

State of Connecticut State
Employee OPEB Plan
(SEOPEBP)

**Governmental Accounting Standards
Board (GASB) Statement 75 Actuarial
Valuation and Review of Other
Postemployment Benefits (OPEB) for
Reporting Date June 30, 2020
Measured at June 30, 2019**



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October 2, 2020

Thomas C. Woodruff, PhD
Director
Healthcare Policy and Benefits Services Division
Office of the State Comptroller
165 Capitol Avenue
Hartford, Connecticut, 06106

Dear Dr. Woodruff:

We are pleased to submit this Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2020, 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, 2019 to be reported as of June 30, 2020, 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 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".

Daniel J. Rhodes, FSA, MAAA
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 as of June 30, 2019, 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, 2019, 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, 2019, 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, 2019 retirement plan valuations; 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, 2020, the NOL was measured as of June 30, 2019. The Plan’s Fiduciary Net Position (plan assets) and the TOL were valued as of the measurement date. Consistent with the provisions of GASB 75, the assets and liabilities measured as of June 30, 2019 are not adjusted or rolled forward to the June 30, 2020 reporting date.
2. The Net OPEB Liability (NOL) as of June 30, 2019 is \$20,682,391,738, an increase of \$3,417,993,738, from the prior valuation NOL of \$17,264,398,000. Net unfunded plan obligations had been expected to increase to \$17,911,012,407, due to normal plan operations. The difference between actual and prior unfunded actuarial accrued liabilities was the net effect of several factors:
 - a. An investment experience gain decreased the NOL by \$639,203. This was the result of a gain due to fund investment performance (returns less than expected).

Section 1: Actuarial Valuation Summary

- b. An actuarial experience gain decreased the NOL by \$645,590,429. This was the net result of gains and losses due to demographic changes and actual 2019 contributions and benefit payments that were different from expected.
- c. Valuation assumption changes increased the Net OPEB Liability by \$3,417,608,963. This was a net result of:
 - 1) A net increase in obligations of \$2,472,192,684 due to updating the valuation-year per capita health costs and future trend on such costs
 - 2) An increase in obligations of \$1,083,829,001 due to lowering the discount rate 3.95% to 3.58%. 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 rating of AA/Aa or higher (3.50% as of June 30, 2019).
 - 3) A net decrease of \$138,412,722 due to small changes in demographic assumptions as described in Section 3, Exhibit II.
3. As of June 30, 2019, the ratio of assets to the Total OPEB Liability (the funded ratio) is 5.47%. This is based on the market value of assets at this point in time.
4. The Annual OPEB Expense increased to \$1,699,659,072 for the year ending June 30, 2019, to be reported as of June 30, 2020. The expense was \$1,187,290,000 last year.
5. The Coronavirus (COVID-19) pandemic is rapidly evolving and is having a significant impact on the US economy in 2020, including most retiree health plans, and will likely continue to have an impact in the future. Our results do not include the impact of the following:
 - Direct or indirect effects of COVID-19 on short-term health plan costs
 - Changes in the market value of plan assets since June 30, 2019
 - Changes in interest rates since June 30, 2019
 - Short-term or long-term impacts on mortality of the covered population
 - The potential for federal or state fiscal relief

Each of the above factors could significantly impact these results. The above factors generally won't have an impact on the June 30, 2019 valuation, since that is based on a snapshot of assets and liabilities prior to recent events. We will keep you updated on emerging developments.

Section 1: Actuarial Valuation Summary

Summary of key valuation results

Reporting Date for Employer under GASB 75		June 30, 2020	June 30, 2019
Measurement Date		June 30, 2019	June 30, 2018
Disclosure elements for	• Total OPEB Liability	\$21,878,399,286	\$18,114,287,000
fiscal year ending	• Plan Fiduciary Net Position (Assets)	1,196,007,548	849,889,000
June 30:	• Net OPEB Liability	20,682,391,738	17,264,398,000
	• Plan Fiduciary Net Position as a percentage of Total OPEB Liability	5.47%	4.69%
	• OPEB Expense	1,699,659,072	1,187,290,000
	• Service Cost at Beginning of Year	848,197,922	901,698,000
	• Total Payroll	3,619,132,693	3,875,035,000

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:

Plan of benefits	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.
Participant data	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.
Assets	The valuation is based on the market value of assets as of the measurement date, as provided by the State.
Actuarial assumptions	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

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

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.

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.

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.

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

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.

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.

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.

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

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

October 2, 2020

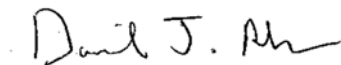
This is to certify that Segal has conducted an actuarial valuation of certain benefit obligations of State of Connecticut State Employee OPEB Plan's other postemployment benefit programs as of June 30, 2019, in accordance with generally accepted actuarial principles and practices. The actuarial calculations 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 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 other professional actuarial organizations and meets the "General Qualification Standards for Statements of Actuarial Opinions" to render the actuarial opinion contained herein.



Daniel J. Rhodes, FSA, MAAA
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, 2019, State plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	77,141
Vested terminated members entitled to but not yet receiving benefits	649
Active members	48,015
Total	125,805

Benefits provided. The plan provides healthcare and life insurance benefits to eligible retirees and their spouses, and other plan provisions are described in Sections 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	June 30, 2020	June 30, 2019
Measurement Date	June 30, 2019	June 30, 2018
Components of the Net OPEB Liability		
Total OPEB Liability	\$21,878,399,286	\$18,114,287,000
Plan Fiduciary Net Position	1,196,007,548	849,889,000
Net OPEB Liability	20,682,391,738	17,264,398,000
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	5.47%	4.69%

The Net OPEB Liability was measured as of June 30, 2019 and 2018. 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, 2019 and 2017, respectively.

Actuarial assumptions. The Total OPEB Liability was measured by an actuarial valuation as of June 30, 2019 using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.50%
Payroll Growth Rate:	3.5%
Salary increases	3.25% to 19.50%, vary by service and retirement system, including inflation
Discount rate	3.58% as of June 30, 2019, and 3.95% as of June 30, 2018
Healthcare cost trend rates	
Medical and prescription drug¹	6.00% graded to 4.50% over 6 years
Dental²	3.00%
Part B	4.50%
Administrative expense³	3.00%

¹ 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 2021 and anticipated increases in 2022 and 2023.

² Short term rates were altered to reflect rate caps and guarantees through 2025.

³ Short term rates were altered to reflect known rates through 2025.

