

The experience and dedication you deserve



GASB STATEMENT NO. 68 REPORT

FOR THE

CONNECTICUT STATE TEACHERS' RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2023

FOR FINANCIAL REPORTING AS OF JUNE 30, 2024



www.CavMacConsulting.com



February 14, 2024

Board of Directors Connecticut State Teachers' Retirement System 165 Capitol Ave Hartford, CT 06106-1673

Members of the Board:

Presented in this report is information to assist the Connecticut State Teachers' Retirement System in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 68 and to identify the information to be provided by the actuary, Cavanaugh Macdonald Consulting (CMC). The information is presented for the period ending June 30, 2023 (the Measurement Date).

GASB Statement Number 68 establishes accounting and financial reporting requirements for governmental employers that provide pension benefits to their employees through a trust.

The annual actuarial valuation used as a basis for much of the information presented in this report, including the Net Pension Liability, was performed as of June 30, 2023. The valuation was based upon data, furnished by the Retirement System staff, for active, inactive and retired members along with pertinent financial information. The schedules contained within this report for participating employers are based on the expected contribution effort as measured June 30, 2023, the date of the latest annual valuation.

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.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144 Phone (678) 388-1700 • Fax (678) 388-1730 www.CavMacConsulting.com Offices in Kennesaw, GA • Bellevue, NE



Board of Directors February 14, 2024 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 internally consistent and individually reasonable 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 68. 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 opinion contained herein.

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.

Sincerely yours,

John J. Garrett ASA, FCA, MAAA Principal and Consulting Actuary

Ben Moble

Ben Mobley ASA, FCA, MAAA Consulting Actuary



TABLE OF CONTENTS

| <u>Section</u> | Item | Page No. |
|----------------|------------------------------------|----------|
| Ι | Introduction | 1 |
| Π | Summary of Collective Amounts | 3 |
| III | Notes to Financial Statements | 4 |
| IV | Collective Pension Expense | 10 |
| V | Required Supplementary Information | 12 |

Schedule

| А | Schedule of Employer Allocations | 14 |
|---|--|----|
| В | Schedule of Pension Amounts by Employer | 20 |
| С | Summary of Benefit Provisions Evaluated | 26 |
| D | Statement of Actuarial Assumptions and Methods | 29 |



REPORT OF THE ANNUAL GASB STATEMENT NO. 68 REQUIRED INFORMATION FOR THE EMPLOYERS PARTCIPATING IN THE CONNECTICUT STATE TEACHERS' RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2023

SECTION I – INTRODUCTION

The Governmental Accounting Standards Board issued Statement No. 68 (GASB 68), "*Accounting and Financial Reporting For Pensions*" in June 2012. GASB 68's effective date is for an employer's fiscal year beginning after June 15, 2014. The Connecticut State Teachers' Retirement System (System) is a cost-sharing multiple employer defined benefit pension plan with a special funding situation.

This report, prepared as of June 30, 2023 (the Measurement Date), presents information to assist the employers participating in the System in meeting the requirements of GASB 68 for the fiscal year ending June 30, 2024 (Reporting Date). 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, 2023. The results of that valuation were detailed in a report dated November 3, 2023.

The Net Pension Liability (NPL) shown in the GASB Statement No. 67 Report for the Connecticut State Teachers' Retirement System prepared as of June 30, 2023 is the collective NPL used for purposes of GASB 68. Please refer to that report for the derivation of the collective NPL.

Pension Expense (PE) includes amounts for service cost (the normal cost under the Entry Age Normal actuarial cost method for the year), interest on the Total Pension Liability (TPL), changes in benefit structure, amortization of increases/decreases in liability due to actuarial experience and actuarial assumption changes, and amortization of investment gains/losses. The actuarial experience and assumption change impacts are amortized over the average expected remaining service life of the Plan membership as of the Measurement Date, and investment gains/losses are amortized over five years. The development of the collective PE is shown in Section IV.

The unamortized portions of each year's experience, assumption changes and investment gains/losses are used to develop deferred inflows and outflows, which also must be included in the employer's and non-employer contributing entities' financial statements. The development of the collective deferred inflows and outflows is shown in Section III.



The State makes all contributions to the System on behalf of employees of the participating districts. Therefore, participating employers are considered to be in a special funding situation as defined by GASB 68 and the State is treated as a non-employer contributing entity in the System. Since the districts do not contribute directly to the System, there is no NPL or deferred inflows or outflows to report in the financial statements of the districts. However, the notes to the financial statements must disclose the portion of the non-employer contributing entities' total proportionate share of the collective NPL that is associated with the employer. In addition, each district must recognize the total PE associated with the district as well as revenue in an amount equal to the non-employer contributing entities' total proportionate share of the collective PE associated with the district. The State, as a non-employer contributing entity, would report the entire collective amounts of the NPL, Deferred Inflows and Outflows and PE.

Schedule A of this report shows the total amount of employer contributions from the State as support provided to the districts for the year ending June 30, 2023. Schedule A also shows the proportionate share percentages that have been determined based on these contributions.

Based on these percentages we have determined the proportionate share amounts of the NPL associated with each participating employer and the employer PE and revenue for State support for each participating employer. These amounts are shown in Schedule B.

Section II of this report is a summary of the principal results of the collective amounts under GASB 68. Section III provides the results of all the necessary calculations, presented in the order laid out in GASB 68 for note disclosure and Section V shows the Required Supplementary Information (RSI).



SECTION II - SUMMARY OF COLLECTIVE AMOUNTS (\$ IN THOUSANDS)

| Valuation Date (VD): | June 30, 2023 |
|---|---------------|
| Measurement Date (MD): | June 30, 2023 |
| Reporting Date (RD): | June 30, 2024 |
| | |
| Single Equivalent Interest Rate (SEIR): | |
| Long-Term Expected Rate of Return | 6.90% |
| Municipal Bond Index Rate at Measurement Date | 3.65% |
| Fiscal Year in which Plan's Fiduciary Net Position is | |
| projected to be depleted from future benefit payments for | N/A |
| current members | |
| Single Equivalent Interest Rate | 6.90% |
| Collective Net Pension Liability: | |
| Total Pension Liability (TPL) | \$ 40,877,027 |
| Fiduciary Net Position (FNP) | 23,869,732 |
| Net Pension Liability (NPL = $TPL - FNP$) | \$ 17,007,295 |
| FNP as a percentage of TPL | 58.39% |
| | |
| Collective Pension Expense (PE): | \$1,628,350 |
| Collective Deferred Outflows of Resources: | \$2,531,214 |
| Collective Deferred Inflows of Resources: | \$134,059 |



SECTION III –NOTES TO FINANCIAL STATEMENTS

The material presented herein will follow the order presented in GASB 68. Paragraph numbers are provided for ease of reference. Amounts are shown in aggregate. Please refer to Schedule B of this report for the proportionate share of certain pension amounts as required by GASB 68.

Paragraphs 77 and 78(a)-(f): These paragraphs require information to be disclosed regarding the actuarial assumptions used to measure the TPL. The actuarial assumptions used in the June 30, 2023 valuation were based on the results of an actuarial experience study for the period July 1, 2014 – June 30, 2019. The complete set of actuarial assumptions utilized in developing the TPL are outlined in Schedule D. The TPL was determined by an actuarial valuation as of June 30, 2023, using the following key actuarial assumptions:

| Inflation | 2.50 percent |
|---------------------------|---|
| Salary increases | 3.00 – 6.50 percent, including inflation |
| Investment rate of return | 6.90 percent, net of pension plan investment expense, including inflation |

Mortality rates were based on the PubT-2010 Healthy Retiree Table (adjusted 105% for males and 103% for females at ages 82 and above), projected generationally with MP-2019 for the period after service retirement. The PubT-2010 Disabled Retiree Table projected generationally with MP-2019 was used for the period after disability retirement. The PubT-2010 Contingent Survivor Table projected generationally with MP-2019 and set forward 1 year for both males and females was used for survivors and beneficiaries. The PubT-2010 Employee Table projected generationally with MP-2019 was used for active members.

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 Real Rate of Return |
|--------------------------------------|-------------------|---|
| Global Equity | 37.0% | 6.8% |
| Public Credit | 2.0 | 2.9 |
| Core Fixed Income | 13.0 | 0.4 |
| Liquidity Fund | 1.0 | -0.4 |
| Risk Mitigation | 5.0 | 0.1 |
| Private Equity | 15.0 | 11.2 |
| Private Credit | 10.0 | 6.1 |
| Real Estate | 10.0 | 6.2 |
| Infrastructure and Natural Resources | 7.0 | 7.7 |

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 78 (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%) |
| Collective net pension liability | \$22,219,023 | \$17,007,295 | \$12,680,931 |

Paragraph 80(a): This paragraph requires disclosure of the employer's proportionate share of the collective NPL and if an employer has a special funding situation the portion of the non-employer contributing entities' proportional share of the collective NPL that is associated with the employer. These amounts are shown in Schedule B.

Paragraph 80(b): This paragraph requires disclosure of the employer's proportion (percentage) of the collective NPL and the changes in proportion since the prior measurement date. 100% of the collective NPL is allocated to the State.

Paragraph 80(c): June 30, 2023 is the actuarial valuation date upon which the TPL is based.

Paragraph 80(d): There were no changes in assumptions that affected the measurement of the TPL since the prior measurement date.

Paragraph 80(e): There were no changes in benefit provisions that affected the measurement of the TPL since the prior measurement date.

Paragraph 80(f): Not applicable.

Paragraph 80(g): Please see Section IV of this report for the development of the collective pension expense. The PE for each employer is shown in Schedule B.



