

The experience and dedication you deserve



# CONNECTICUT STATE TEACHERS' RETIREMENT SYSTEM RETIREE HEALTH INSURANCE PLAN GASB 75 REPORT PREPARED AS OF JUNE 30, 2022







The experience and dedication you deserve

March 2, 2023

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

Re: June 30, 2022 GASB 75 Report for the Retiree Health Insurance Plan of the Connecticut State Teachers' Retirement System

Members of the Board:

This financial accounting report provides the information that the Connecticut State Teachers' Retirement System (the System) should use to satisfy the requirements described in Governmental Accounting Standards Board (GASB) Statement No. 75 for the System's Retiree Health Insurance Plan (the Plan). This report has been prepared by the System's actuary, Cavanaugh Macdonald Consulting (CMC), as of June 30, 2022 (Measurement Date) for financial reporting as of June 30, 2023.

GASB Statement No. 75 (GASB 75) establishes accounting and financial reporting requirements for governmental employers who sponsor or participate in other postemployment benefits (OPEB) plans. In general, the GASB 75 rules that apply to postretirement benefit plans are designed to help plan sponsors adequately and systematically account for plan costs, facilitate comparisons of plan sponsor financial information by standardizing certain aspects of postretirement benefit plan asset and liability measurement, and improve the utility of financial statement information by requiring that plan sponsors provide certain information about their OPEB plans.

#### **Additional Information and Disclosures**

The information contained in this report is intended to be used by the System for financial accounting purposes for the fiscal year ending on June 30, 2023 and its use for other purposes may not be appropriate. Calculations for purposes other than satisfying the requirements of GASB 75 may produce significantly different results. This report supersedes all June 30, 2023 financial reporting results, including draft versions of this document, issued prior to the date of this report. The System should rely only on the June 30, 2023 (as of FYE 2022) financial accounting information provided herein.

The results contained in this report were prepared by qualified actuaries according to generally accepted actuarial principles and practices, and in compliance with Actuarial Standards of Practice issued by the Actuarial Standards Board. The financial accounting information provided in this report reflects our current understanding of GASB Statement Nos. 74 and 75 (GASB accounting rules), including any applicable guidance provided by the System or its audit partners as of the date of this report.



Board of Directors March 2, 2023 Page 2

The biennial actuarial valuation used as the basis for much of the information presented in this report was performed as of June 30, 2022 (Valuation Date). The census data for active and retired members as of the Valuation Date, changes in plan provisions since the prior Valuation Date, the net benefits and administrative expenses paid during the fiscal year beginning on July 1, 2021 and ending on June 30, 2022, and pertinent financial information was provided by the System for actuarial valuation and financial accounting purposes. We did not audit the supplied information, but it was reviewed for reasonableness and consistency. In certain situations, the supplied information was adjusted to account for normal differences in collection dates and/or methods. As a result, we have no reason to doubt the substantial accuracy or completeness of the information and believe that it is reliable for the purposes stated herein. The results and conclusions contained in this report depend on the integrity of this information, and if any of the supplied information or analyses change, our results and conclusions may be different and this report may need to be revised. Likewise, this information may need to be revised to reflect any significant event that affects the Plan subsequent to the Valuation Date.

All assumptions used for GASB 75 purposes—including, but not limited to, discount rates, expected rates of return on assets, expected annual per capita claims, long-term health care cost trend rates, and expected active employee and retired member health care coverage election assumptions—should reflect best estimates of anticipated Plan experience. The discount rate was determined based on the methods prescribed by GASB accounting rules. Other than the discount rate required under GASB 75, we believe that those assumptions selected for financial accounting and reporting purposes as of June 30, 2022 and June 30, 2023, respectively, are reasonable for their intended purposes.

The actuarial cost method, the asset valuation method, and the amortization methods are prescribed under GASB rules for financial accounting purposes as of the Measurement Date. Actuarial methods, such as the actuarial cost method, asset valuation method, and amortization methods, used in the cost allocation procedure (for financial accounting purposes) are designed to recognize changes in an orderly fashion over a period of years. In certain situations, the actuarial methods used in an allocation procedure may have the effect of deferring changes in amounts into later years. Likewise, the use of these methods could produce deferred gains or losses if any material underlying assumption is not met over an extended period of time.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: retiree group benefits program experience differing from that anticipated by the assumptions; changes in assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in retiree group benefits program provisions or applicable law. Retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements. Since an assessment of the potential impact of variations in factors other than discount rates and health care cost trend rates is outside the scope of typical financial reporting requirements, we have not performed any analysis of the potential range of such future differences. **This report does not consider all possible scenarios.** 

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.



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The funded status measurements included in this report are based on the assumptions and methods used to determine the Plan's obligations and asset values as of the Valuation and/or Measurement Date(s). Funded status measurements for financial accounting purposes may not be appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations. Likewise, funded status measurements for financial accounting purposes may not be appropriate for assessing the need for or the amount of future actuarially determined contributions.

CMC does not provide legal, investment, or accounting advice. Thus, the information in this report is not intended to supersede or supplant the advice and interpretations of the System or its affiliated legal, investing, or accounting partners.

The undersigned is familiar with the near-term and long-term aspects of other postemployment benefit plan valuations and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained in this report. All sections of this report, including any appendices and attachments, are considered an integral part of the actuarial opinions.

To the best of our knowledge, no executive or employee of CMC providing services to the System has any direct financial interest or indirect material interest in the System. As a result, we believe that there is no relationship existing that might affect our capacity to prepare and certify these estimates for the System's Plan as of June 30, 2022.

Please call us at 678-388-1700 if you have any questions.

Respectfully submitted,

Alisa Bennett, FSA, EA, FCA, MAAA

President

Youveak Yeng, ASA, MAAA Senior Actuary

AB/YY: JJ



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# Section I — Board Summary

# GASB 75 FISCAL YEAR END DISCLOSURE INFORMATION FOR THE SYSTEM'S RETIREE HEALTH INSURANCE PLAN

(\$ in Thousands) Principal Results for Financial Reporting as of	,	June 30, 2023	June 30, 2022
Valuation Date (VD):		June 30, 2022	June 30, 2020
Measurement Date (MD):		June 30, 2022	June 30, 2021
Discount Rate:			
Long-Term Expected Rate of Return at MD		3.00%	3.00%
Municipal Bond Index Rate at MD Year in which Fiduciary Net Position		3.54%	2.16%
is Projected to be Depleted		2027	2023
Single Equivalent Interest Rate at MD		3.53%	2.17%
Collective Net OPEB Liability (NOL) as of the MD:			
Collective Total OPEB Liability (TOL)	\$	1,771,141	\$ 1,732,104
Fiduciary Net Position (FNP)		167,556	105,915
Collective Net OPEB Liability (NOL = TOL – FNP)	\$	1,603,585	\$ 1,626,189
FNP as a percentage of TOL		9.46%	6.11%
NOL as a percentage of covered compensation		34.15%	36.64%
Collective OPEB Expense / (Income)			
for the Measurement Period:	\$	96,660	\$ (60,050)
Collective Deferred Outflows/			
Inflows of Resources as of the MD:			
Total Collective Deferred Outflows of Resources	\$	576,080	\$ 724,556
Total Collective Deferred Inflows of Resources	\$	1,718,583	\$ 1,768,214



#### Section II — Introduction

The Governmental Accounting Standards Board issued Statement No. 75 (GASB 75), "Accounting and Financial Reporting for Postemployment Benefit Plans Other Than Pensions" in June 2015. GASB 75 is effective for employer fiscal years beginning after June 15, 2017. For the purposes of reporting under GASB 75, the Plan is assumed to be a cost-sharing, other than insured, defined benefit OPEB plan with a special funding situation where assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB 75. Additionally, we have assumed that the System will not restate results for any period prior to the adoption of GASB 75 based on the guidance in paragraph 244 of that Standard.

This report, prepared as of June 30, 2022 (Measurement Date or MD), presents information to assist the System in meeting the requirements of GASB 75. Much of the material provided in this report is based on the data, assumptions, plan provisions, and results of the actuarial valuation of the Plan as of June 30, 2022 (Valuation Date or VD).

GASB 75 requires the plan sponsors to determine the Total OPEB Liability (TOL) utilizing the Entry Age Normal (EAN) actuarial funding method. If the valuation date at which the TOL is determined is before the measurement date, the TOL must be rolled forward to the measurement date. The plan provisions recognized in the determination of the TOL are summarized in Schedule D. The development of the changes in the TOL during the measurement period is shown in Section III.

If a financial accounting asset exists, a Collective Net OPEB Liability / (Asset) (NOL), which is equal to the difference between the actual/projected TOL and the Plan's Fiduciary Net Position (FNP)—the market value of the financial accounting asset—must be determined as of the Measurement Date.

The discount rate is an important assumption used in the measurement of the TOL, and the guidance concerning discount rate selection provided in GASB 75 varies based on whether or not the plan has a financial accounting asset. The environment for yields on 20-year tax-exempt municipal bonds (rating AA/Aa or higher) on the measurement date (Municipal Bond Index Rate) could affect discount rates in either case, so the plan sponsor must choose an appropriate basis for these Municipal Bond Index Rates. The Municipal Bond Index Rate used for this purpose is the 20-Bond average General Obligation 20-year Municipal Bond Rate published at the end of the last week during the month of June by The Bond Buyer (www.bondbuyer.com).

If the plan does not have a financial accounting asset, the plan sponsor must select a discount rate based solely on the Municipal Bond Index Rate. However, if the plan has assets that are accumulated in a Trust that meets the criteria in paragraph 4 of GASB 75, the plan sponsor must select a discount rate based on the Single Equivalent Interest Rate (SEIR) for the plan.

To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable to members and beneficiaries under the relevant plan provisions in effect on the measurement date. Future contributions must be projected in accordance with the plan's funding policy and/or the application of professional judgment in situations where the recent contribution history of the contributing entities warrants detailed consideration. If the FNP is not projected to be depleted at any point in the future, 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.



Conversely, if the FNP is projected to be depleted on any future measurement date, the SEIR will be equal to the single rate that generates 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 based on the long-term expected rate of return on plan investments, and the present value determined by discounting those benefits after the date of depletion by the Municipal Bond Index Rate on the measurement date.

The changes reflected in the TOL and FNP during the measurement period are shown in Section III. Differences between expected and actual experience and changes of assumptions or other inputs, if any, are recorded as Collective Deferred Outflows of Resources if the change increases the Plan's TOL, or Collective Deferred Inflows of Resources if the change reduces the Plan's TOL.

