

# State of Connecticut State Employee OPEB Plan

**Governmental Accounting Standards Board (GASB)  
Statement 75 Actuarial Valuation and Review of Other  
Postemployment Benefits (OPEB) for Reporting Date  
June 30, 2022 Measured as of June 30, 2021**



This report has been prepared at the request of the State of Connecticut to assist in administering the Plan. This valuation report may not otherwise be copied or reproduced in any form without the consent of the State of Connecticut Office of the State Comptroller and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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**Segal**



30 Waterside Drive, Suite 300  
Farmington, CT 06032-3069  
segalco.com  
T 860.678.3000

September 28, 2022

Mr. Joshua Wojcik  
Director  
Healthcare Policy and Benefits Services Division  
Office of the State Comptroller  
165 Capitol Avenue  
Hartford, Connecticut, 06106

Dear Mr. Wojcik:

We are pleased to submit this Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2022 under Governmental Accounting Standards Board Statement No. 75. The report summarizes the actuarial data used in the valuation, discloses the Net OPEB Liability (NOL) measured as of June 30, 2021 to be reported as of June 30, 2022, and analyzes the preceding year's experience. This report was based on the census data and financial information provided by the Healthcare Policy and Benefits Services Division of the Office of the State Comptroller and the terms of the Plan. The actuarial calculations were completed under my supervision.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

The actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of my knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in my opinion, the assumptions used in this valuation and described in *Section 3, Exhibit II* are reasonably related to the experience of and the expectations for the Plan. The actuarial projections are based on these assumptions and the plan of benefits as summarized in *Section 3, Exhibit III*.

Sincerely,

Segal

A handwritten signature in black ink that reads "Daniel J. Rhodes". The signature is written in a cursive style and is positioned above a horizontal line.

Daniel J. Rhodes, FSA, MAAA  
Senior Vice President and Consulting Actuary

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# Actuarial Valuation Summary

## Purpose and basis

This report presents the results of our actuarial valuation of the State of Connecticut (the “State”) State Employee OPEB plan (SEOPEBP) as of June 30, 2021, required by Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*. The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may be significantly different from the results reported here. This valuation is based on:

- The benefit provisions of State of Connecticut SEOPEBP, as administered by the State;
- The characteristics of covered active members, terminated vested members, and retired members and beneficiaries as of June 30, 2021, provided by the Healthcare Policy and Benefits Services Division of the Office of the State Comptroller;
- The assets of the Plan as of June 30, 2021, provided by the Healthcare Policy and Benefits Services Division of the Office of the State Comptroller;
- Economic assumptions regarding future salary increases and investment earnings adopted by the State for the June 30, 2021 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

## Highlights of the valuation

### *Accounting and Financial Reporting*

1. For GASB 75 reporting as of June 30, 2022, the Net OPEB Liability (NOL) was measured as of June 30, 2021. The Plan’s Fiduciary Net Position (plan assets) and the Total OPEB Liability (TOL) were valued as of the measurement date. Consistent with the provisions of GASB 75, the assets and liabilities measured as of June 30, 2021 are not adjusted or rolled forward to the June 30, 2022 reporting date.
2. The NOL as of June 30, 2021 is \$19,527,444,294, a decrease of \$4,013,462,118, from the prior year NOL of \$23,540,906,412. Net unfunded plan obligations had been expected to increase to \$24,348,594,545, due to normal plan operations. The difference between actual and expected unfunded actuarial accrued liabilities was the net effect of several factors:
  - a. An investment experience gain decreased the NOL by \$274,301,360. This was the result of a gain due to fund investment performance (returns greater than expected).

## Section 1: Actuarial Valuation Summary

- b. An actuarial experience loss increased the NOL by \$389,271,363. This was the net result of gains and losses due to actual 2021 contributions and benefit payments that were different from expected.
- c. Valuation assumption changes decreased the NOL by \$4,936,120,254. This was a net result of:
  - 1) A net decrease in obligations of \$599,163,944 due to updating the valuation-year per capita health costs and future trend on such costs.
  - 2) A decrease in obligations of \$6,139,775,843 due to reflecting the results of the Medicare Advantage plan RFP and new rates effective January 1, 2023.
  - 3) An increase of \$1,577,861,006 due to updating the demographic assumptions (mortality, disability, retirement, withdrawal and salary scale) to be the consistent with the Connecticut State Employees Retirement System Experience Investigation for the five-year period ending June 30, 2020 completed by Cavanaugh MacDonald Consulting, LLC, dated August 29, 2021, for non-teachers, and Connecticut State Teachers' Retirement System Experience Investigation for the five-year period ending June 30, 2019 completed by Cavanaugh MacDonald Consulting, LLC, dated June 24, 2020, for teachers.
  - 4) An increase of \$224,958,527 due to lowering the discount rate from 2.38% to 2.31%. The discount rate is determined in accordance with GASB. It is a blend of the long-term expected rate of return on OPEB Trust assets (6.90%, consistent with the assumption used in the GASB 67/68 reports of the retirement systems), and a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rate of AA/Aa or higher (2.16% as of June 30, 2021).
- 3. As of June 30, 2021, the ratio of assets to the Total OPEB Liability (the funded ratio) is 10.12%. This is based on the market value of assets at this point in time.
- 4. The Annual OPEB Expense decreased to \$1,443,778,036 for the year ending June 30, 2021. The expense was \$2,323,795,162 last year.

## Section 1: Actuarial Valuation Summary

### Summary of key valuation results

Reporting Date for Employer under GASB 75		June 30, 2022	June 30, 2021
Measurement Date		June 30, 2021	June 30, 2020
<b>Disclosure elements for fiscal year ending June 30:</b> <ul style="list-style-type: none"> <li>• Total OPEB Liability</li> <li>• Plan Fiduciary Net Position (Assets)</li> <li>• Net OPEB Liability</li> <li>• Plan Fiduciary Net Position as a percentage of Total OPEB Liability</li> <li>• OPEB Expense</li> <li>• Service Cost at Beginning of Year</li> <li>• Total Payroll (Reporting Period)</li> </ul>		\$21,726,989,418	\$25,078,100,032
		2,199,545,124	1,537,193,620
		19,527,444,294	23,540,906,412
		10.12%	6.13%
		1,443,778,036	2,323,795,162
		1,214,728,098	969,674,270
		3,649,211,237	3,745,802,337

## Section 1: Actuarial Valuation Summary

### Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to defining future uncertain obligations of a postretirement health plan. As such, it will never forecast the precise future stream of benefit payments. It is an estimated forecast – the actual cost of the plan will be determined by the benefits and expenses paid, not by the actuarial valuation.

In order to prepare a valuation, Segal relies on a number of input items. These include:

<b>Plan of benefits</b>	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. For example, a plan may provide health benefits to post-65 retirees that coordinates with Medicare. If so, changes in the Medicare law or administration may change the plan's costs without any change in the terms of the plan itself. It is important for the State to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
<b>Participant data</b>	An actuarial valuation for a plan is based on data provided to the actuary by the plan. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is not necessary to have perfect data for an actuarial valuation: the valuation is an estimated forecast, not a prediction. The uncertainties in other factors are such that even perfect data does not produce a "perfect" result. Notwithstanding the above, it is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
<b>Assets</b>	The valuation is based on the market value of assets as of the valuation date, as provided by the State.
<b>Actuarial assumptions</b>	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. To determine the future costs of benefits, Segal collects claims, premiums, and enrollment data in order to establish a baseline cost for the valuation measurement, and then develops short- and long-term health care cost trend rates to project increases in costs in future years. This forecast also requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year, as well as forecasts of the plan's benefits for each of those events. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets or, if there are no assets, a rate of return based on a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale). All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions the actuary selects within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model necessarily uses approximations and estimates that may lead to significant changes in our results but will have no impact on the actual cost of the plan. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

## Section 1: Actuarial Valuation Summary

### Models

Segal accounting results are based on proprietary actuarial modeling software. The accounting valuation models generate a comprehensive set of liability and cost calculations that are presented to meet accounting standards and client requirements. Our Actuarial Technology and Systems unit, comprising both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

The blended discount rate used for calculating total pension liability is based on a model developed by our Actuarial Technology and Systems unit, comprised of both actuaries and programmers. The model allows the client team, under the supervision of the responsible actuary, control over the entry of future expected contribution income, benefit payments and administrative expenses. The projection of fiduciary net position and the discounting of benefits is part of the model.

Our claims costs assumptions are based on proprietary modeling software as well as models that were developed by others. These models generate per capita claims cost calculations that are used in our valuation software. Our Health Technical Services Unit, comprised of actuaries and programmers, is responsible for the initial development and maintenance of our health models. They are also responsible for testing models that we purchase from other vendors for reasonableness. The client team inputs the paid claims, enrollments, plan provisions and assumptions into these models and reviews the results for reasonableness, under the supervision of the responsible actuary.



## Section 1: Actuarial Valuation Summary

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

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The actuarial valuation is prepared for use by the State. It includes information for compliance with accounting standards and for the plan's auditor. Segal is not responsible for the use or misuse of its report, particularly by any other party.

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If the State is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.

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An actuarial valuation is a measurement at a specific date – it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

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Sections of this report include actuarial results that are not rounded, but that does not imply precision.

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Critical events for a plan include, but are not limited to, decisions about changes in benefits and contributions. The basis for such decisions needs to consider many factors such as the risk of changes in plan enrollment, emerging claims experience, health care trend, and investment losses, not just the current valuation results.

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Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The State should look to their other advisors for expertise in these areas.

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While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.

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Segal's report shall be deemed to be final and accepted by the State upon delivery and review. The State should notify Segal immediately of any questions or concerns about the final content.

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As Segal has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

# Section 1: Actuarial Valuation Summary

## **Actuarial Certification**

**September 28, 2022**

This is to certify that Segal has conducted an actuarial valuation of certain benefit obligations of State of Connecticut State Employee OPEB Plan (SEOPEBP)'s other postemployment benefit programs as of June 30, 2021, in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statement 75 for the determination of the liability for postemployment benefits other than pensions.

The actuarial valuation is based on the plan of benefits verified by the State and reliance on participant, premium, claims and expense data provided by the State or from vendors employed by the State. Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. Segal, however, does review the data for reasonableness and consistency.

The actuarial computations made are for purposes of fulfilling plan accounting [and funding] requirements. Determinations for purposes other than meeting financial accounting requirements may be significantly different from the results reported here. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security at termination of the plan, or determining short-term cash flow requirements.