Paragraph 80(h): Since certain expense items are amortized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts serve to reduce collective pension expense they are labeled deferred inflows. If they will increase collective pension expense they are labeled deferred inflows. If they amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions, if any, are amortized over the average expected remaining service life of the active and inactive Plan members at the beginning of the fiscal year. Investment gains and losses are amortized over a fixed five year period.

The table below provides a summary in the difference between projected and actual earnings on plan investments.

| | Investment Earnings (Gain)/Loss as of Jun (\$ thousands) | ie 30, 2023 |
|--------|---|--------------|
| a | Expected asset return rate | 6.90% |
| b | Beginning of year market value assets (BOY) | \$21,549,721 |
| C J | End of year market value assets (EOY) | 23,869,732 |
| d | Expected return on BOY for plan year (a x b) | 1,486,931 |
| | External Cash Flow | 1,578,038 |
| | Contributions - employer Contributions - member | 397,818 |
| | Refunds of contributions | 0 |
| | Benefits paid | (2,359,976) |
| | Admin expenses | 0 |
| | Other changes (net of receivable)* | (2,672) |
| e | Net cash flow | (386,792) |
| f | Expected return on net cash flow (a x 0.5 x e) | (13,344) |
| g | Projected earnings for plan year $(d + f)$ | 1,473,587 |
| h | Net investment income | 1,878,740 |
| | Investment earnings (gain)/loss (g -h) | (405,153) |

*Other changes are comprised of participating employer contributions for Early Retirement Incentive Plans, service purchases, etc.



The table below provides a summary of the determination of the average expected remaining service life for the entire Plan membership determined at the beginning of the year.

| Category | Number (1) | Average Years of Working Lifetime (2) |
|--|---------------|---|
| a. Active Members | 52,200 | 12.39 |
| b. Inactive Members | 50,644 | 0.00 |
| c. Total | 102,844 | |
| Weighted Average Years of Working Lifetime | | |
| [(a1 * a2) + (b1 * b2)]/c1 | | 6.29 |

The table below provides a summary of the collective deferred inflows and outflows as of the Measurement Date. 100% of these amounts are allocated to the State.

| | Deferred Outflows of Resources | Deferred Inflows of Resources |
|--|-----------------------------------|----------------------------------|
| Differences between expected and actual experience | \$602,063 | \$134,059 |
| Changes of assumptions | 1,236,893 | 0 |
| Net difference between projected and actual earnings on plan investments | 692,258 | 0 |
| Employer contributions subsequent to the Measurement Date | <u>0</u> | <u>0</u> |
| Total | <u>\$2,531,214</u> | <u>\$134,059</u> |



Paragraph 80(i): Collective amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in the collective pension expense as follows. 100% of these amounts are allocated to the State.

| Deferred Amounts to be Recognized in Fiscal Years Following the Reporting Date: | | |
|--|-----------|--|
| Year 1 | \$984,797 | |
| Year 2 | 478,037 | |
| Year 3 | 821,800 | |
| Year 4 | 55,142 | |
| Year 5 | 53,995 | |
| Year 6 | 3,384 | |
| Thereafter | 0 | |

Paragraph 80(j): The amount of revenue recognized for the support provided by non-employer contributing entities for the participating employers is provided in Schedule B.



SECTION IV – COLLECTIVE PENSION EXPENSE

As noted earlier, the collective Pension Expense (PE) consists of a number of different items. GASB 68 refers to the first as Service Cost which is the Normal Cost using the Entry Age Normal actuarial funding method. The second item is interest on the beginning Total Pension Liability (TPL) and the cash flow during the year at the 6.90% rate of return in effect as of the previous measurement date. The next three items refer to any changes that occurred in the TPL due to:

- benefit changes, or
- actual versus expected experience, or
- changes in actuarial assumptions.

Benefit changes, which are reflected immediately in PE, can be positive, if there is a benefit improvement for existing Plan members, or negative if there is a benefit reduction. For the year ended June 30, 2023, there were no changes.

The next item to be recognized is the portion of current year changes in TPL due to actual versus expected Plan experience for the year. The portion to recognize in the current year is determined by spreading the total change over the average expected remaining service life of the entire Plan membership determined at the beginning of the year. The average expected remaining service life of active members is the average number of years the active members are expected to remain active. For the year ended June 30, 2023 this number of years for the active members is 12.39. The average expected remaining service life of the inactive members is, of course, zero. Therefore, the number of years to use for the amortization is the weighted average for all active and inactive members, or 6.29 years.

The last item under changes in TPL are changes in actuarial assumptions. There were no changes in assumptions since the last measurement date. If there was a change in TPL due to changes in actuarial assumptions, recognition of the change would also be spread over the average expected remaining service life of the plan membership.

Member contributions for the year and projected earnings on the Fiduciary Net Position (FNP), again at the discount rate used to calculate the liabilities, are subtracted from the amount determined thus far. One-fifth of current period differences between projected and actual investment earnings on the FNP are recognized in the pension expense.



The current year portions of previously determined experience, assumption and earnings amounts, recognized as deferred outflows and inflows (see Section III) are included also. Deferred outflows are added to the PE while deferred inflows are subtracted from the PE. Finally, administrative expenses and other miscellaneous items are included.

The calculation of the Collective Pension Expense determined as of the measurement date is shown in the following table:

| Collective Pension Expense Determined as of the Measurement Date (\$ thousands) | | |
|--|--------------------|--|
| Service Cost at end of year | \$634,409 | |
| Interest on the TPL and net cash flow | 2,668,940 | |
| Current-period benefit changes | 0 | |
| Expensed portion of current-period difference between expected and actual experience in the total pension liability | 11,665 | |
| Expensed portion of current-period changes of assumptions | 0 | |
| Member contributions | (397,818) | |
| Projected earnings on plan investments | (1,473,587) | |
| Expensed portion of current-period differences between projected and actual earnings on plan investments | (81,031) | |
| Administrative expense | 0 | |
| Other | (825,391) | |
| Recognition of beginning deferred outflows of resources as pension expense | 1,201,831 | |
| Recognition of beginning deferred inflows of resources as pension expense | (110,668) | |
| Collective Pension Expense | <u>\$1,628,350</u> | |



<u>SECTION V – REQUIRED SUPPLEMENTARY INFORMATION</u>

Paragraphs 81(a)-(b): CMC was not required to supply this information.

Paragraph 82:

Changes of benefit terms:

- 2022
 - Legislation was passed restoring the 25% wear down of Plan N benefits to vested members as of June 30, 2019.
- 2019
 - HB 7424 made the following provision changes:
 - Beginning July 1, 2019, annual interest credited on mandatory contributions set at 4.0%.
 - For members retiring on or after July 1, 2019 with a partial refund option election (Plan N), if 50% of the benefits paid prior to death do not exceed the Member's mandatory contributions plus interest frozen at the date of the benefit commencement, the difference is paid to the Member's beneficiary.
- 2018
 - Beginning January 1, 2018, member contributions increased from 6% to 7% of salary.

Changes of assumptions:

- 2020
 - The Board adopted new assumptions as the result of an experience study for the five-year period ending June 30, 2019. The changes in assumptions are summarized below:
 - Decrease the annual rate of real wage increase assumption from 0.75% to 0.50%.
 - Decrease payroll growth assumption from 3.25% to 3.00%.
 - Rates of withdrawal, disability, retirement, mortality, and assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience.



- 2019
 - The Board adopted new assumptions in conjunction with HB 7424. The changes in assumptions are summarized below:
 - Reduce the inflation assumption from 2.75% to 2.50%.
 - Reduce the real rate of return assumption from 5.25% to 4.40% which, when combined with the inflation assumption change results in a decrease in the investment rate of return assumption from 8.00% to 6.90%.
 - Increase the annual rate of wage increase assumption from 0.50% to 0.75%.
 - Phase in to a level dollar amortization method for the June 30, 2024 valuation.
- 2016
 - Rates of withdrawal, disability, retirement, mortality, and assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience. These assumptions were recommended as part of the Experience Study for the System for the five year period ended June 30, 2015.

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. The following actuarial methods and assumptions were used to determine the most recent contributions reported in that schedule:

| Actuarial cost method Amortization method | Entry age Level percent of pay closed, grading to a level dollar amortization for 6/30/2024 valuation |
|---|---|
| Remaining amortization period Asset valuation method | 27.8 years 4-year smoothed market |
| Inflation Salary increase Investment rate of return | 2.50 percent3.00-6.50 percent, including inflation6.90 percent, net of investment related expense |