Section 2: GASB 75 Information

Mortality rates

SERS, PJERS, JFSMCCRS, ARP, HYBRID, OTHER

Pre-Retirement: RP-2014 White Collar Employee Mortality Table projected to 2020 with Scale BB at 60% for males and 55% for females

Healthy Annuitant: RP-2014 White Collar Healthy Annuitant Mortality Table projected to 2020 with Scale BB at 100% for males and at 95% for females

Disabled Annuitant: RP-2014 Disabled Retiree Mortality Table at 65% for males and 85% for females

STRS

Pre-Retirement and Healthy Annuitant: Headcount-Weighted RP-2014 White Collar Mortality Table with employee and annuitant rates blended from ages 50 to 80 projected to 2020 with Scale BB and further adjusted to grade in increases (5% for females and 8% for males) for rates over age 80

Disabled Annuitant: Headcount-Weighted RP-2014 Disabled Retiree projected to 2017 with ScaleMP2014

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. 67 Report for the Connecticut State Employees' Retirement System prepared as of June 30, 2019. 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%	5.6%
Developed Market International Stock Fund	11.0%	6.0%
Emerging Markets International Stock Fund	9.0%	7.9%
Core Fixed Income	16.0%	2.1%
Inflation Linked Bond Fund	5.0%	1.1%
Emerging Market Debt Fund	5.0%	2.7%
High Yield Bond Fund	6.0%	4.0%
Real Estate Fund	10.0%	4.5%
Private Equity	10.0%	7.3%
Alternative Investments	7.0%	2.9%
Liquidity Fund	1.0%	0.4%

Discount rate. The discount rates used to measure the Total OPEB Liability (TOL) were 3.58% and 3.95% as of June 30, 2019 and June 30, 2018, 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 (3.50% as of June 30, 2019 and 3.87% as of June 30, 2018). 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 (2.58%) or 1-percentage-point higher (4.58%) 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.

	1% Decrease (2.58%)	Current Discount Rate (3.58%)	1% Increase (4.58%)
Net OPEB Liability (Asset)	\$24,071,077,618	\$20,682,391,738	\$17,931,543,383
	1% Decrease in Health Care Cost Trend Rates	Current Health Care Cost Trend Rates	1% Increase in Health Care Cost Trend Rates
Net OPEB Liability (Asset)	\$17,729,934,229	\$20,682,391,738	\$24,408,941,739

Section 2: GASB 75 Information

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

Reporting Date for Employer under GASB 75	June 30, 2020	June 30, 2019
Measurement Date	June 30, 2019	June 30, 2018
Total OPEB Liability		
Service cost	\$848,197,922	\$901,698,000
Interest	737,298,453	680,154,000
Change of benefit terms	--	--
Differences between expected and actual experience	-645,590,429	--
Changes of assumptions	3,417,608,963	-724,140,000
Benefit payments, including refunds of member contributions	<u>-593,402,623</u>	<u>-648,347,000</u>
Net change in Total OPEB Liability	\$3,764,112,286	\$209,365,000
Total OPEB Liability – beginning	<u>18,114,287,000</u>	<u>17,904,922,000</u>
Total OPEB Liability – ending	<u>\$21,878,399,286</u>	<u>\$18,114,287,000</u>
Plan Fiduciary Net Position		
Contributions – employer	\$752,941,470	\$801,893,000
Contributions – employee	116,538,679	116,814,000
Net investment income	68,847,399	37,001,000
Benefit payments, including refunds of member contributions	-593,402,623	-648,347,000
Administrative expense	--	--
Other	<u>1,193,623</u>	<u>186,000</u>
Net change in Plan Fiduciary Net Position	\$346,118,548	\$307,547,000
Plan Fiduciary Net Position – beginning	<u>849,889,000</u>	<u>542,342,000</u>
Plan Fiduciary Net Position – ending	\$1,196,007,548	\$849,889,000
Net OPEB Liability – ending	<u>\$20,682,391,738</u>	<u>\$17,264,398,000</u>
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	5.47%	4.69%
Covered employee payroll	\$3,619,132,693	\$3,875,035,000
Plan Net OPEB Liability as percentage of covered employee payroll	571.47%	445.53%

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.

Section 2: GASB 75 Information

Deferred outflows of resources and deferred inflows of resources

Reporting Date for Employer under GASB 75	June 30, 2020	June 30, 2019
Measurement Date	June 30, 2019	June 30, 2018
Deferred Outflows of Resources		
Changes of assumptions or other inputs	\$2,762,894,602	\$0
Net difference between projected and actual earnings on OPEB plan investments	0	0
Difference between expected and actual experience in the Total OPEB Liability	<u>0</u>	<u>0</u>
Total Deferred Outflows of Resources	\$2,762,894,602	\$0
Deferred Inflows of Resources		
Changes of assumptions or other inputs	\$684,991,000	\$912,836,000
Net difference between projected and actual earnings on OPEB plan investments	4,487,364	6,938,000
Difference between expected and actual experience in the Total OPEB Liability	<u>521,914,102</u>	<u>0</u>
Total Deferred Inflows of Resources	\$1,211,392,466	\$919,774,000
Deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized as follows:		
Reporting Date for Employer under GASB 75 Year Ended June 30:		
2020	N/A	-\$230,807,000
2021	\$300,103,193	-230,807,000
2022	300,101,193	-230,809,000
2023	359,674,193	-171,236,000
2024	474,795,193	-56,115,000
2025	116,828,364	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)	2019	2020	2021	2022	2023	2024	2025	Thereafter
2018	\$0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	0	0.00	0	0	0	0	0	0	0	0
2020	-645,590,429	5.22	N/A	<u>-123,676,327</u>	<u>-123,676,327</u>	<u>-123,676,327</u>	<u>-123,676,327</u>	<u>-123,676,327</u>	<u>-27,208,794</u>	<u>0</u>
Net increase (decrease) in OPEB expense			N/A	-\$123,676,327	-\$123,676,327	-\$123,676,327	-\$123,676,327	-\$123,676,327	-\$27,208,794	\$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)	2019	2020	2021	2022	2023	2024	2025	Thereafter
2018	-\$510,781,000	5.42	-\$94,240,000	-\$94,240,000	-\$94,240,000	-\$94,240,000	-\$39,581,000	\$0	\$0	\$0
2019	-724,140,000	5.42	-133,605,000	-133,605,000	-133,605,000	-133,605,000	-133,605,000	-56,115,000	0	0
2020	3,417,608,963	5.22	N/A	<u>654,714,361</u>	<u>654,714,361</u>	<u>654,714,361</u>	<u>654,714,361</u>	<u>654,714,361</u>	<u>144,037,158</u>	<u>0</u>
Net increase (decrease) in OPEB expense			N/A	\$426,869,361	\$426,869,361	\$426,869,361	\$481,528,361	\$598,599,361	\$144,037,158	\$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)	2019	2020	2021	2022	2023	2024	2025	Thereafter
2018	-24,567,000	5.00	-4,913,000	-4,913,000	-4,913,000	-4,915,000	0	0	0	0
2019	9,754,000	5.00	1,951,000	1,951,000	1,951,000	1,951,000	1,950,000	0	0	0
2020	-639,203	5.00	N/A	<u>-127,839</u>	<u>-127,841</u>	<u>-127,841</u>	<u>-127,841</u>	<u>-127,841</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in OPEB expense			N/A	-\$3,089,839	-\$3,089,841	-\$3,091,841	\$1,822,159	-\$127,841	\$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	2019	2020	2021	2022	2023	2024	2025	Thereafter
2018	-\$535,348,000	-\$99,153,000	-\$99,153,000	-\$99,153,000	-\$99,155,000	-\$39,581,000	\$0	\$0	\$0
2019	-714,386,000	-131,654,000	-131,654,000	-131,654,000	-131,654,000	-131,655,000	-56,115,000	0	0
2020	2,771,379,331	N/A	<u>530,910,195</u>	<u>530,910,193</u>	<u>530,910,193</u>	<u>530,910,193</u>	<u>530,910,193</u>	<u>116,828,364</u>	<u>0</u>
Net increase (decrease) in OPEB expense		N/A	\$300,103,195	\$300,103,193	\$300,101,193	\$359,674,193	\$474,795,193	\$116,828,364	\$0