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 or rates of return on assets 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); 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. The scope of the assignment did not include performing an analysis of the potential change of such future measurements except where noted.

To the best of my knowledge, this report is complete and accurate and in my opinion presents the information necessary to comply with GASB Statement 75 with respect to the benefit obligations addressed. The signing actuary is a member of the Society of Actuaries, the American Academy of Actuaries and meets the "General Qualification Standards for Statements of Actuarial Opinions" to render the actuarial opinion contained herein.

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Daniel J. Rhodes, FSA, MAAA  
Senior Vice President and Consulting Actuary

# GASB 75 Information

## General information about the OPEB plan

### Plan Description

*Plan administration.* The State Comptroller's Healthcare Policy and Benefits Division under the Direction of the Connecticut State Employees Retirement Commission administers the State Employee OPEB plan. The SEOPEBP is a single-employer defined benefit OPEB plan that covers retired employees of the State who are receiving benefits from any State-sponsored retirement system, except the Teachers' Retirement System and the Municipal Employees' Retirement System.

*Plan membership.* At June 30, 2021, State plan membership consisted of the following:

<b>Retired members or beneficiaries currently receiving benefits</b>	79,870
<b>Vested terminated members entitled to but not yet receiving benefits</b>	385
<b>Active members</b>	<u>49,927</u>
<b>Total</b>	130,170

*Benefits provided.* The plan provides healthcare and life insurance benefits to eligible retirees and their spouses, and other plan provisions are described in Section 5-257 and 5-259 of the Connecticut General Statutes.

*State Contributions.* The contribution requirements of plan members and the State are established and may be amended by State legislature, or by agreement between the State and employees' unions, upon approval by the State legislature. The cost of providing plan benefits is financed approximately 100 percent by the State on a pay-as-you-go basis through an annual appropriation in the General fund. Administrative costs of the plan are financed by the State.

## Section 2: GASB 75 Information

### Net OPEB liability

Reporting Date for Employer under GASB 75 Measurement Date	June 30, 2022 June 30, 2021	June 30, 2021 June 30, 2020
<b>Components of the Net OPEB Liability</b>		
Total OPEB Liability	\$21,726,989,418	\$25,078,100,032
Plan Fiduciary Net Position	2,199,545,124	1,537,193,620
Net OPEB Liability	19,527,444,294	23,540,906,412
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	10.12%	6.13%

The Net OPEB Liability was measured as of June 30, 2021 and 2020. Plan Fiduciary Net Position (plan assets) was valued as of the measurement dates and the Total OPEB Liability was determined from actuarial valuations using data as of June 30, 2021 and 2019, respectively.

*Actuarial assumptions.* The Total OPEB Liability was measured by an actuarial valuation as of June 30, 2021 using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

<b>Inflation</b>	2.50%
<b>Payroll growth rate</b>	3.00%
<b>Salary increases</b>	3.00% to 11.50%, vary by service and retirement system, including inflation
<b>Discount rate</b>	2.31% as of June 30, 2021 and 2.38% as of June 30, 2020
<b>Healthcare cost trend rates:</b>	
<b>Medical and prescription drug<sup>1</sup></b>	6.00% graded to 4.50% over 6 years
<b>Dental<sup>2</sup></b>	3.00%
<b>Part B</b>	4.50%
<b>Administrative costs<sup>3</sup></b>	3.00%

<sup>1</sup> Short term rates were altered for participants under 65 to reflect the impact of new retirees receiving 2017 SEBAC changes upon retirement and for the Medicare-eligible participants to reflect known MAPD rates through 2023.

<sup>2</sup> Short term rates were altered to reflect rate caps and guarantees through 2023.

<sup>3</sup> Short term rates were altered to reflect known rates through 2025.

## Section 2: GASB 75 Information

### Mortality rates:

#### **SERS, PJERS, JFSMCCRS, ARP, HYBRID, OTHER – Non Hazardous**

*Pre-Retirement:* Pub-2010 General, Above-Median, Employee Headcount-weighted Mortality Table projected generationally using Scale MP-2020

*Healthy Annuitant:* Pub-2010 General, Above-Median, Healthy Retiree Headcount-weighted Mortality Table projected generationally using Scale MP-2020

*Disabled Annuitant:* Pub-2010 General, Disabled Retiree Headcount-weighted Mortality Table projected generationally using Scale MP-2020

*Contingent Annuitant:* Pub-2010 General, Above-Median, Contingent Annuitant Headcount-weighted Mortality Table projected generationally using Scale MP-2020

#### **SERS, PJERS, JFSMCCRS, ARP, HYBRID, OTHER – Hazardous**

*Pre-Retirement:* Pub-2010 Public Safety, Above-Median, Employee Headcount-weighted Mortality Table projected generationally using Scale MP-2020

*Healthy Annuitant:* Pub-2010 Public Safety, Above-Median, Healthy Retiree Headcount-weighted Mortality Table projected generationally using Scale MP-2020

*Disabled Annuitant:* Pub-2010 Public Safety, Disabled Retiree Headcount-weighted Mortality Table projected generationally using Scale MP-2020

*Contingent Annuitant:* Pub-2010 Public Safety, Above-Median, Contingent Annuitant Headcount-weighted Mortality Table projected generationally using Scale MP-2020

#### **STRS**

*Pre-Retirement:* Pub-2010 Teacher, Employee Headcount-weighted Mortality Table projected generationally using Scale MP-2019

*Healthy Annuitant:* Pub-2010 Teacher, Healthy Retiree Headcount-weighted Mortality Table projected generationally using Scale MP-2019

*Disabled Annuitant:* Pub-2010 Teacher, Disabled Retiree Headcount-weighted Mortality Table (adjusted 105% for males and 103% for females at ages 82 and above) projected generationally using Scale MP-2019

*Contingent Annuitant:* Pub-2010 Teacher, Contingent Annuitant Headcount-weighted Mortality Table projected generationally using Scale MP-2019

## Section 2: GASB 75 Information

The demographic assumptions used in this valuation are the same as those used in the most recent pension valuation reports or experience studies available, completed by Cavanaugh Macdonald Consulting, LLC. Given that the participants in this Plan are a subset of the participants in the respective pension plans, we have no reason to doubt the reasonableness of these specific assumptions for this valuation. Other assumptions were determined by Segal.

Detailed information regarding all actuarial assumptions can be found in *Section 3, Exhibit II*.

## Section 2: GASB 75 Information

### Determination of discount rate and investment rates of return

The long-term expected rate of return on OPEB plan investments was determined by Cavanaugh MacDonald Consulting, LLC in their GASB Statement No. 68 Report for the Connecticut State Employees' Retirement System prepared as of June 30, 2021. These returns 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 adding expected inflation. The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table:

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

*Discount rate.* The discount rates used to measure the Total OPEB Liability (TOL) were 2.31% and 2.38% as of June 30, 2021 and June 30, 2010, respectively. The discount rate is a blend of the long-term expected rate of return on OPEB Trust assets and a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rate of AA/Aa or higher (2.16% as of June 30, 2021 and 2.21% as of June 30, 2020). The blending is based on the sufficiency of projected assets to make projected benefit payments.

## Section 2: GASB 75 Information

### Sensitivity

The following presents the NOL of State as well as what the State's NOL would be if it were calculated using a discount rate that is 1-percentage-point lower (1.31%) or 1-percentage-point higher (3.31%) than the current rate. Also, shown is the NOL as if it were calculated using healthcare cost trend rates that were 1-percentage-point lower or 1-percentage-point higher than the current healthcare trend rates.

	<b>1% Decrease (1.31%)</b>	<b>Current Discount Rate (2.31%)</b>	<b>1% Increase (3.31%)</b>
Net OPEB Liability (Asset)	\$23,178,479,438	\$19,527,444,294	\$16,628,076,931
	<b>1% Decrease in Health Care Cost Trend Rates</b>	<b>Current Health Care Cost Trend Rates</b>	<b>1% Increase in Health Care Cost Trend Rates</b>
Net OPEB Liability (Asset)	\$16,414,434,272	\$19,527,444,294	\$23,556,870,438



## Section 2: GASB 75 Information

### Schedule of changes in Net OPEB Liability – Last two fiscal years

Reporting Date for Employer under GASB 75 Measurement Date	June 30, 2022 June 30, 2021	June 30, 2021 June 30, 2020
<b>Total OPEB Liability</b>		
Service cost	\$1,214,728,098	\$969,674,270
Interest	618,230,971	806,905,542
Change of benefit terms	--	--
Differences between expected and actual experience	389,271,363	-179,538,474
Changes of assumptions	-4,936,120,254	2,225,763,744
Benefit payments, including refunds of member contributions	-637,220,792	-623,104,336
Net change in Total OPEB Liability	-3,351,110,614	\$3,199,700,746
Total OPEB Liability – beginning	25,078,100,032	21,878,399,286
Total OPEB Liability – ending	\$21,726,989,418	\$25,078,100,032
<b>Plan Fiduciary Net Position</b>		
Contributions – employer	\$868,069,824	\$867,222,367
Contributions – employee	147,037,865	159,376,805
Net investment income	389,771,722	33,372,852
Benefit payments, including refunds of member contributions	-637,220,792	-623,104,336
Administrative expense	--	--
Other	-105,307,115	-95,681,616
Net change in Plan Fiduciary Net Position	\$662,351,504	\$341,186,072
Plan Fiduciary Net Position – beginning	1,537,193,620	1,196,007,548
Plan Fiduciary Net Position – ending	\$2,199,545,124	\$1,537,193,620
Net OPEB Liability – ending	19,527,444,294	23,540,906,412
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	10.12%	6.13%
Covered payroll	\$3,649,211,237	\$3,745,802,337
Plan Net OPEB Liability as percentage of covered payroll	535.11%	628.46%

#### Notes to Schedule:

*Benefit changes:* None

*Changes of assumptions:* See Section 3, Exhibit II for changes in actuarial assumptions applicable to the current measurement date.