SCHEDULE A

CONNECTICUT STATE TEACHERS' RETIREMENT SYSTEM Schedule of Employer Allocations as of June 30, 2023

| Employer Code | Employer | 2023 Expected Employer Contribution Effort for Allocation Purposes | Employer Allocation Percentage |
|------------------|---------------------------|--|-----------------------------------|
| 001 | ANDOVER BD OF ED | \$ 646,121 | 0.040945% |
| 002 | ANSONIA BD OF ED | 5,885,513 | 0.372964% |
| 003 | ASHFORD BD OF ED | 1,132,974 | 0.071796% |
| 004 | AVON BD OF ED | 11,076,211 | 0.701898% |
| 005 | BARKHAMSTED BD OF ED | 565,977 | 0.035866% |
| 007 | BERLIN BD OF ED | 8,650,499 | 0.548181% |
| 008 | BETHANY BD OF ED | 1,066,835 | 0.067605% |
| 009 | BETHEL BD OF ED | 9,243,066 | 0.585732% |
| 010 | HIGHVILLE CHARTER SCH | 586,550 | 0.037170% |
| 011 | BLOOMFIELD BD OF ED | 6,718,665 | 0.425761% |
| 012 | BOLTON BD OF ED | 2,501,166 | 0.158498% |
| 013 | BOZRAH BD OF ED | 633,582 | 0.040150% |
| 014 | BRANFORD BD OF ED | 9,435,010 | 0.597895% |
| 015 | BRIDGEPORT BD OF ED | 44,964,710 | 2.849406% |
| 017 | BRISTOL BD OF ED | 21,915,563 | 1.388785% |
| 018 | BROOKFIELD BD OF ED | 7,847,856 | 0.497317% |
| 019 | BROOKLYN BD OF ED | 2,402,184 | 0.152226% |
| 020 | CHILDRENS CENTER COM PROG | 141,130 | 0.008943% |
| 021 | CANAAN BD OF ED | 290,526 | 0.018411% |
| 022 | CANTERBURY BD OF ED | 1,374,354 | 0.087093% |
| 023 | CANTON BD OF ED | 4,472,525 | 0.283423% |
| 024 | CHAPLIN BD OF ED | 571,428 | 0.036211% |
| 025 | CHESHIRE BD OF ED | 13,269,669 | 0.840897% |
| 026 | CHESTER BD OF ED | 498,222 | 0.031572% |
| 027 | CLINTON BD OF ED | 5,825,950 | 0.369189% |
| 028 | COLCHESTER BD OF ED | 6,987,121 | 0.442773% |
| 029 | AMISTAD ACADEMY | 1,407,856 | 0.089216% |
| 030 | COLEBROOK BD OF ED | 307,889 | 0.019511% |
| 031 | COLUMBIA BD OF ED | 1,657,592 | 0.105041% |
| 032 | CORNWALL BD OF ED | 415,067 | 0.026303% |
| 033 | COVENTRY BD OF ED | 4,809,595 | 0.304783% |
| 034 | CROMWELL BD OF ED | 5,593,751 | 0.354475% |
| 035 | DANBURY BD OF ED | 30,701,862 | 1.945572% |
| 036 | DARIEN BD OF ED | 17,385,018 | 1.101686% |
| 037 | DEEP RIVER BD OF ED | 505,765 | 0.032050% |
| 038 | DERBY BD OF ED | 4,355,786 | 0.276025% |
| 040 | EASTFORD BD OF ED | 480,832 | 0.030470% |
| 041 | EAST GRANBY BD OF ED | 3,110,213 | 0.197094% |



| Employer Code | Employer | 2023 Expected Employer Contribution Effort for Allocation Purposes | Employer Allocation Percentage |
|------------------|------------------------|--|-----------------------------------|
| 042 | EAST HADDAM BD OF ED | \$ 3,598,634 | 0.228045% |
| 043 | EAST HAMPTON BD OF ED | 5,894,931 | 0.373561% |
| 044 | EAST HARTFORD BD OF ED | 19,958,365 | 1.264758% |
| 045 | EAST HAVEN BD OF ED | 8,293,111 | 0.525533% |
| 046 | EAST LYME BD OF ED | 8,524,354 | 0.540187% |
| 047 | EASTON BD OF ED | 3,061,361 | 0.193998% |
| 048 | EAST WINDSOR BD OF ED | 4,159,397 | 0.263580% |
| 049 | ELLINGTON BD OF ED | 7,664,363 | 0.485689% |
| 050 | ENFIELD BD OF ED | 15,244,828 | 0.966062% |
| 051 | ESSEX BD OF ED | 744,682 | 0.047190% |
| 052 | FAIRFIELD BD OF ED | 32,882,241 | 2.083742% |
| 053 | FARMINGTON BD OF ED | 12,609,209 | 0.799043% |
| 054 | FRANKLIN BD OF ED | 486,894 | 0.030854% |
| 055 | GLASTONBURY BD OF ED | 19,028,341 | 1.205823% |
| 057 | GRANBY BD OF ED | 5,149,186 | 0.326303% |
| 058 | GREENWICH BD OF ED | 37,448,216 | 2.373087% |
| 059 | GRISWOLD BD OF ED | 4,552,862 | 0.288514% |
| 060 | GROTON BD OF ED | 13,833,577 | 0.876631% |
| 061 | GUILFORD BD OF ED | 10,213,688 | 0.647240% |
| 063 | HAMDEN BD OF ED | 17,574,994 | 1.113724% |
| 064 | HAMPTON BD OF ED | 271,571 | 0.017209% |
| 065 | HARTFORD BD OF ED | 46,853,273 | 2.969084% |
| 066 | HARTLAND BD OF ED | 468,434 | 0.029685% |
| 068 | HEBRON BD OF ED | 2,179,766 | 0.138131% |
| 069 | KENT BD OF ED | 660,214 | 0.041838% |
| 070 | KILLINGLY BD OF ED | 5,825,608 | 0.369168% |
| 072 | LEBANON BD OF ED | 3,142,433 | 0.199135% |
| 073 | LEDYARD BD OF ED | 7,070,348 | 0.448047% |
| 074 | LISBON BD OF ED | 1,164,920 | 0.073821% |
| 075 | LITCHFIELD BD OF ED | 3,127,583 | 0.198194% |
| 077 | MADISON BD OF ED | 8,951,886 | 0.567279% |
| 078 | MANCHESTER BD OF ED | 20,665,026 | 1.309539% |
| 079 | MANSFIELD BD OF ED | 3,863,277 | 0.244815% |
| 080 | MARLBOROUGH BD OF ED | 1,523,929 | 0.096571% |
| 081 | MERIDEN BD OF ED | 20,812,796 | 1.318903% |
| 085 | MIDDLETOWN BD OF ED | 14,804,684 | 0.938170% |
| 086 | MILFORD BD OF ED | 19,620,801 | 1.243367% |
| 087 | MONROE BD OF ED | 11,046,666 | 0.700025% |
| 088 | MONTVILLE BD OF ED | 6,446,742 | 0.408529% |
| 090 | NAUGATUCK BD OF ED | 11,229,229 | 0.711594% |
| 091 | NEW BRITAIN BD OF ED | 28,620,069 | 1.813649% |
| 092 | NEW CANAAN BD OF ED | 16,064,487 | 1.018004% |
| 093 | NEW FAIRFIELD BD OF ED | 7,413,769 | 0.469809% |



| Employer Code | Employer | 2023 Expected Employer Contribution Effort for Allocation Purposes | Employer Allocation Percentage |
|------------------|---------------------------|--|-----------------------------------|
| 094 | NEW HARTFORD BD OF ED | \$ 1,237,660 | 0.078430% |
| 095 | NEW HAVEN BD OF ED | 50,704,543 | 3.213148% |
| 096 | NEWINGTON BD OF ED | 12,660,883 | 0.802318% |
| 097 | NEW LONDON BD OF ED | 8,776,210 | 0.556147% |
| 099 | NEW MILFORD BD OF ED | 10,829,176 | 0.686243% |
| 100 | NEWTOWN BD OF ED | 13,394,725 | 0.848821% |
| 101 | NORFOLK BD OF ED | 245,739 | 0.015572% |
| 102 | NORTH BRANFORD BD OF ED | 5,131,948 | 0.325211% |
| 103 | NORTH CANAAN BD OF ED | 703,762 | 0.044597% |
| 104 | NORTH HAVEN BD OF ED | 9,705,092 | 0.615010% |
| 105 | NORTH STONINGTON BD OF ED | 2,419,310 | 0.153311% |
| 106 | NORWALK BD OF ED | 40,924,916 | 2.593405% |
| 107 | NORWICH BD OF ED | 11,336,482 | 0.718391% |
| 108 | NORWICH FREE ACADEMY | 6,039,240 | 0.382706% |
| 110 | OLD SAYBROOK BD OF ED | 4,580,973 | 0.290295% |
| 111 | ORANGE BD OF ED | 3,837,521 | 0.243183% |
| 112 | OXFORD BD OF ED | 4,858,213 | 0.307864% |
| 113 | PLAINFIELD BD OF ED | 5,196,697 | 0.329314% |
| 114 | PLAINVILLE BD OF ED | 6,870,341 | 0.435372% |
| 115 | PLYMOUTH BD OF ED | 4,070,356 | 0.257938% |
| 116 | POMFRET BD OF ED | 1,038,826 | 0.065830% |
| 117 | PORTLAND BD OF ED | 3,822,363 | 0.242222% |
| 118 | PRESTON BD OF ED | 1,420,659 | 0.090027% |
| 120 | PUTNAM BD OF ED | 3,113,488 | 0.197301% |
| 121 | REDDING BD OF ED | 3,581,658 | 0.226969% |
| 122 | RSD #1 | 2,267,796 | 0.143710% |
| 123 | RSD #4 | 2,330,548 | 0.147686% |
| 124 | RSD #5 | 7,334,141 | 0.464763% |
| 125 | RSD #6 | 3,027,510 | 0.191853% |
| 126 | RSD #7 | 3,013,713 | 0.190979% |
| 127 | RSD #8 | 4,253,777 | 0.269561% |
| 128 | RIDGEFIELD BD OF ED | 16,459,179 | 1.043015% |
| 129 | ROCKY HILL BD OF ED | 8,533,575 | 0.540771% |
| 131 | SALEM BD OF ED | 1,151,554 | 0.072974% |
| 132 | SALISBURY BD OF ED | 942,849 | 0.059748% |
| 133 | SCOTLAND BD OF ED | 349,152 | 0.022126% |
| 134 | SEYMOUR BD OF ED | 5,914,367 | 0.374792% |
| 135 | SHARON BD OF ED | 593,691 | 0.037622% |
| 136 | SHELTON BD OF ED | 13,362,389 | 0.846772% |
| 137 | SHERMAN BD OF ED | 1,356,268 | 0.085946% |
| 138 | SIMSBURY BD OF ED | 13,611,790 | 0.862577% |
| 139 | SOMERS BD OF ED | 4,293,337 | 0.272068% |
| 141 | SOUTHINGTON BD OF ED | 17,393,488 | 1.102222% |