Section 2: GASB 75 Information

OPEB expense

Reporting Date for Employer under GASB 75 Measurement Date	June 30, 2020 June 30, 2019	June 30, 2019 June 30, 2018
Components of OPEB Expense		
Service cost	\$848,197,922	\$901,698,000
Interest on the Total OPEB Liability	737,298,453	680,154,000
Current-period benefit changes	--	--
Expensed portion of current-period difference between expected and actual experience in the Total OPEB Liability	-123,676,327	--
Expensed portion of current-period changes of assumptions or other inputs	654,714,361	-133,605,000
Member contributions	-116,538,679	-116,814,000
Projected earnings on plan investments	-68,208,196	-46,755,000
Expensed portion of current-period differences between actual and projected earnings on plan investments	-127,839	1,951,000
Administrative expense	--	--
Other	-1,193,623	-186,000
Recognition of beginning of year deferred outflows of resources as OPEB expense	1,951,000	--
Recognition of beginning of year deferred inflows of resources as OPEB expense	-232,758,000	-99,153,000
OPEB Expense	\$1,699,659,072	\$1,187,290,000

Section 2: GASB 75 Information

Schedule of reconciliation of Net OPEB Liability

Reporting Date for Employer under GASB 75	June 30, 2020	June 30, 2019
Measurement Date	June 30, 2019	June 30, 2018
Beginning Net OPEB Liability	\$17,264,398,000	\$17,362,580,000
OPEB expense	1,699,659,072	1,187,290,000
Employer contributions	-752,941,470	-801,893,000
New net deferred inflows/outflows	2,240,469,136	-582,732,000
Recognition of prior deferred inflows/outflows	230,807,000	99,153,000
Ending Net OPEB Liability	\$20,682,391,738	\$17,264,398,000

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- Employee Payroll	Contributions as a Percentage of Covered Employee Payroll
2010					
2011					
2012					
2013	(Historical information prior to implementation of GASB 74/75 is not required.)				
2014					
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%

See accompanying notes to this schedule on next page.

Section 2: GASB 75 Information

Notes to Schedule:

Methods and assumptions used to establish “actuarially determined contribution” rate for the year ended June 30, 2019:

Valuation date	Actuarially determined contribution was determined with the June 30, 2017 actuarial valuation
Actuarial cost method	Entry Age Normal
Amortization method	Level percent of growing payroll, closed, 30 years
Remaining amortization period	20 years as of June 30, 2018
Asset valuation method	Market value
Investment Rate of Return	6.90%
Payroll Growth Rate	3.5%

Supporting Information

Exhibit I: Summary of Participant Data

	As of June 30, 2019	As of June 30, 2017
Number of retirees	46,833	45,412
Average age of retirees	70.4	70.0
Number of spouses	26,018	25,010
Average age of spouses	66.8	66.3
Number of surviving spouses	4,290	4,157
Average age	77.8	77.5
Number of inactive vested	649	256
Average age	55.6	57.2
Number of actives	48,015	49,538
Average age	48.0	48.1
Average service	12.6	12.4

Section 3: Supporting Information

Exhibit II: Actuarial Assumptions and Actuarial Cost Method

Data:	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.																								
Actuarial Cost Method:	Entry Age Normal – Level Percentage of Payroll																								
Asset Valuation Method:	Market Value																								
Measurement Date:	June 30, 2019																								
Actuarial Valuation Date:	June 30, 2019																								
Discount Rate:	3.58% as of June 30, 2019 and 3.95% as of June 30, 2018 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 (3.50% as of June 30, 2019 and 3.87% as of June 30, 2018). The blending is based on the sufficiency of projected assets to make projected benefit payment. Assets as of June 30, 2019, as previously provided from OSC																								
Expected Return:	6.90% - consistent with the rate developed in the GASB 67 report for the SERS prepared as of June 30, 2019 by Cavanaugh MacDonald Consulting, LLC.																								
Salary Increases:	<p><u>SERS, ARP, HYBRID, OTHER</u></p> <p>Rates vary by years of service as follows:</p> <table border="1"> <thead> <tr> <th>Years of Service</th> <th>Rate (%)</th> <th>Years of Service</th> <th>Rate (%)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>9.50</td> <td>5</td> <td>5.25</td> </tr> <tr> <td>1</td> <td>19.50</td> <td>6-9</td> <td>5.00</td> </tr> <tr> <td>2</td> <td>9.50</td> <td>10-14</td> <td>4.50</td> </tr> <tr> <td>3</td> <td>5.75</td> <td>15+</td> <td>3.50</td> </tr> <tr> <td>4</td> <td>5.50</td> <td></td> <td></td> </tr> </tbody> </table>	Years of Service	Rate (%)	Years of Service	Rate (%)	0	9.50	5	5.25	1	19.50	6-9	5.00	2	9.50	10-14	4.50	3	5.75	15+	3.50	4	5.50		
Years of Service	Rate (%)	Years of Service	Rate (%)																						
0	9.50	5	5.25																						
1	19.50	6-9	5.00																						
2	9.50	10-14	4.50																						
3	5.75	15+	3.50																						
4	5.50																								

