
| **50-54** | 6 | 5 | 3 | - | - | - | 2 | - | 16 |
| **55-59** | 6 | 5 | 1 | 1 | - | 1 | 1 | - | 15 |
| **60-64** | 5 | 8 | 2 | 1 | 1 | 2 | 3 | - | 22 |
| **65-69** | 1 | 2 | 2 | - | - | - | 5 | - | 10 |
| **70-74** | - | - | - | - | - | - | 1 | - | 1 |
| **75-79** | - | - | - | - | - | - | 1 | - | 1 |
| **80-84** | - | - | - | - | - | - | 3 | - | 3 |
| **85 & over** | - | - | - | - | - | - | - | - | - |
| **Total** | **24** | **26** | **14** | **2** | **2** | **3** | **22** | **9** | **102** |

# Table 27

## Retirees and Disabled Members by Service at Retirement and Years Since Retirement

Average Service at Retirement = 18.0  Average Years Since Retirement = 10.8

| Service at Retirement | | Years Elapsed Since Retirement | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 Plus | Totals |
| **Less than 5** | Count | 12 | 8 | 13 | 8 | 31 | 33 | 27 | 132 |
| | Avg. Benefit | $4,623 | $1,090 | $3,419 | $3,912 | $3,855 | $2,279 | $1,842 | $1,902 |
| **5-9** | Count | 49 | 42 | 48 | 23 | 10 | - | - | 172 |
| | Avg. Benefit | $1,160 | $746 | $1,001 | $884 | $1,240 | - | - | $982 |
| **10-14** | Count | 56 | 58 | 47 | 24 | 11 | - | 2 | 198 |
| | Avg. Benefit | $1,791 | $1,811 | $1,715 | $1,638 | $1,553 | - | $1,547 | $1,745 |
| **15-19** | Count | 56 | 33 | 26 | 37 | 11 | - | 2 | 165 |
| | Avg. Benefit | $2,554 | $2,304 | $1,975 | $1,725 | $1,727 | - | $1,898 | $2,164 |
| **20-24** | Count | 210 | 148 | 120 | 104 | 45 | 2 | 1 | 630 |
| | Avg. Benefit | $2,940 | $2,828 | $2,627 | $2,179 | $2,109 | $1,854 | $1,890 | $2,664 |
| **25-29** | Count | 37 | 54 | 34 | 45 | 14 | 1 | 1 | 186 |
| | Avg. Benefit | $4,090 | $3,684 | $3,551 | $2,855 | $2,511 | $2,556 | $2,562 | $3,440 |
| **30-34** | Count | 19 | 25 | 20 | 15 | 2 | - | - | 81 |
| | Avg. Benefit | $4,816 | $3,636 | $4,064 | $3,616 | $3,150 | - | - | $4,002 |
| **35 & Over** | Count | 8 | 4 | 3 | - | - | - | - | 15 |
| | Avg. Benefit | $5,422 | $4,671 | $3,777 | - | - | - | - | $4,893 |
| **Totals** | Count | **447** | **372** | **311** | **256** | **124** | **36** | **33** | **1,579** |
| | Avg. Benefit | **$2,752** | **$2,549** | **$2,323** | **$2,115** | **$2,043** | **$2,263** | **$1,851** | **$2,431** |

# Table 28

## Retirees and Disabled Members by Year of Retirement

January 1, 2025 Total = 1,579

| Year of Retirement | Count | Year of Retirement | Count |
|---|---|---|---|
| Under 1960 | - | 1992 | 2 |
| 1960 | - | 1993 | 6 |
| 1961 | - | 1994 | 3 |
| 1962 | - | 1995 | 9 |
| 1963 | - | 1996 | 8 |
| 1964 | - | 1997 | 5 |
| 1965 | - | 1998 | 11 |
| 1966 | - | 1999 | 4 |
| 1967 | - | 2000 | 8 |
| 1968 | - | 2001 | 11 |
| 1969 | - | 2002 | 26 |
| 1970 | - | 2003 | 34 |
| 1971 | - | 2004 | 40 |
| 1972 | - | 2005 | 55 |
| 1973 | - | 2006 | 46 |
| 1974 | - | 2007 | 66 |
| 1975 | - | 2008 | 54 |
| 1976 | - | 2009 | 36 |
| 1977 | - | 2010 | 55 |
| 1978 | - | 2011 | 70 |
| 1979 | 1 | 2012 | 49 |
| 1980 | - | 2013 | 57 |
| 1981 | 2 | 2014 | 77 |
| 1982 | - | 2015 | 73 |
| 1983 | 1 | 2016 | 71 |
| 1984 | - | 2017 | 67 |
| 1985 | 2 | 2018 | 71 |
| 1986 | 2 | 2019 | 94 |
| 1987 | 1 | 2020 | 86 |
| 1988 | 1 | 2021 | 94 |
| 1989 | 5 | 2022 | 93 |
| 1990 | 2 | 2023 | 106 |
| 1991 | 4 | 2024* | 71 |