| Employer Code | Employer | 2023 Expected Employer Contribution Effort for Allocation Purposes | Employer Allocation Percentage |
|------------------|------------------------|--|-----------------------------------|
| 142 | SOUTH WINDSOR BD OF ED | \$ 14,895,234 | 0.943908% |
| 143 | SPRAGUE BD OF ED | 625,671 | 0.039649% |
| 144 | STAFFORD BD OF ED | 4,441,870 | 0.281481% |
| 145 | STAMFORD BD OF ED | 53,633,048 | 3.398717% |
| 146 | STATE BD OF ED | 17,544,864 | 1.111815% |
| 149 | DCYS RECG HOME | 615,984 | 0.039035% |
| 150 | STERLING BD OF ED | 917,376 | 0.058134% |
| 151 | STONINGTON BD OF ED | 6,039,547 | 0.382725% |
| 152 | STRATFORD BD OF ED | 20,647,061 | 1.308401% |
| 153 | SUFFIELD BD OF ED | 6,615,473 | 0.419221% |
| 154 | THOMASTON BD OF ED | 2,589,041 | 0.164067% |
| 155 | THOMPSON BD OF ED | 2,724,715 | 0.172665% |
| 156 | TOLLAND BD OF ED | 6,462,339 | 0.409517% |
| 157 | TORRINGTON BD OF ED | 11,612,950 | 0.735911% |
| 158 | TRUMBULL BD OF ED | 20,709,837 | 1.312379% |
| 159 | UNION BD OF ED | 213,142 | 0.013507% |
| 160 | VERNON BD OF ED | 9,809,616 | 0.621634% |
| 161 | VOLUNTOWN BD OF ED | 764,365 | 0.048438% |
| 162 | WALLINGFORD BD OF ED | 19,792,710 | 1.254261% |
| 165 | WATERBURY BD OF ED | 41,291,738 | 2.616650% |
| 166 | WATERFORD BD OF ED | 8,314,455 | 0.526886% |
| 167 | WATERTOWN BD OF ED | 7,540,804 | 0.477859% |
| 168 | WESTBROOK BD OF ED | 2,822,925 | 0.178888% |
| 169 | WEST HARTFORD BD OF ED | 30,227,801 | 1.915531% |
| 170 | WEST HAVEN BD OF ED | 16,180,979 | 1.025386% |
| 171 | WESTON BD OF ED | 8,563,416 | 0.542662% |
| 172 | WESTPORT BD OF ED | 21,595,954 | 1.368532% |
| 173 | WETHERSFIELD BD OF ED | 10,798,432 | 0.684295% |
| 174 | WILLINGTON BD OF ED | 1,377,113 | 0.087267% |
| 175 | WILTON BD OF ED | 14,973,686 | 0.948880% |
| 176 | WINCHESTER BD OF ED | 1,887,886 | 0.119635% |
| 177 | WINDHAM BD OF ED | 9,221,662 | 0.584375% |
| 178 | WINDSOR BD OF ED | 11,640,862 | 0.737679% |
| 179 | WINDSOR LOCKS BD OF ED | 6,079,432 | 0.385253% |
| 180 | WINSTED GILBERT SCHOOL | 1,358,654 | 0.086098% |
| 181 | WOLCOTT BD OF ED | 6,490,723 | 0.411316% |
| 182 | WOODBRIDGE BD OF ED | 2,568,737 | 0.162780% |
| 184 | WOODSTOCK BD OF ED | 1,959,495 | 0.124173% |
| 185 | WOODSTOCK ACADEMY | 2,715,525 | 0.172082% |
| 186 | UNIVERSITY OF CONN | 458,355 | 0.029046% |
| 194 | RSD #9 | 3,522,562 | 0.223224% |
| 197 | CCI SOMERS | 91,275 | 0.005784% |
| 198 | DCF HIGH MEADOWS | , | 0.000000% |



| Employer Code | Employer | 2023 Expected Employer Contribution Effort for Allocation Purposes | Employer Allocation Percentage |
|------------------|--------------------------------|--|-----------------------------------|
| 201 | RSD #10 \$ | 6,489,522 | 0.411240% |
| 206 | SUPERVISORY DISTRICT #4 | 1,413,764 | 0.089590% |
| 208 | NORTHWESTERN CTC | 130,144 | 0.008247% |
| 209 | MANCHESTER CTC | 175,889 | 0.011146% |
| 210 | NORWALK CTC | 226,554 | 0.014357% |
| 211 | WESTERN CSU | 159,673 | 0.010118% |
| 212 | CENTRAL CSU | 641,671 | 0.040663% |
| 213 | EASTERN CSU | 322,690 | 0.020449% |
| 214 | SOUTHERN CSU | 653,281 | 0.041398% |
| 215 | RSD #11 | 748,323 | 0.047421% |
| 216 | CAPITAL CTC | 49,558 | 0.003140% |
| 217 | HOUSATONIC CTC | 224,869 | 0.014250% |
| 218 | NAUGATUCK VALLEY CTC | 247,423 | 0.015679% |
| 219 | MIDDLESEX CTC | 222,826 | 0.014120% |
| 220 | DEPT OF HIGHER ED | - | 0.000000% |
| 221 | EDADVANCE | 2,119,960 | 0.134341% |
| 222 | RSD #12 | 3,361,264 | 0.213003% |
| 223 | GATEWAY CTC | 233,267 | 0.014782% |
| 225 | RSD #13 | 5,728,931 | 0.363041% |
| 226 | RSD #14 | 5,588,869 | 0.354166% |
| 228 | CCI CHESHIRE | 28,773 | 0.001823% |
| 229 | SHARED SERVICES | 607,375 | 0.038489% |
| 230 | CREC | 30,853,569 | 1.955185% |
| 230 | RSD #15 | 11,406,035 | 0.722799% |
| 233 | RSD #16 | 5,816,871 | 0.368614% |
| 233 | THREE RIVERS CC | 75,854 | 0.004807% |
| 234 | TUNXIS CTC | 102,445 | 0.006492% |
| 236 | QUINEBAUG CTC | 82,946 | 0.005256% |
| 230 | ODYSSEY CHARTER SCH | 866,053 | 0.054882% |
| 240 | CES | 4,846,352 | 0.307113% |
| 240 | ACES | 9,417,898 | 0.596811% |
| 241 | PROJECT LEARN | 7,558,324 | 0.478970% |
| 242 | RSD #17 | 5,764,278 | 0.365281% |
| 243 | ASNUNTUCK CTC | 27,900 | 0.001768% |
| 244 245 | DCF CENTRAL | 27,300 | 0.000000% |
| 243 247 | RSD #18 | 4,812,197 | 0.304948% |
| 247 | DCF MENTAL HEALTH | 7,012,177 | 0.000000% |
| 253 254 | EASTCONN | 2,864,857 | 0.181545% |
| 258 | DCF RIVERVIEW | 2,004,057 | 0.101043% |
| 238 263 | SERVICES FOR THE BLIND | 364,075 | 0.023071% |
| 265 265 | RSD #19 | 3,689,879 | 0.233827% |
| 263 269 | DDS REGION #2 | 3,007,079 | 0.233827% |
| 269 270 | ACADEMIC AWARDS/CHARTER OAK ST | - | |
| 270 | ACADEMIC AWARDS/CHARTER OAK ST | - | 0.000000% |



| Employer Code | Employer | _ | 2023 Expected Employer Contribution Effort for Allocation Purposes | Employer Allocation Percentage |
|------------------|----------------------------|----|--|-----------------------------------|
| 271 | UCONN HEALTH CENTER | \$ | 488,696 | 0.030969% |
| 272 | CCI SUFFIELD | | 26,632 | 0.001688% |
| 273 | CCI NIANTIC | | - | 0.000000% |
| 275 | CHILDRENS CENTER | | 398,727 | 0.025267% |
| 277 | BRIDGE ACADEMY CHARTER SCH | | 704,013 | 0.044613% |
| 278 | COMMON GROUND CHARTER SCH | | 597,514 | 0.037864% |
| 280 | EXPLORATIONS CHARTER SCH | | 309,271 | 0.019598% |
| 281 | INTEGRATED DAY SCHOOL | | 725,208 | 0.045956% |
| 282 | ISAAC CHARTER SCH | | 743,688 | 0.047127% |
| 283 | JUMOKE ACADEMY CHARTER SCH | | 674,953 | 0.042772% |
| 284 | SIDE BY SIDE CHARTER SCH | | 527,312 | 0.033416% |
| 290 | TP WORK AREA 1 | | - | 0.000000% |
| 291 | TP WORK AREA 2 | | - | 0.000000% |
| 295 | MSA PAYROLL | | - | 0.000000% |
| 302 | NEW BEGINNINGS | | 802,893 | 0.050879% |
| 303 | ELM CITY COLLEGE PREP | | 722,475 | 0.045783% |
| 304 | STAMFORD ACADEMY | | - | 0.000000% |
| 305 | PARK CITY PREP | | 630,482 | 0.039954% |
| 307 | AF BRIDGEPORT ACADEMY | | 662,594 | 0.041988% |
| 308 | SERC | | 158,270 | 0.010030% |
| 309 | AF HARTFORD ACADEMY | | 1,273,530 | 0.080703% |
| 311 | BRASS CITY | | 592,964 | 0.037576% |
| 313 | GREAT OAKS CHARTER SCHOOL | | 643,714 | 0.040792% |
| 314 | BTW ACADEMY | | 742,557 | 0.047056% |
| 315 | CAPITAL PREP HARBOR SCH | | 874,896 | 0.055442% |
| 317 | STAMFORD CH SCH EX | | 600,855 | 0.038076% |
| | Total | \$ | 1,578,038,000 | 100.000000% |