Section 3: Supporting Information

Salary Increases (continued):

STRS

Rates vary by years of service as follows:

Years of Service	Rate (%)	Years of Service	Rate (%)
0 – 1	6.50	17	4.25
2 – 9	6.25	18	4.00
10 – 11	5.50	19	3.75
12 – 14	5.00	20	3.50
15	4.75	21+	3.25
16	4.50		

PJERS, JFSMCCRS 4.50%

Total Payroll Growth Rate: 3.50%

Demographic and Salary Scale Assumptions:

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.

Mortality Rates:

SERS, PJERS, JFSMCCRS, ARP, HYBRID, OTHER

Pre-Retirement: RP-2014 White Collar Employee Mortality Table projected to 2020 with Scale BB at 60% for males and 55% for females

Healthy Annuitant: RP-2014 White Collar Healthy Annuitant Mortality Table projected to 2020 with Scale BB at 100% for males and 95% for females

Disabled Annuitant: RP-2014 Disabled Retiree Mortality Table at 65% for males and 85% for females

STRS

Pre-Retirement and Healthy Annuitant: Headcount-Weighted RP-2014 White Collar Mortality Table with employee and annuitant rates blended from ages 50 to 80 projected to year 2020 under Scale BB and further adjusted to grade in increases (5% for females and 8% for males) to rates over ages 80

Disabled Annuitant: Headcount-Weighted RP-2014 Disabled Retiree Mortality Table projected to 2017 with Scale MP2014

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 ¹		Withdrawal ²		
	Hazardous	Non-Hazardous	Non-Hazardous		Hazardous
			Male	Female	
25	0.0000	0.0000	5.0000	4.0000	1.2500
35	0.1200	0.0500	3.0000	3.0000	1.2500
45	0.3500	0.1200	2.0000	2.5000	1.2500
55	0.5000	0.4000	2.0000	2.0000	1.2500
65	0.8000	0.6000	2.0000	2.0000	1.2500

¹ 20% of disabilities are assumed to be in-service. Rates cut off at early retirement eligibility.

² 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.

STRS

Age	Rate (%)			
	Disability ¹		Withdrawal ²	
	Male	Female	Male	Female
25	0.0341	0.0500	1.5000	4.0000
35	0.0341	0.0410	1.5000	3.5000
45	0.1219	0.1200	1.5900	1.5000
55	0.5363	0.4380	3.4400	2.5000
65	0.9604	0.5000	0.0000	0.0000

¹ Rates cut off at early retirement eligibility.

² Higher select period turnover rates varying by age and gender are used for participants with less than 10 years of service.

PJERS

Age	Rate (%)			
	Disability ¹		Withdrawal	
	Male	Female	Male	Female
25	0.0400	0.0400	5.0000	7.5000
35	0.0800	0.0800	5.0000	5.0000
45	0.1900	0.1900	5.0000	5.0000
55	0.5200	0.5200	5.0000	5.0000
65	0.0000	0.0000	5.0000	5.0000

¹ Rates cut off at early retirement eligibility.

Section 3: Supporting Information

Termination Rates before Retirement (continued):

JFSMCCRS

Age	Rate (%)	
	Disability ¹	Withdrawal ²
25	0.0256	0.0000
35	0.0442	0.0000
45	0.1079	0.0000
55	0.3027	0.0000
65	0.0000	0.0000

¹ Rates cutoff at normal retirement eligibility.

² No pre-retirement withdrawal is assumed.

ARP, OTHER, HYBRID

Age	Disability ¹	Rate (%)	
		Withdrawal ²	
		Male	Female
25	0.0000	5.0000	4.0000
35	0.0500	3.0000	3.0000
45	0.1200	2.0000	2.5000
55	0.4000	2.0000	2.0000
65	0.6000	2.0000	2.0000

¹ Rates cutoff at early retirement eligibility.

² 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.

Section 3: Supporting Information

Actives' Retirement Rates:

SERS, HYBRID

Rates are 20% more than shown for 2021.

Tier I

Rate (%)						
Hazardous			Non-Hazardous			
Age	First Year Eligible	All Years After	Age	Early	First Year Eligible for Unreduced	All Year After
40	50	50	55	6.0	28.0	--
41	30	40	56	6.0	10.0	15.0
42	30	35	57	6.0	10.0	12.5
43	30	30	58 - 59	6.0	10.0	10.0
44	30	25	60	--	12.5	12.5
45 - 47	40	25	61	--	15.0	12.5
48 - 49	40	15	62	--	10.0	20.0
50 - 52	40	20	63	--	35.0	15.0
53 - 56	40	25	64	--	45.0	10.0
57	40	15	65	--	65.0	15.0
58	40	25	66	--	65.0	20.0
59	40	20	67	--	65.0	22.0
60 - 64	50	30	68 - 69	--	65.0	15.0
65 - 69	50	50	70 - 79	--	100.0	15.0
70 - 79	100	30	80+	--	100.0	100.0
80+	100	100				

Section 3: Supporting Information

Actives' Retirement Rates (continued):

Tier II & IIA, OTHER

Age	Rate (%)					
	Hazardous			Non-Hazardous		
	First Year Eligible	Subsequent Years	Age	Early	First Year Eligible for Unreduced	Subsequent Years
40	50	50	55	4.5	--	--
41	30	40	56 - 59	4.0	--	--
42	30	35	60	4.0	13.5	--
43	30	30	61	4.0	15.0	13.0
44	30	25	62	--	15.0	24.0
45 - 47	40	25	63 - 64	--	15.0	15.0
48 - 49	40	15	65	--	25.0	15.0
50 - 52	40	20	66	--	25.0	21.0
53 - 56	40	25	67	--	25.0	24.0
57	40	15	68 - 69	--	25.0	18.0
58	40	25	70	--	50.0	20.0
59	40	20	71	--	50.0	24.0
60 - 64	50	30	72 - 74	--	50.0	22.0
65 - 69	50	50	75	--	100.0	22.0
70 - 79	100	30	76	--	100.0	25.0
80+	100	100	77	--	100.0	22.0
			78	--	100.0	25.0
			79	--	100.0	22.0
			80+	--	100.0	100.0

