# Connecticut Judges, Family Support Magistrates, and Compensation Commissioners Retirement System



GASB
Statement No. 67
Report

Prepared as of June 30, 2024





January 24, 2025

State of Connecticut State Employees' Retirement Commission 165 Capital Avenue Hartford, CT 06106

#### Members of the Commission:

Presented in this report is information to assist the Connecticut Judges, Family Support Magistrates and Compensation Commissioners Retirement System in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67. The information is presented for the period ending June 30, 2024.

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of June 30, 2024. The valuation was based on data, provided by the Retirement Division staff for active, inactive, and retired members along with pertinent financial information. While not verifying data at the source, the actuary performed tests for consistency and reasonableness. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete, our results may be different and our calculations may need to be revised. Please see the actuarial valuation for additional details on the funding requirements for the System.

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

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 and GASB 68 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.



Members of the Commission January 24, 2025 Page 2

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the System, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the System. In addition, the calculations were completed in compliance with the laws governing the System and, in our opinion, meet the requirements of GASB 67. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Sincerely yours,

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

Edward J. Worbel

Larry Langer, EA, ASA, FCA, MAAA Principal and Consulting Actuary





| Section  |  |
|----------|--|
| 1        | Introduction1                              |
| II       | Financial Statement Notes2                 |
| III      | Required Supplementary Information6        |
| Schedule |  |
| Α        | Required Supplementary Information Tables8 |
| В        | Main Plan Provisions11                     |
| С        | Actuarial Assumptions and Methods15        |





# **SECTION I - INTRODUCTION**

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), "Financial Reporting For Pension Plans", in June 2012. This report, prepared as of June 30, 2024 (the Measurement Date), presents information to assist the Connecticut Judges, Family Support Magistrates and Compensation Commissioners Retirement System (System) in meeting the requirements of GASB 67. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of the System as of June 30, 2024. The results of that valuation were detailed in a report dated December 13, 2024.

GASB 67 requires a measurement of the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial funding method. The Net Pension Liability (NPL) is then set equal to the TPL minus the System's Fiduciary Net Position (FNP) (basically the market values of assets) as of the measurement date. The benefit provisions recognized in the calculation of the TPL are summarized in Schedule B.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR). To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan's provision applicable to the membership and beneficiaries of the System on the Measurement Date. Future contributions were projected to be made in accordance with the laws governing the Retirement System. If the FNP is not projected to be depleted at any point in the future, as the results currently indicate, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If however, at a future measurement date the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. The rate used, if necessary, for this purpose is the June average of the Bond Buyer General Obligation 20-year Municipal Bond Index published weekly by the Board of Governors of the Federal Reserve System. We have determined as of the Measurement Date that use of a 6.90 percent discount rate meets the requirements of GASB 67.

The FNP projections are based upon the System's financial status on the Measurement Date, the indicated set of methods and assumptions, and the requirements of GASB 67. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing plan basis, reflecting the impact of future members. Therefore, the results of this test do not necessarily indicate whether or not the fund will actually run out of money, the financial condition of the System, or the System's ability to make benefit payments in future years.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information (RSI).





The actuarial related information presented herein will follow the order presented in GASB 67. There are other non-actuarial items required which are not included in this report. Paragraph numbers are provided for ease of reference.

**Paragraph 30(a) (4):** The data required regarding the membership of the System were furnished by the Retirement Division staff. The following table summarizes the membership of the system as of June 30, 2024, the Valuation Date.

| Membership Type  | Number |
|--|--------|
| Retired Members Or Their Beneficiaries<br>Currently Receiving Benefits | 330    |
| Inactive Members Entitled To But Not Yet Receiving Benefits            | 3      |
| Active Members   | 208    |
| Total  | 541    |

**Paragraphs 31(a) (1)-(4):** As stated above, the NPL is equal to the TPL minus the FNP. That result as of June 30, 2024 is presented in the table below (\$ thousands).