SCHEDULE B

CONNECTICUT STATE TEACHERS' RETIREMENT SYSTEM Schedule of Pension Amounts by Employer as of June 30, 2023

| Employer Code | Employer | State's Proportionate Share Of the Net Pension Liability Associated with the District | Pension Expense and Revenue For State Support |
|------------------|---------------------------|---|---|
| 001 | ANDOVER BD OF ED | \$ 6,963,637 \$ | 666,728 |
| 002 | ANSONIA BD OF ED | 63,431,088 | 6,073,159 |
| 003 | ASHFORD BD OF ED | 12,210,558 | 1,169,090 |
| 004 | AVON BD OF ED | 119,373,863 | 11,429,356 |
| 005 | BARKHAMSTED BD OF ED | 6,099,836 | 584,024 |
| 007 | BERLIN BD OF ED | 93,230,760 | 8,926,305 |
| 008 | BETHANY BD OF ED | 11,497,782 | 1,100,846 |
| 009 | BETHEL BD OF ED | 99,617,169 | 9,537,767 |
| 010 | HIGHVILLE CHARTER SCH | 6,321,612 | 605,258 |
| 011 | BLOOMFIELD BD OF ED | 72,410,429 | 6,932,879 |
| 012 | BOLTON BD OF ED | 26,956,222 | 2,580,902 |
| 013 | BOZRAH BD OF ED | 6,828,429 | 653,783 |
| 014 | BRANFORD BD OF ED | 101,685,766 | 9,735,823 |
| 015 | BRIDGEPORT BD OF ED | 484,606,884 | 46,398,303 |
| 017 | BRISTOL BD OF ED | 236,194,762 | 22,614,281 |
| 018 | BROOKFIELD BD OF ED | 84,580,169 | 8,098,061 |
| 019 | BROOKLYN BD OF ED | 25,889,525 | 2,478,772 |
| 020 | CHILDRENS CENTER COM PROG | 1,520,962 | 145,623 |
| 021 | CANAAN BD OF ED | 3,131,213 | 299,796 |
| 022 | CANTERBURY BD OF ED | 14,812,163 | 1,418,179 |
| 023 | CANTON BD OF ED | 48,202,586 | 4,615,118 |
| 024 | CHAPLIN BD OF ED | 6,158,512 | 589,642 |
| 025 | CHESHIRE BD OF ED | 143,013,833 | 13,692,746 |
| 026 | CHESTER BD OF ED | 5,369,543 | 514,103 |
| 027 | CLINTON BD OF ED | 62,789,062 | 6,011,689 |
| 028 | COLCHESTER BD OF ED | 75,303,710 | 7,209,894 |
| 029 | AMISTAD ACADEMY | 15,173,228 | 1,452,749 |
| 030 | COLEBROOK BD OF ED | 3,318,293 | 317,707 |
| 031 | COLUMBIA BD OF ED | 17,864,633 | 1,710,435 |
| 032 | CORNWALL BD OF ED | 4,473,429 | 428,305 |
| 033 | COVENTRY BD OF ED | 51,835,344 | 4,962,934 |
| 034 | CROMWELL BD OF ED | 60,286,609 | 5,772,094 |
| 035 | DANBURY BD OF ED | 330,889,169 | 31,680,722 |
| 036 | DARIEN BD OF ED | 187,366,988 | 17,939,304 |
| 037 | DEEP RIVER BD OF ED | 5,450,838 | 521,886 |
| 038 | DERBY BD OF ED | 46,944,386 | 4,494,653 |
| 040 | EASTFORD BD OF ED | 5,182,123 | 496,158 |
| 041 | EAST GRANBY BD OF ED | 33,520,358 | 3,209,380 |



| Employer Code | Employer | State's Proportionate Share Of the Net Pension Liability Associated with the District | Pension Expense and Revenue For State Support |
|------------------|------------------------|---|---|
| 042 | EAST HADDAM BD OF ED | \$ 38,784,286 \$ | 3,713,371 |
| 043 | EAST HAMPTON BD OF ED | 63,532,621 | 6,082,881 |
| 044 | EAST HARTFORD BD OF ED | 215,101,124 | 20,594,687 |
| 045 | EAST HAVEN BD OF ED | 89,378,948 | 8,557,517 |
| 046 | EAST LYME BD OF ED | 91,871,197 | 8,796,135 |
| 047 | EASTON BD OF ED | 32,993,812 | 3,158,966 |
| 048 | EAST WINDSOR BD OF ED | 44,827,828 | 4,292,005 |
| 049 | ELLINGTON BD OF ED | 82,602,561 | 7,908,717 |
| 050 | ENFIELD BD OF ED | 164,301,014 | 15,730,871 |
| 051 | ESSEX BD OF ED | 8,025,743 | 768,418 |
| 052 | FAIRFIELD BD OF ED | 354,388,149 | 33,930,613 |
| 053 | FARMINGTON BD OF ED | 135,895,600 | 13,011,217 |
| 054 | FRANKLIN BD OF ED | 5,247,431 | 502,411 |
| 055 | GLASTONBURY BD OF ED | 205,077,875 | 19,635,019 |
| 057 | GRANBY BD OF ED | 55,495,314 | 5,313,355 |
| 058 | GREENWICH BD OF ED | 403,597,907 | 38,642,162 |
| 058 | GRISWOLD BD OF ED | 49,068,427 | 4,698,018 |
| 060 | GROTON BD OF ED | 149,008,427 | 14,274,621 |
| 060 | GUILFORD BD OF ED | 149,091,220 | |
| 061 | HAMDEN BD OF ED | | 10,539,333 |
| | | 189,414,326 | 18,135,325 |
| 064 | HAMPTON BD OF ED | 2,926,785 | 280,223 |
| 065 | HARTFORD BD OF ED | 504,960,875 | 48,347,079 |
| 066 | HARTLAND BD OF ED | 5,048,616 | 483,376 |
| 068 | HEBRON BD OF ED | 23,492,347 | 2,249,256 |
| 069 | KENT BD OF ED | 7,115,512 | 681,269 |
| 070 | KILLINGLY BD OF ED | 62,785,491 | 6,011,347 |
| 072 | LEBANON BD OF ED | 33,867,477 | 3,242,615 |
| 073 | LEDYARD BD OF ED | 76,200,675 | 7,295,773 |
| 074 | LISBON BD OF ED | 12,554,955 | 1,202,064 |
| 075 | LITCHFIELD BD OF ED | 33,707,438 | 3,227,292 |
| 077 | MADISON BD OF ED | 96,478,813 | 9,237,288 |
| 078 | MANCHESTER BD OF ED | 222,717,161 | 21,323,878 |
| 079 | MANSFIELD BD OF ED | 41,636,409 | 3,986,445 |
| 080 | MARLBOROUGH BD OF ED | 16,424,115 | 1,572,514 |
| 081 | MERIDEN BD OF ED | 224,309,724 | 21,476,357 |
| 085 | MIDDLETOWN BD OF ED | 159,557,340 | 15,276,691 |
| 086 | MILFORD BD OF ED | 211,463,094 | 20,246,367 |
| 087 | MONROE BD OF ED | 119,055,317 | 11,398,857 |
| 088 | MONTVILLE BD OF ED | 69,479,732 | 6,652,282 |
| 090 | NAUGATUCK BD OF ED | 121,022,891 | 11,587,241 |
| 091 | NEW BRITAIN BD OF ED | 308,452,636 | 29,532,553 |
| 092 | NEW CANAAN BD OF ED | 173,134,943 | 16,576,668 |
| 093 | NEW FAIRFIELD BD OF ED | 79,901,803 | 7,650,135 |



| Employer Code | Employer | State's Proportionate Share Of the Net Pension Liability Associated with the District | Pension Expense and Revenue For State Support |
|------------------|---------------------------|---|---|
| 094 | NEW HARTFORD BD OF ED | \$ 13,338,821 \$ | 1,277,115 |
| 095 | NEW HAVEN BD OF ED | 546,469,562 | 52,321,287 |
| 096 | NEWINGTON BD OF ED | 136,452,589 | 13,064,545 |
| 097 | NEW LONDON BD OF ED | 94,585,561 | 9,056,020 |
| 099 | NEW MILFORD BD OF ED | 116,711,371 | 11,174,438 |
| 100 | NEWTOWN BD OF ED | 144,361,491 | 13,821,777 |
| 101 | NORFOLK BD OF ED | 2,648,376 | 253,567 |
| 102 | NORTH BRANFORD BD OF ED | 55,309,594 | 5,295,573 |
| 103 | NORTH CANAAN BD OF ED | 7,584,743 | 726,195 |
| 104 | NORTH HAVEN BD OF ED | 104,596,565 | 10,014,515 |
| 105 | NORTH STONINGTON BD OF ED | 26,074,054 | 2,496,440 |
| 106 | NORWALK BD OF ED | 441,068,039 | 42,229,710 |
| 107 | NORWICH BD OF ED | 122,178,877 | 11,697,920 |
| 108 | NORWICH FREE ACADEMY | 65,087,938 | 6,231,793 |
| 110 | OLD SAYBROOK BD OF ED | 49,371,327 | 4,727,019 |
| 111 | ORANGE BD OF ED | 41,358,850 | 3,959,870 |
| 112 | OXFORD BD OF ED | 52,359,339 | 5,013,103 |
| 113 | PLAINFIELD BD OF ED | 56,007,403 | 5,362,385 |
| 114 | PLAINVILLE BD OF ED | 74,045,000 | 7,089,380 |
| 115 | PLYMOUTH BD OF ED | 43,868,277 | 4,200,133 |
| 116 | POMFRET BD OF ED | 11,195,902 | 1,071,943 |
| 117 | PORTLAND BD OF ED | 41,195,410 | 3,944,222 |
| 118 | PRESTON BD OF ED | 15,311,157 | 1,465,955 |
| 120 | PUTNAM BD OF ED | 33,555,563 | 3,212,751 |
| 121 | REDDING BD OF ED | 38,601,287 | 3,695,850 |
| 122 | RSD #1 | 24,441,184 | 2,340,102 |
| 123 | RSD #4 | 25,117,394 | 2,404,845 |
| 123 | RSD #5 | 79,043,614 | 7,567,968 |
| 125 | RSD #6 | 32,629,006 | 3,124,038 |
| 126 | RSD #7 | 32,480,362 | 3,109,807 |
| 120 | RSD #8 | 45,845,034 | 4,389,397 |
| 127 | RIDGEFIELD BD OF ED | 177,388,638 | 16,983,935 |
| 120 | ROCKY HILL BD OF ED | 91,970,519 | 8,805,645 |
| 131 | SALEM BD OF ED | 12,410,903 | 1,188,272 |
| 131 | SALISBURY BD OF ED | 10,161,519 | 972,907 |
| 132 | SCOTLAND BD OF ED | 3,763,034 | 360,289 |
| 133 | SEYMOUR BD OF ED | 63,741,981 | 6,102,926 |
| 134 | SHARON BD OF ED | 6,398,485 | 612,618 |
| 135 | SHELTON BD OF ED | 144,013,012 | 13,788,412 |
| 130 | SHERMAN BD OF ED | 144,015,012 14,617,090 | |
| | SIMSBURY BD OF ED | | 1,399,502 |
| 138 | | 146,701,015 | 14,045,773 |
| 139 | SOMERS BD OF ED | 46,271,407 | 4,430,219 |
| 141 | SOUTHINGTON BD OF ED | 187,458,147 | 17,948,032 |