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State of Connecticut State Employee OPEB Plan  
GASB 75 Actuarial Valuation for June 30, 2022 Reporting

## Section 2: GASB 75 Information

### Deferred outflows of resources and deferred inflows of resources

Reporting Date for Employer under GASB 75 Measurement Date	June 30, 2022 June 30, 2021	June 30, 2021 June 30, 2020
<b>Deferred Outflows of Resources</b>		
Changes of assumptions or other inputs	\$2,826,446,580	\$3,907,552,463
Net difference between projected and actual earnings on OPEB plan investments	0	46,419,457
Difference between expected and actual experience in the Total OPEB Liability	<u>313,831,176</u>	<u>0</u>
Total Deferred Outflows of Resources	\$3,140,277,756	\$3,953,971,920
<b>Deferred Inflows of Resources</b>		
Changes of assumptions or other inputs	\$4,208,808,802	\$457,146,000
Net difference between projected and actual earnings on OPEB plan investments	181,884,035	0
Difference between expected and actual experience in the Total OPEB Liability	<u>385,311,234</u>	<u>543,381,905</u>
Total Deferred Inflows of Resources	\$4,776,004,071	\$1,000,527,905
<b>Deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized as follows:</b>		
Reporting Date for Employer under GASB 75 Year Ended June 30:		
2022	N/A	\$704,052,616
2023	-\$172,406,921	763,625,616
2024	-57,285,921	878,746,616
2025	-415,252,750	520,779,787
2026	-849,793,157	86,239,380
2027	-140,987,566	0
Thereafter	0	0

The average of the expected service lives of all employees is determined by:

- Calculating each active employee's expected remaining service life as the present value of \$1 per year of future service at zero percent interest.
- Setting the remaining service life to zero for each nonactive or retired member.
- Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.

## Section 2: GASB 75 Information

### Schedule of recognition of change in total Net OPEB Liability

Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience on Total OPEB Liability

Reporting Date for Employer under GASB 75 Year Ended June 30	Differences between Expected and Actual Experience	Recognition Period (Years)	2021	2022	2023	2024	2025	2026	2027	Thereafter
2018	\$0	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	0	N/A	0	0	0	0	0	0	0	0
2020	-645,590,429	5.22	-123,676,327	-123,676,327	-123,676,327	-123,676,327	-27,208,794	0	0	0
2021	-179,538,474	5.22	-34,394,344	-34,394,344	-34,394,344	-34,394,344	-34,394,344	-7,566,754	0	0
2022	389,271,363	5.16	N/A	<u>75,440,187</u>	<u>75,440,187</u>	<u>75,440,187</u>	<u>75,440,187</u>	<u>75,440,187</u>	<u>12,070,428</u>	<u>0</u>
Net increase (decrease) in OPEB expense		N/A	-	<u>-\$82,630,484</u>	<u>-\$82,630,484</u>	<u>-\$82,630,484</u>	\$13,837,049	\$67,873,433	\$12,070,428	\$0

## Section 2: GASB 75 Information

### Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of Assumption Changes

Reporting Date for Employer under GASB 75 Year Ended June 30	Assumption Changes	Recognition Period (Years)	2021	2022	2023	2024	2025	2026	2027	Thereafter
2018	-\$510,781,000	5.42	-\$94,240,000	-\$94,240,000	-\$39,581,000	\$0	\$0	\$0	\$0	\$0
2019	-724,140,000	5.42	-133,605,000	-133,605,000	-133,605,000	-56,115,000	0	0	0	0
2020	3,417,608,963	5.22	654,714,361	654,714,361	654,714,361	654,714,361	144,037,158	0	0	0
2021	2,225,763,744	5.22	426,391,522	426,391,522	426,391,522	426,391,522	426,391,522	93,806,134	0	0
2022	-4,936,120,254	5.16	N/A	<u>-956,612,452</u>	<u>-956,612,452</u>	<u>-956,612,452</u>	<u>-956,612,452</u>	<u>-956,612,452</u>	<u>-153,057,994</u>	<u>0</u>
Net increase (decrease) in OPEB expense			N/A	-\$103,351,569	-\$48,692,569	\$68,378,431	-\$386,183,772	-\$862,806,318	-\$153,057,994	\$0

## Section 2: GASB 75 Information

### Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of Differences between Projected and Actual Earnings on OPEB Plan Investments

Reporting Date for Employer under GASB 75 Year Ended June 30	Differences between Projected and Actual Earnings	Recognition Period (Years)	2021	2022	2023	2024	2025	2026	2027	Thereafter
2018	-\$24,567,000	5.00	-\$4,913,000	-\$4,915,000	\$0	\$0	\$0	\$0	\$0	\$0
2019	9,754,000	5.00	1,951,000	1,951,000	1,950,000	0	0	0	0	0
2020	-639,203	5.00	-127,841	-127,841	-127,841	-127,841	0	0	0	0
2021	59,771,225	5.00	11,954,245	11,954,245	11,954,245	11,954,245	11,954,245	0	0	0
2022	-274,301,360	5.00	N/A	<u>-54,860,272</u>	<u>-54,860,272</u>	<u>-54,860,272</u>	<u>-54,860,272</u>	<u>-54,860,272</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in OPEB expense			N/A	-\$45,997,868	-\$41,083,868	-\$43,033,868	-\$42,906,027	-\$54,860,272	\$0	\$0

## Section 2: GASB 75 Information

### Total Increase (Decrease) in OPEB Expense

Reporting Date for Employer under GASB 75 Year Ended June 30	Total Increase (Decrease) in OPEB Expense	2021	2022	2023	2024	2025	2026	2027	Thereafter
2018	-\$535,348,000	-\$99,153,000	-\$99,155,000	-\$39,581,000	\$0	\$0	\$0	\$0	\$0
2019	-714,386,000	-131,654,000	-131,654,000	-131,655,000	-56,115,000	0	0	0	0
2020	2,771,379,331	530,910,193	530,910,193	530,910,193	530,910,193	116,828,364	0	0	0
2021	2,105,996,495	403,951,423	403,951,423	403,951,423	403,951,423	403,951,423	86,239,380	0	0
2022	-4,821,150,251	N/A	<u>-936,032,537</u>	<u>-936,032,537</u>	<u>-936,032,537</u>	<u>-936,032,537</u>	<u>-936,032,537</u>	<u>-140,987,566</u>	<u>0</u>
Net increase (decrease) in OPEB expense		N/A	-\$231,979,921	-\$172,406,921	-\$57,285,921	-\$415,252,750	-\$849,793,157	-\$140,987,566	\$0

## Section 2: GASB 75 Information

### OPEB expense

Reporting Date for Employer under GASB 75 Measurement Date	June 30, 2022 June 30, 2021	June 30, 2021 June 30, 2020
<b>Components of OPEB Expense</b>		
Service cost	\$1,214,728,098	\$969,674,270
Interest on the Total OPEB Liability	618,230,971	806,905,542
Current-period benefit changes	--	--
Expensed portion of current-period difference between expected and actual experience in the Total OPEB Liability	75,440,187	-34,394,344
Expensed portion of current-period changes of assumptions or other inputs	-956,612,452	426,391,522
Member contributions	-147,037,865	-159,376,805
Projected earnings on plan investments	-115,470,362	-93,144,077
Expensed portion of current-period differences between actual and projected earnings on plan investments	-54,860,272	11,954,245
Administrative expense	--	--
Other	105,307,115	95,681,616
Recognition of beginning of year deferred outflows of resources as OPEB expense	1,095,011,128	656,665,361
Recognition of beginning of year deferred inflows of resources as OPEB expense	-390,958,512	-356,562,168
<b>OPEB Expense</b>	<b>\$1,443,778,036</b>	<b>\$2,323,795,162</b>

## Section 2: GASB 75 Information

### Schedule of reconciliation of Net OPEB Liability

Reporting Date for Employer under GASB 75	June 30, 2022	June 30, 2021
Measurement Date	June 30, 2021	June 30, 2020
<b>Beginning Net OPEB Liability</b>	\$23,540,906,412	\$20,682,391,738
OPEB expense	1,443,778,036	2,323,795,162
Employer contributions	-868,069,824	-867,222,367
New net deferred inflows/outflows	-3,885,117,714	1,702,045,072
Recognition of prior deferred inflows/outflows	-704,052,616	-300,103,193
<b>Ending Net OPEB Liability</b>	\$19,527,444,294	\$23,540,906,412



## Section 2: GASB 75 Information

### Schedule of contributions – Last ten fiscal years

Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2012					
2013					
2014	(Historical information prior to implementation of GASB 74/75 is not required.)				
2015					
2016					
2017	\$1,043,143,000	\$667,401,000	\$375,742,000	N/A	N/A
2018	1,157,121,000	801,893,000	355,228,000	\$3,743,995,000	21.42%
2019	1,203,406,000	752,941,470	450,464,530	3,875,035,000	19.43%
2020	1,287,059,000	867,222,367	419,836,633	3,619,132,693	23.96%
2021	1,338,541,000	868,069,824	470,471,176	3,745,802,337	23.17%

#### Notes to Schedule:

##### Methods and assumptions used to establish “actuarially determined contribution” rates:

<b>Valuation date</b>	Actuarially determined contribution was determined with the June 30, 2019 actuarial valuation
<b>Actuarial cost method</b>	Entry Age Normal
<b>Amortization method</b>	Level percent of growing payroll, closed, 30 years
<b>Remaining amortization period</b>	16 years as of June 30, 2022
<b>Asset valuation method</b>	Market value
<b>Investment rate of return</b>	6.90%
<b>Payroll growth rate</b>	3.50%

# Supporting Information

## Exhibit I: Summary of Participant Data

	As of June 30, 2021	As of June 30, 2019
Number of retirees	48,590	46,833
Average age of retirees	70.8	70.4
Number of spouses	26,958	26,018
Average age of spouses	67.3	66.8
Number of surviving spouses	4,322	4,290
Average age	78.2	77.8
Number inactive vested	385	649
Average age	57.5	55.6
Number of actives	49,927	48,015
Average age	47.3	48.0
Average service	13.3	12.6

## Section 3: Supporting Information

### Exhibit II: Actuarial Assumptions and Actuarial Cost Method

<b>Data:</b>	Detailed census data, premium data and/or claim experience, and summary plan descriptions for OPEB were provided by the Healthcare Policy & Benefit Services Division of the Office of the State Comptroller. Eligible groups for the Program include State employees covered under the State Employees Retirement System (SERS), State Teachers' Retirement System (STRS), Probate Judges and Employees Retirement System (PJERS), Judges, Family Support Magistrates and Compensation Commissioners Retirement System (JFSMCCRS), Alternative Retirement Program (ARP), and the Hybrid Defined Benefit/Defined Contribution Plan (HYBRID). In addition, there are other State employees not covered under the retirement systems who are eligible for this program (OTHER). Actuarial assumptions that differ by group are noted.
<b>Actuarial Cost Method:</b>	Entry Age Normal – Level Percentage of Payroll
<b>Asset Valuation Method:</b>	Market Value
<b>Measurement Date:</b>	June 30, 2021
<b>Actuarial Valuation Date:</b>	June 30, 2021
<b>Discount Rate:</b>	2.31% as of June 30, 2021 and 2.38% as of June 30, 2020 The discount rate is a blend of the long-term expected rate of return on OPEB Trust assets and a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (2.16% as of June 30, 2021 and 2.21% as of June 30, 2020). The blending is based on the sufficiency of projected assets to make projected benefit payment. Assets as of June 30, 2021, as previously provided from OSC
<b>Expected Return:</b>	6.90% - consistent with the rate developed in the GASB 67 report for the SERS prepared as of June 30, 2021 by Cavanaugh MacDonal Consulting, LLC.
<b>Demographic and Salary Scale Assumptions:</b>	The demographic and salary scale assumptions used in this valuation are the same as those used in the most recent pension valuation report or experience study available, completed by Cavanaugh Macdonald Consulting, LLC. Given that the participants in this Plan are a subset of the participants in the respective pension plans, we have no reason to doubt the reasonableness of these specific assumptions for this valuation.