|                               | Fiscal Year Ending<br>June 30, 2024 |
|-------------------------------|-------------------------------------|
|                               |                                     |
| Total Pension Liability (TPL) | \$567,245                           |
| Fiduciary Net Position (FNP)  | <u>333,134</u>                      |
| Net Pension Liability (NPL)   | \$234,111                           |
|                               |                                     |
| Ratio of FNP to TPL           | 58.73%                              |
|                               |                                     |





**Paragraph 31(b) (1)(a)-(f):** This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The actuarial assumptions utilized in developing the TPL are outlined in Schedule C. The total pension liability was determined by an actuarial valuation as of June 30, 2024, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation 2.50 percent

Salary increases 4.00 percent, including inflation

Investment rate of return 6.90 percent, net of pension plan investment

expense, including inflation

The Pub-2010 Mortality Tables projected generationally with scale MP-2020:

• Service Retirees: General, Above-Median, Healthy Retiree.

• Disabled Retirees: General, Disabled Retiree.

• Beneficiaries: General, Above-Median Contingent Annuitant.

Active Employees: General, Above-Median, Employee.

The actuarial assumptions used in the June 30, 2024 valuation were based on the results of an actuarial experience study for the period July 1, 2015 – June 30, 2020.

The long-term expected rate of return on pension plan investments was determined using a lognormal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.





The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

| Asset Class                       | Target Allocation | Long-Term Expected<br>Real Rates of Return |
|-----------------------------------|-------------------|--|
| Domestic Equity Fund              | 20.0%             | 5.4%                                       |
| Developed Market Intl. Stock Fund | 11.0%             | 6.4%                                       |
| Emerging Market Intl. Stock Fund  | 9.0%              | 8.6%                                       |
| Core Fixed Income Fund            | 13.0%             | 0.8%                                       |
| Emerging Market Debt Fund         | 5.0%              | 3.8%                                       |
| High Yield Bond Fund              | 3.0%              | 3.4%                                       |
| Real Estate Fund                  | 19.0%             | 5.2%                                       |
| Private Equity                    | 10.0%             | 9.4%                                       |
| Private Credit                    | 5.0%              | 6.5%                                       |
| Alternative Investments           | 3.0%              | 3.1%                                       |
| Liquidity Fund                    | 2.0%              | -0.4%                                      |
| Total                             | 100.0%            |  |

Discount rate. The discount rate used to measure the total pension liability was 6.90 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that State contributions will be made at the actuarially determined rates in future years. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Paragraph 31(b) (1) (g):** This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the System, calculated using the discount rate of 6.90 percent, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.90 percent) or 1-percentage-point higher (7.90 percent) than the current rate (\$ thousands):

|                                | 1%         | Current      | 1%         |
|--------------------------------|------------|--------------|------------|
|                                | Decrease   | Discount     | Increase   |
|                                | (5.90%)    | Rate (6.90%) | (7.90%)    |
| System's net pension liability | \$ 291,790 | \$ 234,111   | \$ 184,688 |





**Paragraph 31(c):** June 30, 2024 is the actuarial valuation date upon which the TPL is based. In order to provide the experience, gain or loss, an expected TPL is determined as of June 30, 2024 using standard roll forward techniques. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the expected investment rate of return for the year. The difference between the expected TPL and the actual TPL as of June 30, 2024 is reflected as an experience gain or loss for the year. The change in the assumptions from prior Measurement Date is then calculated, if applicable. The procedure was used to determine the expected TPL as of June 30, 2024, as shown in the following table:

| TPL Roll-Forward<br>(\$ in thousands)               |           |
|---|-----------|
|   |           |
| (a) Interest Rate                                   | 6.90%     |
| (b) Actual TPL as of June 30, 2023                  | \$557,543 |
| (c) Service Cost for the Year                       |           |
| July 1, 2023 – June 30, 2024                        | \$10,533  |
| (d) Actual Benefit Payments for the Year            |           |
| July 1, 2023 – June 30, 2024                        | \$37,690  |
| (e) Expected TPL as of June 30, 2024                |           |
| = $[(b) \times 1.069] + (c) - [(d) \times 1.0345)]$ | \$567,556 |
| (f) Experience (Gain)/Loss for Year                 | \$(311)   |
|   |           |
| (g) Actual TPL as of June 30,2024                   | \$567,245 |
| (h) Assumption Change for Year                      | \$0       |
| (i) Final TPL as of June 30, 2024                   | \$567,245 |
|   |           |





# **SECTION III - REQUIRED SUPPLEMENTARY INFORMATION**

There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements:

Paragraphs 32(a)-(c): The required tables are provided in Schedule A.