| Employer Code | Employer | State's Proportionate Share Of the Net Pension Liability Associated with the District | Pension Expense and Revenue For State Support |
|------------------|--|---|---|
| 142 | SOUTH WINDSOR BD OF ED | \$ 160,533,218 \$ | 15,370,126 |
| 143 | SPRAGUE BD OF ED | 6,743,222 | 645,624 |
| 144 | STAFFORD BD OF ED | 47,872,304 | 4,583,496 |
| 145 | STAMFORD BD OF ED | 578,029,826 | 55,343,008 |
| 146 | STATE BD OF ED | 189,089,657 | 18,104,240 |
| 149 | DCYS RECG HOME | 6,638,798 | 635,626 |
| 150 | STERLING BD OF ED | 9,887,021 | 946,625 |
| 151 | STONINGTON BD OF ED | 65,091,170 | 6,232,103 |
| 152 | STRATFORD BD OF ED | 222,523,618 | 21,305,348 |
| 153 | SUFFIELD BD OF ED | 71,298,152 | 6,826,385 |
| 154 | THOMASTON BD OF ED | 27,903,359 | 2,671,585 |
| 155 | THOMPSON BD OF ED | 29,365,646 | 2,811,591 |
| 156 | TOLLAND BD OF ED | 69,647,764 | 6,668,370 |
| 157 | TORRINGTON BD OF ED | 125,158,555 | 11,983,207 |
| 158 | TRUMBULL BD OF ED | 223,200,168 | 21,370,123 |
| 159 | UNION BD OF ED | 2,297,175 | 219,941 |
| 160 | VERNON BD OF ED | 105,723,128 | 10,122,377 |
| 161 | VOLUNTOWN BD OF ED | 8,237,994 | 788,740 |
| 162 | WALLINGFORD BD OF ED | 213,315,868 | 20,423,759 |
| 165 | WATERBURY BD OF ED | 445,021,385 | 42,608,220 |
| 166 | WATERFORD BD OF ED | 89,609,056 | 8,579,548 |
| 167 | WATERTOWN BD OF ED | 81,270,890 | 7,781,217 |
| 168 | WESTBROOK BD OF ED | 30,424,010 | 2,912,923 |
| 169 | WEST HARTFORD BD OF ED | 325,780,008 | 31,191,549 |
| 170 | WEST HAVEN BD OF ED | 174,390,422 | 16,696,873 |
| 171 | WESTON BD OF ED | 92,292,127 | 8,836,437 |
| 172 | WESTPORT BD OF ED | 232,750,274 | 22,284,491 |
| 173 | WETHERSFIELD BD OF ED | 116,380,069 | 11,142,718 |
| 174 | WILLINGTON BD OF ED | 14,841,756 | 1,421,012 |
| 175 | WILTON BD OF ED | 161,378,821 | 15,451,087 |
| 176 | WINCHESTER BD OF ED | 20,346,677 | 1,948,077 |
| 177 | WINDHAM BD OF ED | 99,386,380 | 9,515,670 |
| 178 | WINDSOR BD OF ED | 125,459,244 | 12,011,996 |
| 179 | WINDSOR LOCKS BD OF ED | 65,521,114 | 6,273,267 |
| 180 | WINDSOR LOCKS DD OF ED WINSTED GILBERT SCHOOL | 14,642,941 | 1,401,977 |
| 180 | WOLCOTT BD OF ED | 69,953,726 | 6,697,664 |
| 181 | WOODBRIDGE BD OF ED | 27,684,475 | 2,650,628 |
| 182 | WOODSTOCK BD OF ED | 27,004,475 21,118,468 | 2,030,028 |
| | | | |
| 185 | WOODSTOCK ACADEMY | 29,266,493 | 2,802,097 |
| 186 104 | UNIVERSITY OF CONN | 4,939,939 | 472,971 |
| 194 107 | RSD #9 | 37,964,364 | 3,634,868 |
| 197 | CCI SOMERS | 983,702 | 94,184 |
| 198 | DCF HIGH MEADOWS | | - |



| Employer Code | Employer | State's Proportionate Share Of the Net Pension Liability Associated with the District | Pension Expense and Revenue For State Support |
|------------------|--------------------------------|---|---|
| 201 | RSD #10 | \$ 69,940,800 \$ | 6,696,427 |
| 206 | SUPERVISORY DISTRICT #4 | 15,236,836 | 1,458,839 |
| 208 | NORTHWESTERN CTC | 1,402,592 | 134,290 |
| 209 | MANCHESTER CTC | 1,895,633 | 181,496 |
| 210 | NORWALK CTC | 2,441,737 | 233,782 |
| 211 | WESTERN CSU | 1,720,798 | 164,756 |
| 212 | CENTRAL CSU | 6,915,676 | 662,136 |
| 213 | EASTERN CSU | 3,477,822 | 332,981 |
| 214 | SOUTHERN CSU | 7,040,680 | 674,104 |
| 215 | RSD #11 | 8,065,029 | 772,180 |
| 216 | CAPITAL CTC | 534,029 | 51,130 |
| 217 | HOUSATONIC CTC | 2,423,540 | 232,040 |
| 218 | NAUGATUCK VALLEY CTC | 2,666,574 | 255,309 |
| 219 | MIDDLESEX CTC | 2,401,430 | 229,923 |
| 220 | DEPT OF HIGHER ED | - | - |
| 221 | EDADVANCE | 22,847,770 | 2,187,542 |
| 222 | RSD #12 | 36,226,049 | 3,468,434 |
| 223 | GATEWAY CTC | 2,514,018 | 240,703 |
| 225 | RSD #13 | 61,743,454 | 5,911,578 |
| 226 | RSD #14 | 60,234,056 | 5,767,062 |
| 228 | CCI CHESHIRE | 310,043 | 29,685 |
| 229 | SHARED SERVICES | 6,545,938 | 626,736 |
| 230 | CREC | 332,524,081 | 31,837,255 |
| 231 | RSD #15 | 122,928,558 | 11,769,698 |
| 233 | RSD #16 | 62,691,270 | 6,002,326 |
| 234 | THREE RIVERS CC | 817,541 | 78,275 |
| 235 | TUNXIS CTC | 1,104,114 | 105,712 |
| 236 | QUINEBAUG CTC | 893,903 | 85,586 |
| 238 | ODYSSEY CHARTER SCH | 9,333,944 | 893,671 |
| 240 | CES | 52,231,614 | 5,000,875 |
| 241 | ACES | 101,501,407 | 9,718,172 |
| 241 | PROJECT LEARN | 81,459,841 | 7,799,308 |
| 242 | RSD #17 | 62,124,417 | 5,948,053 |
| 243 | ASNUNTUCK CTC | 300,689 | 28,789 |
| 244 | DCF CENTRAL | | 20,709 |
| 243 | RSD #18 | 51,863,406 | 4,965,621 |
| 253 | DCF MENTAL HEALTH | 51,005,400 | 4,905,021 |
| 253 254 | EASTCONN | 30,875,894 | 2,956,188 |
| 254 258 | DCF RIVERVIEW | 50,075,074 | 2,750,100 |
| 258 263 | SERVICES FOR THE BLIND | 3,923,753 | 375,677 |
| 265 265 | RSD #19 | 3,923,733 | 3,807,522 |
| 263 269 | DDS REGION #2 | 37,707,040 | 5,007,522 |
| | | - | - |
| 270 | ACADEMIC AWARDS/CHARTER OAK ST | - | - |



