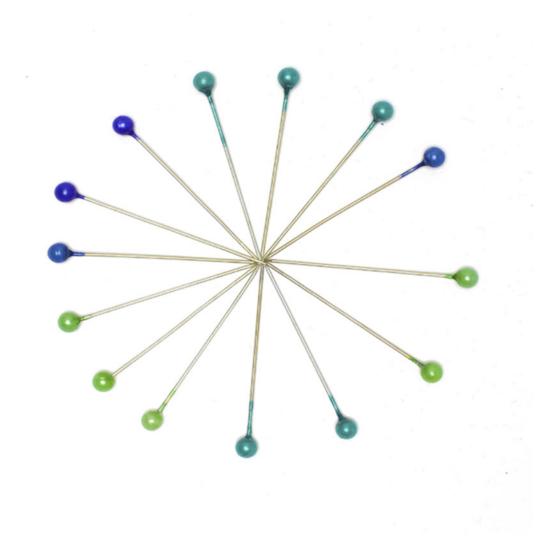
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Commonwealth of Massachusetts Postemployment Benefits Other Than Pensions GASB Statement Nos. 74/75 Valuation Report

Measurement Date of June 30, 2024

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Actuarial Valuation Opinion

This report presents results of the actuarial valuation of the Commonwealth of Massachusetts's Other Post-Employment Benefit Plan ("OPEB Plan" or "the Plan") measured as of June 30, 2024. In this report, we present disclosure information measured as of June 30, 2024 as required by Government Accounting Standards Board Statement Nos. 74 and 75 ("GASB Nos. 74/75"). In our opinion, this report is complete and accurate and represents fairly the actuarial position of the Plan for the purposes stated herein.

Actuarial information under GASB Nos. 74/75 is for purposes of fulfilling trust and employer financial accounting requirements. The results have been prepared on a basis consistent with our understanding of GASB Nos. 74/75 and are based upon assumptions prescribed by the Commonwealth of Massachusetts ("the Commonwealth"). Determinations for purposes other than meeting trust financial accounting requirements may be significantly different from the results reported herein.

The Commonwealth provided the participant data, financial information, and plan descriptions used in this valuation. The actuary has analyzed the data and other information provided for reasonableness but has not independently audited the data or other information provided. The actuary has no reason to believe the data or other information provided is not complete and accurate and knows of no further information that is essential to the preparation of the actuarial valuation.

In our opinion, all costs, liabilities, rates of interest, and other factors underlying these actuarial computations have been determined on the basis of actuarial assumptions and methods that are each reasonable (or consistent with authoritative guidance) for the purposes herein taking into account the experience of the Plan and future expectations.

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; increases or decreases expected as part of the natural operations of the methodology used for these measurements (such as the additional cost or contribution requirements based on the Plan's funded status); and changes in program provisions or applicable law. Our scope for this actuarial valuation did not include analyzing the potential range of such future measurements, and we did not perform that analysis.

The undersigned with actuarial credentials collectively meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

This report was prepared solely for the benefit and internal use of the plan sponsor. This report is not intended for the benefit of any other party and may not be relied upon by any third party for any purpose, and Deloitte Consulting accepts no responsibility or liability with respect to any party other than the plan sponsor.

To the best of our knowledge, no employee of the Deloitte U.S. Firms is an officer or director of the employer. In addition, we are not aware of any relationship between the Deloitte U.S. Firms and the employer that may impair or appear to impair the objectivity of the work detailed in this report.

Jeannie Chen, FCA, ASA, EA, MAAA

Specialist Leader

DELOITTE CONSULTING LLP

Michael de Leon, FCA, ASA, EA, MAAA

Managing Director

John Schubert, FCA, ASA, MAAA

Specialist Leader

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Executive Summary

Governmental Accounting Requirements and Report Purpose

The Governmental Accounting Standards Board released the Statement of Governmental Accounting Standards Nos. 74 and 75 in June 2015. GASB No. 74 establishes financial reporting requirements for OPEB plans that have assets accumulated in a trust or equivalent arrangement for the purpose of funding OPEB. GASB No. 75 details the reporting and disclosure requirements for employers with payables (OPEB liabilities) to employees of state and local governmental employers through defined benefit OPEB plans.