Schedule A shows the development of the Plan's projected earnings on plan investments, and the determination of the difference between actual and projected earnings on plan investments during the measurement period. Differences between actual and projected earnings on plan investments, if any, are recorded as Collective Deferred Outflows of Resources if the change lowers the FNP, or Collective Deferred Inflows of Resources if the change increases the FNP.

Collective Deferred Outflows of Resources and Collective Deferred Inflows of Resources are usually recognized on a level dollar basis without any adjustments for interest. The unrecognized portions of the Collective Deferred Outflows of Resources and Collective Deferred Inflows of Resources that must be included on the Statement of Net Position are provided in Section IV.



GASB 75 requires the determination and disclosure of the Collective OPEB Expense / (Income) (OE) for the Plan in the notes to financial statements. Generally speaking, OE includes the following components:

#### COMPONENTS OF COLLECTIVE OPEB EXPENSE / (INCOME)

#### + Service Cost (SC)

This is equal to the Normal Cost determined using the Entry Age Normal (Level Percentage of Pay) actuarial cost method.

#### Active Member Contributions

The total amount of active employee payroll deductions for OPEB benefits, if applicable.

#### + Administrative Expenses

The amount, if any, paid during the measurement period for OPEB costs not directly related to the payment of benefits. This amount would include costs such as actuarial fees, audit fees, trust fees, salaries associated with staff time spent on OPEB related tasks, etc.

#### +/- Changes of Benefit Terms

Benefit changes during the period are recognized immediately. Plan amendments increase OE if the change improves benefits for existing Plan members. Likewise, changes that reduce benefits for existing Plan members lower OE.

#### + Interest on the Collective Total OPEB Liability (IOT)

IOT is determined based on the Discount Rate that was used to measure the Plan's TOL as of the Prior Measurement Date. Please note that the SC component may include interest to the end of the measurement period, or this interest adjustment may be included with IOT.

#### Projected Earnings on Plan Investments (XR)

If the Plan has a financial accounting asset, XR is determined based on the long-term expected rate of return assumption at the end of the prior measurement period.

#### +/- Other

Miscellaneous and non-standard expense items are included in this component.



#### **COMPONENTS OF COLLECTIVE OPEB EXPENSE / (INCOME)**

# + / - Recognition of Current Period Collective Deferred Outflows / Inflows of Resources for:

- Differences Between Expected and Actual Experience
- Changes of Assumptions or Other Inputs
- Differences Between Actual and Projected Earnings on Plan Investments

For differences between expected and actual experience and changes of assumptions or other inputs, the amounts that must be recognized during the current period are determined by spreading the total changes over the average expected remaining service lives (AERSL) of the entire Plan membership at the beginning of the measurement period. The active member AERSL is the average number of years that the active members are expected to remain in covered employment. AERSL is equal to zero for inactive members. The AERSL of the entire Plan membership is the weighted average of these two values, but cannot be less than one year<sup>1</sup>. The development of the AERSL as of the Prior Measurement Date is shown in Schedule A.

For differences between actual and projected earnings on plan investments, if any, the amount that must be recognized during the current period is determined by amortizing the total change over five (5) years.

#### + Recognition of Prior Period Collective Deferred Outflows of Resources

The amounts that must be recognized during the current year for those Collective Deferred Outflows of Resources established before the current measurement period.

#### Recognition of Prior Period Collective Deferred Inflows of Resources

The amounts that must be recognized during the current year for those Collective Deferred Inflows of Resources established before the current measurement period.

The development of the OE is shown in Section V.

Generally speaking, each contributing entity must report an allocation (proportionate share) of the collective financial accounting amounts associated with a cost-sharing defined benefit OPEB plan. However, the State of Connecticut (State) makes all contributions to the Plan on behalf of the employees of the participating districts. Therefore, our understanding is that the participating districts (employers) are considered to be in a special funding situation as defined by GASB 75 and the State is treated as a governmental non-employer contributing entity in the System. Since employers do not contribute directly to the Plan, we believe that the participating districts would not be required to report proportionate shares of the Plan's NOL or Collective Deferred Outflows or Inflows of Resources in their financial statements. However, each employer must disclose its share of the NOL (i.e. the non-employer contributing entities' total proportionate share of the NOL that is associated with the employer) in the notes to its financial statements, and would also be required to provide information about the Plan in its note disclosures and schedules of Required Supplementary Information (RSI). Additionally, each district must recognize expense and record revenue equal to the district's share of the OE for the Plan (i.e. the non-employer

<sup>&</sup>lt;sup>1</sup> Based on the guidance in GASB Implementation Guide 2017-3, paragraph 4.264.



contributing entities' total proportionate share of the Collective OPEB Expense / (Income) associated with the district). The State—as the sole (non-employer) contributing entity—would report the entire NOL, Collective Deferred Outflows and Inflows of Resources, and OE for the Plan.

Section VI provides the actuarial information for the Plan that must be disclosed for financial reporting purposes. Section VII provides the RSI for the reporting entity's financial statements.

Section VIII 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, 2022. Section VIII 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 NOL associated with each participating employer and the employer OE and revenue for State support for each participating employer for the year ending June 30, 2022. These amounts are also provided in Section VIII.

The appendices (Schedules) contain additional details and in-depth information. As a final reminder, please keep in mind that any information that may be included in this report for periods prior to June 30, 2010 was produced by the prior actuarial consulting firm.



## Section III — Schedule of Changes in the Collective Net OPEB Liability / (Asset)

The tables below provide the changes in the Collective Total OPEB Liability (TOL), the Fiduciary Net Position (FNP), and the Collective Net OPEB Liability / (Asset) (NOL) during the current measurement period that must be disclosed under GASB accounting rules, as well as the most recent five years of the 10-year schedule of changes in the TOL, FNP, NOL, and related ratios that must be included in Required Supplementary Information (RSI).

### Reconciliation of Changes in the Plan's Collective Total OPEB Liability (TOL)

(\$ in Thousands)					
Fiscal Years Ending on June 30	2022	2021	2020	2019	2018
Collective Total OPEB Liability (TOL)					
Service Cost	\$ 72,027	\$ 121,535	\$ 93,324	\$ 87,313	\$ 132,392
Interest on the TOL	38,342	64,951	97,264	105,702	133,597
Changes of benefit terms	299,536	0	0	(339,076)	(1,044,628)
Difference between expected and actual experience	(60,031)	(1,218,425)	(586,004)	66,502	217,853
Changes of assumptions or other inputs	(236,042)	12,750	626,595	182,438	(196,049)
Net benefit payments	(74,795)	(131,543)	(67,383)	(55,154)	(110,622)
Net change in TOL	\$ 39,037	\$ (1,150,732)	\$ 163,796	\$ 47,725	\$ (867,457)
TOL—beginning of period	\$ 1,732,104	\$ 2,882,836	\$ 2,719,040	\$ 2,671,315	\$ 3,538,772
TOL—end of period	\$ 1,771,141	\$ 1,732,104	\$ 2,882,836	\$ 2,719,040	\$ 2,671,315



## Reconciliation of Changes in the Plan's Fiduciary Net Position (FNP) and Collective Net OPEB Liability / (Asset) (NOL)

(\$ in Thousands)						
Fiscal Years Ending on June 30		2022	2021	2020	2019	2018
TOL—end of period	(a)	\$ 1,771,141	\$ 1,732,104	\$ 2,882,836	\$ 2,719,040	\$ 2,671,315
Fiduciary Net Position (FNP)						
Contributions - State of Connecticut		\$ 20,419	\$ 29,411	\$ 29,173	\$ 35,320	\$ 35,299
Contributions – active member		50,630	54,058	53,221	51,944	51,484
Net investment income		49,587	82,256	849	1,090	411
Net benefit payments		(74,795)	(131,543)	(67,383)	(55,154)	(110,622
Administrative expenses		(283)	(117)	(372)	(383)	(264
Other		16,083	(91)	0	(16,100)	(
Net change in FNP		\$ 61,641	\$ 33,974	\$ 15,488	\$ 16,717	\$ (23,692
FNP—beginning of period		\$ 105,915	\$ 71,941	\$ 56,453	\$ 39,736	\$ 63,428
FNP—end of period	(b)	\$ 167,556	\$ 105,915	\$ 71,941	\$ 56,453	\$ 39,736
FNP as a percentage of the TOL	[(b) / (a)]	9.46%	6.11%	2.50%	2.08%	1.49%
Collective Net OPEB Liability/(Asset)	(NOL)					
NOL—end of period	[(a) - (b)]	\$ 1,603,585	\$ 1,626,189	\$ 2,810,895	\$ 2,662,587	\$ 2,631,579
Covered Payroll <sup>1</sup>		\$ 4,695,730	\$ 4,438,394	\$ 4,438,394	\$ 4,389,654	\$ 4,075,939
NOL as a percentage of Covered Pay	yroll .	34.15%	36.64%	63.33%	60.66%	64.56%

<sup>&</sup>lt;sup>1</sup>Covered Payroll provided by the System for active employees who would be eligible for benefits at retirement. Beginning in 2021, for years following the valuation date (when no new valuation is performed), covered payroll has been set equal to the covered payroll from the most recent valuation.



#### Section IV — Balances of Collective Deferred Outflows / Inflows of Resources

The following tables provide the balances of Collective Deferred Outflows and Inflows of Resources that are reported for current and prior period differences between expected and actual experience, changes of assumptions or other inputs, and differences between actual and projected earnings on plan investments. The information in the tables reflects the assumptions and other conventions listed below. This presentation is designed to facilitate the development of Collective OPEB Expense / (Income) (OE), and should not be used for financial reporting purposes without appropriate adjustments. Please note that the contributing entities may be required to report Collective Deferred Outflows / Inflows of Resources for contributions made subsequent to the measurement date and prior to the end of the reporting period; however, CMC will not provide or incorporate these amounts in the tables included in this section of the report.