**Paragraph 34:** In addition, the following should be noted regarding the RSI:

#### Changes of assumptions:

#### • 2021

- Wage inflation assumed rate changed from 3.50% to 3.00%.
- o Assumed Salary Scale changed to reflect the above wage inflation change.
- Assumed rates of mortality have been revised to the Pub-2010 Above Median Mortality Tables (Amount-weighted) projected generationally with the MP-2020 improvement scale.
- Assumed rates of withdrawal, disability, and retirement have been adjusted to reflect experience more closely.

#### • 2016

- The mortality tables and salary scale were changed based on the Experience Investigation for the five-year period ending June 30, 2015.
- Economic assumptions (assumed rates of inflation and investment return), the actuarial cost method, and the UAAL amortization methodology were changed in accordance with Memorandum of Agreement (MOU) between the State and SEBAC effective December 8, 2016.





# **SECTION III - REQUIRED SUPPLEMENTARY INFORMATION**

Method and assumptions used in calculations of actuarially determined contributions. The actuarially determined contributions in the schedule of employer contributions are calculated as of June 30 each biennium for the fiscal years ending two and three years after the valuation date (June 30, 2024 contributions are based on June 30, 2022 valuation). The following actuarial methods and assumptions were used to determine the most recent contributions reported in that schedule:

Actuarial cost method Entry Age Normal

Amortization method Level percent of pay, closed

Single equivalent amortization 9 years

period

Asset valuation method 5-year smoothed market

Inflation 2.50 percent

Salary increase 4.00 percent, including inflation

Investment rate of return 6.90 percent, net of investment related expense





# SCHEDULE A - REQUIRED SUPPLEMENTARY INFORMATION TABLES

| SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY GASB 67 Paragraph 32(a) (\$ in Thousands) |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|  | 2024             | 2023             | 2022             | 2021             | 2020             | 2019             | 2018             | 2017             | 2016             | 2015             |
| Total Pension Liability  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Service Cost   | \$ 10,533        | \$ 11,667        | \$10,487         | \$ 9,289         | \$ 9,813         | \$ 10,834        | \$ 11,352        | \$ 10,159        | \$ 8,508         | \$ 8,142         |
| Interest   | 37,170           | 33,491           | 32,720           | 32,743           | 31,815           | 29,559           | 29,954           | 29,062           | 28,251           | 27,240           |
| Benefit Changes  | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| Difference between expected and actual experience  | (311)            | 44,883           | 2,354            | (9,271)          | 2,474            | 22,095           | (18,528)         | 0                | (9,380)          | 0                |
| Changes of Assumption and other inputs   | 0                | 0                | 0                | (1,020)          | 0                | 0                | 0                | 0                | 64,604           | 0                |
| Benefit Payments   | (37,690)         | (35,751)         | (32,927)         | (31,116)         | (30,200)         | (29,386)         | (27,616)         | (24,899)         | (22,994)         | (22,541)         |
| Refund of Contributions  | 0                | 0                | (91)             | (6)              | 0                | 0                | 0                | 0                | 0                | 0                |
| Net Change in Total Pension Liability  | 9,702            | 54,290           | 12,543           | 619              | 13,902           | 33,102           | (4,838)          | 14,322           | 68,989           | 12,841           |
| Total Pension Liability – Beginning  | <u>557,543</u>   | <u>503,253</u>   | <u>490,710</u>   | <u>490,091</u>   | <u>476,189</u>   | 443,087          | <u>447,925</u>   | 433,603          | <u>364,614</u>   | <u>351,773</u>   |
| Total Pension Liability – Ending (a)   | <u>\$567,245</u> | <u>\$557,543</u> | <u>\$503,253</u> | <u>\$490,710</u> | <u>\$490,091</u> | <u>\$476,189</u> | <u>\$443,087</u> | <u>\$447,925</u> | <u>\$433,603</u> | <u>\$364,614</u> |
| Plan Net Position  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Contributions – Employer   | \$ 35,252        | \$ 32,533        | \$ 33,170        | \$ 31,893        | \$ 27,011        | \$ 27,427        | \$ 25,458        | \$ 19,164        | \$ 18,259        | \$ 17,731        |
| Contributions – Member   | 2,297            | 2,019            | 1,642            | 1,570            | 1,575            | 1,694            | 1,663            | 1,689            | 1,831            | 1,791            |
| Net Investment Income  | 34,252           | 23,363           | (27,407)         | 59,881           | 5,461            | 13,383           | 13,178           | 24,452           | 1,440            | 4,781            |
| Benefit Payments   | (37,690)         | (35,751)         | (32,927)         | (31,116)         | (30,200)         | (29,386)         | (27,616)         | (24,899)         | (22,994)         | (22,541)         |
| Administrative Expense   | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| Refund of Contributions  | 0                | 0                | (91)             | (6)              | 0                | 0                | 0                | 0                | 0                | 0                |
| Other  | 0                | 477              | 0                | 0                | 0                | 0                | 0                | (39)             | 1,680*           | 0                |
| Net Change in Plan Net Position  | 34,111           | 22,641           | (25,613)         | 62,222           | 3,847            | 13,118           | 12,683           | 20,367           | 216              | 1,762            |
| Plan Net Position – Beginning  | 299,023          | 276,382          | <u>301,995</u>   | 239,773          | 235,926          | 222,808          | <u>210,125</u>   | <u>189,758</u>   | 189,542          | <u>187,780</u>   |
| Plan Net Position – Ending (b)   | <u>\$333,134</u> | \$299,023        | \$276,382        | <u>\$301,995</u> | \$239,773        | \$235,926        | \$222,808        | <u>\$210,125</u> | <u>\$189,758</u> | \$189,542        |
| Net Pension Liability – Ending (a) – (b)   | <u>\$234,111</u> | <u>\$258,520</u> | <u>\$226,871</u> | <u>\$188,715</u> | <u>\$250,318</u> | <u>\$240,263</u> | <u>\$220,279</u> | <u>\$237,800</u> | <u>\$243,845</u> | <u>\$175,072</u> |

<sup>\*</sup> Includes \$1,614,000 audit adjustment to the beginning of year plan net position.





# SCHEDULE A - REQUIRED SUPPLEMENTARY INFORMATION TABLES

| SCHEDULE OF THE NET PENSION LIABILITY  GASB 67 Paragraph 32(b)  (\$ in Thousands) |                |                |           |                |           |                |           |                |                |           |
|---|----------------|----------------|-----------|----------------|-----------|----------------|-----------|----------------|----------------|-----------|
|   | 2024           | 2023           | 2022      | 2021           | 2020      | 2019           | 2018      | 2017           | 2016           | 2015      |
| Total Pension Liability   | \$567,245      | \$557,543      | \$503,253 | \$490,710      | \$490,091 | \$476,189      | \$443,087 | \$447,925      | \$433,603      | \$364,614 |
| Plan Net Position   | <u>333,134</u> | <u>299,023</u> | 276,382   | <u>301,995</u> | 239,773   | <u>235,926</u> | 222,808   | <u>210,125</u> | <u>189,758</u> | 189,542   |
| Net Pension Liability   | \$234,111      | \$258,520      | \$226,871 | \$188,715      | \$250,318 | \$240,263      | \$220,279 | \$237,800      | \$243,845      | \$175,072 |
| Ratio of Plan Net Position to<br>Total Pension Liability                          | 58.73%         | 53.63%         | 54.92%    | 61.54%         | 48.92%    | 49.54%         | 50.29%    | 46.91%         | 43.76%         | 51.98%    |
| Covered Payroll*  | \$ 38,936      | \$ 39,102      | \$ 35,872 | \$ 31,438      | \$ 31,495 | \$ 34,643      | \$ 34,970 | \$ 36,467      | \$ 34,897      | \$ 34,972 |
| Net Pension Liability as a<br>Percentage of Covered Payroll                       | 601.27%        | 661.14%        | 632.45%   | 600.28%        | 794.79%   | 693.54%        | 629.91%   | 652.10%        | 698.76%        | 500.61%   |