The purpose of this actuarial valuation report is to provide information for the Commonwealth's trust and employer financial reporting. The information provided herein will be used for the fiscal year ended June 30, 2024 for the GASB No. 74 disclosures and fiscal year ending June 30, 2025 for the GASB No. 75 disclosures (the Commonwealth has elected to use a measurement date as of the end of the prior fiscal year end for GASB No. 75).

Summary of Results

The key results for the measurement period ended June 30, 2024 are:

- Net OPEB Liability (NOL) is \$13.7 billion, 214.5% of covered employee payroll (was \$14.2 billion, 248.3% of covered employee payroll in the prior year)
 - o Total OPEB Liability (TOL) is \$16.2 billion (was \$16.5 billion in the prior year)
 - o Plan Fiduciary Net Position (FNP) is \$2.5 billion (was \$2.3 billion in the prior year)
- Plan FNP as a percentage of TOL, also known as the funded ratio, is 15.6%.

Significant Changes from the Previous Actuarial Valuation

For the June 30, 2024 measurement, there was a decrease in TOL of \$0.2 billion compared to the previous valuation, with the change due to the following:

- There was an expected increase of \$0.7 billion due to the passage of time (service cost, interest, actual benefit payments, retiree contributions);
- There was a decrease of \$0.8 billion due to changes in the discount rate and healthcare cost trend;
- There was a decrease of \$0.1 billion due to actual experience over the past year being different than expected, primarily due to demographic experience.

The effect of changes on the TOL is detailed in the Actuarial Experience section of this report.

Background and Comments

Overview of Plan

The Commonwealth administers a single employer defined benefit Other Post-Employment Benefit (OPEB) plan. Benefits are managed by the Group Insurance Commission (GIC) and investments are managed by PRIM. The GIC has representation on the Board of Trustees of the State Retirees' Benefits Trust (SRBT).

Under Chapter 32A of the Massachusetts General Laws (MGL) the Commonwealth is required to provide certain health care and life insurance benefits for retired employees of the Commonwealth, housing authorities, redevelopment authorities and certain other governmental agencies. Substantially all of the Commonwealth's employees may become eligible for these benefits upon reaching retirement age if they are eligible for a retirement allowance from the State Employees' Retirement System.

Eligible retirees are required to contribute a specified percentage of the health care/benefit costs based on the date of retirement. Employer and retiree contribution rates are set in MGL.

Funding Policy

In addition to funding the pay-as-you-go cost of the OPEB Plan, the Commonwealth is required by statute to allocate to the SRBT a portion of revenue received under the Master Settlement Agreement with tobacco companies, increasing from 10% in FY14 to 100% by FY23. The percentage of tobacco settlement proceeds to be transferred to the SRBT in FY24 was set at 10%, overriding existing statute. Based on recent contribution history, it is assumed that approximately \$26 million of tobacco settlement proceeds will be transferred to the SRBT in future years, subject to annual evaluation.

The SRBT is set up solely to fund OPEB benefits and the cost to administer those benefits. It can only be revoked when all such health care and other non-pension benefits, current and future, have been paid or defeased. GIC administers benefit payments, while the Trustees are responsible for reviewing the applications of entities that wish to invest their OPEB funds with PRIT. The SRBT is administered by the board of trustees and is reported as an OPEB Trust Fund and does not issue a stand-alone audited financial report.

The SRBT is required statutorily to invest in the PRIT Fund. The SRBT's target asset allocation as of June 30, 2024 is shown in the table below.

Asset Class	Target Allocation
Global Equity	31% - 41%
Core Fixed Income	12% - 18%
Value Added Fixed Income	6% - 12%
Private Equity	13% - 19%
Real Estate	7% - 13%
Timberland	1% - 7%
Portfolio Completion Strategies	7% - 13%
Total	100%

Health Care Reform

The Patient Protection and Affordable Care Act ("PPACA") was signed into law on March 23, 2010. The primary objective of the act is to increase the number of Americans with health insurance coverage. There are several provisions within PPACA with potentially significant short- and long-term cost implications for employers. The applicable provisions of PPACA were first accounted for in the July 1, 2010 valuation. On December 20, 2019, the excise tax and the health insurance provider fee for calendar years beginning after December 31, 2020 were repealed. In future years, there may continue to be increased cost impact to the extent the health & welfare program experiences increased utilization due to these changes, all of which are assumed to be in place indefinitely.