The table below provides a summary of the unrecognized balances of Collective Deferred Outflows of Resources and Inflows of Resources by source as of June 30, 2022:

	C	Collective Deferred Outflows	Collective Deferred Inflows
(\$ in Thousands)		of Resources	of Resources
Differences between expected and actual experience	\$	112,964	\$ 1,267,472
Changes of assumptions or other inputs		463,116	366,126
Differences between projected and actual earnings on plan investments		0	 84,985
Total unrecognized balance as of Measurement Date	\$	576,080	\$ 1,718,583



# **Balances of Collective Deferred Outflows / Inflows of Resources by Source and Year**

(\$ Thousands)		(a)	(b)		(c)		(d) Amounts		Balances as	of .	June 30, 2022 Collective
Measurement		Initial Experience (Gain) / Loss	Initial Recognition Period		Initial Recognition Amount	Recognized in Collective OPEB Expense through			Collective ferred Outflows of Resources		Deferred Inflows of Resources Absolute value,
Period Ending		Amount	(Years)		[(a) ÷ (b)]		June 30, 2022		[(a) – (d), > 0]		[(a) – (d), < 0]
		· · · · · · · · · · · · · · · · · · ·					tween Expected a		ual Experience:		
2017	\$	0	7.99	\$	0	\$	0	\$	0	\$	0
2018	\$	217,853	7.89		27,611	\$	138,055		79,798		0
2019	\$	66,502	7.98		8,334	\$	33,336		33,166		0
2020	\$	(586,004)	7.13		(82,188)	\$	(246,564)		0		339,440
2021	\$	(1,218,425)	7.13		(170,887)	\$	(341,774)		0		876,651
2022	\$	(60,031)	6.94		(8,650)	\$	(8,650)		0		51,381
				\$	(225,780)			\$	112,964	\$	1,267,472
Collective Defer	rred	Outflows / (Infl	ows) of Resou	rces	s for Changes ir	n As	sumptions or Othe	r Input	s:		
2017	\$	(370,549)	7.99	\$	(46,377)	\$	(278,262)	\$	0	\$	92,287
2018	\$	(196,049)	7.89		(24,848)	\$	(124,240)		0		71,809
2019	\$	182,438	7.98		22,862	\$	91,448		90,990		0
2020	\$	626,595	7.13		87,881	\$	263,643		362,952		0
2021	\$	12,750	7.13		1,788	\$	3,576		9,174		0
2022	\$	(236,042)	6.94		(34,012)	\$	(34,012)		0		202,030
				\$	7,294			\$	463,116	\$	366,126
Collective Defer	rred	Outflows / (Infl	ows) of Resou	rces	s for Differences	s Be	etween Projected a	nd Act	tual Earnings on	Pla	an Investments:
2017	\$	1,512	5.00	\$	302	\$	1,512	\$	0	\$	0
2018	\$	784	5.00		157	\$	784		0		0
2019	\$	335	5.00		67	\$	268		67		0
2020	\$	1,063	5.00		213	\$	639		424		0
2021	\$	(80,817)	5.00		(16,163)	\$	(32,326)		0		48,491
2022	\$	(46,231)	5.00		(9,246)	\$	(9,246)		0		36,985
				\$	(24,670)		,	\$	491	\$	85,476



# Section V — Collective OPEB Expense / (Income)

The development of the Collective OPEB Expense / (Income) for the financial reporting period ending on June 30, 2023 is shown in the following table:

Collective OPEB Expense / (Income) For the Fiscal Year Ending on June 30, 2023									
(\$ in Thousands)	(\$ in Thousands)								
Service cost	\$	72,027							
Active member contributions		(50,630)							
Administrative costs*		283							
Changes of benefit terms during the current period		299,536							
Interest on the TOL		38,342							
Projected earnings on plan investments		(3,356)							
Other		(16,083)							
Recognition of current period									
Collective Deferred Outflows / (Inflows) of Resources:									
Difference between expected and actual experience		(8,650)							
Changes of assumptions or other inputs		(34,012)							
Difference between actual and projected earnings on plan investments		(9,246)							
Recognition of prior period Collective Deferred Outflows of Resources		148,476							
Recognition of prior period Collective Deferred Inflows of Resources		(340,027)							
Collective OPEB Expense / (Income)	\$	96,660							

<sup>\*</sup> Administrative costs are based on the administrative expenses paid from the Plan's trust during the fiscal year ending on June 30, 2022.



#### Section VI — Financial Statement Note Disclosures

This section contains financial accounting information that may be used to satisfy the reporting requirements for employers and governmental nonemployer contributing entities (GNCEs) under Governmental Accounting Standards Board Statement No. 75 (GASB 75) for the year ending on June 30, 2023, based on a June 30, 2022 valuation date. The Plan is assumed to be cost-sharing, other than insured, defined benefit OPEB plan with a special funding situation where assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB 75. Additionally, we have assumed that the System will not restate results for any period prior to the adoption of GASB 75 based on the guidance in paragraph 244 of that Standard. Amounts are shown in aggregate. This report does not include any non-actuarial items that may need to be reported or disclosed.

#### **Summary of Key Actuarial Assumptions, Methods, and Other Inputs**

The TOL was determined by an actuarial valuation as of June 30, 2022, using the key actuarial assumptions, methods, and other inputs listed below. Please note that the complete set of actuarial assumptions, methods, and other inputs that were used to develop the TOL are provided in Schedule B.

Inflation	2.50%
Real Wage Growth	0.50%
Wage Inflation	3.00%
Salary Increases, Including Wage Inflation	3.00% - 6.50%
Long-term Investment Rate of Return, Net of OPEB Plan Investment Expense, Including Inflation	3.00%
Municipal Bond Index Rate	3.54%
Year FNP is Projected to be Depleted	2027
Single Equivalent Interest Rate, Net of OPEB Plan Investment Expense, Including Price Inflation	3.53%
Health Care Cost Trend Rates*	Known increases until calendar year 2024, then general trend decreasing to an ultimate rate of 4.50% by 2031

Subsidy amounts will not increase upon reaching their limit.

\*Premium rates have been set for the Medicare Advantage and Medicare Supplement plans until calendar year 2024. The general health care trend rates are used for trending the subsidy amount for pre-Medicare participants until the limit is reached. The general health care rates prior to fiscal year 2024 are 6.75% for fiscal year beginning 2022 and 6.50% for fiscal year beginning 2023. Subsidy amounts are assumed to follow medical trend until they reach their limit and to not increase after that.

Health care cost trend rates are set on an annual basis based on published annual health care inflation surveys in conjunction with knowledge of future anticipated events and actual plan experience (if credible). Effective June 30, 2022, the health care cost trend rates for the Medicare Supplement and Medicare Advantage medical and prescription drug options were revised to reflect current expectations of future increases in health care claim costs for those options.



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 demographic actuarial assumptions for retirement, disability incidence, and withdrawal used in the June 30, 2022 valuation were based on the results of an actuarial experience study for the period July 1, 2014 – June 30, 2019. The actuarial economic assumptions used in the June 30, 2022 valuation were based on the results of a study of economic assumptions for use in actuarial valuations dated April 24, 2019.

The remaining actuarial assumptions (e.g., initial per capita costs, rates of plan participation, rates of plan election, etc.) used in the June 30, 2022 valuation are based on a review of recent plan experience that was performed concurrently with the June 30, 2022 valuation and/or based on anticipated or observed changes in participant behavior.

The long-term expected return on plan assets is reviewed as part of the GASB 75 valuation process. Several factors are considered in evaluating the long-term rate of return assumption, including the Plan's current asset allocations and a log-normal distribution analysis using the best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) for each major asset class compiled by Horizon Actuarial Services, LLC in its "Survey of Capital Market Assumptions, 2022 Edition". The long-term expected rate of return was determined by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The assumption is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

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

Asset Class	Target Allocation	Expected 10-Year Geometric Real Rate of Return	Standard Deviation
U.S. Treasuries (Cash Equivalents)	100.00%*	-0.98%	1.12%
Price Inflation		2.50%	
Expected Rate of Return	0.9	902 x 1.0250 – 1 = 1.50	<b>)</b> %
Expected Rate of Return (Rounded Nea	rest 0.25%)	1.50%	

<sup>\*</sup>All of the Plan's assets are assumed to be invested in cash equivalents given the need for liquidity.

Since there have not been any changes to the asset allocation and we expect that the recent economic downturn is temporary, we continue to use the funding rate of 3.00% as of June 30, 2022.



#### **DEVELOPMENT OF THE DISCOUNT RATE (SEIR)**

The projection of cash flows used to determine the discount rate was performed in accordance with GASB 75. The basis for this projection was the actuarial valuation performed as of June 30, 2022. In addition to the actuarial methods and assumptions of the June 30, 2022 actuarial valuation, the following actuarial methods and assumptions were used in the projection of cash flows:

- Total payroll for the initial projection year consists of the payroll of the active membership present on the Valuation Date. In subsequent projection years, total payroll was assumed to increase annually at a rate of 3.00%.
- Annual State contributions were assumed to be equal to the most recent five-year average of state contributions toward the fund.

Based on these assumptions, the Plan's FNP was projected to be depleted in 2027 and, as a result, the Municipal Bond Index Rate was used in the determination of the SEIR. In this analysis, the long-term expected rate of return on Plan investments equal to 3.00% was applied to periods through 2027 and the Municipal Bond Index Rate as of the Measurement Date (3.54%) was applied to periods on or after 2027, resulting in a SEIR equal to 3.53% as of the Measurement Date.

Please note that the FNP projections are based upon the Plan's financial status on the Valuation Date, the indicated set of methods and assumptions, and the requirements of GASB 75. 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 Plan, or the Plan's ability to make benefit payments in future years.

#### Sensitivity of the Collective Net OPEB Liability / (Asset) to Health Care Cost Trend Rates

The sensitivity of the NOL to changes in health care cost trend rates must be disclosed under GASB accounting rules. The table below provides the NOL of the Plan determined using current health care cost trend rates, as well as what the Plan's NOL would be if health care cost trend rates were 1-percentage-point lower or 1-percentage-point higher than current health care cost trend rates.

Sensitivity of the Net OPEB Liability to Health Care Cost Trend Rates						
	1% Lower	Current	1% Higher			
	Trend Rates	Trend Rates	Trend Rates			
Net OPEB Liability / (Asset)	\$1,378,209	\$1,603,585	\$1,908,836			



#### Sensitivity of the Collective Net OPEB Liability / (Asset) to Discount Rates

The sensitivity of the NOL to changes in the discount rate must also be disclosed under GASB accounting rules. The table below provides the NOL of the Plan determined using the current discount rate of 3.53%, as well as what the Plan's NOL would be if the discount rate was 1-percentage-point lower or 1-percentage-point higher than the current rate:

Sensitivity of the Net OPEB Liability to Discount Rates (\$ in Thousands)							
	Current						
	1%	Discount	1%				
	Decrease	Rate	Increase				
	(2.53%)	(3.53%)	(4.53%)				
Net OPEB Liability / (Asset)	\$1,936,354	\$1,603,585	\$1,341,136				

# Schedule of the Recognition of Collective Deferred Outflows / (Inflows) of Resources in Collective OPEB Expense / (Income)

Amounts reported as Collective Deferred Outflows of Resources and Collective Deferred (Inflows) of Resources related to OPEB benefits will be recognized in Collective OPEB Expense / (Income) as follows:

Reporting Period Ending:	Ne	et Amount Recognized (\$ in Thousands)
	_	
June 30, 2024	\$	(243,615)
June 30, 2025	\$	(243,217)
June 30, 2026	\$	(197,820)
June 30, 2027	\$	(184,747)
June 30, 2028	\$	(211,021)
Thereafter	\$	(62,083)



## Section VII — Required Supplementary Information

Under GASB 75, the reporting entity may need to incorporate one or more of the following items in the Required Supplementary Information (RSI) that must be included in its financial statements.