Section 3: Supporting Information

Actives' Retirement Rates (continued):

Tiers III & IV

		Rate (%)			
		Hazardous		Non-Hazardous	
Age	All Years	Age	Early	First Year Eligible for Unreduced	Subsequent Years
40 – 79	20	58	5	--	--
80+	100	59	7	--	--
		60	9	--	--
		61	10	--	--
		62	12	--	--
		63	12	32	--
		64	12	30	30
		65	--	28	25
		66 – 68	--	25	35
		69	--	25	30
		70 – 74	--	50	30
		75 – 79	--	100	30
		80+	--	100	100

Section 3: Supporting Information

Actives' Retirement Rates (continued):

STRS

Age	Rate (%)					
	Unreduced		Pro-ratable		Reduced	
	Male	Female	Male	Female	Male	Female
50	27.5	27.5	--	--	1.0	1.00
51	27.5	27.5	--	--	1.0	1.25
52	27.5	27.5	--	--	1.0	1.75
53	27.5	27.5	--	--	2.0	2.25
54	27.5	27.5	--	--	3.0	2.75
55	38.5	27.5	--	--	4.0	4.75
56	38.5	27.5	--	--	6.0	6.25
57	38.5	27.5	--	--	7.0	6.75
58	38.5	27.5	--	--	8.0	7.25
59	38.5	27.5	--	--	11.0	8.50
60	22.0	27.5	6.0	5.5	--	--
61	25.3	27.5	6.0	6.5	--	--
62	25.3	27.5	9.0	7.5	--	--
63	27.5	27.5	11.0	7.5	--	--
64	27.5	27.5	10.0	8.0	--	--
65	36.3	32.5	13.0	12.5	--	--
66-67	27.5	32.5	20.0	12.5	--	--
68	27.5	32.5	20.0	12.0	--	--
69	27.5	32.5	30.0	14.5	--	--
70-73	100.0	32.5	30.0	14.5	--	--
74-79	100.0	32.5	30.0	18.0	--	--
80+	100.0	100.0	100.0	100.0	--	--

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

50% are assumed to retire at the later of age 65 and 10 years of service with 100% at age 70

ARP

Age	Rate (%)	
	First Year	Other Years
55	28.0	
56	10.0	15.0
57	10.0	12.5
58 – 59	10.0	10.0
60	12.5	12.5
61	15.0	12.5
62	10.0	20.0
63	35.0	15.0
64	45.0	10.0
65	65.0	15.0
66	65.0	20.0
67	65.0	22.0
68 – 69	65.0	15.0
70 – 79	100.0	15.0
80+	100.0	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, five active members were reported with missing compensation.

Section 3: Supporting Information

	<p>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.</p> <p>HYBRID members were assumed to elect the SERS tier available at their original date of hire.</p> <p>Inactive vested participants missing service were assumed to have service less than 15 years making them ineligible for healthcare coverage.</p> <p>Actives missing medical plan information were assumed to be in a plan that paid contributions at the lower contribution level.</p> <p>Retirees paying a percentage of the Early Retirement Premium are assumed to reach Normal Retirement Age at age 65.</p>															
Continuation of Medical and Dental Benefits after Retiree's Death:	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.															
Participation and Coverage Election:	100% of current active and inactive vested participants are assumed to elect coverage.															
Health Enhancement Program Election:	100% of future retirees were assumed to elect to participate in the Health Enhancement Program.															
Dependents:	<p>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:</p> <table border="1"> <thead> <tr> <th></th> <th>Percentage Electing Spousal Coverage</th> <th>Age of Spouse</th> </tr> </thead> <tbody> <tr> <td>SERS, JFSMCCRS, HYBRID, OTHER</td> <td>80%</td> <td>Females 3 years younger than males</td> </tr> <tr> <td>STRS</td> <td>85% of males 75% of females</td> <td>Females 3 years younger than males</td> </tr> <tr> <td>PJERS</td> <td>100%</td> <td>Females 3 years younger than males</td> </tr> <tr> <td>ARP</td> <td>100%</td> <td>Females same age as males</td> </tr> </tbody> </table>		Percentage Electing Spousal Coverage	Age of Spouse	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
	Percentage Electing Spousal Coverage	Age of Spouse														
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 April 1, 2018 through March 31, 2020. 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. 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, 2019.

Administrative Expenses: Administrative expenses for self-funded plans were based on Anthem and United/Oxford access fees effective July 1, 2019.

Per Capita Health Costs:

Dental claims costs for the valuation year are \$698. The annual per capita cost for Medicare Part B reimbursement for the plan year beginning July 1, 2019 is assumed to be \$1,681. 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	\$11,033	\$12,567	\$7,707	\$10,091	\$3,094	\$3,524	\$2,161	\$2,830
55	13,103	13,528	10,312	11,680	3,675	3,794	2,892	3,374
60	15,561	14,582	13,805	13,547	4,364	4,089	3,872	3,799
65	18,481	15,709	18,481	15,709	5,183	4,406	5,183	4,406
70	21,419	16,929	21,419	16,929	6,007	4,748	6,007	4,748
75	23,083	18,222	23,083	18,222	6,474	5,110	6,474	5,110
80	24,857	19,645	24,857	19,645	6,971	5,510	6,971	5,510

Section 3: Supporting Information

Per Capita Health Costs (continued):

Age	Medical and Prescription Drugs (Medicare)							
	Future Retirees				Current Retirees			
	Retiree		Spouse		Retiree		Spouse	
	Male	Female	Male	Female	Male	Female	Male	Female
65	\$2,900	\$2,465	\$2,900	\$2,465	\$3,781	\$3,214	\$3,781	\$3,214
70	3,361	2,656	3,361	2,656	4,382	3,463	4,382	3,463
75	3,677	2,859	3,677	2,859	4,722	3,728	4,722	3,728
80	3,901	3,083	3,901	3,083	5,085	4,019	5,085	4,019

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) ¹		Prescription Drug (Non-Medicare) ¹		Medical & Prescription Drug (Medicare) ²	Dental ³	Medicare Part B
	Under 65	65 & Older	Under 65	65 & Older			
2020	5.60	6.00	4.85	6.00	8.10	-11.15	4.50
2021	5.35	5.75	4.55	5.75	4.70	2.00	4.50
2022	5.05	5.50	4.25	5.50	20.00	2.00	4.50
2023	4.85	5.25	3.95	5.25	5.25	3.00	4.50
2024	4.60	5.00	3.65	5.00	5.00	3.00	4.50
2025	4.75	4.75	4.75	4.75	4.75	3.00	4.50
2026+	4.50	4.50	4.50	4.50	4.50	3.00	4.50

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

² Short-term rates reflect MA-PD premium guarantees through 2021 and anticipated increases for 2022 and 2023.