The provisions of PPACA considered are as follows:

- Prohibiting lifetime and annual limits on the dollar value of coverage for "essential health benefits"
- Increasing the dependent child age limit to age 26
- Elimination of cost sharing for in-network preventive services
- Out-of-pocket limit includes both medical and Rx expenses.

The impact of applicable provisions were incorporated in the per capita claims costs summarized in the Actuarial Assumptions section of this report.

Inflation Reduction Act

The Inflation Reduction Act of 2022 ("IRA") was signed into law on August 16, 2022 and includes provisions to reform Medicare prescription drugs. The IRA impacts the duration of Medicare Part D Retiree Drug Subsidy ("RDS") payments. Since RDS payments should not be reflected in GASB actuarial valuations, there is no effect on the per capita claims costs assumption in this report.

The impact of applicable plan enhancements required by the IRA on Employer Group Waiver Plans ("EGWPs") were incorporated in the per capita claims costs/trend assumption summarized in Actuarial Assumptions section (if applicable).

- Limit cost-sharing for insulin to no more than \$35/month
- Eliminate cost-sharing for adult vaccines covered under Medicare Part D
- Eliminate 5% member cost share in the catastrophic phase
- Limit Medicare Part D Base Beneficiary Premium to 6% cap over prior year
- Expand eligibility for Part D Low-Income Subsidy full benefits up to 150% Federal Poverty Level ("FPL")
- Additional enhancements starting in calendar year 2025, include:
 - o Define new standard Part D with three phases: deductible, initial coverage, catastrophic
 - o Limit maximum out-of-pocket ("MOOP") to \$2,000 for beneficiaries
 - o Replace Coverage Gap Discount Program with a new Manufacturer Discount Program
 - Decrease government reinsurance for catastrophic coverage

Additional impacts of the IRA on EGWPs are still not currently estimable due to the unknown effect of other provisions and market reactions, such as:

- Medicare prescription drug negotiations starting in 2026
- The introduction of the Medicare Prescription Payment Plan
- Changes in member behavior or potential induced utilization in response to the benefit changes
- Changes in PBM and pharmaceutical manufacturer pricing and rebating behaviors in response to the regulation
- Potential future volatility in Medicare Part D National Average Bid Amount.

Actuarial Methods and Assumptions

The Public Employee Retirement Administration Commission (PERAC) performs experience studies of the Commonwealth of Massachusetts State Employees' Retirement System (SERS) periodically to determine reasonable and appropriate economic and demographic assumptions for purposes of valuing the defined benefit pension plan. The most recent SERS experience study covered the years 2006 through 2011 and was published in February 2014. The approved recommendations from that study were used to determine the assumptions for this valuation, where applicable. The long-term expected rate of return assumption of 7.00% as of June 30, 2024 is based on the assumption adopted by PERAC at the April 10, 2024 meeting for the Commonwealth's pension valuations, which includes SERS. Based on documentation provided by PERAC, the inflation assumption underlying the 7.00% long-term rate of return assumption is 2.50%. In addition, Deloitte reviews actuarial assumptions only applicable to the OPEB Plan outside of the experience study, such as medical trend rates and age-graded medical rates.

One significant assumption where the PERAC recommendations is not applicable to this OPEB Plan is the discount rate. For June 30, 2024, the single discount rate was based on the long-term expected rate of return on SRBT investments of 7.00% and a municipal bond rate of 3.93% (based on the 20-year Bond Buyer GO Index as of the end of June 2024). Based on the stated assumptions and the projection of cash flows, the Plan's Fiduciary Net Position and future contributions were not sufficient to finance the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on SRBT investments was applied to projected benefit payments through year 2043 and the municipal bond rate was applied to all remaining future years to determine the Total OPEB Liability. The resulting single discount rate was 4.61% as of June 30, 2024, increased from 4.34% in the prior year. The projection of cash flows used to determine the single discount rate for each fiscal year end assumed that employer contributions will be made based on the current funding policy for future years. The analysis is provided in the Development of June 30, 2024 Discount Rate section of this report.