| Employer Code | Employer | Of th | 's Proportionate Share te Net Pension Liability ciated with the District | Pension Expense and Revenue For State Support |
|------------------|----------------------------|-------|--|---|
| 271 | UCONN HEALTH CENTER | \$ | 5,266,989 | \$ 504,284 |
| 272 | CCI SUFFIELD | | 287,083 | 27,487 |
| 273 | CCI NIANTIC | | - | - |
| 275 | CHILDRENS CENTER | | 4,297,233 | 411,435 |
| 277 | BRIDGE ACADEMY CHARTER SCH | | 7,587,465 | 726,456 |
| 278 | COMMON GROUND CHARTER SCH | | 6,439,642 | 616,558 |
| 280 | EXPLORATIONS CHARTER SCH | | 3,333,090 | 319,124 |
| 281 | INTEGRATED DAY SCHOOL | | 7,815,872 | 748,325 |
| 282 | ISAAC CHARTER SCH | | 8,015,028 | 767,393 |
| 283 | JUMOKE ACADEMY CHARTER SCH | | 7,274,360 | 696,478 |
| 284 | SIDE BY SIDE CHARTER SCH | | 5,683,158 | 544,129 |
| 290 | TP WORK AREA 1 | | - | - |
| 291 | TP WORK AREA 2 | | - | - |
| 295 | MSA PAYROLL | | - | - |
| 302 | NEW BEGINNINGS | | 8,653,142 | 828,488 |
| 303 | ELM CITY COLLEGE PREP | | 7,786,450 | 745,507 |
| 304 | STAMFORD ACADEMY | | - | - |
| 305 | PARK CITY PREP | | 6,795,095 | 650,591 |
| 307 | AF BRIDGEPORT ACADEMY | | 7,141,023 | 683,712 |
| 308 | SERC | | 1,705,832 | 163,324 |
| 309 | AF HARTFORD ACADEMY | | 13,725,397 | 1,314,127 |
| 311 | BRASS CITY | | 6,390,661 | 611,869 |
| 313 | GREAT OAKS CHARTER SCHOOL | | 6,937,616 | 664,237 |
| 314 | BTW ACADEMY | | 8,002,953 | 766,236 |
| 315 | CAPITAL PREP HARBOR SCH | | 9,429,184 | 902,790 |
| 317 | STAMFORD CH SCH EX | | 6,475,698 | 620,011 |
| | Total | \$ | 17,007,295,000 | \$ 1,628,350,000 |



SCHEDULE C

SUMMARY OF BENEFIT PROVISIONS EVALUATED

Covered Employees

Any teacher, principal, superintendent or supervisor engaged in service of public schools, plus professional employees at State schools of higher education if they choose to be covered.

Annual Salary

Annual Salary rate for service as a Connecticut teacher during a school year excluding amounts paid for extra duty assignments, coaching, unused sick time, unused vacation or terminal pay.

Average Annual Salary

Average of Annual Salary received during three years of highest salary.

Credited Service

One month for each month of service as a teacher in Connecticut public schools, maximum 10 months for each school year. Ten months of credited service constitutes one year of Credited Service. Certain other types of teaching service, State employment, or war-time military service may be purchased prior to retirement, if the Member pays one-half the cost.

Normal Retirement

Eligibility - Age 60 with 20 years of Credited Service in Connecticut, or 35 years of Credited Service including at least 25 years of service in Connecticut.

Benefit - 2% of Average Annual Salary times years of Credited Service (maximum benefit is 75% of Average Annual Salary)

In addition, amounts derived from the accumulation of mandatory contributions made prior to July 1, 1989 and voluntary contributions by the teacher are payable.

Minimum Benefit: Effective January 1, 1999, Public Act 98-251 provides a minimum monthly retirement benefit of \$1,200 to teachers who retire under the Normal Retirement provisions and who have completed at least 25 years of full time Connecticut service at retirement.

Early Retirement

Eligibility - 25 years of Credited Service including 20 years of Connecticut service, or age 55 with 20 years of Credited Service including 15 years of Connecticut service.

Benefit - Reduced normal retirement benefit. The early retirement factors currently in effect are 6% per year for the first five years by which early retirement precedes the minimum normal retirement age and 4% per year for the next five years by which early retirement precedes the minimum normal retirement age. Effective July 1, 1999, the reduction for individuals with 30 or more years of service is 3% for each year by which early retirement age.



Proratable Retirement

Eligibility - Age 60 with 10 years of Credited Service.

Benefit - 2% less 0.1% for each year less than 20 years of Average Annual Salary times years of Credited Service in Connecticut, plus 1% of Average Annual Salary times years of additional Credited Service time.

Disability Retirement

Eligibility - 5 years of Credited Service in Connecticut if not incurred in the performance of duty and no service requirement if incurred in the performance of duty.

Benefit - 2% of Average Annual Salary times Credited Service to date of disability, but not less than 15% of Average Annual Salary, nor more than 50% of Average Annual Salary. In addition, disability benefit under this plan (without regard to any cost-of-living adjustments) plus any initial award of Social Security benefits and workers' compensation cannot exceed Average Annual Salary.

Termination of Employment

Less than 5 years of Credited Service - Return mandatory contributions with interest.

5 or more years of Credited Service - Return employee mandatory contributions with interest and 1% contributions made prior to July 1, 1989 without interest.

10 or more years of Credited Service - Member is 100% vested in the accrued benefit based on Credited Service and Average Annual Salary as of the date of termination of covered employment. Benefits are payable at age 60 and early retirement reductions are based on the number of years of service the member would have had if they had continued to work until age 60.

Member may elect return of all contributions plus interest on employee mandatory contributions in lieu of vested benefit.

Pre-Retirement Death Benefits

A lump sum plus one of the following: survivor's benefit, return of all contributions with interest, or surviving spouse's benefit.

- Lump Sum: \$1,000 for the first 5 years of Connecticut service plus \$200 per year thereafter. Maximum benefit: \$2,000.
- Survivor's Benefit: For active teachers who die while in service, the family maximum benefit payable to survivors is \$1,500 per month. Each minor child is entitled to \$300 per month. The surviving spouse's benefit is \$300 per month if the member has 12 or less years of service. For each additional year of service, the surviving spouse's monthly benefit is increased \$25, up to a maximum of \$600.
- Accumulated contributions with interest plus dependent children's benefits as described in the "Survivor's Benefit" paragraph.
- Surviving Spouse's Benefit: An active member who is eligible for immediate retirement and who has named his or her spouse as primary beneficiary will be covered by a 100% Plan D co-participant option in the event of his or her death prior to retirement.



Benefit Options

Normal form: Partial Refund Option – For any member who retires having earned 10 or more years of service prior to July 1, 2019, 75% of total benefit is paid as a life annuity. If 25% of the benefits paid prior to death do not exceed the Member's mandatory contributions plus interest frozen at the date of the benefit commencement, the difference is paid to the Member's beneficiary. For any member who retires having earned less than 10 years of service prior to July 1, 2019, 50% of total benefit is paid as a life annuity. If 50% of the benefits paid prior to death do not exceed the Member's mandatory contributions plus interest frozen at the date of the benefits paid prior to death do not exceed the Member's mandatory contributions plus interest frozen at the date of the benefits commencement, the difference is paid to the Member's beneficiary.

Optional Forms: 5-, 10-, 20-, or 25-year certain and life and 33-1/3%, 50%, 66-2/3%, 75%, or 100% co-participant annuity (if co-participant dies first, benefit reverts to unreduced amount). Amounts payable under the optional forms are determined on an actuarially equivalent basis as set by the board.

Cost-of-Living Allowance

For teachers who retired prior to September 1, 1992, pension benefit adjustments are made in accordance with increases in the Consumer Price Index, with a minimum of 3% and a maximum of 5% per annum.

For teachers who were members of the Teachers' Retirement System before July 1, 2007, and retire on or after September 1, 1992, pension benefit adjustments are made that are consistent with those provided for Social Security benefits on January 1 of the year granted, with a maximum of 6% per annum. If the return on assets in the previous year was less than 8.5%, the maximum increase is 1.5%.

For teachers who were members of the Teachers' Retirement System after July 1, 2007, pension benefit adjustments are made that are consistent with those provided for Social Security benefits on January 1 of the year granted, with a maximum of 5% per annum. If the return on assets in the previous year was less than 11.5%, the maximum increase is 3%, and if the return on the assets in the previous year was less than 8.5%, the maximum increase is 1.0%

Teachers' Mandatory Contribution

Effective July 1, 1992, each teacher is required to contribute 6% of annual salary for the pension benefit. Beginning January 1, 2018, each teacher is required to contribute 7% of annual salary. Beginning July 1, 2019, annual interest credited on mandatory contributions set at 4.0%.

State Contribution

The State's contribution requirement is determined in accordance with Section 10-183z (as amended by Section 88 of Public Act 19-117).

Early Retirement Incentive

A local or regional board of education may establish a retirement incentive plan. The plan shall provide for purchase of additional credited service by a board of education and a member of the system who chooses to participate in the plan, of additional credited service for such member and for payment by the board of education of not less than fifty per cent of the entire cost of such total cost. Any such plan shall specify a maximum number of years to be purchased, not to exceed five. Members must have attained age 50 and be eligible for retirement with the additional purchased service. The amount of service purchased cannot exceed the lesser of five years and one-fifth of the member's credited service.



SCHEDULE D

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

Investment Rate of Return

Assumed annual rate of 6.90% net of investment expenses.