## Section 3: Supporting Information

### Salary Increases:

**SERS, ARP, HYBRID, OTHER** Rates vary by years of service as follows:

Years of Service	Rate (%)		Years of Service	Rate (%)	
	Non-Hazardous	Hazardous		Non-Hazardous	Hazardous
0 – 1	10.50	11.50	11	4.25	4.50
2	7.50	7.50	12 – 13	4.25	4.25
3	5.50	5.50	14	4.00	4.00
4	5.25	5.25	15	3.50	3.50
5	5.00	5.00	16 – 17	3.25	3.50
6 – 9	4.75	4.75	18 – 19	3.25	3.25
10	4.50	4.50	20+	3.00	3.00

**STRS** Rates vary by years of service as follows:

Years of Service	Rate (%)	Years of Service	Rate (%)
0	6.50	15	4.50
1	6.25	16	4.00
2-9	6.00	17	3.75
10-11	5.50	18	3.50
12	5.25	19	3.25
13	5.00	20	3.00
14	4.75	21+	3.00

**PJERS:** 4.50%

**JFSMCCRS:** 4.00%

**Total Payroll Growth Rate:** 3.00%

## Section 3: Supporting Information

### Mortality Rates:

#### **SERS, PJERS, JFSMCCRS, ARP, HYBRID, OTHER – Non Hazardous**

- *Pre-Retirement:* Pub-2010 General, Above-Median, Employee Headcount-weighted Mortality Table projected generationally using Scale MP-2020
- *Healthy Annuitant:* Pub-2010 General, Above-Median, Healthy Retiree Headcount-weighted Mortality Table projected generationally using Scale MP-2020
- *Disabled Annuitant:* Pub-2010 General, Disabled Retiree Headcount-weighted Mortality Table projected generationally using Scale MP-2020
- *Contingent Annuitant:* Pub-2010 General, Above-Median, Contingent Annuitant Headcount-weighted Mortality Table projected generationally using Scale MP-2020

#### **SERS, PJERS, JFSMCCRS, ARP, HYBRID, OTHER – Hazardous**

- *Pre-Retirement:* Pub-2010 Public Safety, Above-Median, Employee Headcount-weighted Mortality Table projected generationally using Scale MP-2020
- *Healthy Annuitant:* Pub-2010 Public Safety, Above-Median, Healthy Retiree Headcount-weighted Mortality Table projected generationally using Scale MP-2020
- *Disabled Annuitant:* Pub-2010 Public Safety, Disabled Retiree Headcount-weighted Mortality Table projected generationally using Scale MP-2020
- *Contingent Annuitant:* Pub-2010 Public Safety, Above-Median, Contingent Annuitant Headcount-weighted Mortality Table projected generationally using Scale MP-2020

#### **STRS**

- *Pre-Retirement:* Pub-2010 Teacher, Employee Headcount-weighted Mortality Table projected generationally using Scale MP-2019
- *Healthy Annuitant:* Pub-2010 Teacher, Healthy Retiree Headcount-weighted Mortality Table (adjusted 105% for males and 103% for females at ages 82 and above) projected generationally using Scale MP-2019
- *Disabled Annuitant:* Pub-2010 Teacher, Disabled Retiree Headcount-weighted Mortality Table projected generationally using Scale MP-2019
- *Contingent Annuitant:* Pub-2010 Teacher, Contingent Annuitant Headcount-weighted Mortality Table projected generationally using Scale MP-2019

The above tables were selected based on the most recent pension valuations or experience studies available for each group and were assumed to contain provision appropriate to reasonably reflect future mortality improvement based on a review by the pension actuary of the mortality experience. We have no reason to doubt their applicability here.

## Section 3: Supporting Information

### Termination Rates before Retirement:

#### SERS

Age	Rate (%)					
	Disability <sup>1</sup>		Withdrawal <sup>2</sup>			
	Non-Hazardous	Hazardous	Non-Hazardous		Hazardous	
			Male	Female	Male	Female
30	0.04	0.05	4.50	4.50	1.00	1.75
40	0.07	0.15	2.75	2.00	0.80	1.00
50	0.22	0.33	2.50	2.00	0.80	1.00
60	0.50	0.50	2.00	2.00	0.80	1.00
70	0.50	0.80	2.00	2.00	0.80	1.00

#### STRS

Age	Rate (%)			
	Disability <sup>3</sup>		Withdrawal <sup>4</sup>	
	Male	Female	Male	Female
20	0.02	0.02	1.80	6.00
30	0.02	0.02	1.80	6.00
40	0.03	0.06	1.80	2.50
50	0.15	0.15	2.25	2.40
60	0.15	0.15	0.00	0.00

#### PJERS

Age	Rate (%)			
	Disability <sup>5</sup>		Withdrawal	
	Male	Female	Male	Female
25	0.04	0.04	5.00	7.50
35	0.08	0.08	5.00	5.00
45	0.19	0.19	5.00	5.00

<sup>1</sup> 30% of disabilities for Non-Hazardous employees and 60% of disabilities for Hazardous employees are assumed to be in-service. Rates cut off at early retirement eligibility.

<sup>2</sup> Higher select period turnover rates varying by age and gender are used for participants with less than 10 years of service. Rates cutoff at early retirement age.

<sup>3</sup> Rates cut off at early retirement eligibility

<sup>4</sup> Higher select period turnover rates varying by age and gender are used for participants with less than 10 years of service.

<sup>5</sup> Rates cut off at early retirement eligibility.

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## Section 3: Supporting Information

### Termination Rates before Retirement (continued):

#### JFSMCCRS

Age	Rate (%)	
	Disability <sup>1</sup>	Withdrawal <sup>2</sup>
25	0.0256	1.0000
35	0.0442	1.0000
45	0.1079	1.0000
55	0.3027	1.0000
65	0.0000	1.0000

#### ARP, OTHER, HYBRID

Age	Disability <sup>1</sup>	Rate (%)	
		Withdrawal <sup>3</sup>	
		Male	Female
30	0.04	4.50	4.50
40	0.07	2.75	2.00
50	0.22	2.50	2.00
60	0.50	2.00	2.00
70	0.50	2.00	2.00

<sup>1</sup> Rates cutoff at normal retirement eligibility.

<sup>2</sup> Rates cutoff at early retirement eligibility.

<sup>3</sup> Higher select period turnover rates varying by age and gender are used for participants with less than 10 years of service. Rates cutoff at early retirement eligibility.

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## Section 3: Supporting Information

### Actives' Retirement Rates:

### SERS, HYBRID

#### Tier I

Age	Rate (%)				
	Hazardous		Non-Hazardous <sup>1</sup>		
	First Year Eligible	All Years After	Age	Early	Other
40-56	45.0	25.0	55-59	12.0	30.0
57	60.0	25.0	60-79		30.0
58-61	60.0	30.0	80		100.0
62-63	65.0	30.0			
64	65.0	40.0			
65-66	75.0	50.0			
67	75.0	45.0			
68	75.0	40.0			
69	75.0	35.0			
70-73	75.0	30.0			
74-79	100.0	30.0			
80		100.0			

<sup>1</sup> Rates have an additional 20% for early retirement and 40% for normal retirement under age 70 in the plan year before July 1, 2022.

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## Section 3: Supporting Information

### Actives' Retirement Rates (continued):

#### Tier II & IIA, OTHER

Age	Rate (%)				
	Hazardous		Non-Hazardous		
	First Year Eligible	All Years After	Age	Early	Other
40-56	45.0	25.0	55-59	4.0	
57	60.0	25.0	60-61	4.0	20.0
58-61	60.0	30.0	62-65		20.0
62-63	65.0	30.0	66-70		25.0
64	65.0	40.0	71-79		22.5
65-66	75.0	50.0	80		100.0
67	75.0	45.0			
68	75.0	40.0			
69	75.0	35.0			
70-73	75.0	30.0			
74-79	100.0	30.0			
80		100.0			

## Section 3: Supporting Information

### Actives' Retirement Rates (continued):

#### Tiers III & IV

Age	Rate (%)					
	Hazardous				Non-Hazardous	
	Years of Service				Early	Other
	20	21-24	25	26+		
40 – 49			45.0	25.0		
50	45.0	45.0	45.0	25.0		
51-56	45.0	25.0	25.0	25.0		
57	60.0	25.0	25.0	25.0		
58-61	60.0	30.0	30.0	30.0	4.0	
62	65.0	30.0	30.0	30.0	4.0	
63	65.0	30.0	30.0	30.0	4.0	25.0
64	65.0	40.0	40.0	40.0	4.0	25.0
65-66	75.0	50.0	50.0	50.0		25.0
67	75.0	45.0	45.0	45.0		25.0
68	75.0	40.0	40.0	40.0		25.0
69	75.0	35.0	35.0	35.0		25.0
70-73	75.0	30.0	30.0	30.0		25.0
74-79	100.0	30.0	30.0	30.0		25.0
80	100.0	100.0	100.0	100.0		100.0