The actuarial methods and assumptions are described in the Basis for the Valuation section of this report.

Cash Costs vs. Implicit Rate Subsidy

GASB Nos. 74/75 require that employers recognize the expected claims of the retiree population less the expected contributions by those retirees. This is not necessarily the same determination as the expected cash payments of the employer for retiree health benefits. The difference is that many post-employment health plans (including the Commonwealth's OPEB Plan) charge the same premium rates for all participants in a non-Medicare plan regardless of their age. This single premium rate is called a blended premium rate because it blends the expected claims of both active and retired participants. Retirees are generally older than the average participant in a non-Medicare plan, which means they are expected to generate higher claims than the average participant of the plan; therefore, they are receiving a subsidy even if they pay 100% of the blended premium rate because they would be paying less in premiums than their expected claims costs. This subsidy is referred to as the "Implicit Rate Subsidy".

Another way of considering the Implicit Rate Subsidy is to assume the retirees were removed from a blended plan and, instead, separately rated. In this scenario, the premium rate for the remaining active population would be lower; therefore, the retirees' premium rate is being subsidized by the premiums for active employees. Since the employer generally pays a portion of the premiums for the active employees, this subsidy creates a liability for the employer.

By comparison, the cash costs are the actual dollars paid by the employer to cover a portion or all of the retirees' premium rates. This is sometimes referred to as the "Explicit Rate Subsidy". This is the benefit that is explicitly stated by the Commonwealth that will be paid on behalf of retirees.

GASB Nos. 74/75 Disclosures

GASB Nos. 74/75 requires disclosure of notes to the financial statements and required supplementary information that includes information shown in this section.

Schedule of Changes in Net OPEB Liability

(All dollar amou.	Disc	count		Total OPEB Liability (a)		an Fiduciary et Position (b)		Net OPEB Liability (a)-(b)
Measurement Date of June 30, 2023		4.34%	\$	16,470,056	\$	2,266,842	\$	14,203,214
Service Cost				551,863				551,863
Interest				725,635				725,635
Changes In Benefit Terms				-				-
Changes In Assumptions - Discount Rate				(566,976)				(566,976)
Changes In Assumptions - Others				(230,973)				(230,973)
Differences Between Expected And Actual Experience				(96,894)				(96,894)
Benefit Payments*				(610,921)		(610,921)		-
Contributions - Employer	\$ 64	48,694		. , ,		648,694		(648,694)
Contributions - Employee						-		-
Contributions - Retiree				-		-		-
Other Additions						150		(150)
Administrative Expenses						(223)		223
Net Investment Income						(==3)		
Expected Investment Earnings	\$ 1	59,976						
Differences Between Projected And Actual Earnings		61,127						
Total	-				\$	221,103	\$	(221,103)
Net Change			\$	(228,266)	\$	258,803	\$	(487,069)
Measurement Date of June 30, 2024		4.61%	-	16,241,790	\$	2,525,645	\$	13,716,145
Measurement Date				<u> </u>	lu	ne 30, 2024	lı	une 30, 2023
Plan Fiduciary Net Position As A Percentage Of Total OPEB Liability						15.6%		13.8%
Covered Employee Payroll					\$	6,395,957	\$	5,721,250
Net OPEB Liability As A Percentage Of Covered Employee Payroll					·	214.5%		248.3%
Sensitivity of Liability to Changes in Discount Rate						\$ Change		% Change
A one percentage point change in discount rate would have the follo	owing e	ffect on	Tota	al OPEB Liability	as o		:	70 G.I.W.I.B.C
One Percent Increase (5.61%)	. 0				\$	(1,864,179)		-11%
One Percent Decrease (3.61%)					\$	2,258,704		14%
Net OPEB Liability at a one percentage point change in discount rate	a as of l	una 30	202	A is as follows:			Not	OPEB Liability
One Percent Increase (5.61%)	2 43 01)	une 50,	202	4 13 d3 10110W3.			\$	11,851,966
One Percent Decrease (3.61%)							\$	15,974,849
·						* Cl	Ψ	
Sensitivity of Liability to Changes in Trend Rate	na offo	et on To	tal C	NDED Linbility on		\$ Change		% Change
A one percentage point change in trend rate would have the following	ng enec	LL OII 10	lai C	DPED LIADILITY as				170/
One Percent Increase (8.42% / 6.35% grading to 4.94%)					\$	2,769,446		17%
One Percent Decrease (6.42% / 4.35% grading to 2.94%)					\$	(2,201,678)		-14%
Net OPEB Liability at a one percentage point change in trend rate as	of June	e 30, 202	24 is	as follows:				OPEB Liability
One Percent Increase (8.42% / 6.35% grading to 4.94%)							\$	16,485,591
One Percent Decrease (6.42% / 4.35% grading to 2.94%)							\$	11,514,467
Key Assumptions					Ju	ne 30, 2024	Ju	une 30, 2023
Discount Rate						4.61%		4.34%
Investment Rate of Return						7.00%		7.00%
Inflation						2.50%		2.50%
Initial Medical Trend Rate					7.	42% / 5.35%	7	.50% / 5.79%
Initial Medical Trend Rate Ultimate Medical Trend Rate					7.	42% / 5.35% 3.94%	7	.50% / 5.79% 3.94%