#### **Details Concerning Plan Amendments and Assumption Changes**

Information about changes to benefit terms and changes to assumptions or other inputs should be provided in RSI. The information should be listed by the date for which the indicated change was first reflected in reported amounts. We have only provided relevant details for the measurement period ending on June 30, 2022.

#### **CHANGES TO BENEFIT TERMS**

June 30, 2022 (Valuation Date: June 30, 2022)

 There was a change in the maximum monthly subsidy amounts offered to retirees and their dependents from \$110 / \$220 to \$220 / \$440.

#### **CHANGES TO ASSUMPTIONS OR OTHER INPUTS**

June 30, 2022 (Valuation Date: June 30, 2022)

- Based on the procedure described in GASB 74, the discount rate used to measure Plan obligations for financial accounting purposes as of June 30, 2022 was updated to equal the SEIR of 3.53% as of June 30, 2022;
- Expected annual per capita claims costs were updated to better reflect anticipated medical and prescription drug claim experience;
- The assumed age related annual percentage increases in expected annual per capita health care claim costs were updated;
- Long-term health care cost trend rates were updated; and
- The percentages of participating retirees who are expected to enroll in the Medicare Supplement Plan and the Medicare Advantage Plan options were updated to better reflect anticipated plan experience.



#### Methods and Assumptions Used in the Determination of Actuarially Determined Contributions

The actuarially determined contribution (ADC) rates, as a percentage of payroll, used to determine the actuarially determined State contribution amounts for the measurement period ending on June 30, 2022 that are shown in the following "Schedule of Governmental Nonemployer Contributing Entity Contributions" are calculated as of the June 30, 2020 valuation date. The following actuarial methods and assumptions as of June 30, 2020 were used to determine the actuarially determined State contribution amounts reported in that schedule for the fiscal year ending on June 30, 2022:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll over an open period
Amortization period	30 years
Asset valuation method	Market value of assets
Long-term investment rate of return, net of pension plan investment expense, including price inflation	3.00%
Price inflation	2.50%
Real wage growth	0.50%
Wage inflation	3.00%
Salary increases, including wage inflation	3.00% to 6.50%
Initial health care cost trend rates	5.125%
Ultimate health care cost trend rates	4.50%
Year ultimate trend rates reached	2023
Subsidy amounts will not increase upon reaching their limit.	
Basis for Postretirement Mortality Rates	PubT-2010, Amount Weighted
Basis for Postretirement Mortality Improvement Rates For Healthy / Disabled Lives	Scale MP-2019
Projection of Mortality Improvements for Healthy / Disabled Lives	Generational



# REQUIRED SUPPLEMENTARY INFORMATION— SCHEDULE OF GOVERNMENTAL NONEMPLOYER CONTRIBUTING ENTITY CONTRIBUTIONS

(\$ in Thousands) Fiscal Year	_			-	_	-	-	 _				-		
Ending on June 30		2022	_	2021		2020	2019	2018	2017	2016	2015	2014	_	2013
Actuarially Determined State Contribution	\$	123,908	\$	120,299	\$	173,273	\$ 167,819	\$ 172,223	\$ 166,802	\$ 130,331	\$ 125,620	\$ 187,227	\$	180,460
Contributions in relation to the Actuarially Determined Contribution		20,419		29,411		29,173	35,320	35,299	19,922	19,960	25,145	25,955		27,040
Annual Contribution Deficiency (Excess)	\$	103,489	\$	90,888	\$	144,100	\$ 132,499	\$ 136,924	\$ 146,880	\$ 110,371	\$ 100,475	\$ 161,272	\$	153,420
Covered Payroll <sup>1</sup>	\$	4,695,730	\$	4,438,394	\$	4,438,394	\$ 4,389,654	\$ 4,075,939	\$ 4,279,755	\$ 4,125,066	\$ 4,078,367	\$ 3,930,957	\$	4,101,750
Actual Contributions as a Percentage of Covered Payroll		0.43%		0.66%		0.66%	0.80%	0.87%	0.47%	0.48%	0.62%	0.66%		0.66%

<sup>&</sup>lt;sup>1</sup>Covered Payroll provided by the System for active employees who would be eligible for benefits at retirement. Beginning in 2021, for years following the valuation date (when no new valuation is performed), covered payroll has been set equal to the covered payroll from the most recent valuation.



# Section VIII — Schedule of Employer Allocations as of June 30, 2022

			Expected Employer		Sha	State's Proportionate are of the NOL	
Function of		С	ontribution		As	sociated With	Employer
Employer Code	Employer		FYE 2022	Percentage at FYE 2022		at FYE 2022	OPEB Expense and Revenue
001	Employer ANDOVER BD OF ED	\$	8,904	0.043608%	\$	699,291	\$ 42,151
002	ANSONIA BD OF ED	Ψ	72,269	0.353932%	Ψ	5,675,600	342,111
003	ASHFORD BD OF ED		15,615	0.076472%		1,226,294	73,918
004	A VON BD OF ED		143,554	0.703041%		11,273,860	679,559
005	BARKHAM STED BD OF ED		7,342	0.035955%		576,569	34,754
007	BERLIN BD OF ED		113,179	0.554284%		8,888,415	535,771
008	BETHANY BD OF ED		14,500	0.071012%		1,138,738	68,640
009	BETHEL BD OF ED		117,242	0.574181%		9,207,480	555,003
010	HIGHVILLE CHARTER SCH		9,432	0.046190%		740,696	44,647
011	BLOOM FIELD BD OF ED		90,755	0.444465%		7,127,374	429,620
012	BOLTON BD OF ED		32,976	0.161497%		2,589,742	156,103
013	BOZRAH BD OF ED		7,982	0.039093%		626,889	37,787
014	BRANFORD BD OF ED		122,622	0.600527%		9,629,961	580,469
015	BRIDGEPORT BD OF ED		579,624	2.838652%		45,520,198	2,743,841
017	BRISTOL BD OF ED		278,522	1.364033%		21,873,429	1,318,474
018	BROOKFIELD BD OF ED		101,692	0.498029%		7,986,318	481,395
019	BROOKLYN BD OF ED		31,384	0.153700%		2,464,710	148,566
020	CHILDRENS CENTER COM PROG		1,689	0.008273%		132,665	7,997
021	CANAAN BD OF ED		3,528	0.017276%		277,035	16,699
022	CANTERBURY BD OF ED		17,864	0.087489%		1,402,960	84,567
023	CANTON BD OF ED		58,164	0.284852%		4,567,844	275,338
024	CHAPLIN BD OF ED		7,493	0.036694%		588,419	35,468
025	CHESHIRE BD OF ED		169,670	0.830942%		13,324,861	803,189
026	CHESTER BD OF ED		6,136	0.030052%		481,909	29,048
027	CLINTON BD OF ED		75,780	0.371125%		5,951,305	358,729
028	COLCHESTER BD OF ED		91,206	0.446673%		7,162,781	431,754
029	AMISTAD ACADEMY		20,719	0.101471%		1,627,174	98,082
030	COLEBROOK BD OF ED		3,954	0.019366%		310,550	18,719
031	COLUMBIA BD OF ED		20,776	0.101748%		1,631,616	98,350
032	CORNWALL BD OF ED		5,465	0.026763%		429,167	25,869
033	COVENTRY BD OF ED		61,412	0.300758%		4,822,910	290,713
034	CROM WELL BD OF ED		72,942	0.357226%		5,728,423	345,295
035	DANBURY BD OF ED		402,581	1.971601%		31,616,298	1,905,750
036	DARIEN BD OF ED		227,703	1.115153%		17,882,426	1,077,907
037	DEEP RIVER BD OF ED		6,617	0.032404%		519,626	31,322



				State's	
		Expected		Proportionate	
		Employer		Share of the NOL	
		Contribution		Associated With	
Employer			Percentage at		OPEB Expense
Code	Employer	FYE 2022			and Revenue
038	DERBY BD OF ED	\$ 54,352	0.266182%		\$ 257,292
040	EASTFORD BD OF ED	5,807	0.028439%	456,044	27,489
041	EAST GRANBY BD OF ED	40,750	0.199569%	3,200,259	192,903
042	EAST HADDAM BD OF ED	46,502	0.227739%	3,651,988	220,133
043	EAST HAMPTON BD OF ED	75,857	0.371502%	5,957,350	359,094
044	EAST HARTFORD BD OF ED	261,998	1.283108%	20,575,727	1,240,252
045	EAST HAVEN BD OF ED	105,223	0.515319%	8,263,578	498,107
046	EAST LYME BD OF ED	111,580	0.546453%	8,762,838	528,201
047	EASTON BD OF ED	38,305	0.187596%	3,008,261	181,330
048	EAST WINDSOR BD OF ED	52,400	0.256625%	4,115,200	248,054
049	ELLINGTON BD OF ED	97,580	0.477890%	7,663,372	461,928
050	ENFIELD BD OF ED	194,070	0.950439%	15,241,097	918,694
051	ESSEX BD OF ED	9,554	0.046789%	750,301	45,226
052	FAIRFIELD BD OF ED	435,679	2.133695%	34,215,613	2,062,430
053	FARM INGTON BD OF ED	165,187	0.808986%	12,972,778	781,966
054	FRANKLIN BD OF ED	6,312	0.030914%	495,732	29,881
055	GLASTONBURY BD OF ED	242,367	1.186970%	19,034,073	1,147,325
057	GRANBY BD OF ED	67,176	0.328990%	5,275,634	318,002
058	GREENWICH BD OF ED	487,458	2.387277%	38,282,016	2,307,542
059	GRISWOLD BD OF ED	58,851	0.288217%	4,621,805	278,591
060	GROTON BD OF ED	180,090	0.881971%	14,143,155	852,513
061	GUILFORD BD OF ED	131,438	0.643704%	10,322,341	622,204
063	HAM DEN BD OF ED	226,009	1.106855%	17,749,361	1,069,886
064	HAMPTON BD OF ED	3,760	0.018413%	295,268	17,798
065	HARTFORD BD OF ED	621,365	3.043073%	48,798,262	2,941,434
066	HARTLAND BD OF ED	6,352	0.031107%	498,827	30,068
068	HEBRON BD OF ED	27,857	0.136425%	2,187,691	131,868
069	KENT BD OF ED	8,511	0.041681%	668,390	40,289
070	KILLINGLY BD OF ED	74,954	0.367080%	5,886,440	354,820
072	LEBANON BD OF ED	40,852	0.200069%	3,208,276	193,387
073	LEDYARD BD OF ED	92,671	0.453847%	7,277,822	438,689
074	LISBON BD OF ED	15,224	0.074557%	1,195,585	72,067
075	LITCHFIELD BD OF ED	40,458	0.198140%	3,177,343	191,522
077	M A DISON BD OF ED	115,002	0.563210%	9,031,551	544,399
078	MANCHESTER BD OF ED	275,940	1.351388%	21,670,655	1,306,252
079	MANSFIELD BD OF ED	51,205	0.250773%	4,021,358	242,397
080	MARLBOROUGH BD OF ED	19,847	0.097196%	1,558,620	93,950