## Section 3: Supporting Information

Actives' Retirement Rates (continued):	STRS								
	Rate (%)								
	Unreduced								
	Age	Less than 35 YOS		35 or more YOS		Pro-ratable		Early	
Male		Female	Male	Female	Male	Female	Male	Female	
50-52	--	--	35.00	30.00	--	--	1.50	1.25	
53	--	--	35.00	30.00	--	--	1.50	1.75	
54	--	--	35.00	30.00	--	--	2.00	2.25	
55	--	--	35.00	30.00	--	--	3.00	3.00	
56	--	--	35.00	30.00	--	--	4.00	3.75	
57	--	--	35.00	30.00	--	--	5.00	4.50	
58	--	--	35.00	30.00	--	--	6.50	5.50	
59	--	--	35.00	30.00	--	--	8.00	7.00	
60	20.00	20.00	30.00	30.00	6.00	5.00	--	--	
61	20.00	20.00	30.00	30.00	6.00	6.00	--	--	
62	22.50	20.00	30.00	30.00	6.00	7.00	--	--	
63	22.50	20.00	30.00	30.00	9.00	8.00	--	--	
64	25.00	25.00	30.00	30.00	12.00	9.00	--	--	
65	27.50	32.50	35.00	37.50	15.00	12.00	--	--	
66	27.50	30.00	35.00	37.50	18.00	15.00	--	--	
67-68	27.50	30.00	30.00	32.50	18.00	15.00	--	--	
69-74	27.50	30.00	30.00	32.50	28.50	15.00	--	--	
75-79	100.00	100.00	100.00	100.00	28.50	15.00	--	--	
80	--	--	--	--	100.00	100.00	--	--	

## Section 3: Supporting Information

### Actives' Retirement Rates (continued):

#### PJERS

Age	Rate (%)
50-61	5.0
62-64	10.0
65-69	20.0
70+	100.0

#### JFSMCCRS

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

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

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

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

The remaining actives are assumed to retire at age 70.

#### ARP

	Rate (%)
55-79	30.0
80	100.0

### Inactive Vesteds' Retirement Rates:

100% are assumed to retire on the normal retirement date provided in the data

### Unknown Data for Participants:

Same as those exhibited by participants with similar known characteristic. If not specified, participants are assumed to be female.

For this valuation, twenty-five active members were reported with missing compensation.

Spousal coverage was set for current retirees based on their medical tier. For retirees with spousal coverage who did not have demographic data available, the assumption for the respective active group was used.

HYBRID members were assumed to elect the SERS tier available at their original date of hire.

Inactive vested participants missing service were assumed to have service less than 15 years making them ineligible for healthcare coverage.

Actives missing medical plan information were assumed to be in a plan that paid contributions at the lower contribution level.

Retirees paying a percentage of the Early Retirement Premium are assumed to reach Normal Retirement Age at age 65.

## Section 3: Supporting Information

<b>Continuation of Medical and Dental Benefits after Retiree's Death:</b>	For retiree medical and dental benefits, we assumed that 64% of current and future retired members have medical and dental benefits that continue after the retiree's death, and 36% have medical and dental benefits that stop upon the retiree's death.		
<b>Participation and Coverage Election:</b>	100% of current active and inactive vested participants are assumed to elect coverage.		
<b>Health Enhancement Program Election:</b>	100% of future retirees were assumed to elect to participate in the Health Enhancement Program.		
<b>Dependents:</b>	Demographic data was available for spouses of current retirees. The percentage of future retirees electing coverage and assumed age differences between husbands and wives are shown below:		
		<b>Percentage Electing Spousal Coverage</b>	<b>Age of Spouse</b>
	SERS, JFSMCCRS, HYBRID, OTHER	80%	Females 3 years younger than males
	STRS	85% of males 75% of females	Females 3 years younger than males
	PJERS	100%	Females 3 years younger than males
	ARP	100%	Females same age as males

## Section 3: Supporting Information

### Per Capita Cost Development:

*Self-Funded (Medical and Drug Plan):* Per capita claims costs were based on actual paid retiree claim experience from Anthem, United/Oxford, and CVS Caremark for the period February 1, 2020 through January 31, 2022. Prescription drug claims include offsets for rebates. Claims were separated by plan and adjusted as follows:

- paid claims were multiplied by a factor to yield an estimate of incurred claims,
- total claims were divided by the number of adult members to yield a per capita claim,
- the per capita claim was trended to the midpoint of the valuation year at assumed trend rates, and
- the per capita claim was adjusted for the effect of any plan changes.

Per capita claims for each plan year were then combined by taking a weighted average. The weights used in this average account for a number of factors including each plan year's volatility of claims experience and distance to the valuation year. Actuarial factors were then applied to the weighted average cost to estimate individual retiree and spouse costs by age and by gender

*Fully Insured Medicare Advantage Prescription Drug Plan:* Premium rates were provided by UnitedHealthcare for 2021 and 2022 and Aetna for 2023. Actuarial factors were applied to the premium to estimate individual retiree and spouse costs by age and by gender in accordance with ASOP 6. Separate costs were developed for current retirees (who have various plan designs and rates depending on date of retirement) and future retirees (who will all have the same plan design and rates at retirement).

*Fully Insured Dental Plan:* Per capita costs were based on actual active/retiree premium rates effective July 1, 2021.

*Administrative Expenses:* Administrative expenses for self-funded plans were based on Anthem access fees effective July 1, 2021.

## Section 3: Supporting Information

### Per Capita Health Costs:

Dental claims costs for the valuation year are \$620. The annual per capita cost for Medicare Part B reimbursement for the plan year beginning July 1, 2021 is assumed to be \$1,912. Medical and prescription drug claims costs for the valuation year, excluding assumed expenses, are shown in the table below for future retirees and spouses at selected ages. These costs are net of deductibles and other benefit plan cost sharing provisions.

Age	Medical (Non-Medicare)				Prescription Drugs (Non-Medicare)			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
50	\$11,507	\$13,106	\$8,037	\$10,524	\$3,077	\$3,505	\$2,149	\$2,814
55	13,665	14,109	10,755	12,181	3,654	3,773	2,876	3,257
60	16,229	15,207	14,398	14,128	4,340	4,067	3,850	3,778
65	19,274	16,383	19,274	16,383	5,154	4,381	5,154	4,381
70	22,339	17,655	22,339	17,655	5,973	4,721	5,973	4,721
75	24,073	19,004	24,073	19,004	6,437	5,082	6,437	5,082
80	25,924	20,488	25,924	20,488	6,932	5,479	6,932	5,479

Age	Medical and Prescription Drugs (Medicare)							
	Future Retirees				Current Retirees			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
65	\$3,001	\$2,551	\$3,001	\$2,551	\$3,834	\$3,259	\$3,834	\$3,259
70	3,478	2,749	3,478	2,749	4,444	3,512	4,444	3,512
75	3,748	2,959	3,748	2,959	4,789	3,780	4,789	3,780
80	4,036	3,190	4,036	3,190	5,157	4,076	5,157	4,076

## Section 3: Supporting Information

### Health Care Cost Trend Rates:

Health care trend measures the anticipated overall rate at which health plan costs are expected to increase in future years. The rates shown below are “net” and are applied to the net per capita costs shown above. The trend shown for a particular plan year is the rate that is applied to that year’s cost to yield the next year’s projected cost.

Year Ending June 30	Rate (%)						
	Medical (Non-Medicare) <sup>1</sup>		Prescription Drug (Non-Medicare)		Medical & Prescription Drug (Medicare) <sup>2</sup>	Dental <sup>3</sup>	Medicare Part B
	Under 65	65 & Older	Under 65	65 & Older			
2022 <sup>4</sup>	3.75	4.10	-6.65	-5.15	-23.85	-4.65	4.50
2023	5.30	5.75	4.35	5.75	-24.20	2.85	4.50
2024	5.05	5.50	4.00	5.50	6.10	3.00	4.50
2025	5.25	5.25	5.25	5.25	5.25	3.00	4.50
2026	5.00	5.00	5.00	5.00	5.00	3.00	4.50
2027	4.75	4.75	4.75	4.75	4.75	3.00	4.50
2028+	4.50	4.50	4.50	4.50	4.50	3.00	4.50

Ultimate trend was used to trend backward for purpose of the Entry Age Normal Cost Method.

The trend rate assumptions were developed using Segal’s internal guidelines, which are established each year using data sources such as the 2022 Segal Health Trend Survey, internal client results, trends from other published surveys prepared by the S&P Dow Jones Indices, consulting firms and brokers, and CPI statistics published by the Bureau of Labor Statistics.

### Retiree Contribution:

For future retirees under age 65, an average contribution was used as shown in the table below. In addition, Early Retiree Premiums were based on an average premium of \$18,519 in the valuation year.

Plan	Service 25+	Service <25
ANTM02, ANTM03, ANTM05	\$0	\$245
ANTM01, ANTM04, ANTM06	\$262	\$492

For all participants, an average contribution of \$496 was used in the valuation year for dental benefits.

<sup>1</sup> Short-term rates were altered for participants under 65 to reflect the impact of new retirees receiving 2017 SEBAC changes upon retirement.

<sup>2</sup> Short-term rates reflect reduction in MAPD rates for 2023 based on new contract with Aetna.

<sup>3</sup> Short term rates reflect rate caps through year beginning July 1, 2023.

<sup>4</sup> First year trend rates for non-Medicare plans reflect actual rate actions for year beginning July 1, 2022.



## Section 3: Supporting Information

### Retiree Contribution Increase Rate:

Contributions for dental benefits are assumed to increase with dental trend. An annual increase in required retiree contributions for non-Medicare medical and prescription drugs was assumed, as shown below.

Year Ending June 30,	Rate (%) <sup>1</sup>
2022 <sup>2</sup>	1.15
2023	5.05
2024	4.80
2025	5.25
2026	5.00
2027	4.75
2028+	4.50

Ultimate trend was used to trend backward for purpose of the Entry Age Normal Cost Method.

### Administrative Expenses:

An administrative expense load of \$275 per participant remaining flat for the years ending June 30, 2022 through 2024 (based on fee guarantees in the new Anthem contract) and increasing at 3.0% per year thereafter was added to projected incurred self-funded medical claim costs in developing the benefit obligations.

### Plan Design:

Development of plan liabilities was based on the substantive plan of benefits in effect as described in Exhibit III.

### Assumption Changes since Prior Valuation:

- The discount rate was updated in accordance with GASB Statement No. 75 to 2.31% as of June 30, 2021 and 2.38% as of June 30, 2020.
- The demographic assumptions (mortality, disability, retirement, withdrawal and salary scale) were updated to be consistent with the corresponding retirement system assumptions.
- Per capita health costs, administrative expenses and retiree contributions were updated for recent experience.
- Health care cost trend rates and retiree contribution increase rates were adjusted.