³ Short term rates were altered to reflect the results of the dental RFP effective July 1, 2020, including rate caps and guarantees through 2025.

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 2020 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.

Section 3: Supporting Information

Retiree Contribution:	<p>For future retirees under age 65, an average contribution of \$306 was used for higher contribution plans (ANTM01, ANTM04, OXFM01) and an average contribution of \$219 was used for all other plans. In addition, Early Retiree Premiums were based on an average premium of \$17,414 in the valuation year.</p> <p>For all participants, an average contribution of \$558 was used in the valuation year for dental benefits.</p>																
Retiree Contribution Increase Rate:	<p>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.</p> <table border="1" data-bbox="646 418 1218 755"> <thead> <tr> <th>Year Ending June 30,</th> <th>Rate (%)¹</th> </tr> </thead> <tbody> <tr> <td>2020</td> <td>5.40</td> </tr> <tr> <td>2021</td> <td>5.15</td> </tr> <tr> <td>2022</td> <td>4.85</td> </tr> <tr> <td>2023</td> <td>4.65</td> </tr> <tr> <td>2024</td> <td>4.35</td> </tr> <tr> <td>2025</td> <td>4.75</td> </tr> <tr> <td>2026+</td> <td>4.50</td> </tr> </tbody> </table> <p>¹ Short-term rates were altered to reflect the impact of new retirees receiving 2017 SEBAC changes upon retirement. Ultimate trend was used to trend backward for purpose of the Entry Age Normal Cost Method.</p>	Year Ending June 30,	Rate (%) ¹	2020	5.40	2021	5.15	2022	4.85	2023	4.65	2024	4.35	2025	4.75	2026+	4.50
Year Ending June 30,	Rate (%) ¹																
2020	5.40																
2021	5.15																
2022	4.85																
2023	4.65																
2024	4.35																
2025	4.75																
2026+	4.50																
Administrative Expenses:	<p>An administrative expense load of \$244 per participant increasing at 13.1% for the year ending June 30, 2020, (reflecting the results of the medical RFP effective July 1, 2020, including the elimination of United/Oxford, estimated fees and credits for Anthem-processed drug rebates, and fees for the new contract with Remedy/Signify), 0% per year for the years ending June 30, 2021 through 2024 (based on fee guarantees in the new Anthem contract) and at 3.0% per year thereafter was added to projected incurred self-funded medical claim costs in developing the benefit obligations.</p>																
Plan Design:	<p>Development of plan liabilities was based on the substantive plan of benefits in effect as described in Exhibit III.</p>																
Assumption Changes since Prior Valuation:	<p>The discount rate was updated in accordance with GASB Statement No. 75 to 3.58% as of June 30, 2019 and 3.95% as of June 30, 2018.</p> <p>The salary scale for PJERS and mortality rates for SERS, ARP, Hybrid and Other were updated to be consistent with the corresponding retirement system assumptions.</p> <p>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.</p>																

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.

Eligibility:	<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">• SERS – State Employees Retirement System.• JFSMCCRS – Judges, Family Support Magistrates, and Compensation Commissioners Retirement System.• PJERS – Probate Judges and Employees Retirement System.• STRS – State Teachers’ Retirement System.• ARP – Alternate Retirement System.• HYBRID – Hybrid Defined Benefit/Defined Contribution Plan <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>
Benefit Types:	<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>
Duration of Coverage:	Lifetime.
Spouse Benefits:	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.
Retiree Contributions:	<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
Years of Service	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

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.

Section 3: Supporting Information

Benefit Descriptions:

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

All Plans¹	In-Network	Out-Of-Network
Deductible ²	\$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 ³	Deductible and coinsurance
Emergency Room Copay ⁴	None	None

¹ 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.

² 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.

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

⁴ 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)¹

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

¹ 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.

Section 3: Supporting Information

Benefit Descriptions (continued):

Dental

	CIGNA Basic	CIGNA Enhanced	CIGNA DHMO
Deductible	None	\$25/\$75 single/family	None
Annual Maximum	\$500 ¹ for periodontics	\$3,000	None
Exam and X-rays ¹	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

¹ If enrolled in the Health Enhancement Program, annual dental cleaning (up to two) and unlimited periodontal care provided.

Life Insurance

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.

Plan Changes since Prior Valuation:

None.

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.

Actuarially Determined Contribution:	A target or recommended contribution to an OPEB plan for the reporting period based on the most recent measurement available.
Assumptions or Actuarial Assumptions:	The estimates on which the cost of the Plan is calculated including: <ul style="list-style-type: none"> a) Investment return — the rate of investment yield that the Plan will earn over the long-term future; b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates; c) Retirement rates — the rate or probability of retirement at a given age; d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.
Covered Employee Payroll:	The payroll of the employees that are provided OPEB benefits
Discount Rate:	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: <ul style="list-style-type: none"> 1) the actuarial present value of projected benefit payments projected to be funded by plan assets using a long term rate of return, and 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
Entry Age Actuarial Cost Method:	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
Healthcare Cost Trend Rates:	The rate of change in per capita health costs over time
Net OPEB Liability:	The Total OPEB Liability less the Plan Fiduciary Net Position
Plan Fiduciary Net Position:	Market Value of Assets
Real Rate of Return:	The rate of return on an investment after removing inflation
Service Cost:	The amount of contributions required to fund the benefit allocated to the current year of service.
Total OPEB Liability:	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.
Valuation Date:	The date at which the actuarial valuation is performed

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 3, 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 3. 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. Appendices C and E of Section 3 contain a definition of terms as well as more information about GASB 74/75 concepts.