^{*}Benefit Payments reflect actual claims, including the effect of implicit subsidy, net of retiree contributions.

Development of OPEB Expense for Fiscal Year Ending June 30, 2025 (Measurement Year June 30, 2024)

Components of OPEB Expense	 urement Year ed 06/30/2024	Measurement Year Ended 06/30/2023	
Service Cost	\$ 551,863	\$	530,964
Interest	725,635		672,136
Expected Investment Earnings	(159,976)		(144,933)
Contributions - Employee	-		-
Administrative Expenses	223		246
Other	(150)		(176)
Changes In Benefit Terms	-		-
Recognition of Deferred Outflows and (Inflows)			
Changes in assumptions	(1,044,665)		(988,884)
Differences between expected and actual experience	(436,287)		(355,232)
Differences between expected and actual investment earnings	(9,249)		7,351
OPEB Expense	\$ (372,606)	\$	(278,528)

Assumptions Used to Determine OPEB Expense	Measurement Year Ended 06/30/2024	Measurement Year Ended 06/30/2023
Assumptions as of Measurement Date	6/30/2023	6/30/2022
Discount Rate	4.34%	4.30%
Investment Rate of Return	7.00%	7.00%
Inflation	2.50%	2.50%
Initial Medical Trend Rate	7.50% / 5.79%	7.60% / 5.00%
Ultimate Medical Trend Rate	3.94%	3.94%
Year Ultimate Trend Rate Reached	2075	2075