<sup>1</sup> Short-term rates were altered to reflect the impact of new retirees receiving 2017 SEBAC changes upon retirement.

<sup>2</sup> First year trend rates for non-Medicare plans reflect actual rate actions for year beginning July 1, 2022.

## Section 3: Supporting Information

### Exhibit III: Summary of Plan

This exhibit summarizes the major benefit provisions as included in the valuation. To the best of our knowledge, the summary represents the substantive plans as of the measurement date. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

<b>Eligibility:</b>	<p>Retired and receiving a Normal, Early, Disabled, or Pre-retirement Survivor pension from the following Retirement Plans:</p> <ul style="list-style-type: none"><li>• SERS – State Employees Retirement System.</li><li>• JFSMCCRS – Judges, Family Support Magistrates, and Compensation Commissioners Retirement System.</li><li>• PJERS – Probate Judges and Employees Retirement System.</li><li>• STRS – State Teachers’ Retirement System.</li><li>• ARP – Alternate Retirement System.</li><li>• HYBRID – Hybrid Defined Benefit/Defined Contribution Plan</li></ul> <p>In addition, there are a small number of “Other” State employees who are not covered by the retirement systems above but who are eligible for OPEB benefits.</p> <p>Employees with less than 10 years of service as of July 1, 2009, must have 15 years of service to receive retiree medical benefits unless they were grandfathered in under the provisions of SEBAC 2011. In addition, an employee must have a combined age plus service of 75 years to receive retiree medical benefits unless they retire directly from active service.</p>
<b>Benefit Types:</b>	<p>Medical, prescription drug, dental, life insurance. Prescription drug and medical benefits for Medicare-eligible retirees are provided through a Medicare Advantage Prescription Drug (MA-PD) plan. The State also reimburses the Medicare Part B premium for Medicare-eligible retirees.</p> <p>Probate judges, probate employees, and terminated vested participants are not eligible for life insurance.</p> <p>Teachers and terminated vested participants are not eligible for pre-retirement death benefits.</p>
<b>Duration of Coverage:</b>	Lifetime.
<b>Spouse Benefits:</b>	Same benefits as for retirees except no life insurance. Spousal coverage is for life if the spouse receives a survivor pension from their retirement system; otherwise coverage ends at the retiree’s death.
<b>Retiree Contributions:</b>	<p><i>Medical, Rx, and Dental:</i> The monthly retiree contributions used were provided in a schedule supplied by the Office of the State Comptroller.</p> <p><i>Health Enhancement Program:</i> Individuals who retire after October 1, 2011, and who decline participation in the Health Enhancement Program, or who are removed from the program, must pay an additional \$100 per month in premium share.</p>

## Section 3: Supporting Information

### Retiree Contributions (continued):

*Early Retirement Premiums:* Individuals who elect early retirement will be charged the greater of the retiree contribution described above and a percentage of the premium (as described on the following page) until they reach their normal retirement date, or age 65, whichever is earlier. The percentages will also be applied to individuals who are eligible for a deferred vested benefit that elect to receive their pension benefits before age 65. If the participant has fewer than 15 years of service, 15 years is used. If the participant has more than 25 years of service, 25 years is used. If the participant retires more than 5 years early, 5 years is used. The premium is capped at 25% of the person's actual pension benefit.

	Years Retired Early				
	5	4	3	2	1
15	40.0%	32.0%	24.0%	16.0%	8.0%
16	37.0	29.6	22.2	14.8	7.4
17	34.0	27.2	20.4	13.6	6.8
18	31.0	24.8	18.6	12.4	6.2
19	28.0	22.4	16.8	11.2	5.6
20	25.0	20.0	15.0	10.0	5.0
21	22.0	17.6	13.2	8.8	4.4
22	19.0	15.2	11.4	7.6	3.8
23	16.0	12.8	9.6	6.4	3.2
24	13.0	10.4	7.8	5.2	2.6
25	10.0	8.0	6.0	4.0	2.0

## Section 3: Supporting Information

### Employee Contributions:

Current active employees pay a percentage of their pay into the Retiree Health Care Trust Fund for pre-funding of OPEB benefits.

All employees hired after July 1, 2009, or with fewer than five years of service as of July 1, 2010, are contributing 3.0% of their salaries to the Fund, for a period of 10 years or until their retirement, whichever is sooner.

All employees not paying into the Fund as of June 30, 2013, began paying a contribution at that time. The contribution was 0.5% for the year beginning July 1, 2013, increasing to 2.0% for the year beginning July 1, 2014, and to 3.0% for the year beginning July 1, 2015. Contributions will continue for a period of 10 years or until the employee retires, whichever is sooner.

Employees hired after July 1, 2017 will contribute for a period of 15 years or until the employee retires, whichever is sooner.

Contributions are refundable to employees who leave State employment prior to completing 10 years of service.

Effective July 1, 2017, the State will begin to contribute into the Retiree Health Care Trust Fund an amount equal to the amount contributed by employees each year.

### Benefit Descriptions:

#### Medical (Non-Medicare: Anthem or United/Oxford; Medicare: UnitedHealthcare)

All Plans <sup>1</sup>	In-Network	Out-Of-Network
Deductible <sup>2</sup>	\$350/person, up to \$1,400/family	\$300/person, up to \$900/family
Member Coinsurance	None	80%
Out-of-pocket Maximum (not incl. ded.)	\$2,000/\$4,000 single/family	\$2,000/\$4,000 single/family
Preferred Provider Office Visit Copay	None	Deductible and coinsurance
Non-Preferred Provider Office Visit Copay	\$15 <sup>3</sup>	Deductible and coinsurance
Emergency Room Copay <sup>4</sup>	None	None

<sup>1</sup> Only Point of Service (POS) and Out-of-Area (OOA) plans offer out-of-network benefits. Point of Enrollment (POE) and Point of Enrollment-Gatekeeper (POE-G) plans offer only in-network benefits. Medicare Advantage plan has same benefits in- and out-of-network.

<sup>2</sup> Deductible only applies for post-October 2011 retirees not enrolled in Health Enhancement Program (HEP). Deductible is waived for pre-October 2011 retirees and HEP-compliant post-October 2011 retirees.

<sup>3</sup> Office visit copay is \$5 copay for retirees who retired prior to July 1, 1999.

<sup>4</sup> Emergency room copay is \$35 for those retiring between October 2, 2011 and October 1, 2017, and increases to \$250 for those retiring after October 2, 2017.

## Section 3: Supporting Information

### Benefit Descriptions (continued):

#### Prescription Drug (Non-Medicare: CVS Caremark; Medicare: UnitedHealthcare)<sup>1</sup>

Retirement Date Prior to 5/1/2009	90-Day Supply Retail	90-Day Supply Mail
Generic	\$3	\$0
Brand-name	\$6	\$0
Retirement Date 6/1/2009 to 10/1/2011	90-Day Supply Retail	90-Day Supply Mail
Generic	\$5	\$0
Preferred brand-name	\$10	\$0
Non-preferred brand-name	\$25	\$0
Retirement Date 10/2/2011 to 10/1/2017	90-Day Supply Retail	90-Day Supply Mail
Generic	\$5	\$5
Preferred brand-name	\$20	\$10
Non-preferred brand-name	\$35	\$25
Retirement Date 10/2/2017 or Later	90-Day Supply Retail	90-Day Supply Mail
Preferred generic	\$5	\$5
Non-preferred generic	\$10	\$10
Preferred brand-name	\$25	\$25
Non-preferred brand-name	\$40	\$40

<sup>1</sup> If enrolled in Health Enhancement Program, copays for drugs prescribed for certain chronic conditions will be waived or reduced to \$0/\$5/\$12.50. Mandatory mail applies for under-65 retirees with retirement date on or after October 2, 2011.

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## Section 3: Supporting Information

Benefit Descriptions (continued):	Dental		
	CIGNA Basic	CIGNA Enhanced	CIGNA DHMO
Deductible	None	\$25/\$75 single/family	None
Annual Maximum	\$500 <sup>1</sup> for periodontics	\$3,000	None
Exam and X-rays <sup>1</sup>	Covered at 100%	Covered at 100%	Covered at 100%
Simple Restoration			
• Fillings	Covered at 80%	Covered at 80%	Covered w/ copay
• Oral Surgery	Covered at 67%	Covered at 80%	Covered w/ copay
Major Restoration			
• Crowns	Covered at 67%	Covered at 67%	Covered w/ copay
• Dentures, Fixed Bridges	Not covered	Covered at 50%	Covered w/ copay
• Implants	Not covered	Covered at 50% (up to \$500)	Covered w/ copay
Orthodontia	Not covered	\$1,500 lifetime maximum per person	Covered w/ copay
<b>Life Insurance</b>			
Pay-related coverage, equal to 50% of the basic coverage amount immediately before retirement. The basic coverage amount is a function of the employee's salary and the position held by the employee. The minimum post-retirement coverage amount is \$10,000 for employees with 25 or more years of service.			
For retirees with less than 25 years of service, the above coverage amount is proportionately reduced based on years of service, and has no minimum amount of coverage.			
Members who retire under the hazardous duty provisions of C.G.S. 5-173 receive coverage equal to 50% of the basic coverage amount immediately before retirement, regardless of the number of years of service.			
Retired members who are totally and permanently disabled before age 60 receive coverage equal to 100% of the basic coverage amount.			
<b>Plan Changes since Prior Valuation:</b>	None.		

<sup>1</sup> If enrolled in the Health Enhancement Program, annual dental cleaning (up to two) and unlimited periodontal care provided.  
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## Section 3: Supporting Information

### Appendix A: Definition of Terms

Definitions of certain terms as they are used in Statement 75. The terms may have different meanings in other contexts.