Rates of Annual Salary Increase

| Rates of Annual Salary Increase Assumption | | | | |
|---|-------|--|--|--|
| Years of Service | | | | |
| 0 | 6.50% | | | |
| 1 | 6.25 | | | |
| 2 | 6.00 | | | |
| 3 | 6.00 | | | |
| 4 | 6.00 | | | |
| 5 | 6.00 | | | |
| 6 | 6.00 | | | |
| 7 | 6.00 | | | |
| 8 | 6.00 | | | |
| 9 | 6.00 | | | |
| 10 | 5.50 | | | |
| 11 | 5.50 | | | |
| 12 | 5.25 | | | |
| 13 | 5.00 | | | |
| 14 | 4.75 | | | |
| 15 | 4.50 | | | |
| 16 | 4.00 | | | |
| 17 | 3.75 | | | |
| 18 | 3.50 | | | |
| 19 | 3.25 | | | |
| 20 | 3.00 | | | |
| 21+ | 3.00 | | | |
| | | | | |



Active Member Decrement Rates

| Annual Rates of Retirement | | | | | |
|----------------------------|--|--|---|--|--|
| Unreduced | | | | | |
| Less than 35 y | ears of Service | 35 or more years of Servi | | | |
| Male | <u>Female</u> | <u>Male</u> | <u>Female</u> | | |
| | | 35.0% | 30.0% | | |
| | | 35.0% | 30.0% | | |
| 20.0% | 20.0% | 30.0% | 30.0% | | |
| 27.5% | 32.5% | 35.0% | 37.5% | | |
| 27.5% | 30.0% | 30.0% | 32.5% | | |
| 100.0% 100.0% | | 100.0% | 100.0% | | |
| | | | | | |
| Annual Rates of Retirement | | | | | |
| Pror | atable | Red | uced | | |
| Male | <u>Female</u> | Male | <u>Female</u> | | |
| | | 1.50% | 1.25% | | |
| | | 1.50% | 1.25% | | |
| | | 2.00% | 2.25% | | |
| | | 4.00% | 3.75% | | |
| | | 6.50% | 5.50% | | |
| 6.0% | 5.0% | | | | |
| 15.0% | 12.0% | | | | |
| 28.5% | 15.0% | | | | |
| 28.5% | 15.0% | | | | |
| 100.0% | 100.0% | | | | |
| | Less than 35 y Male 20.0% 27.5% 27.5% 100.0% Annu Prora Male 6.0% 15.0% 28.5% | Unree Less than 35 years of Service Male Female 20.0% 20.0% 27.5% 32.5% 27.5% 30.0% 100.0% 100.0% Male Sof Retire Proratable Male Female 6.0% 5.0% 15.0% 12.0% 28.5% 15.0% | Unreduced Less than 35 years of Service 35 or more years Male Female Male Male Service 35.0% Male 20.0% 20.0% 30.0% 20.0% 20.0% 30.0% 30.0% 27.5% 32.5% 35.0% 30.0% 27.5% 30.0% 30.0% 100.0% 100.0% Horatable of Retirement Male Female Male Male Female Male Operation 1.50% 1.50% 1.50% 6.0% 5.0% 6.50% 6.50% 15.0% 12.0% 28.5% 15.0% | | |

a. Table below provides a summary of the assumed rates of service retirement.

b. Table below provides a summary of the assumed rates of mortality while actively employed and disability.

| A | Annual Rates of Disabil | lity |
|-----|-------------------------|---------------|
| Age | Male | <u>Female</u> |
| 20 | 0.020% | 0.020% |
| 25 | 0.020% | 0.020% |
| 30 | 0.020% | 0.020% |
| 35 | 0.020% | 0.030% |
| 40 | 0.030% | 0.060% |
| 45 | 0.080% | 0.090% |
| 50 | 0.150% | 0.150% |
| 55 | 0.150% | 0.170% |
| 60 | 0.150% | 0.150% |
| | | |



c. Table below provides a summary of the assumed rates of withdrawal for active members prior to eligibility for retirement.

| Annual Rates of Withdrawal | | | | | | |
|----------------------------|--------|--------|-----------------------------|-------|--------|--|
| | | | 10 or more years of service | | | |
| Years of Service | Male | Female | Age | Male | Female | |
| 0 | 15.00% | 12.00% | 25 | 1.80% | 6.00% | |
| 1 | 11.00 | 11.00 | 30 | 1.80 | 6.00 | |
| 2 | 8.50 | 9.50 | 35 | 1.80 | 4.25 | |
| 3 | 7.00 | 8.00 | 40 | 1.80 | 2.50 | |
| 4 | 5.50 | 7.50 | 45 | 1.80 | 2.00 | |
| 5 | 4.50 | 7.00 | 50 | 2.25 | 2.40 | |
| 6 | 4.00 | 6.50 | 55 | 4.00 | 3.90 | |
| 7 | 3.50 | 6.00 | 59 | 5.50 | 4.00 | |
| 8 | 3.50 | 5.50 | | | | |
| 9 | 3.50 | 5.00 | | | | |

Pre-Retirement Mortality

The PubT-2010 Employee Table projected generationally with MP-2019 is used for both males and females while in active service. Representative values of the assumed annual rates of mortality while in active service are as follows:

| Annual Rates of Death* | | | | | |
|------------------------|--------|---------------|--|--|--|
| Age | Male | <u>Female</u> | | | |
| 30 | 0.022% | 0.014% | | | |
| 35 | 0.030% | 0.020% | | | |
| 40 | 0.042% | 0.031% | | | |
| 45 | 0.067% | 0.048% | | | |
| 50 | 0.111% | 0.073% | | | |
| 55 | 0.172% | 0.107% | | | |
| 60 | 0.264% | 0.161% | | | |
| 65 | 0.435% | 0.270% | | | |

* Rates shown are for 2010, the base year of the table.



Post-Retirement Mortality

The PubT-2010 Healthy Retiree Table (adjusted 105% for males and 103% for females at ages 82 and above) projected generationally with MP-2019 is used for the period after service retirement. The PubT-2010 Disabled Retiree Table projected generationally with MP-2019 is used for the period after disability retirement. The PubT-2010 Contingent Survivor Table projected generationally with MP-2019 and set forward 1 year for both males and females is used for survivors and beneficiaries. Representative values of the assumed annual rates of mortality are as follows:

| | Annual Rates of Death* | | | | | | |
|------------|---------------------------|---------------|-------------|---------------|-------------|---------------|--|
| | Healthy Disabled Survivor | | | | | | |
| <u>Age</u> | <u>Male</u> | <u>Female</u> | <u>Male</u> | <u>Female</u> | <u>Male</u> | <u>Female</u> | |
| 50 | 0.111% | 0.073% | 1.605% | 1.483% | 0.724% | 0.342% | |
| 55 | 0.223% | 0.193% | 2.114% | 1.742% | 0.854% | 0.476% | |
| 60 | 0.357% | 0.287% | 2.503% | 1.956% | 1.067% | 0.667% | |
| 65 | 0.592% | 0.446% | 3.044% | 2.256% | 1.497% | 0.973% | |
| 70 | 1.070% | 0.770% | 3.901% | 2.862% | 2.335% | 1.478% | |
| 75 | 2.031% | 1.461% | 5.192% | 4.003% | 3.706% | 2.371% | |
| 80 | 3.960% | 2.868% | 7.348% | 6.007% | 5.897% | 3.985% | |
| 85 | 7.598% | 5.548% | 10.815% | 9.331% | 9.658% | 7.122% | |
| 90 | 13.923% | 10.392% | 16.253% | 13.665% | 15.947% | 12.596% | |

* Rates shown are for 2010, the base year of the tables

Asset Valuation Method

Market value of assets is used for GASB 68 disclosure purposes.

Actuarial Cost Method

The Entry Age Normal actuarial cost method allocates the plan's actuarial present value of future benefits to various periods based upon service. The portion of the present value of future benefits allocated to years of service prior to the valuation date is the actuarial accrued liability, and the portion allocated to years following the valuation date is the present value of future normal costs. The normal cost is determined for each active member as the level percent of payroll necessary to fully fund the expected benefits to be earned over the career of each individual active member. The normal cost is partially funded with active member contributions with the remainder funded by employer contributions.

The unfunded accrued liability is determined by subtracting the actuarial value of assets from the actuarial accrued liability. The UAAL as of June 30, 2018 is amortized as a level percent of pay and will grade to a level dollar method beginning with the June 30, 2024 valuation. Future changes to the UAAL will be amortized utilizing layered 25-year closed amortization bases established at the end of each plan year.

Payroll Growth Rate

This assumption only applies to the level percent of pay amortization method. The total annual payroll of active members is assumed to increase at an annual rate of 3.00%. This rate does not anticipate increases in the number of members. This rate will grade to 0% in the following steps: 2.40% for the FY 2022 payment, 1.80% for the FY 2023 payment, 1.20% for the FY 2024 payments, 0.60% for the FY 2025 payment and 0% for fiscal years thereafter.



Future Cost-of-living Increases

Members who retired prior to September 1, 1992 are assumed to receive an annual Cost-of-Living Adjustment (COLA) of 3.0%. Members who retired on or after September 1, 1992 and were hired prior to July 1, 2007 are assumed to receive an annual Cost-of-Living Adjustment (COLA) of 2.0%. Members who retired on or after September 1, 1992 and were hired on or after July 1, 2007 are assumed to receive an annual Cost-of-Living Adjustment (COLA) of 2.0%. Members who retired on or after September 1, 1992 and were hired on or after July 1, 2007 are assumed to receive an annual Cost-of-Living Adjustment (COLA) of 2.0%.

Marriage Assumption

85% of males and 75% of females assumed to be married, with female spouses 3 years younger than males.

Plan N Partial Refund Option (Normal Form of Payment):

For any member who retires having earned 10 or more years of service prior to July 1, 2019, upon death, the member's beneficiary will receive a lump sum payment of the member's contributions with interest to the member's date of retirement less 25% of the total payments received to the member's date of death. A 12-year Certain and Life payment form is used to approximate the Plan N option where available data does not allow liabilities to be calculated directly.

For any member who retires having earned less than 10 years of service prior to July 1, 2019, upon death, the member's beneficiary will receive a lump sum payment of the member's contributions with interest to the member's date of retirement less 50% of the total payments received to the member's date of death. A 9-year Certain and Life payment form is used to approximate the Plan N option where available data does not allow liabilities to be calculated directly.

Changes from Prior Valuation

None.