**May include retirements as of January 1, 2025*

# Table 29

## Thirty Year Closed Group Projected Benefit Payments

| Year Ending December 31 | Actives | Retirees* | Total |
|---|---|---|---|
| **2025** | $ 4,035,434 | $ 49,904,955 | $ 53,940,389 |
| **2026** | 7,532,394 | 49,773,921 | 57,306,314 |
| **2027** | 11,061,589 | 49,629,626 | 60,691,215 |
| **2028** | 14,877,607 | 49,624,017 | 64,501,624 |
| **2029** | 18,773,839 | 49,442,042 | 68,215,881 |
| **2030** | 22,777,003 | 49,242,684 | 72,019,686 |
| **2031** | 26,862,236 | 49,035,566 | 75,897,802 |
| **2032** | 31,062,481 | 48,713,590 | 79,776,070 |
| **2033** | 35,356,231 | 48,366,021 | 83,722,252 |
| **2034** | 39,691,840 | 47,943,125 | 87,634,965 |
| **2035** | 44,127,523 | 47,475,451 | 91,602,974 |
| **2036** | 48,650,338 | 46,973,218 | 95,623,556 |
| **2037** | 53,227,762 | 46,515,322 | 99,743,084 |
| **2038** | 57,873,439 | 45,899,889 | 103,773,327 |
| **2039** | 62,581,921 | 45,125,512 | 107,707,433 |
| **2040** | 67,217,343 | 44,277,199 | 111,494,542 |
| **2041** | 71,769,832 | 43,430,289 | 115,200,121 |
| **2042** | 76,246,475 | 42,548,091 | 118,794,566 |
| **2043** | 80,628,069 | 41,606,047 | 122,234,116 |
| **2044** | 85,066,307 | 40,567,656 | 125,633,963 |
| **2045** | 89,325,217 | 39,471,849 | 128,797,067 |
| **2046** | 93,013,549 | 38,338,529 | 131,352,078 |
| **2047** | 96,124,254 | 37,127,212 | 133,251,466 |
| **2048** | 98,684,475 | 35,858,769 | 134,543,244 |
| **2049** | 100,807,599 | 34,555,879 | 135,363,477 |
| **2050** | 102,474,881 | 33,174,807 | 135,649,688 |
| **2051** | 103,666,669 | 31,752,756 | 135,419,425 |
| **2052** | 104,473,199 | 30,317,346 | 134,790,544 |
| **2053** | 104,906,917 | 28,873,125 | 133,780,043 |
| **2054** | 104,979,818 | 27,428,006 | 132,407,824 |

* Includes Disabled Members, Beneficiaries, and Deferred Vested Members. Retirement benefit payments for deferred vested members are assumed to commence at age 60.

# APPENDIX A

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

# Summary of Actuarial Assumptions and Methods

The following methods and assumptions were used in preparing the January 1, 2025 actuarial valuation report.

1. Valuation Date

   The valuation date for any given year is January 1st, the first day of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

2. Actuarial Cost Method

   The actuarial valuation uses the Entry Age Normal (EAN) actuarial cost method, amortized as a level percentage of payroll. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate, and (ii) the rate that will amortize the unfunded actuarial accrued liability (UAAL).

   a. The valuation is prepared on the projected benefit basis, under which the present value, at the investment return rate assumed to be earned in the future (currently 6.80%), of each participant's expected benefit payable at retirement or death is determined, based on his/her age, service, sex and compensation. The calculations take into account the probability of a participant's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, disability, or survivor's benefit. Future salary increases are also anticipated. The present value of the expected benefits payable for the active participants is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits payable from the Fund on account of the present group of participants and beneficiaries.