<sup>\*</sup>Covered payroll equals the total active annual compensation from each year's valuation report.





# SCHEDULE A - REQUIRED SUPPLEMENTARY INFORMATION TABLES

|  |               |               |               | (\$ IN I N    | ousands)      |               |               |               |               |               |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|  | 2024          | 2023          | 2022          | 2021          | 2020          | 2019          | 2018          | 2017          | 2016          | 2015          |
| Actuarially Determined<br>Employer Contributions             | \$ 35,252     | \$ 32,533     | \$ 33,170     | \$ 31,893     | \$ 27,011     | \$ 27,427     | \$ 25,458     | \$ 19,164     | \$ 18,259     | \$ 17,731     |
| Actual Employer<br>Contributions                             | <u>35,252</u> | <u>32,533</u> | <u>33,170</u> | <u>31,893</u> | <u>27,011</u> | <u>27,427</u> | <u>25,458</u> | <u>19,164</u> | <u>18,259</u> | <u>17,731</u> |
| Annual Contribution (Excess) Deficiency                      | \$ -          | <u>\$ -</u>   | <u>\$ -</u>   | <u>\$ -</u>   | <u>\$</u>     | <u>\$</u> _   | <u>\$ -</u>   | <u>\$</u>     | <u>\$ -</u>   | \$            |
| Covered Payroll*   | \$ 38,936     | \$ 39,102     | \$ 35,872     | \$ 31,438     | \$ 31,495     | \$ 34,643     | \$ 34,970     | \$ 36,467     | \$ 34,897     | \$ 34,972     |
| Actual Contribution as a<br>Percentage of Covered<br>Payroll | 90.54%        | 83.20%        | 92.47%        | 101.45%       | 85.76%        | 79.17%        | 72.80%        | 52.55%        | 52.32%        | 50.70%        |

<sup>\*</sup> Covered payroll equals the total active annual compensation from each year's valuation report.





The Connecticut Judges, Family Support Magistrates, and Compensation Commissioners Retirement System (CT JFSMCCRS) is a defined benefit pension plan established by the Connecticut General Assembly for the purpose of providing retirement allowances and other benefits for Judges, Family Support Magistrates, and Compensation Commissioners in Connecticut, and their survivors and other beneficiaries.

#### **Eligibility Requirements**

Any appointed Judge, Family Support Magistrate, or Compensation Commissioner of the State of Connecticut.

#### **Final Average Compensation**

For members hired prior to July 1, 2011, salary of office; For members hired on or after July 1, 2011, Average annual salary for 5 years preceding retirement;

plus longevity payments based on service as follows:

| Completed<br>Years of Service | Annual Longevity as % of Compensation |
|-------------------------------|---------------------------------------|
| 0-9                           | 0.00%                                 |
| 10-14                         | 0.75%                                 |
| 15-19                         | 1.50%                                 |
| 20-24                         | 2.25%                                 |
| 25 or more                    | 3.00%                                 |

#### **Normal Retirement Benefit**

Eligibility

For those who retire before July 1, 2022, the earliest of age 65 or 20 years of service or 30 years of total state service with at least 10 years as a Judge, Family Support Magistrate or Compensation Commissioner.

For those who retire on or after July 1, 2022, the earliest of age 65 with 10 years of vesting service, age 63 with 25 years of vesting service, or 30 years of vesting service.

Retirement is mandatory at age 70.