				State's	
		Expected		Proportionate	
		Employer		Share of the NOL	
		Contribution		Associated With	Employer
Employer			Percentage at		OPEB Expense
Code	Employer	FYE 2022		at FYE 2022	and Revenue
081	MERIDEN BD OF ED	\$ 273,111	1.337532%	\$ 21,448,463	\$ 1,292,858
085	MIDDLETOWN BD OF ED	189,512	0.928116%	14,883,129	897,117
086	MILFORD BD OF ED	254,297	1.245396%	19,970,983	1,203,800
087	MONROE BD OF ED	139,626	0.683804%	10,965,378	660,965
088	M ONT VILLE BD OF ED	86,151	0.421915%	6,765,766	407,823
090	NAUGATUCK BD OF ED	144,087	0.705652%	11,315,730	682,083
091	NEW BRITAIN BD OF ED	370,101	1.812531%	29,065,475	1,751,992
092	NEW CANAAN BD OF ED	207,411	1.015775%	16,288,816	981,848
093	NEW FAIRFIELD BD OF ED	101,005	0.494664%	7,932,358	478,142
094	NEW HARTFORD BD OF ED	16,640	0.081491%	1,306,777	78,769
095	NEW HAVEN BD OF ED	676,950	3.315296%	53,163,591	3,204,571
096	NEWINGTON BD OF ED	163,566	0.801046%	12,845,453	774,291
097	NEW LONDON BD OF ED	112,523	0.551069%	8,836,860	532,663
099	NEW MILFORD BD OF ED	137,685	0.674301%	10,812,990	651,779
100	NEWTOWN BD OF ED	174,266	0.853449%	13,685,780	824,944
101	NORFOLK BD OF ED	3,656	0.017903%	287,090	17,305
102	NORTH BRANFORD BD OF ED	66,268	0.324542%	5,204,307	313,702
103	NORTH CANAAN BD OF ED	9,518	0.046613%	747,479	45,056
104	NORTH HAVEN BD OF ED	124,907	0.611721%	9,809,466	591,290
105	NORTH STONINGTON BD OF ED	30,290	0.148343%	2,378,806	143,388
106	NORWALK BD OF ED	518,453	2.539072%	40,716,178	2,454,267
107	NORWICH BD OF ED	126,546	0.619746%	9,938,154	599,046
108	NORWICH FREE ACADEMY	77,022	0.377209%	6,048,867	364,610
110	OLD SAYBROOK BD OF ED	58,528	0.286633%	4,596,404	277,059
111	ORANGE BD OF ED	48,823	0.239106%	3,834,268	231,120
112	OXFORD BD OF ED	65,587	0.321204%	5,150,779	310,476
113	PLAINFIELD BD OF ED	69,951	0.342578%	5,493,529	331,136
114	PLA INVILLE BD OF ED	88,210	0.431999%	6,927,471	417,570
115	PLYM OUTH BD OF ED	52,068	0.254998%	4,089,110	246,481
116	POM FRET BD OF ED	13,567	0.066445%	1,065,502	64,226
117	PORTLAND BD OF ED	48,277	0.236433%	3,791,404	228,536
118	PRESTON BD OF ED	18,683	0.091500%	1,467,280	88,444
120	PUTNAM BD OF ED	42,251	0.206921%	3,318,154	200,010
121	REDDING BD OF ED	46,438	0.227426%	3,646,969	219,830
122	RSD#1	29,293	0.143457%	2,300,455	138,666
123	RSD #4	31,189	0.152743%	2,449,364	147,641
124	RSD #5	95,169	0.466081%	7,474,005	450,514



						State's	
		Exp	ected		P	roportionate	
			loyer	Employer		e of the NOL	
		Contrik				ociated With	Employe
Employer				Percentage at			OPEB Expense
Code	Employer		2022	FYE 2022		at FYE 2022	and Revenue
125	RSD#6		,244	0.201988%	\$	3,239,049	\$ 195,242
126	RSD#7		,640	0.194134%		3,113,104	187,650
127	RSD#8	54	,567	0.267235%		4,285,340	258,309
128	RIDGEFIELD BD OF ED	211	,285	1.034748%		16,593,064	1,000,187
129	ROCKY HILL BD OF ED	110	,538	0.541347%		8,680,959	523,266
131	SALEM BD OF ED	14	,925	0.073093%		1,172,108	70,652
132	SALISBURY BD OF ED	11	,845	0.058011%		930,256	56,073
133	SCOTLAND BD OF ED	4	,891	0.023953%		384,107	23,153
134	SEYMOUR BD OF ED	78	,965	0.386721%		6,201,400	373,805
135	SHARON BD OF ED	7	,953	0.038951%		624,612	37,650
136	SHELTON BD OF ED	174	,229	0.853268%		13,682,878	824,769
137	SHERMAN BD OF ED	17	,235	0.084408%		1,353,554	81,589
138	SIM SBURY BD OF ED	172	,408	0.844349%		13,539,854	816,148
139	SOM ERS BD OF ED	56	,941	0.278861%		4,471,773	269,547
141	SOUTHINGTON BD OF ED	226	,462	1.109076%		17,784,976	1,072,033
142	SOUTH WINDSOR BD OF ED	190	,304	0.931997%		14,945,364	900,868
143	SPRAGUE BD OF ED	8	,575	0.041997%		673,458	40,594
144	STAFFORD BD OF ED	58	,103	0.284554%		4,563,065	275,050
145	STAMFORD BD OF ED	675	,407	3.307737%		53,042,374	3,197,259
146	STATE BD OF ED	204	,487	1.001453%		16,059,150	968,004
149	DCYS RECG HOME	6	,229	0.030507%		489,206	29,488
150	STERLING BD OF ED	10	,617	0.051994%		833,768	50,257
151	STONINGTON BD OF ED	79	,321	0.388468%		6,229,415	375,493
152	STRATFORD BD OF ED	269	,171	1.318236%		21,139,035	1,274,207
153	SUFFIELD BD OF ED	86	,857	0.425375%		6,821,250	411,167
154	THOM A STON BD OF ED	32	,283	0.158103%		2,535,316	152,822
155	THOM PSON BD OF ED	35	,769	0.175176%		2,809,096	169,325
156	TOLLAND BD OF ED	82	,363	0.403367%		6,468,333	389,895
157	TORRINGTON BD OF ED	146	,827	0.719072%		11,530,931	695,055
158	TRUM BULL BD OF ED	269	,051	1.317651%		21,129,654	1,273,641
159	UNION BD OF ED	2	,438	0.011942%		191,500	11,543
160	VERNON BD OF ED	127	,883,	0.626295%		10,043,173	605,377
161	VOLUNTOWN BD OF ED	10	,207	0.049990%		801,632	48,320
162	WALLINGFORD BD OF ED	260	,909	1.277774%		20,490,192	1,235,096
165	WATERBURY BD OF ED	560	,373	2.744370%		44,008,306	2,652,708
166	WATERFORD BD OF ED	110	,373	0.540543%		8,668,066	522,489
167	WATERTOWN BD OF ED	97	,567	0.477823%		7,662,298	461,864



				State's	
		Expected		Proportionate	
		Employer	Employer	Share of the NOL	
		Contribution		Associated With	Employer
Employer			Percentage at		OPEB Expense
Code	Employer	FYE 2022	FYE 2022	at FYE 2022	and Revenue
168	WESTBROOK BD OF ED	\$ 39,101	0.191495%		\$ 185,099
169	WEST HARTFORD BD OF ED	387,270	1.896616%	30,413,850	1,833,269
170	WEST HAVEN BD OF ED	212,151	1.038990%	16,661,088	1,004,288
171	WESTON BD OF ED	112,029	0.548649%	8,798,053	530,324
172	WESTPORT BD OF ED	277,054	1.356843%	21,758,131	1,311,524
173	WETHERSFIELD BD OF ED	143,436	0.702464%	11,264,607	679,002
174	WILLINGTON BD OF ED	18,517	0.090683%	1,454,179	87,654
175	WILTON BD OF ED	193,923	0.949716%	15,229,503	917,995
176	WINCHESTER BD OF ED	24,646	0.120701%	1,935,543	116,670
177	WINDHAM BD OF ED	113,923	0.557927%	8,946,834	539,292
178	WINDSOR BD OF ED	151,175	0.740362%	11,872,334	715,634
179	WINDSOR LOCKS BD OF ED	79,109	0.387430%	6,212,769	374,490
180	WINSTED GILBERT SCHOOL	17,065	0.083576%	1,340,212	80,785
181	WOLCOTT BD OF ED	82,404	0.403564%	6,471,492	390,085
182	WOODBRIDGE BD OF ED	34,210	0.167539%	2,686,630	161,943
184	WOODSTOCK BD OF ED	24,791	0.121413%	1,946,961	117,358
185	WOODSTOCKACADEMY	35,695	0.174815%	2,803,307	168,976
186	UNIVERSITY OF CONN	7,641	0.037422%	600,094	36,172
194	RSD #9	44,346	0.217180%	3,482,666	209,926
197	CCISOMERS	1,043	0.005107%	81,895	4,936
198	DCF HIGH MEADOWS	-	0.000000%	-	-
201	RSD #10	82,749	0.405255%	6,498,608	391,719
206	SUPERVISORY DISTRICT #4	17,243	0.084444%	1,354,131	81,624
208	NORTHWESTERN CTC	1,661	0.008135%	130,452	7,863
209	MANCHESTER CTC	1,763	0.008633%	138,437	8,345
210	NORWALKCTC	703	0.003444%	55,227	3,329
211	WESTERN CSU	2,146	0.010511%	168,553	10,160
212	CENTRALCSU	8,000	0.039181%	628,301	37,872
213	EASTERN CSU	3,795	0.018584%	298,010	17,963
214	SOUTHERN CSU	9,091	0.044522%	713,948	43,035
215	RSD #11	10,537	0.051606%	827,546	49,882
216	CAPITALCTC	478	0.002339%	37,508	2,261
217	HOUSATONIC CTC	2,637	0.012913%	207,071	12,482
218	NAUGATUCK VALLEY CTC	3,253	0.015931%	255,467	15,399
219	MIDDLESEX CTC	2,684	0.013147%	210,823	12,708
220	DEPT OF HIGHER ED	315	0.001542%	24,727	1,490
221	EDADVANCE	23,696	0.116048%	1,860,928	112,172