<b>Actuarially Determined Contribution:</b>	A target or recommended contribution to an OPEB plan for the reporting period based on the most recent measurement available.
<b>Assumptions or Actuarial Assumptions:</b>	The estimates on which the cost of the Plan is calculated including: <ol style="list-style-type: none"> <li>a. Investment return — the rate of investment yield that the Plan will earn over the long-term future;</li> <li>b. Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;</li> <li>c. Retirement rates — the rate or probability of retirement at a given age;</li> <li>d. Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.</li> </ol>
<b>Covered Payroll:</b>	The payroll of the employees that are provided OPEB benefits
<b>Discount Rate:</b>	The single rate of return, that when applied to all projected benefit payments results in an actuarial present value that is the sum of the following: <ol style="list-style-type: none"> <li>1. the actuarial present value of projected benefit payments projected to be funded by plan assets using a long term rate of return, and</li> <li>2. the actuarial present value of projected benefit payments that are not included in (1) using a yield or index rate for 20 year tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher</li> </ol>
<b>Entry Age Actuarial Cost Method:</b>	An actuarial cost method where the present value of the projected benefits for an individual is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age
<b>Healthcare Cost Trend Rates:</b>	The rate of change in per capita health costs over time
<b>Net OPEB Liability:</b>	The Total OPEB Liability less the Plan Fiduciary Net Position
<b>Plan Fiduciary Net Position:</b>	Market Value of Assets
<b>Real Rate of Return:</b>	The rate of return on an investment after removing inflation
<b>Service Cost:</b>	The amount of contributions required to fund the benefit allocated to the current year of service.
<b>Total OPEB Liability:</b>	Present value of all future benefit payments for current retirees and active employees taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions.
<b>Valuation Date:</b>	The date at which the actuarial valuation is performed

## Section 3: Supporting Information

### Appendix B: Accounting Requirements

The Governmental Accounting Standards Board (GASB) issued Statement Number 74 – Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, and Statement Number 75 – Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. Under these statements, all state and local government entities that provide other post-employment benefits are required to report the cost of these benefits on their financial statements. The accounting standards supplement cash accounting, under which the expense for postemployment benefits is equal to benefit and administrative costs paid on behalf of retirees and their dependents (i.e., a pay-as-you-go basis).

The statements cover postemployment benefits of medical, prescription drugs, dental, vision and life insurance coverage for retirees; long-term care coverage, life insurance and death benefits that are *not* offered as part of a pension plan; and long-term disability insurance for employees. The benefits valued in this report are limited to those described in Exhibit III of Section 4, which are based on those provided under the terms of the substantive plan in effect at the time of the valuation and on the pattern of sharing costs between the employer and plan members. The projection of benefits is not limited by legal or contractual limits on funding the plan unless those limits clearly translate into benefit limits on the substantive plan being valued.

The new standards prescribe an accrual-basis accounting requirement, thereby recognizing the employer cost of postemployment benefits over an employee's career. The standards also prescribe a consistent accounting requirement for both pension and non-pension benefits.

The total cost of providing postemployment benefits is projected, taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions. These assumptions are summarized in Exhibit II of Section 4. This amount is then discounted to determine the Total OPEB Liability. The Net OPEB Liability (NOL) is the difference between the Total OPEB Liability and market value of assets in the Plan, called the Plan Fiduciary Net Position.

Once the NOL is determined, the Annual OPEB Expense is determined as the change in NOL from the prior year with deferred recognition of certain elements. In addition, Required Supplementary Information (RSI) must be reported, including historical information about the Net OPEB Liability and the contributions made to the Plan. Appendix A contains a definition of terms .

The calculation of an accounting obligation does not, in and of itself, imply that there is any legal liability to provide the benefits valued, nor is there any implication that the Employer is required to implement a funding policy to satisfy the projected expense.

Actuarial calculations reflect a long-term perspective, and the methods and assumptions use techniques designed to reduce short-term volatility in accrued liabilities and the actuarial value of assets, if any.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and the actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.



# State of Connecticut State Employee OPEB Plan

## GASB 75 Agency Calculations for Reporting Date June 30, 2022 Measured at June 30, 2021

### Allocation Calculation

Groups	Prior Year		Current Year			
	Fiscal Year 2020 Employer Contributions	Proportionate Share	Share of NOL Measured at June 30, 2020	Fiscal Year 2021 Employer Contributions	Proportionate Share	Share of NOL Measured at June 30, 2021
Primary Government	\$855,730,480	98.674863%	\$23,228,957,082	\$857,298,328	98.759144%	\$19,285,136,842
Component Units						
Connecticut Airport Authority	3,505,904	0.404268%	95,168,392	3,053,437	0.351750%	68,687,817
Connecticut Green Bank	872,660	0.100627%	23,688,513	912,040	0.105065%	20,516,564
Connecticut Innovations Inc.	1,227,990	0.141600%	33,334,008	1,108,220	0.127665%	24,929,682
Connecticut Lottery Corporation	2,472,823	0.285143%	67,125,223	2,315,470	0.266738%	52,087,067
Capital Region Development Authority	311,279	0.035894%	8,449,724	302,412	0.034837%	6,802,832
Connecticut Port Authority	53,005	0.006112%	1,438,830	69,337	0.007987%	1,559,753
Paid Family and Medical Leave Authority	13,755	0.001586%	373,382	229,015	0.026382%	5,151,748
Total Component Units	\$8,457,416	0.975230%	\$229,578,072	\$7,989,931	0.920425%	\$179,735,463
<b>Grand Total</b>	<b>\$867,222,367</b>	<b>100.000000%</b>	<b>\$23,540,906,412</b>	<b>\$868,069,824</b>	<b>100.000000%</b>	<b>\$19,527,444,294</b>

# State of Connecticut State Employee OPEB Plan

GASB 75 Agency Calculations for Reporting Date June 30, 2022 Measured at June 30, 2021

## OPEB Expense

Groups	Service cost	Interest on the Total OPEB Liability	Expensed portion of current-period changes in proportion	Expensed portion of current-period benefit changes	Expensed portion of current-period difference between expected and actual experience in the Total OPEB Liability	Expensed portion of current-period changes of assumptions or other inputs	Employee contributions	Projected earnings on plan investments	Expensed portion of current-period differences between actual and projected earnings on plan investments	Administrative expense	Other	Recognition of beginning of year deferred outflows of resources as OPEB expense	Recognition of beginning of year deferred inflows of resources as OPEB expense	Net amortization of past-period amounts from changes in proportion	OPEB Expense
Primary Government	\$1,199,655,072	\$610,559,616	\$3,362,674	\$0	\$74,504,083	(\$944,742,269)	(\$145,213,335)	(\$114,037,542)	(\$54,179,536)	\$0	\$104,000,406	\$1,081,423,618	(\$386,107,280)	\$3,615,651	\$1,432,841,158
Component Units															
Connecticut Airport Authority	4,272,808	2,174,628	(2,095,373)	0	265,361	(3,364,886)	(517,206)	(406,167)	(192,971)	0	370,418	3,851,703	(1,375,197)	(218,689)	2,764,429
Connecticut Green Bank	1,276,257	649,546	177,078	0	79,261	(1,005,068)	(154,486)	(121,319)	(57,639)	0	110,641	1,150,477	(410,762)	(1,378,322)	315,664
Connecticut Innovations Inc.	1,550,781	789,264	(556,002)	0	96,311	(1,221,258)	(187,716)	(147,415)	(70,037)	0	134,440	1,397,944	(499,117)	(459,572)	827,623
Connecticut Lottery Corporation	3,240,139	1,649,055	(734,332)	0	201,227	(2,551,647)	(392,206)	(308,003)	(146,333)	0	280,894	2,920,808	(1,042,834)	(690,790)	2,425,978
Capital Region Development Authority	423,178	215,375	(42,153)	0	26,281	(333,258)	(51,224)	(40,227)	(19,112)	0	36,686	381,472	(136,199)	46,971	507,790
Connecticut Port Authority	97,026	49,381	74,827	0	6,026	(76,409)	(11,745)	(9,223)	(4,382)	0	8,411	87,464	(31,228)	205,109	395,257
Paid Family and Medical Leave Authority	320,471	163,102	989,315	0	19,903	(252,374)	(38,792)	(30,463)	(14,473)	0	27,782	288,887	(103,143)	58,129	1,428,344
Total Component Units	\$11,180,660	\$5,690,351	(\$2,186,640)	\$0	\$694,370	(\$8,804,900)	(\$1,353,375)	(\$1,062,817)	(\$504,947)	\$0	\$969,272	\$10,078,755	(\$3,598,480)	(\$2,437,164)	\$8,665,085
<b>Grand Total</b>	<b>\$1,214,728,098</b>	<b>\$618,230,971</b>	<b>\$0</b>	<b>\$0</b>	<b>\$75,440,187</b>	<b>(\$956,612,452)</b>	<b>(\$147,037,865)</b>	<b>(\$115,470,362)</b>	<b>(\$54,860,272)</b>	<b>\$0</b>	<b>\$105,307,115</b>	<b>\$1,095,011,128</b>	<b>(\$390,958,512)</b>	<b>\$0</b>	<b>\$1,443,778,036</b>

# State of Connecticut State Employee OPEB Plan

## GASB 75 Agency Calculations for Reporting Date June 30, 2022 Measured at June 30, 2021

### Deferred Outflows of Resources and Deferred Inflows of Resources

Groups	Deferred Outflows of Resources					Deferred Inflows of Resources				
	Changes in proportion	Changes of assumptions	Net difference between projected and actual earnings on OPEB Plan investments	Difference between expected and actual experience in the Total OPEB Liability	Total Deferred Outflows of Resources	Changes in proportion	Changes of assumptions	Net difference between projected and actual earnings on OPEB Plan investments	Difference between expected and actual experience in the Total OPEB Liability	Total Deferred Inflows of Resources
Primary Government	\$45,858,422	\$2,791,374,450	\$0	\$309,936,984	\$3,147,169,856	\$16,815,795	\$4,156,583,548	\$179,627,117	\$380,530,076	\$4,733,556,536
Component Units										
Connecticut Airport Authority	5,539,542	9,942,030	0	1,103,902	16,585,474	16,904,087	14,804,492	639,777	1,355,333	33,703,689
Connecticut Green Bank	806,390	2,969,614	0	329,728	4,105,732	4,676,359	4,421,997	191,097	404,828	9,694,281
Connecticut Innovations Inc.	1,990,655	3,608,379	0	400,652	5,999,686	5,077,299	5,373,169	232,202	491,907	11,174,577
Connecticut Lottery Corporation	4,233,870	7,539,200	0	837,106	12,610,176	9,754,688	11,226,482	485,153	1,027,771	22,494,094
Capital Region Development Authority	490,008	984,657	0	109,330	1,583,995	679,353	1,466,235	63,363	134,232	2,343,183
Connecticut Port Authority	1,116,859	225,762	0	25,067	1,367,688	508,001	336,178	14,528	30,777	889,484
Paid Family and Medical Leave Authority	4,302,728	745,676	0	82,795	5,131,199	0	1,110,372	47,985	101,653	1,260,010
Total Component Units	\$18,480,052	\$26,015,318	\$0	\$2,888,580	\$47,383,950	\$37,599,787	\$38,738,925	\$1,674,105	\$3,546,501	\$81,559,318
<b>Grand Total</b>	<b>\$68,552,558</b>	<b>\$2,826,446,580</b>	<b>\$0</b>	<b>\$313,831,176</b>	<b>\$3,208,830,314</b>	<b>\$68,552,558</b>	<b>\$4,208,808,802</b>	<b>\$181,884,035</b>	<b>\$385,311,234</b>	<b>\$4,844,556,629</b>