Schedule of Deferred Outflows and Deferred Inflows of Resources*

			(/ aoa. a	,	ts are in thousand	,,,			
Measurement Date Established	Initial Amount	Res	Deferred Outflows of Sources as of 06/30/2024	Re	Deferred (Inflows) of esources as of 6/30/2024**	Initial Years	Remaining Years	Re Meas	lows/(Inflows) cognized in surement Year ed 06/30/2024
Changes In Assumptions									
Changes In Assumptions 06/30/2019 \$	(1,935,139)	¢		\$		5.73	0.00	\$	(246,534)
06/30/2020	2,050,139	Ф	- 267,409	₽	-	5.75	0.00	₽	356,546
06/30/2020	(2,297,649)		207,409		- (702,061)	5.76	1.76		(398,897)
06/30/2022	(3,328,161)				(1,588,704)	5.74	2.74		(579,819)
06/30/2023	(179,432)				(1,568,764)	5.62	3.62		(37,517)
06/30/2023	(797,949)				(653,915)	5.54	4.54		(144,034)
	(737,343)	ф.	267.400	ф.		5.54	4.54	<u>+</u>	
Total		\$	267,409	>	(3,060,258)			\$	(1,044,665)
Differences Between Expe	ected And Ac	tual	l Plan Experier	nce					
06/30/2019 \$	715,192		-	\$	_	5.73	0.00	\$	91,116
06/30/2020	(600,057)	4	_	4	(78,267)	5.75	0.75	4	(104,358)
06/30/2021	(2,926,517)		_		(894,213)	5.76	1.76		(508,076)
06/30/2022	(16,054)		_		(7,663)	5.74	2.74		(2,797)
06/30/2023	591,887		381,251		-	5.62	3.62		105,318
06/30/2024	(96,894)		-		(79,404)	5.54	4.54		(17,490)
Total	(30,031)	\$	381,251	¢	(1,059,547)	3.3 1	1.5	\$	(436,287)
Total		Ψ	301,231	Ψ	(1,055,547)			4	(430,207)
Net Difference Between P	rojected And	d Ac	tual Earnings	Эn	Investments				
06/30/2020 \$	76,637		-	\$	-	5.00	0.00	\$	15,329
06/30/2021	(307,322)	·	-	·	(61,466)	5.00	1.00	·	(61,464)
06/30/2022	212,073		84,828		-	5.00	2.00		42,415
06/30/2023	33,478		20,086		_	5.00	3.00		6,696
06/30/2024	(61,127)		-		(48,902)	5.00	4.00		(12,225)
Total***	(0:,,=,,	\$	104,914	\$	(110,368)	3.00		\$	(9,249)
Total		4	104,514	4	(110,500)			*	(5,245)
Contributions subsequen	t to measure	me	nt date**** TBD						
			.22						
Balance as of 06/30/2024	4	\$	753,574	\$	(4,230,173)			\$	(1,490,201)
Deferred Outflows And	Deferred (Ir	flo	ws) Of Resoui	ce	s Will Be Recogr	nized In E	xpense As Fo	llows:	
Monsuromont Von	r Ending:							04	lows/(Inflows)
Measurement Yea 06/30/2025	i Ellullig:							\$	• •
06/30/2026								₽	(1,413,160)
									(1,323,166)
06/30/2027									(524,799)
06/30/2028									(128,251)
06/30/2029									(87,223)
Thereafter									-

^{*}Deferred Outflows and Inflows of Resources established on or prior to June 30, 2019 were prepared by the prior plan actuary.

^{**} Deferred (Inflows) should be disclosed as positive numbers in the Annual Financial Report.

^{***} Per GASB 75 Paragraph 43.b, Deferred outflows of resources and deferred inflows of resources arising from differences between projected and actual OPEB plan investment earnings in different measurement periods should be aggregated and reported as a net deferred outflow of resources related to OPEB or a net deferred inflow or resources related to OPEB. Therefore, a net deferred inflow of \$5,454 is recognized as of June 30, 2024.

^{****} This will be recognized as a reduction in Net OPEB Liability next year.

Schedule of Net OPEB Liability

(All dollar amounts are in thousands)

Measurement Year Ended*	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (c)	Plan Fiduciary Net Position As A Percentage Of Total OPEB Liability (d)	Covered Employee Payroll (e)	Net OPEB Liability As A Percentage Of Covered Employee Payroll (f)
			(a)-(b)	(b)/(a)		(c)/(e)
June 30, 2017	\$18,480,936	\$996,407	\$17,484,529	5.4%	\$5,927,012	295.0%
June 30, 2018	\$19,761,333	\$1,187,569	\$18,573,764	6.0%	\$5,296,859	350.7%
June 30, 2019	\$19,662,106	\$1,368,548	\$18,293,558	7.0%	\$5,491,214	333.1%
June 30, 2020	\$22,105,511	\$1,414,312	\$20,691,199	6.4%	\$5,625,684	367.8%
June 30, 2021	\$17,910,405	\$1,910,940	\$15,999,465	10.7%	\$5,594,324	286.0%
June 30, 2022	\$15,340,605	\$1,988,383	\$13,352,222	13.0%	\$5,772,086	231.3%
June 30, 2023	\$16,470,056	\$2,266,842	\$14,203,214	13.8%	\$5,721,250	248.3%
June 30, 2024	\$16,241,790	\$2,525,645	\$13,716,145	15.6%	\$6,395,957	214.5%

^{*}Information for measurement year ended on or prior to June 30, 2019 were prepared by the prior plan actuary.