				State's	
		Expected		Proportionate	
		Employe		Share of the NOL	
		Contribution		Associated With	
Employer			Percentage at		OPEB Expense
Code	Employer	FYE 2022			and Revenue
222	RSD #12	\$ 42,094			
223	GATEWAYCTC	1,570	0.007690%	123,316	7,433
225	RSD #13	75,672	0.370597%	5,942,838	358,219
226	RSD #14	70,598	0.345749%	5,544,379	334,201
228	CCICHESHIRE	643	0.003148%	50,481	3,043
229	SHARED SERVICES	7,882	0.038600%	618,984	37,311
230	CREC	402,112	1.969304%	31,579,464	1,903,529
231	RSD #15	146,211	0.716055%	11,482,551	692,139
233	RSD #16	75,203	0.368300%	5,906,004	355,999
234	THREE RIVERS CC	661	0.003236%	51,892	3,128
235	TUNXIS CTC	555	0.002718%	43,585	2,627
236	QUINEBAUG CTC	665	0.003255%	52,197	3,146
238	ODYSSEY CHARTER SCH	10,718	0.052488%	841,690	50,735
240	CES	61,638	0.301867%	4,840,694	291,785
241	ACES	114,676	0.561614%	9,005,958	542,856
242	PROJECT LEARN	88,931	0.435533%	6,984,142	420,986
243	RSD #17	75,154	0.368061%	5,902,171	355,768
244	A SNUNTUCK CTC	159	0.000776%	12,444	750
245	DCF CENTRAL	-	0.000000%	-	-
247	RSD #18	62,441	0.305800%	4,903,763	295,586
253	DCF MENTAL HEALTH	-	0.000000%	-	-
254	EASTCONN	32,774	0.160507%	2,573,866	155,146
258	DCF RIVERVIEW	-	0.000000%	-	-
263	SERVICES FOR THE BLIND	5,690	0.027864%	446,823	26,933
265	RSD #19	47,276	0.231530%	3,712,780	223,797
269	DDS REGION #2	-	0.000000%	-	-
270	ACADEMIC AWARDS/CHARTER OAK ST	-	0.000000%	-	-
271	UCONN HEALTH CENTER	6,236	0.030539%	489,719	29,519
272	CCISUFFIELD	313	0.001534%	24,599	1,483
273	CCINIANTIC	279	0.001365%	21,889	1,319
275	CHILDRENS CENTER	5,610	0.027473%	440,553	26,555
277	BRIDGE ACADEMY CHARTER SCH	8,483	0.041543%	666,177	40,155
278	COMMON GROUND CHARTER SCH	8,363	0.040955%	656,748	39,587
280	EXPLORATIONS CHARTER SCH	3,927	0.019231%	308,385	18,589
281	INTEGRATED DAY SCHOOL	9,319	0.045638%	731,844	44,114
282	ISAAC CHARTER SCH	10,609	0.051957%	833,175	50,222
283	JUM OKE A CADEMY CHARTER SCH	12,511	0.061272%	982,549	59,226



		_	· · · · · · · · · · · · ·		State's	
			xpected mployer	Fmplover	Proportionate Share of the NOL	
			tribution		Associated With	
Employer			Effort at	Percentage at	the Employer	OPEB Expense
Code	Employer		YE 2022	FYE 2022	at FYE 2022	and Revenue
284	SIDE BY SIDE CHARTER SCH	\$	6,858	0.033584%	\$ 538,548	\$ 32,462
290	TP WORK AREA 1		-	0.000000%	-	-
291	TP WORK AREA 2		-	0.000000%	-	-
295	MSA PAYROLL		-	0.000000%	-	-
301	TRAILBLAZERSACADEMY		-	0.000000%	-	-
302	NEWBEGINNINGS		10,586	0.051842%	831,331	50,110
303	ELM CITY COLLEGE PREP		8,985	0.044003%	705,626	42,533
304	STAMFORD ACADEMY		-	0.000000%	-	-
305	PARK CITY PREP		7,633	0.037382%	599,452	36,133
307	AF BRIDGEPORT ACADEMY		10,399	0.050929%	816,690	49,228
308	SERC		1,433	0.007019%	112,556	6,785
309	AF HARTFORD ACADEMY		18,903	0.092573%	1,484,487	89,481
311	BRASSCITY		8,127	0.039802%	638,259	38,473
313	GREAT OAKS CHARTER SCHOOL		8,549	0.041867%	671,373	40,469
314	BTWACADEMY		9,495	0.046502%	745,699	44,949
315	CAPITAL PREP HARBOR SCH		12,162	0.059560%	955,095	57,571
317	STAMFORD CH SCH EX		6,914	0.033858%	542,942	32,727
	Totals	\$ 20,4	419,000	100.000000%	\$ 1,603,585,000	\$ 96,660,000



#### Schedule A — Additional Supporting Information

#### Development of the Projected Earnings on Plan Investments as of June 30, 2022

The development of the projected earnings on plan investments component of Collective OPEB Expense / (Income) as of the June 30, 2022 measurement date is shown in the following table:

	Projected Earnings on Plan Investments For the Measurement Period Ending on June 30, 2022 (\$ in Thousands)						
(a)	Expected rate of return on assets at June 30, 2021		3.00%				
(b)	Beginning of year market value of assets	\$	105,915				
(c)	Expected return on assets at the beginning of the year [(b) x (a)]	\$	3,177				
(d)	External cash flow (mid-year payments assumed):						
	Contributions - State of Connecticut	\$	20,419				
	Contributions - member		50,630				
	Refunds of contributions		0				
	Net benefit payments		(74,795)				
	Administrative expenses		(283)				
	Other		16,083				
	Total net external cash flow	\$	12,054				
(e)	Expected return on external cash flow [(d) x (1 - (a)) <sup>1/2</sup> - 1)]	\$	179				
(f)	Projected earnings on plan investments [(c) + (e)]	\$	3,356				

# Development of the Collective Deferred Outflow / (Inflow) of Resources for the Difference Between Projected and Actual Earnings on Plan Investments at June 30, 2022

The determination of the Collective Deferred Outflow / (Inflow) of Resources for the difference between projected and actual earnings on plan investments at June 30, 2022 is shown in the following table:

	Difference Between Projected and Actu Earnings on Plan Investments at June 30, (\$ in Thousands)	
(a)	Projected earnings on plan investments at June 30, 2022	\$ 3,356
(b)	Net investment income¹	\$ 49,587
(c)	Difference between projected and actual	
	earnings on plan investments [(a) - (b)]	\$ (46,231)

<sup>&</sup>lt;sup>1</sup> See "Reconciliation of Changes in the Plan's Fiduciary Net Position (FNP) and Collective Net OPEB Liability / (Asset) (NOL)" on page 8.



## **Development of the Average Expected Remaining Service Lives**

The determination of the average expected remaining service lives for the entire Plan membership is provided in the following table:

Membership Category	(1) Number	(2) Average Remaining Service Lives (in Years)
(a) Active Members	52,200	12.41
(b) Inactive Members	41,133	0.00
(c) Total Membership [((1a) × (2a)) + ((1b) × (2b))] / (1c)	93,333	6.94



#### Schedule B —

#### **Summary of Actuarial Assumptions and Methods for GASB Accounting Purposes**

#### **ECONOMIC ASSUMPTIONS**

#### **Discount Rate**

3.53% per year for all periods after June 30, 2022.

#### **Municipal Bond Index Rate Basis**

The 20-Bond average General Obligation 20-year Municipal Bond Rate published at the end of the last week during the month of June by The Bond Buyer (www.bondbuyer.com) was used as the 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate required under GASB rules.

#### **Expected Long-term Rate of Return on Assets**

3.00% per year, net of investment expenses, for all periods after June 30, 2022.

#### **Expected Long-term Rates of Inflation**

CPI: 2.50% per year for all periods after June 30, 2022.

MEDICAL CPI: 3.25% per year for all periods after June 30, 2022.

#### **Expected Long-term Real Wage Growth**

0.50% per year for all periods after June 30, 2022.

#### **Expected Long-term Wage Inflation**

3.00% per year for all periods after June 30, 2022. This rate does not reflect any expected future increase in the number of active members.

#### **Expected Administrative Expenses Included in Service Cost**

None.



#### **Long-term Health Care Cost Trend Rates**

Annual per capita health care claims costs are expected to increase in future years as a result of medical inflation, utilization, leverage in the plan design, and improvements in technology adjusted for any implicit and/or explicit cost containment features. Initial health care cost trend rates were selected based on an analysis of national average health trend surveys specific to similarly structured plans for Medicare-eligible participants. Since a significant portion of Medicare plan costs are due to prescription drug costs, the continued high cost of prescription drugs and the changes to Medicare Part D due to the Inflation Reduction Act are considered in the development of the trend assumption.

The assumed annual assumed rates of increases in retiree expected health care claims costs and contributions during each period subsequent to the measurement date are shown in the table below. Medicare Advantage Rates are previously negotiated and known through calendar year 2024.