   b. The employer contributions required to support the benefits of the Fund are determined using a level funding approach, and consist of a normal cost contribution and an unfunded accrued liability contribution.

   c. The normal cost contribution is determined using the "entry age normal" actuarial cost method. Under this method, a calculation is made to determine the average uniform and constant percentage rate of employer contribution which, if applied to the compensation of each new participant during the entire period of his/her anticipated covered service, would be required to meet the cost of all benefits payable on his/her behalf based on the benefits provisions applicable for the individual member.

d. The unfunded accrued liability contributions are determined by subtracting the actuarial value of assets from the actuarial accrued liability. Amortization bases are established each year and amortized based on the Board's policy. The Board's policy consists of amortizing the unfunded liability as of January 1, 2018, over a closed 30-year period with each subsequent amortization base created as a result of year to year experience changes over individual 20-year closed periods. The current year amortization base is determined by taking the current unfunded liability less the outstanding amounts of prior year bases.

3. Actuarial Value of Assets

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income, with interest, dividends, and other income recognized immediately. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses. An adjustment is made if the actuarial value is not within 20% of the Market Value. For any year following a year in which the 20% of market value adjustment was applied, the actuarial value is determined as if the adjustment was not applied in the previous year.

4. Economic Assumptions

a. Investment return

6.80% per year, compounded annually, composed of an assumed 2.25% inflation rate and a 4.55% net real rate of return. This rate represents the assumed return, net of investment expenses.

a. Salary increase rate

| Age | Rate |
|---|---|
| 20 | 7.00% |
| 25 | 6.50% |
| 30 | 5.00% |
| 35 | 4.25% |
| 40 | 4.25% |
| 45 | 4.00% |
| 50 | 3.50% |
| 55 | 3.25% |
| 60 | 3.00% |

b. Payroll growth rate

In the amortization of the unfunded actuarial accrued liability, payroll is assumed to increase 2.50% per year. This increase rate is solely due to the effect of inflation on salaries, with no allowance for future membership growth.

c. Cost-of-Living adjustment

No cost-of-living adjustment is assumed since the policy for providing the benefit requires Board approval to make the recommendation to the Joint Appropriations Committee and the funded level of the plan shows a cost-of-living requirement would not be permitted.

5. Demographic Assumptions

b. Rates Before Retirement

Healthy Pre-Retirement Mortality:

Pub-2010 Safety Healthy Active Mortality Table, amount-weighted, fully generational, projected with the MP-2020 Ultimate Scale

Males: No set back with a multiplier of 100%

Females: No set back with a multiplier of 100%

Healthy Post-Retirement Mortality:

Pub-2010 Safety Healthy Annuitant Mortality Table, amount-weighted, fully generational, projected with the MP-2020 Ultimate Scale

Males: No set back with a multiplier of 100%

Females: No set back with a multiplier of 100%

Disabled Mortality:

Pub-2010 Safety Disabled Retiree Mortality Table, amount-weighted, fully generational, projected with the MP-2020 Ultimate Scale

Males: No set back with a multiplier of 100%

Females: No set back with a multiplier of 100%

| | Pre-Retirement | | Post-Retirement | | Disabled | |
|---|---|---|---|---|---|---|
| | Projected to 2025 using the MP-2020 Ultimate Scale | | | | | |
| Age | Male | Female | Male | Female | Male | Female |
| 20 | 0.03% | 0.01% | 0.03% | 0.01% | 0.10% | 0.04% |
| 25 | 0.03% | 0.02% | 0.03% | 0.02% | 0.09% | 0.05% |
| 30 | 0.03% | 0.02% | 0.03% | 0.02% | 0.10% | 0.07% |
| 35 | 0.04% | 0.03% | 0.04% | 0.03% | 0.11% | 0.10% |
| 40 | 0.05% | 0.04% | 0.05% | 0.04% | 0.14% | 0.13% |
| 45 | 0.07% | 0.05% | 0.10% | 0.07% | 0.20% | 0.18% |
| 50 | 0.10% | 0.07% | 0.16% | 0.12% | 0.29% | 0.25% |
| 55 | 0.14% | 0.10% | 0.25% | 0.21% | 0.39% | 0.38% |
| 60 | 0.22% | 0.14% | 0.41% | 0.36% | 0.60% | 0.57% |
| 65 | 0.34% | 0.19% | 0.72% | 0.63% | 0.97% | 0.87% |
| 70 | 0.64% | 0.38% | 1.30% | 1.10% | 1.58% | 1.34% |
| 75 | | | 2.37% | 1.92% | 2.72% | 2.05% |
| 80 | | | 4.32% | 3.36% | 4.74% | 3.36% |
| 85 | | | 8.01% | 6.00% | 8.08% | 6.00% |
| 90 | | | 14.43% | 10.75% | 14.43% | 10.75% |
| 95 | | | 22.46% | 17.85% | 22.46% | 17.85% |
| 100 | | | 31.17% | 26.92% | 31.17% | 26.92% |