Benefit

66.67% of Final Average Compensation reduced for less than 10 years of service by a ratio of the number of years of completed service to the number of years of service which would have been completed at age 70, or 10 years, whichever is less.

**Disability Retirement Benefit** 

Any member becoming permanently disabled is entitled to 66.67% of Final Average Compensation commencing upon determination of disability.

**Death Benefit** 

The spouse of any member who was hired before January 1, 1981 and dies in active service or after retirement is entitled to 33.33% of the final compensation of the member at time of death commencing the first of the month after death.

The spouse of any member who was hired on or after January 1, 1981 and dies in active service is entitled to 33.33% of the final compensation of the member at time of death commencing the first of the month after death.

The spouse of any member who was hired on or after January 1, 1981 and who dies after retirement is entitled to 50% of the monthly benefit of the member at the time of death.

The spouse of any member who dies after leaving active service and before retirement is entitled to 50% of the benefit the member would have received upon retirement commencing when the member would have been eligible.





#### **Deferred Vested Retirement Benefit**

Eligibility 10 years of service.

Benefit <u>Members hired before 1981 who resign on or before</u>
October 1, 2011 – 50% of the retirement benefit at 10

years increasing to 100% after 15 years.

Members hired before 1981 who resign on or after October 2, 2011 – 100% of the retirement benefit multiplied by the ratio of service at termination to projected service at the earliest retirement age (the

earlier of age 65 or 20 years of service).

<u>Members hired on or after January 1, 1981</u> – 100% of the retirement benefit multiplied by the ratio of service at termination to projected service at the earliest retirement

age (the earlier of age 65 or 20 years of service).

Commencement <u>For members who resign on or before October 1, 2011</u> -

Benefits shall commence upon the attainment of the earlier of age 65 or the attainment of 20 years of service

(assuming the member had remained in service).

<u>For members hired before 1981 who resign on or after</u> <u>October 2, 2011</u> – Benefits shall commence no earlier

than at age 62.

For members hired on or after January 1, 1981 who resign on or after October 2, 2011 - Benefits shall

commence no earlier than at age 65.





#### **Cost of Living Adjustments**

For members hired prior to 1981 and retire prior to October 2, 2011, benefits are increased in line with current compensation of an active member in the same position.

For members hired on or after January 1, 1981 and retire prior to October 2, 2011, benefits are increased in line with a cost of living index, not to exceed 3% per year.

For members retiring on or after October 2, 2011 and all surviving spouses, the annual adjustment will be 60% of the increase in CPI up to 6% and 75% of the increase in the CPI over 6%. The minimum COLA shall be 2.0% and the maximum COLA shall be 7.5%.

#### **Member Contributions**

Members contribute 6% of annual compensation. Upon withdrawal prior to benefit eligibility, contributions are refunded without interest.





# SCHEDULE C - ACTUARIAL ASSUMPTIONS AND METHODS

Adopted or reaffirmed by the Commission on September 16, 2021 for the June 30, 2021 and later valuations based on the experience investigation report for the five-year period ending June 30, 2020 which can be found at on the Office of the State Comptroller - Retirement Services Division website.

**VALUATION INTEREST RATE:** 6.90% per annum, compounded annually, net of expenses, comprised of a 2.50% price inflation assumption and a 4.40% real return assumption.

**SALARY INCREASES:** 4.00% at all ages.

#### **COST OF LIVING ADJUSTMENTS:**

| Group  | Rate  |
|--|-------|
| Hired prior to January 1, 1981 and retired prior to October 2, 2011    | 4.00% |
| Hired on or after January 1, 1981 and retired prior to October 2, 2011 | 2.60% |
| Retired on or after October 2, 2011                                    | 2.25% |
| All surviving spouses of active or retired members                     | 2.25% |

PAYROLL GROWTH ASSUMPTION: 3.00% per annum.

**SEPARATIONS BEFORE SERVICE RETIREMENT:** Representative values of the assumed annual rates of separation before service retirement are as follows:

WITHDRAWAL: 1% for all ages

**DISABILITY:** 20% of 1975 Social Security Table

#### SEPARATIONS DUE TO RETIREMENT:

15% are assumed to retire at 30 years of service or 63 years of age.