Fiscal Year Beginning July 1,	Annual Per Capita Claims Cost Increase*
2024	6.25%
2025	6.00%
2026	5.75%
2027	5.50%
2028	5.25%
2029	5.00%
2030	4.75%
2031 and beyond	4.50%

<sup>\*</sup>Premium rates have been set for the Medicare Advantage and Medicare Supplement plans until calendar year 2024. The general health care trend rates are used for trending the subsidy amount for pre-Medicare participants until the limit is reached. The general health care rates prior to fiscal year 2024 are 6.75% for fiscal year beginning 2022 and 6.50% for fiscal year beginning 2023. Subsidy amounts are assumed to follow medical trend until they reach their limit and to not increase after that.



#### **DEMOGRAPHIC ASSUMPTIONS**

The demographic actuarial assumptions for retirement, disability incidence, and withdrawal were developed based on the results of an actuarial experience study for the five-year period from July 1, 2014 to June 30, 2019, adopted by the Board, and prescribed for use in the Plan's June 30, 2022 actuarial valuation.

#### **Expected Annual Subsidies for Local School District Coverage**

#### **FUTURE RETIREES AND DEPENDENTS**

The lesser of \$2,640 per year (\$220 per month) and the Maximum Annual Subsidy for all future retired members and dependents who are expected to be covered under local school district OPEB plans in future periods.

#### **CURRENT RETIREES AND DEPENDENTS**

The lesser of the annualized actual monthly subsidy amounts provided by the System for retired members and dependents who are covered under local school district OPEB plans as of June 30, 2022 and the applicable Maximum Annual Subsidy. Reported subsidies are expected to increase each year based on the assumed long-term health care cost trend rates for Medicare Supplement Plans until the Maximum Annual Subsidy is reached.

The following table provides Maximum Annual Subsidy amounts for Medicare-ineligible and Medicare-eligible members and dependents who are receiving health care coverage under a local school district OPEB plan:

Medicare Status	Maximum Annual Subsidy
Ineligible	\$2,640 per year (\$220 per month)
Eligible	\$5,280 per year (\$440 per month) for those without "premium free" Medicare Part A, and contribute at least \$440 per month for coverage under a local school district plan;
	\$2,640 per year (\$220 per month), otherwise.

Since the prior valuation, the Maximum Annual Subsidies provided in the table above increased for the first time since July of 1996. Our understanding is that these types of benefit improvements would not be considered "substantially automatic" (as that term is defined in GASB 74 and 75) based on the Plan's history of such changes. As a result, the Maximum Annual Subsidy Amounts shown above are not expected to increase in any future period.



#### **Expected Annual Per Capita Health Care Claims Costs**

#### MEDICAL AND PRESCRIPTION DRUGS

Assumed annual per capita health care claims costs were developed for the Medicare Supplement Plan and the Medicare Advantage Plan based on the medical and prescription drug premium rates for each plan and period provided by the System. Our understanding is that these premium rates include all relevant medical, prescription drug, and/or third-party administrative costs, and represent the amounts paid by the System as "the full contribution amount" for each coverage provided.

The expected annual age 65 per capita health care claims costs for the Medicare Supplement Plan and Medicare Advantage Plan for the year following the valuation date are shown below:

Expected Annual Age 65 Per Capita Claims Cost for		
Medicare Supplement Plan	\$3,030	
Medicare Advantage Plan	\$877	

Premium rates for both plans have been set for calendar years 2022 through 2024. Annual claims have been set according to these rates and are assumed to increase according to the long-term health care cost trend rates following that period.

#### AFFORDABLE CARE ACT (ACA)

The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results other than plan design features and fees currently mandated by the ACA and incorporated in the plan designs, which are included in the current baseline claims costs. Continued monitoring of the ACA's impact on the Plan's liability will be required.

#### **COVID-19 PANDEMIC**

The impact of the COVID-19 pandemic was considered in this valuation; however, no changes were incorporated at this time due to the level of uncertainty regarding the impact on both plan costs and contribution levels going forward. Given the uncertainty regarding COVID-19 (e.g., the impact of routine care being deferred, direct COVID-19 treatment and prevention costs, changes in contribution and budget projections), continued monitoring of the impact on the Plan's liability will be required.



### **AGE RELATED MORBIDITY**

Expected annual age 65 per capita health care claims costs are adjusted to reflect anticipated age-related cost changes. The assumed annual percentage increases in expected annual per capita health care costs/net incurred claims that were used to adjust Medicare Supplement and Medicare Advantage Plan amounts from one age to the next are provided in the following table for both retirees and their dependents:

Payment Age	Annual Increase
Under 30	0.0%
30 – 34	1.0%
35 – 39	1.5%
40 – 44	2.0%
45 – 49	2.6%
50 – 54	3.3%
55 – 59	3.6%
60 – 64	4.2%
65 – 69	3.0%
70 – 74	2.5%
75 – 79	2.0%
80 – 84	1.0%
85 – 89	0.5%
Over 90	0.0%

# **Mortality and Mortality Improvement Rates**

## 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*				
<u>Age</u>	<u>Male</u>	<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%		

<sup>\*</sup> 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 <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	0.111%	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%

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

# **Withdrawal Rates**

The following table contains service based annual rates of withdrawal (separation from service for causes other than death, disability, or retirement) for males and females:

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			



# **Retirement Rates**

The following table contains age and service based annual rates of retirement at sample ages:

Annual Rates of Retirement					
		Unred	duced		
Age	Less than 35 years of 35 or more years of Service				
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	
50			35.0%	30.0%	
55			35.0%	30.0%	
60	20.0%	20.0%	30.0%	30.0%	
65	27.5%	32.5%	35.0%	37.5%	
70	27.5%	30.0%	30.0%	32.5%	
75	100.0%	100.0%	100.0%	100.0%	

Annual Rates of Retirement				
Age	Prora	Proratable		ıced
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
50			1.50%	1.25%
52			1.50%	1.25%
54			2.00%	2.25%
56				3.75%
58				5.50%
60	6.0%	5.0%		
65	15.0%	12.0%		
70	28.5%	15.0%		
75	28.5%	15.0%		
80	100.0%	100.0%		



# **Disability Rates**

The table below provides age based annual rates of disability for males and females at sample ages:

Annual Rates of Disability				
Age	Male	Female		
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%		

# **Rates of Annual Salary Increases**

Rates of annual salary increases are constructed geometrically based on the expected long-term rate of inflation (currently, 2.50%), an expected productivity component (currently, 0.50%), and a variable expected merit component that is dependent on years of service. The following table provides a sample of the service-based rates of salary increases that are used to project a member's total salary as of the valuation date to future years.

Years of Service	Total Increase (Next Year)
0	6.50%
1	6.25%
2 – 9	6.00%
10 – 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 and Over	3.00%



## **Decrement Timing and Adjustment**

Decrements—retirement, withdrawal, death, and disability—are assumed to occur at the beginning of the year. Decrement rates (or "probabilities") are assumed to be uniformly distributed throughout the year, and reflect multiple decrement effects.

Subsidized Local School District Coverage and System-Sponsored Health Care Plan Participation Rates<sup>1</sup>

### **FUTURE RETIREES AND DEPENDENTS**

The table below provides the percentage of future retired members and dependents who are expected to be covered under local school district OPEB plans or the System-sponsored health care plan options in future periods.

Membership Class	Subsidized Local School District Coverage	System-Sponsored Health Care Plans
Pre-65 Members	60.0%	N/A
Post-64 Members	20.0%	60.0%
Pre 65 Spouses/Survivors*	45.0%	N/A
Post-64 Spouses/Survivors*	40.0%	45.0%

<sup>\*</sup> Percentage of participating members electing spouse coverage.

### **CURRENT RETIREES AND DEPENDENTS—ENROLLED**

All current retirees and dependents who are eligible for Medicare as of the valuation date are assumed to continue current coverage. For retirees and surviving spouses who are not eligible for Medicare and are covered under local school district OPEB plans as of the valuation date, the following table shows the assumed migration from subsidized local school district coverage to a System-sponsored health care plan option at age 65:

Membership Class	Assumed Percentage Electing Subsidized Local School District Coverage On or After Age 65	Assumed Percentage Electing System-Sponsored Health Care Plans On or After Age 65	
Pre-65 Members	25.0%	75.0%	
Pre-65 Spouses/Survivors*	47.1%	52.9%	

<sup>\*</sup> Percentage of participating members electing spouse coverage.

Long-term Plan participation and spouse coverage election and enrollment rates are uncertain due to the recent plan changes, and future experience may differ significantly from the assumptions that were used to measure Plan obligations as of June 30, 2022. As such, these assumptions will need to be reviewed as experience evolves, and the results provided in this report should be viewed as having a likely range of variability.

# **Connecticut State Teachers' Retirement System**

### CURRENT RETIREES AND DEPENDENTS—NOT ENROLLED

50% of retired members who are not eligible for Medicare, are currently receiving a retirement or disability benefit, but are not participating in the Plan, are expected to be covered under a System-sponsored health care plan option at age 65. Of these participants, 50% are assumed to cover a spouse.

### SYSTEM-SPONSORED HEALTH CARE PLAN ELECTION

Current retirees already enrolled in a System-sponsored health care plan are assumed to continue with their elected plan for life. Future retirees and current retirees newly electing to enroll in System-sponsored health care plans are assumed to elect between the System-sponsored health care plan options as follows:

Health Care Coverage Option	Percent of New System-Sponsored Health Care Plan Enrollees Electing the Plan	
Medicare Supplement Plan	15.0%	
Medicare Advantage Plan	85.0%	

Participants are not assumed to change plan options once System-sponsored health care is elected.

### Assumed Eligibility for "Premium Free" Medicare Part A Benefits

### **FUTURE RETIREES AND DEPENDENTS**

100% of future Medicare-eligible retirees and dependents are expected to be eligible for "premium free" Medicare Part A benefits.

### **CURRENT RETIREES AND DEPENDENTS**

0% of retired members and dependents who are currently receiving a subsidy equal to \$5,280 per year (\$440 per month) as of June 30, 2022 are expected to be eligible for "premium free" Medicare Part A benefits. Otherwise, 100% of retired members and dependents are expected to be eligible for these benefits when they reach age 65 or, if they are older, their attained age on the valuation date.

## **Assumed Commencement Age for Eligible Deferred Vested Members**

Eligible deferred vested members and their dependents are expected to begin receiving health care benefits when members reach age 60 or, if they are older, the member's attained age on the valuation date.