30% of active deaths are assumed to be duty-related

c. Disability

| Age | Disability | |
|---|---|---|
| | Non-Duty | Duty |
| 20 | 0.03% | 0.02% |
| 25 | 0.03% | 0.02% |
| 30 | 0.03% | 0.02% |
| 35 | 0.04% | 0.02% |
| 40 | 0.09% | 0.05% |
| 45 | 0.19% | 0.12% |
| 50 | 0.33% | 0.20% |
| 55 | 0.57% | 0.34% |
| 60 | 1.11% | 0.67% |
| 65 | 1.53% | 0.92% |
| 70 | 1.53% | 0.92% |
| 75 | 1.53% | 0.92% |

30% of active disabilities are assumed to be duty-related

d. Withdrawal

| Service | Withdrawal | |
|---|---|---|
| | Male | Female |
| 1 | 12.00% | 18.00% |
| 2-4 | 12.00% | 16.00% |
| 5 | 12.00% | 14.00% |
| 6 | 10.00% | 14.00% |
| 7 | 10.00% | 12.00% |
| 8 | 9.00% | 11.00% |
| 9 | 7.00% | 8.00% |
| 10-11 | 6.00% | 8.00% |
| 12 | 5.00% | 7.00% |
| 13 | 4.00% | 6.00% |
| 14 | 4.00% | 5.00% |
| 15 | 3.00% | 4.00% |
| 16 | 3.00% | 3.00% |
| 17-18 | 2.00% | 2.00% |
| 19-20 | 1.00% | 1.00% |
| 21+ | 0.00% | 0.00% |

e. Retirement Rates

| Age | Normal | Early |
|---|---|---|
| 50 | 25.00% | 2.00% |
| 51-56 | 18.00% | 2.00% |
| 57-60 | 20.00% | 2.00% |
| 61-62 | 17.00% | |
| 63-64 | 20.00% | |
| 65-69 | 50.00% | |
| 70+ | 100.00% | |

15% is assumed for members with at least 20 years of service before age 50

6. Other Assumptions

a. Percent married: 85% of employees are assumed to be married. (No beneficiaries other than the spouse assumed.)

b. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.

c. Percent electing annuity on death (when eligible): All of the spouses of vested, married participants are assumed to elect an annuity.

d. Percent electing deferred termination benefit: It is assumed that 45% of active members who terminate with a vested deferred benefit will elect to have their contributions refunded.

e. Assumed age for commencement of deferred benefits: Members electing to receive a deferred benefit are assumed to commence receipt at the first age at which unreduced benefits are available, which for this plan is age 60.

f. No benefit data is available for members entitled to deferred benefits. The benefit is estimated using the final average compensation and service provided by WRS.

g. There will be no recoveries once disabled.

h. No children are assumed for purposes of valuing the ordinary death benefit.

i. Administrative expenses: Assumed to be the average of the prior two years, with each year projected at 2.50% to the valuation date.

j. Pay increase timing: Beginning of (fiscal) year. This is equivalent to assuming that reported pay represents amount paid to members during the year ended on the valuation date.

k. Decrement timing: Decrements of all types are assumed to occur mid-year.

l. Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

m. Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in the report, and the actual payroll payable at the time contributions are made.

n. Benefit Service: All members are assumed to accrue one year of service each year.

o. Employee contribution pickup: For members hired after January 1, 2018, it is assumed that 25% of the employee contributions were paid by employee and therefore would be refundable.