# State of Connecticut State Employee OPEB Plan

GASB 75 Agency Calculations for Reporting Date June 30, 2022 Measured at June 30, 2021

## Deferred Outflows of Resources and Deferred Inflows of Resources

Projected Recognition

Groups	2023	2024	2025	2026	2027	Thereafter	Total
Primary Government	(\$163,256,459)	(\$50,929,259)	(\$399,560,182)	(\$833,940,688)	#####	\$0	(\$1,586,386,680)
Component Units							
Connecticut Airport Authority	(2,888,510)	(2,332,406)	(5,445,200)	(5,620,914)	(831,185)	0	(17,118,215)
Connecticut Green Bank	(1,478,701)	(1,346,432)	(1,628,741)	(1,014,880)	(119,795)	0	(5,588,549)
Connecticut Innovations Inc.	(879,973)	(532,583)	(1,681,225)	(1,812,160)	(268,950)	0	(5,174,891)
Connecticut Lottery Corporation	(2,047,369)	(1,085,703)	(2,927,647)	(3,329,641)	(493,558)	0	(9,883,918)
Capital Region Development Authority	(45,391)	4,404	(290,623)	(371,720)	(55,858)	0	(759,188)
Connecticut Port Authority	266,164	275,360	(36,272)	(27,759)	711	0	478,204
Paid Family and Medical Leave Authority	1,001,958	1,032,331	937,892	777,912	121,096	0	3,871,189
Total Component Units	(\$6,071,822)	(\$3,985,029)	(\$11,071,816)	(\$11,399,162)	(\$1,647,539)	\$0	(\$34,175,368)
<b>Grand Total</b>	<b>(\$172,406,921)</b>	<b>(\$57,285,921)</b>	<b>(\$415,252,750)</b>	<b>(\$849,793,157)</b>	<b>#####</b>	<b>\$0</b>	<b>(\$1,635,726,315)</b>

# State of Connecticut State Employee OPEB Plan

GASB 75 Agency Calculations for Reporting Date June 30, 2022 Measured at June 30, 2021

## Projected Recognition Schedules of Deferred Outflows of Resources and Deferred Inflows of Resources Changes in Proportion

Groups	2022	2023	2024	2025	2026	2027	Recognition of Deferred Outflows Thereafter	Total	2022	2023	2024	2025	2026	2027	Recognition of Deferred Inflows Thereafter	Total
	Outstanding Balance of Deferred Outflows of Resources	Recognition of Deferred Outflows	Recognition of Deferred Outflows	Recognition of Deferred Outflows	Recognition of Deferred Outflows	Recognition of Deferred Outflows			Outstanding Balance of Deferred Inflows of Resources	Recognition of Deferred Inflows	Recognition of Deferred Inflows	Recognition of Deferred Inflows	Recognition of Deferred Inflows	Recognition of Deferred Inflows		
Primary Government	\$45,858,422	\$14,598,875	\$13,209,812	\$12,203,953	\$5,307,760	\$538,022	\$0	\$45,858,422	(\$16,815,795)	(\$7,587,736)	(\$7,563,986)	(\$1,664,073)	\$0	\$0	\$0	(\$16,815,795)
Component Units																
Connecticut Airport Authority	5,539,542	2,495,290	2,495,290	548,962	0	0	0	5,539,542	(16,904,087)	(4,777,358)	(4,626,193)	(4,533,510)	(2,631,765)	(335,261)	0	(16,904,087)
Connecticut Green Bank	806,390	246,822	177,078	177,078	177,078	28,334	0	806,390	(4,676,359)	(1,544,384)	(1,463,322)	(1,369,533)	(299,120)	0	0	(4,676,359)
Connecticut Innovations Inc.	1,990,655	932,205	875,047	183,403	0	0	0	1,990,655	(5,077,299)	(1,592,076)	(1,334,496)	(1,334,496)	(727,273)	(88,958)	0	(5,077,299)
Connecticut Lottery Corporation	4,233,870	1,971,765	1,854,186	407,919	0	0	0	4,233,870	(9,754,688)	(3,559,259)	(2,787,086)	(2,227,930)	(1,062,922)	(117,491)	0	(9,754,688)
Capital Region Development Authority	490,008	220,725	220,725	48,558	0	0	0	490,008	(679,353)	(206,054)	(196,364)	(194,518)	(75,675)	(6,742)	0	(679,353)
Connecticut Port Authority	1,116,859	437,700	437,700	154,660	74,827	11,972	0	1,116,859	(508,001)	(157,764)	(157,764)	(157,764)	(34,709)	0	0	(508,001)
Paid Family and Medical Leave Authority	4,302,728	1,047,444	1,047,444	1,047,444	1,002,105	158,291	0	4,302,728	0	0	0	0	0	0	0	0
Total Component Units	\$18,480,052	\$7,351,951	\$7,107,470	\$2,568,024	\$1,254,010	\$198,597	\$0	\$18,480,052	(\$37,599,787)	(\$11,836,895)	(\$10,565,225)	(\$9,817,751)	(\$4,831,464)	(\$548,452)	\$0	(\$37,599,787)
<b>Grand Total</b>	<b>\$68,552,558</b>	<b>\$23,917,377</b>	<b>\$22,159,522</b>	<b>\$15,177,270</b>	<b>\$6,561,770</b>	<b>\$736,619</b>	<b>\$0</b>	<b>\$68,552,558</b>	<b>(\$68,552,558)</b>	<b>(\$23,917,377)</b>	<b>(\$22,159,522)</b>	<b>(\$15,177,270)</b>	<b>(\$6,561,770)</b>	<b>(\$736,619)</b>	<b>\$0</b>	<b>(\$68,552,558)</b>

# State of Connecticut State Employee OPEB Plan

GASB 75 Agency Calculations for Reporting Date June 30, 2022 Measured at June 30, 2021

## Schedule of Reconciliation of Net OPEB Liability - Current Year

Groups	1. Beginning Net OPEB Liability	2. OPEB expense	3. Employer contributions	4. New net deferred inflows/outflows	5. Change in allocation of prior deferred inflows/outflows	6. New net deferred inflows/outflows due to change in proportion	7. Recognition of prior deferred inflows/outflows	8. Recognition of prior deferred inflows/outflows due to change in proportions	9. Ending Net OPEB Liability
Primary Government	\$23,228,957,081	\$1,432,841,158	(\$857,298,328)	(\$3,836,909,000)	\$2,489,202	\$13,988,718	(\$695,316,337)	(\$3,615,651)	\$19,285,136,843
Component Units									
Connecticut Airport Authority	95,168,392	2,764,429	(3,053,437)	(13,665,908)	(1,551,090)	(8,716,753)	(2,476,506)	218,689	68,687,816
Connecticut Green Bank	23,688,515	315,664	(912,040)	(4,081,910)	131,082	736,646	(739,715)	1,378,322	20,516,564
Connecticut Innovations Inc.	33,334,009	827,623	(1,108,220)	(4,959,930)	(411,577)	(2,312,966)	(898,828)	459,572	24,929,683
Connecticut Lottery Corporation	67,125,220	2,425,978	(2,315,470)	(10,363,076)	(543,586)	(3,054,819)	(1,877,974)	690,790	52,087,063
Capital Region Development Authority	8,449,724	507,790	(302,412)	(1,353,470)	(31,203)	(175,354)	(245,273)	(46,971)	6,802,831
Connecticut Port Authority	1,438,832	395,257	(69,337)	(310,323)	55,391	311,280	(56,236)	(205,109)	1,559,755
Paid Family and Medical Leave Authority	373,382	1,428,344	(229,015)	(1,024,975)	732,335	4,115,551	(185,744)	(58,129)	5,151,749
Total Component Units	\$229,578,074	\$8,665,085	(\$7,989,931)	(\$35,759,592)	(\$1,618,648)	(\$9,096,415)	(\$6,480,276)	\$2,437,164	\$179,735,461
<b>Grand Total</b>	<b>\$23,540,906,412</b>	<b>\$1,443,778,036</b>	<b>(\$868,069,824)</b>	<b>(\$3,885,117,714)</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$704,052,616)</b>	<b>\$0</b>	<b>\$19,527,444,294</b>

# State of Connecticut State Employee OPEB Plan

GASB 75 Agency Calculations for Reporting Date June 30, 2022 Measured at June 30, 2021

## Discount Rate and Trend Sensitivity

Groups	NOL at Current Discount Rate (2.31%)	1% Decrease in Discount Rate (1.31%)	1% Increase in Discount Rate (3.31%)	1% Decrease in Trend Rates	1% Increase in Trend Rates
Primary Government	\$19,285,136,842	\$22,890,867,899	\$16,421,746,451	\$16,210,754,790	\$23,264,563,612
Component Units					
Connecticut Airport Authority	68,687,817	81,530,339	58,489,287	57,737,799	82,861,329
Connecticut Green Bank	20,516,564	24,352,534	17,470,336	17,245,871	24,750,092
Connecticut Innovations Inc.	24,929,682	29,590,771	21,228,209	20,955,463	30,073,843
Connecticut Lottery Corporation	52,087,067	61,825,757	44,353,360	43,783,494	62,835,069
Capital Region Development Authority	6,802,832	8,074,754	5,792,771	5,718,344	8,206,575
Connecticut Port Authority	1,559,753	1,851,379	1,328,166	1,311,101	1,881,603
Paid Family and Medical Leave Authority	5,151,748	6,114,967	4,386,834	4,330,471	6,214,795
Total Component Units	\$179,735,463	\$213,340,501	\$153,048,963	\$151,082,543	\$216,823,306
<b>Grand Total</b>	<b>\$19,527,444,294</b>	<b>\$23,178,479,438</b>	<b>\$16,628,076,931</b>	<b>\$16,414,434,272</b>	<b>\$23,556,870,438</b>