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, 2020 Measured at June 30, 2019

Groups	Allocation Calculation					
	Prior Year			Current Year		
	Fiscal Year 2018 Employer Contributions	Proportionate Share	Share of NOL Measured at June 30, 2018	Fiscal Year 2019 Employer Contributions	Proportionate Share	Share of NOL Measured at June 30, 2019
Primary Government	\$791,073,503	98.650756%	\$17,031,459,145	\$741,147,561	98.433622%	\$20,358,427,319
Component Units						
Connecticut Airport Authority	3,200,867	0.399164%	68,913,262	3,544,807	0.470794%	97,371,562
Connecticut Green Bank	1,114,766	0.139017%	24,000,448	1,036,994	0.137726%	28,484,971
Connecticut Innovations Inc.	1,113,921	0.138911%	23,982,148	1,226,106	0.162842%	33,679,649
Connecticut Lottery Corporation	2,186,525	0.272670%	47,074,834	2,453,812	0.325897%	67,403,249
Capital Region Development Authority	270,358	0.033715%	5,820,692	301,562	0.040051%	8,283,543
Connecticut Port Authority	0	0.000000%	0	78,432	0.010417%	2,154,432
Total Component Units	\$7,886,437	0.983477%	\$169,791,384	\$8,641,713	1.147727%	\$237,377,406
Grand Total	\$801,893,000	100.000000%	\$17,264,398,000	\$752,941,470	100.000000%	\$20,682,391,738

State of Connecticut State Employee OPEB Plan

GASB 75 Agency Calculations for Reporting Date June 30, 2020 Measured at June 30, 2019

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	\$834,911,936	\$725,749,571	(\$7,563,986)	\$0	(\$121,739,089)	\$644,459,060	(\$114,713,242)	(\$67,139,799)	(\$125,837)	\$0	(\$1,174,926)	\$1,920,441	(\$229,112,130)	\$2,338,358	\$1,667,810,357
Component Units															
Connecticut Airport Authority	3,993,269	3,471,161	2,495,290	0	(582,261)	3,082,359	(548,658)	(321,120)	(602)	0	(5,620)	9,185	(1,095,812)	(275,842)	10,221,349
Connecticut Green Bank	1,168,187	1,015,450	(44,983)	0	(170,334)	901,710	(160,504)	(93,940)	(176)	0	(1,644)	2,687	(320,568)	26,299	2,322,184
Connecticut Innovations Inc.	1,381,224	1,200,633	833,655	0	(201,397)	1,066,151	(189,774)	(111,072)	(208)	0	(1,944)	3,177	(379,028)	(514,733)	3,086,684
Connecticut Lottery Corporation	2,764,250	2,402,832	1,854,186	0	(403,057)	2,133,693	(379,796)	(222,288)	(417)	0	(3,890)	6,358	(758,551)	(1,051,378)	6,341,942
Capital Region Development Authority	339,713	295,297	220,725	0	(49,534)	262,221	(46,675)	(27,318)	(51)	0	(478)	781	(93,222)	(21,389)	880,070
Connecticut Port Authority	88,355	76,803	362,873	0	(12,883)	68,200	(12,140)	(7,105)	(13)	0	(124)	203	(24,246)	0	539,923
Total Component Units	\$9,734,998	\$8,462,176	\$5,721,746	\$0	(\$1,419,466)	\$7,514,334	(\$1,337,547)	(\$782,843)	(\$1,467)	\$0	(\$13,700)	\$22,391	(\$2,671,427)	(\$1,837,043)	\$23,392,152
Grand Total	\$848,197,922	\$737,298,453	\$0	\$0	(\$123,676,327)	\$654,714,361	(\$116,538,679)	(\$68,208,196)	(\$127,839)	\$0	(\$1,193,623)	\$1,951,000	(\$232,758,000)	\$0	\$1,699,659,072

State of Connecticut State Employee OPEB Plan

GASB 75 Agency Calculations for Reporting Date June 30, 2020 Measured at June 30, 2019

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	\$8,190,625	\$2,719,617,230	\$0	\$0	\$2,727,807,855	\$32,056,895	\$674,261,451	\$4,417,077	\$513,738,955	\$1,224,474,378
Component Units										
Connecticut Airport Authority	10,530,122	13,007,556	0	0	23,537,678	888,215	3,224,900	21,126	2,457,143	6,591,384
Connecticut Green Bank	401,868	3,805,216	0	0	4,207,084	667,817	943,409	6,180	718,810	2,336,216
Connecticut Innovations Inc.	3,855,065	4,499,157	0	0	8,354,222	1,484,146	1,115,454	7,307	849,896	3,456,803
Connecticut Lottery Corporation	8,502,144	9,004,185	0	0	17,506,329	4,553,143	2,232,364	14,624	1,700,901	8,501,032
Capital Region Development Authority	931,458	1,106,572	0	0	2,038,030	56,160	274,347	1,797	209,033	541,337
Connecticut Port Authority	<u>1,531,325</u>	<u>287,804</u>	<u>0</u>	<u>0</u>	<u>1,819,129</u>	<u>0</u>	<u>71,354</u>	<u>467</u>	<u>54,366</u>	<u>126,187</u>
Total Component Units	\$25,751,982	\$31,710,490	\$0	\$0	\$57,462,472	\$7,649,481	\$7,861,828	\$51,501	\$5,990,149	\$21,552,959
Grand Total	\$42,433,141	\$2,762,894,602	\$0	\$0	\$2,805,327,743	\$42,433,141	\$684,991,000	\$4,487,364	\$521,914,102	\$1,253,825,607

State of Connecticut State Employee OPEB Plan

GASB 75 Agency Calculations for Reporting Date June 30, 2020 Measured at June 30, 2019

Deferred Outflows of Resources and Deferred Inflows of Resources

Projected Recognition

Groups	2021	2022	2023	2024	2025	Thereafter	Total
Primary Government	\$290,176,815	\$290,174,846	\$348,847,522	\$460,799,979	\$113,334,315	\$0	\$1,503,333,477
Component Units							
Connecticut Airport Authority	3,632,317	3,632,308	3,944,768	4,637,917	1,098,984	0	16,946,294
Connecticut Green Bank	394,635	394,633	380,362	550,231	151,007	0	1,870,868
Connecticut Innovations Inc.	807,616	807,613	1,260,326	1,648,214	373,650	0	4,897,419
Connecticut Lottery Corporation	1,780,835	1,780,828	1,812,603	2,842,372	788,659	0	9,005,297
Capital Region Development Authority	319,531	319,530	353,243	409,040	95,349	0	1,496,693
Connecticut Port Authority	<u>394,134</u>	<u>394,134</u>	<u>400,339</u>	<u>412,331</u>	<u>92,004</u>	<u>0</u>	<u>1,692,942</u>
Total Component Units	\$7,329,068	\$7,329,046	\$8,151,641	\$10,500,105	\$2,599,653	\$0	\$35,909,513
Grand Total	\$300,103,193	\$300,101,193	\$359,674,193	\$474,795,193	\$116,828,364	\$0	\$1,551,502,136