15% are assumed to retire at 25 years of service at age 63.

25% are assumed to retire at age 65 and 10 years of service.

10% are assumed to retire after age 65 and 10 years of service.

The remaining actives are assumed to retire at age 70.





# SCHEDULE C - ACTUARIAL ASSUMPTIONS AND METHODS

**PRE-RETIREMENT MORTALITY:** The Pub-2010 General Above-Median Employee Mortality Table projected generationally with scale MP-2020. Representative values of the assumed annual rates of mortality while in active service are as follows:

| Annual Rates of Death* |             |               |  |  |  |  |
|------------------------|-------------|---------------|--|--|--|--|
| <u>Age</u>             | <u>Male</u> | <u>Female</u> |  |  |  |  |
| 30                     | 0.031%      | 0.013%        |  |  |  |  |
| 35                     | 0.041%      | 0.021%        |  |  |  |  |
| 40                     | 0.057%      | 0.033%        |  |  |  |  |
| 45                     | 0.085%      | 0.051%        |  |  |  |  |
| 50                     | 0.129%      | 0.076%        |  |  |  |  |
| 55                     | 0.190%      | 0.112%        |  |  |  |  |
| 60                     | 0.276%      | 0.169%        |  |  |  |  |
| 65                     | 0.405%      | 0.270%        |  |  |  |  |

<sup>\*</sup> Rates shown are for 2010, the base year of the table.

**POST-RETIREMENT MORTALITY:** The Pub-2010 Mortality Tables projected generationally with scale MP-2020:

- Service Retirees: General, Above-Median, Healthy Retiree Mortality Table.
- Disabled Retirees:General, Disabled Retiree Mortality Table.
- Beneficiaries: General, Above-Median Contingent Annuitant Mortality Table.

| Annual Rates of Death* |                |               |                 |               |                 |               |
|------------------------|----------------|---------------|-----------------|---------------|-----------------|---------------|
|                        | <u>Healthy</u> |               | <u>Disabled</u> |               | <u>Survivor</u> |               |
| <u>Age</u>             | <u>Male</u>    | <u>Female</u> | <u>Male</u>     | <u>Female</u> | <u>Male</u>     | <u>Female</u> |
| 50                     | 0.267%         | 0.212%        | 1.605%          | 1.483%        | 0.701%          | 0.320%        |
| 55                     | 0.387%         | 0.275%        | 2.114%          | 1.742%        | 0.824%          | 0.439%        |
| 60                     | 0.552%         | 0.371%        | 2.503%          | 1.956%        | 1.012%          | 0.596%        |
| 65                     | 0.820%         | 0.595%        | 3.044%          | 2.256%        | 1.337%          | 0.839%        |
| 70                     | 1.381%         | 1.032%        | 3.901%          | 2.862%        | 2.058%          | 1.272%        |
| 75                     | 2.437%         | 1.827%        | 5.192%          | 4.003%        | 3.272%          | 2.037%        |
| 80                     | 4.391%         | 3.260%        | 7.348%          | 6.007%        | 5.190%          | 3.410%        |
| 85                     | 7.965%         | 6.019%        | 10.815%         | 9.331%        | 8.473%          | 6.075%        |
| 90                     | 13.712%        | 11.139%       | 16.253%         | 13.665%       | 13.984%         | 10.979%       |

<sup>\*</sup> Rates are shown for 2010, the base year of the tables.

In our opinion, the generational projection of the mortality rates with scale MP-2020 provide a sufficient margin in the assumed rates of mortality to allow for additional improvement in mortality experience.





# SCHEDULE C - ACTUARIAL ASSUMPTIONS AND METHODS

**ASSET METHOD:** Market Value of Assets.

**VALUATION METHOD:** Entry Age Normal cost method.

**SPOUSES:** For members who have elected spouse coverage, husbands are assumed to be three years older than their wives.

**PERCENT MARRIED:** 80% of active members are assumed to be married.