# APPENDIX B

## SUMMARY OF PLAN PROVISIONS

# Summary of Plan Provisions

| | |
|---|---|
| **Covered Members** | County sheriffs, deputy county sheriffs, municipal police officers; Investigator of the Wyoming Livestock Board; meeting the specifications of W.S.7-2-101(a)(iv)(E), investigators employed by the Wyoming State Board of Outfitters and professional guides meeting the specifications of W.S. 7-2-101(a)(iv)(J); Correctional officers, probation and parole agents employed by the Wyoming Department of Corrections, Wyoming Law Enforcement Academy instructors, University of Wyoming campus police officers; And full-time dispatchers or detention officers for law enforcement agencies. |
| **Final Average Salary** | Employee's average annual salary for the highest paid five continuous years of service. |
| **Service Retirement** | |
| Eligibility | Age 60 with four or more years of service as a law enforcement officer or any age with at least twenty years of service as a law enforcement officer. Early retirement benefits are payable to any law enforcement officer who has at least four but less than twenty years of service and are at least age 50. Early retirement benefits are actuarially reduced by 5% per year before age 60. |
| Monthly Benefit | 2.50% of employee's highest five-year average salary for each year of credited service, not to exceed 75.0% of final average salary. |
| Vesting | Any employee who has left employment with four or more years of service, and who has not withdrawn accumulated contributions, is eligible to receive the above benefit or can elect to receive a lump-sum refund of contributions with interest. An employee who terminates with less than four years of service is only eligible for the lump-sum benefit. |
| **Duty Disability Retirement** | |
| Eligibility | No age or service eligibility requirements. Partial or total disability resulting from an individual and specific act, the type of which would normally occur only while employed as an employee, or as otherwise defined under W.S. 9-3-432(h). |
| Monthly Benefit | 62.5% of Final Salary. |
| **Non-duty Disability Retirement** | |
| Eligibility | 10 years of credited service. Partial or total disability, but not eligible for duty disability. |
| Monthly Benefit | 50.0% of Final Salary. |

**Pre-retirement Duty Death Benefit**

| | |
|---|---|
| Eligibility | No age or service requirements. |
| Monthly Benefit | The greater of 90% or 2.5% for each year of credited service times the greater of the member's final actual salary and final average compensation, payable to the surviving spouse plus 6% of the member's final actual salary for each unmarried child under 18. Payment shall not exceed 100% of the greater of the member's final actual salary and final average compensation. |

**Pre-retirement Non-duty Death Benefit**

| | |
|---|---|
| Eligibility | No age or service requirements. |
| Monthly Benefit | 50% of the greater of the member's final actual salary and final average compensation, payable to the surviving spouse plus 6% of the member's final actual salary for each unmarried child under 18. Payment shall not exceed 100% of the greater of the member's final actual salary and final average compensation. |

**Contributions**

| | |
|---|---|
| Employee | 9.50% of salary. The employer may subsidize all or part of the employee contributions. |
| Employer | 9.50% of salary.<br><br>Pursuant to Senate Enrolled Act No. 50, both employee and employer contribution rates will increase to 10.40% effective July 1, 2025 and will increase by 0.90% on July 1 of each subsequent year until July 1, 2026 when an ultimate rate of 11.30% is reached. |
| Interest | 3.0% annually. (0.0% for non-vested inactive members after July 1, 2019) |

| | |
|---|---|
| **Cost-of-Living Improvements** | W.S. 9-3-454 prohibits benefit changes, including cost-of-living increases, unless the funded ratio stays above 100% plus a margin for adverse experience throughout the life of the benefit change. |

**Optional Forms of Payment**

| | |
|---|---|
| Option 1 | Monthly benefit for life with a lump-sum death benefit equal to the excess (if any) of the employee contributions with interest over the total benefits received. |
| Option 2 | Monthly benefit for life. Upon death, 100% of the benefit continues to be paid to the beneficiary. |
| Option 2P | Monthly benefit for life. Upon death, 100% of the benefit continues to be paid to the beneficiary. Benefit reverts to Option 1 amount but without the cash refund feature upon beneficiary death. |
| Option 3 | Monthly benefit for life. Upon death, 50% of the benefit continues to be paid to the beneficiary. |
| Option 3P | Monthly benefit for life. Upon death, 50% of the benefit continues to be paid to the beneficiary. Benefit reverts to Option 1 amount but without the cash refund feature upon beneficiary death. |
| Option 4 | Monthly benefit for life with a guarantee of 120 monthly payments. |
| Option 5 | The largest possible monthly benefit payable for life with no lump-sum death benefit. |
| Other | Grandfathered group of retirees has an optional form which, upon death, 66.67% of the benefit continues to be paid to the beneficiary. |