State of Connecticut State Employee OPEB Plan

GASB 75 Agency Calculations for Reporting Date June 30, 2020 Measured at June 30, 2019

Projected Recognition Schedules of Deferred Outflows of Resources and Deferred Inflows of Resources

Changes in Proportion

Groups	2020	2021	2022	2023	2024	2025	Recognition of Deferred Outflows Thereafter	Total	2020	2021	2022	2023	2024	2025	Recognition of Deferred Inflows Thereafter	Total
	Outstanding Balance of Deferred Outflows of Resources								Outstanding Balance of Deferred Inflows of Resources							
Primary Government	\$8,190,625	\$2,394,922	\$2,394,922	\$2,394,922	\$1,005,859	\$0	\$0	\$8,190,625	(\$32,056,895)	(\$7,620,550)	(\$7,620,550)	(\$7,587,736)	(\$7,563,986)	(\$1,664,073)	\$0	(\$32,056,895)
Component Units																
Connecticut Airport Authority	10,530,122	2,495,290	2,495,290	2,495,290	2,495,290	548,962	0	10,530,122	(888,215)	(275,842)	(275,842)	(243,848)	(92,683)	0	0	(888,215)
Connecticut Green Bank	401,868	166,062	166,062	69,744	0	0	0	401,868	(667,817)	(184,746)	(184,746)	(184,746)	(103,684)	(9,895)	0	(667,817)
Connecticut Innovations Inc.	3,855,065	932,205	932,205	932,205	875,047	183,403	0	3,855,065	(1,484,146)	(613,283)	(613,283)	(257,580)	0	0	0	(1,484,146)
Connecticut Lottery Corporation	8,502,144	2,134,137	2,134,137	1,971,765	1,854,186	407,919	0	8,502,144	(4,553,143)	(1,331,329)	(1,331,329)	(1,331,329)	(559,156)	0	0	(4,553,143)
Capital Region Development Authority	931,458	220,725	220,725	220,725	220,725	48,558	0	931,458	(56,160)	(21,389)	(21,389)	(11,536)	(1,846)	0	0	(56,160)
Connecticut Port Authority	1,531,325	362,873	362,873	362,873	362,873	79,833	0	1,531,325	0	0	0	0	0	0	0	0
Total Component Units	\$25,751,982	\$6,311,292	\$6,311,292	\$6,052,602	\$5,808,121	\$1,268,675	\$0	\$25,751,982	(\$7,649,481)	(\$2,426,589)	(\$2,426,589)	(\$2,029,039)	(\$757,369)	(\$9,895)	\$0	(\$7,649,481)
Grand Total	\$42,433,141	\$10,844,439	\$10,844,439	\$10,414,075	\$8,656,220	\$1,673,968	\$0	\$42,433,141	(\$42,433,141)	(\$10,844,439)	(\$10,844,439)	(\$10,414,075)	(\$8,656,220)	(\$1,673,968)	\$0	(\$42,433,141)

State of Connecticut State Employee OPEB Plan

GASB 75 Agency Calculations for Reporting Date June 30, 2020 Measured at June 30, 2019

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	\$17,031,459,145	\$1,667,810,357	(\$741,147,561)	\$2,205,374,923	\$1,997,139	(\$31,920,017)	\$227,191,688	(\$2,338,358)	\$20,358,427,316
Component Units									
Connecticut Airport Authority	68,913,264	10,221,349	(3,544,807)	10,548,005	(658,838)	10,530,122	1,086,627	275,842	97,371,564
Connecticut Green Bank	24,000,450	2,322,184	(1,036,994)	3,085,702	11,877	(189,827)	317,881	(26,299)	28,484,974
Connecticut Innovations Inc.	23,982,147	3,086,684	(1,226,106)	3,648,428	(220,111)	3,518,023	375,851	514,733	33,679,649
Connecticut Lottery Corporation	47,074,831	6,341,942	(2,453,812)	7,301,617	(489,566)	7,824,663	752,193	1,051,378	67,403,246
Capital Region Development Authority	5,820,692	880,070	(301,562)	897,334	(58,279)	931,458	92,441	21,389	8,283,543
Connecticut Port Authority	0	539,923	(78,432)	233,384	(95,810)	1,531,325	24,043	0	2,154,433
Total Component Units	\$169,791,384	\$23,392,152	(\$8,641,713)	\$25,714,470	(\$1,510,727)	\$24,145,764	\$2,649,036	\$1,837,043	\$237,377,409
Grand Total	\$17,264,398,000	\$1,699,659,072	(\$752,941,470)	\$2,240,469,136	\$0	\$0	\$230,807,000	\$0	\$20,682,391,738

State of Connecticut State Employee OPEB Plan

GASB 75 Agency Calculations for Reporting Date June 30, 2020 Measured at June 30, 2019

Discount Rate and Trend Sensitivity

Groups	NOL at Current Discount Rate (3.58%)	1% Decrease in Discount Rate (2.58%)	1% Increase in Discount Rate (4.58%)	1% Decrease in Trend Rates	1% Increase in Trend Rates
Primary Government	\$20,358,427,319	\$23,694,033,571	\$17,650,667,646	\$17,452,216,452	\$24,026,605,464
Component Units					
Connecticut Airport Authority	97,371,562	113,325,309	84,420,719	83,471,555	114,915,954
Connecticut Green Bank	28,484,971	33,152,063	24,696,346	24,418,678	33,617,389
Connecticut Innovations Inc.	33,679,649	39,197,858	29,200,109	28,871,804	39,748,043
Connecticut Lottery Corporation	67,403,249	78,446,867	58,438,322	57,781,285	79,547,955
Capital Region Development Authority	8,283,543	9,640,752	7,181,796	7,101,049	9,776,071
Connecticut Port Authority	<u>2,154,432</u>	<u>2,507,423</u>	<u>1,867,883</u>	<u>1,846,882</u>	<u>2,542,617</u>
Total Component Units	\$237,377,406	\$276,270,272	\$205,805,175	\$203,491,253	\$280,148,029
Grand Total	\$20,682,391,738	\$24,071,077,618	\$17,931,543,383	\$17,729,934,229	\$24,408,941,739