The following table contains the age based assumed percentages of deferred vested members who will become ineligible for future health care benefits because they are expected to withdraw their contributions from the System:

Attained Ages on the Later of the Valuation Date or Date of Decrement					
Under Age 55 Age 56 Age 57 Age 58 Age 59 Over Age 59					
30.00%	24.00%	18.00%	12.00%	6.00%	0.00%

# **Connecticut State Teachers' Retirement System**



## **Marital and Spouse Assumptions**

## **FUTURE RETIREES**

100% of future retired members are assumed to be married to a spouse of the opposite gender. Husbands are assumed to be three years older than their wives.

### **CURRENT RETIREES**

Actual spouse age is used where available. If relevant spouse information is not available, husbands are assumed to be three years older than their wives.

# **Valuation Date**

June 30, 2022

## **Measurement Date**

June 30, 2022

### **Measurement Period**

July 1, 2021 to June 30, 2022

### **Benefits Not Valued**

Dental benefits for retirees and their dependents are paid by the retiree on a full cost basis, and without an implicit subsidy. As a result, no dental benefit liabilities are included in the Plan's valuation results as of June 30, 2022.

# **Connecticut State Teachers' Retirement System**



## **Changes in Assumptions and Methods Since the Prior Valuation**

The June 30, 2022 measurements used in the development of June 30, 2022 financial accounting results for the Plan reflect the following changes in assumptions and methods:

- Based on the procedure described in GASB 74, the discount rate used to measure Plan obligations for financial accounting purposes as of June 30, 2022 was updated to equal the SEIR of 3.53% as of June 30, 2022;
- Expected annual per capita claims costs were updated to better reflect anticipated medical and prescription drug claim experience;
- Long-term health care cost trend rates were updated;
- The percentages of participating retirees who are expected to enroll in the Medicare Supplement Plan and the Medicare Advantage Plan options were updated to better reflect anticipated plan experience;
- The assumed age related annual percentage increases in expected annual per capita health care claim costs were updated.

The aggregate effect of the changes described above was a reduction in the Plan's Total OPEB Liability and Service Cost measured as of June 30, 2022.



# Schedule C — Summary of Actuarial Cost and Asset Valuation Methods

### **Actuarial Cost Method**

The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each member's expected benefits at retirement is determined, based upon age, service, and gender. The calculations take into account the probability of a member's death or termination of employment prior to receiving benefits under the Plan. The present value of the expected benefits payable on account of active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable by the Plan.

The actuarial cost method is a procedure for allocating the actuarial present value of postemployment benefits and expenses to time periods. The method used for the valuation is known as the Entry Age Normal (Level Percentage of Pay) actuarial cost method, and has the following characteristics:

- (i) The annual normal costs for each individual active participant are sufficient to accumulate the value of the participant's postemployment benefits at time of retirement.
- (ii) Each annual normal cost is a constant percentage of the participant's year-by-year projected covered compensation.

The Entry Age Normal (Level Percentage of Pay) actuarial cost method allocates the actuarial present value of each participant's projected benefits on a level basis over the participant's assumed compensation rates between the entry age of the participant and the assumed ages at which the participant will leave active service.

The portion of the actuarial present value allocated to the valuation year is called the service cost (SC). The portion of the actuarial present value of expected benefits not provided for by the actuarial present value of future service costs is called the Total OPEB Liability (TOL). The difference between the TOL and the Fiduciary Net Position (FNP) is the Net OPEB Liability / (Asset) (NOL).

The actuarial cost method is prescribed by GASB 74 and 75 for financial accounting purposes.

### **Asset Valuation Method**

The Actuarial Asset Value for financial accounting purposes is equal to the market value of plan assets.

The asset valuation method is prescribed by GASB 74 and 75 for financial accounting purposes.

### Changes in Actuarial Cost and Asset Valuation Methods Since the Previous Valuation

There were no changes in actuarial cost or amortization methods since the previous valuation on June 30, 2020.



# Schedule D — Summary of Main Plan Provisions for Valuation Purposes

This summary of main plan provisions is intended to describe only the principal features of the Retiree Health Insurance Plan (RHIP, or the Plan), cost-sharing, other than insured, defined benefit OPEB plan with a special funding situation sponsored by the Connecticut State Teachers' Retirement System (the System) as interpreted for valuation purposes. All actual eligibility requirements and benefit amounts will be determined in accordance with the Plan document and any System practices, processes, and procedures.

## **Key Plan Terms**

### **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.

#### **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 wartime 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.

### **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.

### PRORATABLE RETIREMENT

Eligibility—Age 60 with 10 years of Credited Service.

### **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.

### **TERMINATION OF EMPLOYMENT**

Eligibility—10 or more years of Credited Service.

# **Teachers' Required Contribution**

1.25% of annual salaries in excess of \$500,000 is contributed for health insurance of retired teachers.

### **State Contribution**

The State pays for one third of the costs through an annual appropriation in the General Fund. Administrative costs of the Plan are financed by the State. Based upon Chapter 167a, Subsection D of Section 10-183t of the Connecticut statutes, it is assumed the State will pay for any long-term shortfall arising from insufficient active member contributions.



## **Retiree Health Care Coverage**

Any member who is currently receiving a retirement or disability benefit is eligible to participate in the Plan. There are two types of the health care benefits offered through the system. Subsidized Local School District Coverage provides a subsidy paid to members still receiving coverage through their former employer and the CTRB Sponsored Medical Plans provide coverage for those participating in Medicare, but not receiving Subsidized Local School District Coverage.

Any member who is not currently participating in Medicare Parts A & B is eligible to continue health care coverage with their former employer. A subsidy of up to \$220 per month for a retired member plus an additional \$220 per month for a spouse enrolled in a local school district plan is provided to the school district to first offset the retiree's share of the cost of coverage, any remaining portion is used to offset the district's cost. As of July 1, 2022, the subsidy amount was increased for the first time since July of 1996. A subsidy amount of \$440 per month may be paid for a retired member, spouse or the surviving spouse of a member who has attained the normal retirement age to participate in Medicare, is not eligible for Part A of Medicare without cost, and contributes at least \$440 per month towards coverage under a local school district plan.

Any member that is currently participating in Medicare Parts A & B is eligible to either continue health care coverage with their former employer, if offered, or enroll in the plan sponsored by the System. If they elect to remain in the plan with their former employer, the same subsidies as above will be paid to offset the cost of coverage.

If a member participating in Medicare Parts A & B so elects, they may enroll in one of the CTRB Sponsored Medicare Supplement Plan(s). Effective July 1, 2018, the System added a Medicare Advantage Plan option. Active members, retirees, and the State pay equally toward the cost of the basic coverage (medical and prescription drug benefits) under the Medicare Advantage plan. Retired members who choose to enroll in the Medicare Supplement Plan are responsible for the full difference in the premium cost between the two plans. Additionally, effective July 1, 2018, retired members who cancel their health care coverage(s) or elect not to enroll in a CTRB sponsored health care coverage option must wait two years to re-enroll.

## **Survivor Health Care Coverage**

Survivors of former employees or retirees remain eligible to participate in the Plan and continue to be eligible to receive either the \$220 monthly subsidy or participate in the CTRB Sponsored Medicare Supplement or Medicare Advantage Plan options, as long as they do not remarry.

## **System Determined Monthly Retiree Contributions**

Eligible retirees who elect to enroll in a health care coverage option under the Plan contribute a monthly amount based on the coverages that they selected during the enrollment process. Effective January 1, 2015, new enrollees will only be able to elect the "all coverages" package (Medical with Prescription Drugs, Dental, Vision and Hearing). Existing retired members and dependents were grandfathered into the health care option elections that they had made prior to January 1, 2015. Additionally, as of January 1, 2022, Vision and Hearing coverage is included in all Medical plans.



# Monthly Retiree Contribution Rates by Coverage Type

The following tables provide the monthly health care contributions for retiree and dependent coverage options during the periods beginning on January 1, 2018 and ending on January 1, 2022.

Monthly Retiree Rates for the CTRB Sponsored Medicare Supplemental Plan Options						
Coverage	Jan. 1 2018	July 1 2018	Jan. 1 2019	Jan. 1 2020	Jan. 1 2021	Jan. 1 2022
Medical* with Prescriptions	\$101	\$199	\$173	\$179	\$167	\$269
Medical* with Prescriptions and Dental	\$151	\$254	\$231	\$231	\$220	\$319
Medical with Prescriptions, Dental, Vision & Hearing	\$156	\$259	\$238	\$239	\$228	N/A

Monthly Retiree Rates for the CTRB Sponsored Medicare Advantage Plan Options						
Coverage	Jan. 1 2018	July 1 2018	Jan. 1 2019	Jan. 1 2020	Jan. 1 2021	Jan. 1 2022
Medical* with Prescriptions	N/A	\$74	\$65	\$67	\$64	\$30
Medical* with Prescriptions and Dental	N/A	\$129	\$123	\$119	\$117	\$80
Medical with Prescriptions, Dental, Vision & Hearing	N/A	\$134	\$130	\$127	\$125	N/A

<sup>\*</sup>As of January 1, 2022, Vision and Hearing coverage is included in both Medical plans for all participants.



# **Monthly Full Premium Rates by Coverage Type**

Additionally, the following tables provide the full health care premiums for retiree and dependent coverage options during the periods beginning on January 1, 2018 and ending on January 1, 2022.

Monthly Full Premiums for the CTRB Sponsored Medicare Supplemental Plan Options						
Coverage	Jan. 1 2018	July 1 2018	Jan. 1 2019	Jan. 1 2020	Jan. 1 2021	Jan. 1 2022
Medical* with Prescriptions	\$303	\$347	\$303	\$313	\$295	\$326
Medical* with Prescriptions and Dental	\$353	\$402	\$361	\$365	\$348	\$376
Medical with Prescriptions, Dental, Vision & Hearing	\$358	\$407	\$368	\$373	\$356	N/A

Monthly Full Premiums for the CTRB Sponsored Medicare Supplemental Plan Options						
Coverage	Jan. 1 2018	July 1 2018	Jan. 1 2019	Jan. 1 2020	Jan. 1 2021	Jan. 1 2022
Medical* with Prescriptions	N/A	\$222	\$195	\$201	\$192	\$89
Medical* with Prescriptions and Dental	N/A	\$277	\$253	\$253	\$245	\$139
Medical with Prescriptions, Dental, Vision & Hearing	N/A	\$282	\$260	\$261	\$253	N/A

<sup>\*</sup>As of January 1, 2022, Vision and Hearing coverage is included in both Medical plans for all participants.

# **Changes in Plan Provisions Since the Previous Valuation**

■ There was a change in the maximum monthly subsidy amounts offered to retirees and their dependents from \$110 / \$220 to \$220 / \$440.