# APPENDIX C

## RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

# Risks Associated With Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

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 due to changing conditions; 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 plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns;
2. Asset/Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
5. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
6. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution rate shown on page 13 may be considered as a minimum contribution rate that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

# Risks Associated With Measuring the Accrued Liability and Actuarially Determined Contribution

### Plan Maturity Measures

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

| | January 1, 2025 | January 1, 2024 |
|---|---|---|
| Ratio of the market value of assets to total payroll | 4.8 | 4.9 |
| Ratio of actuarial accrued liability to payroll | 5.6 | 5.8 |
| Ratio of actives to retirees and beneficiaries | 1.5 | 1.5 |
| Ratio of net cash flows to market value of assets | -2% | -2% |
| Duration of the actuarial accrued liability | 13.4 | 13.4 |

### Ratio of Market Value of Assets to Payroll

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 4.0 times the payroll, a return on assets 5% different than assumed would equal 20% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

### Ratio of Actuarial Accrued Liability to Payroll

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 5.5 times the payroll, a change in liability 2% other than assumed would equal 11% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

### Ratio of Actives to Retirees and Beneficiaries

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

# Risks Associated With Measuring the Accrued Liability and Actuarially Determined Contribution

### Ratio of Net Cash Flow to Market Value of Assets

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

### Duration of Actuarial Accrued Liability

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

### Additional Risk Assessment

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.

# Risk Measures – Low Default Risk Obligation Measure

**Introduction**

In December 2021, the Actuarial Standards Board (ASB) adopted a revision to Actuarial Standard of Practice (ASOP) No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions. The revised ASOP No. 4 requires the calculation and disclosure of a liability referred to by the ASOP as the "Low-Default-Risk Obligation Measure" (LDROM). The rationale that the ASB cited for the calculation and disclosure of the LDROM was included in the Transmittal Memorandum of ASOP No. 4 and is presented below (emphasis added):

> "The ASB believes that the calculation and disclosure of this measure provides **appropriate, useful information for the intended user regarding the funded status of a pension plan**. The calculation and disclosure of this additional measure is **not intended to suggest that this is the "right" liability measure** for a pension plan. However, the ASB does believe that **this additional disclosure provides a more complete assessment of a plan's funded status and provides additional information regarding the security of benefits that members have earned as of the measurement date.**"

**Comparing the Accrued Liabilities and the LDROM**

One of the fundamental financial objectives of the Wyoming Law Enforcement Retirement Fund (the Fund) is to finance each member's retirement benefits over the period from the member's date of hire until the member's projected date of retirement (entry age actuarial cost method) as a level percentage of payroll. To fulfill this objective, the discount rate that is used to value the accrued liabilities of the Fund is set equal to the expected return on the Fund's diversified portfolio of assets (referred to sometimes as the investment return assumption). For the Law Enforcement plan, the investment return assumption is 6.80%.

The LDROM is meant to approximately represent the lump sum cost to a plan to purchase low-default-risk fixed income securities whose resulting cash flows essentially replicate in timing and amount the benefits earned (or the costs accrued) as of the measurement date. The LDROM is very dependent upon market interest rates at the time of the LDROM measurement. The lower the market interest rates, the higher the LDROM, and vice versa. The LDROM results presented in this report are based on the entry age actuarial cost method and discount rates based upon the intermediate rate from the FTSE Pension Discount Curve and Liability Index published by the Society of Actuaries. This rate is 5.49% as of December 31, 2024. This measure may not be appropriate for assessing the need for or amount of future contributions. This measure may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligation.

The difference between the two measures (Valuation and LDROM) is one illustration of the savings the sponsor anticipates by taking on risk in a diversified portfolio.

| Valuation Accrued Liabilities | LDROM |
|---|---|
| $1,122,932,463 | $1,327,290,247 |