Basis for the Valuation

Plan Participation Summary

The participant data used in the valuation was provided by the Commonwealth as of January 1, 2024. While the participant data was checked for reasonableness, the data was not audited, and the valuation results presented in this report are dependent upon the accuracy of the participant data provided. This section presents a summary of the basic participant information for the active, terminated vested, and retired participants covered under the terms of the Plan.

a.	Active Participants	Job Group						
u.	, tett e i ar ere partes	1	2	3	4	Total		
	Counts	60,819	1,383	1,968	5,347	69,517		
	Average Age	48.4	48.4	40.7	42.4	47.7		
	Average Service	12.6	17.9	14.2	13.4	12.9		
b.	Terminated Vested - Eligible for Parti	icipation						
	Counts	4,735						
	Average Age	53.3						
		Former	Dependent					
c.	Retired Participants	Employees ¹	Spouses					
	Counts	, ,	·					
	Under Age 65 Non-Medicare	10,543	7,687					
	Under Age 65 Medicare	211	186					
	Over Age 65 Non-Medicare	4,024	357					
	Over Age 65 Medicare	45,525	18,283					
	Total Counts ²	60,303	26,513					
	Average Age	73.6	69.6					
d.	Total Participants ³	134,555						

¹Former employees include 53,321 retirees and disabled participants and 6,982 surviving spouses.

²Retired participants cover 6,779 dependent children in addition to the total counts.

³Total participant count includes active participants, vested terminated participants, and former employees.

Plan Participation Summary (cont.)

	Distribution of Service Groups by Age Groups								
Age Group	Retired Participant		Active Participants - Years of Service						
		0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total
<25	-	606	1	-	-	-	-	-	607
25-29	2	4,419	670	1	-	-	-	-	5,090
30-34	10	4,261	2,807	563	2	-	-	-	7,633
35-39	38	3,039	2,671	1,955	677	7	-	-	8,349
40-44	81	2,152	1,989	1,637	2,084	355	5	-	8,222
45-49	245	1,650	1,432	1,330	1,640	1,389	396	9	7,846
50-54	926	1,526	1,277	1,216	1,677	1,523	1,661	564	9,444
55-59	2,853	1,331	1,216	1,096	1,485	1,317	1,428	1,759	9,632
60-64	6,599	853	970	922	1,201	1,075	968	1,673	7,662
65-69	10,782	267	481	481	589	529	478	722	3,547
70+	38,767	45	127	170	226	225	186	506	1,485
Total	60,303	20,149	13,641	9,371	9,581	6,420	5,122	5,233	69,517

Actuarial Experience

Actuarial gains and losses arise from experience different from that assumed, changes in actuarial assumptions and methods, and changes in plan provisions. The following summarizes the changes in the Total OPEB Liability due to these sources from June 30, 2023 to June 30, 2024. Dollar amounts are in thousands.

1. 2. 3. 4. 5.	Actual Benefit Payments for the year ended June 30, 2024 Interest at 4.34% on (1), (2) and (3)		-	\$16,470,056 \$551,863 (\$610,921) \$725,635 \$17,136,633
6.	(Gain)/Loss i. Assumption Changes - Discount Rate was increased from 4.34% to 4.61% (based on a blend of the Bond Buyer Index rate of 3.93% and the expected rate of return on assets of 7.00%)		(566,976)	
	 ii. Assumption Changes - Others a. Healthcare trend rates were updated to reflect short-term expectations based on a review of the Commonwealth's emerging experience, industry surveys, and an adjustment to estimate the impact of recent general inflation. Long-term expectations were updated based on the most recent SOA-Getzen trend model. 	(230,973)	(230,973)	
	iii. Experience		(96,894)	
	a. Per capita claims costs were updated to reflect FY25 rates	20,308		
	b. Demographic and benefit payment experience	(117,202)		
7.	iv. Total (Gain)/LossActual Total OPEB Liability as of June 30, 2024(5) + (6)(iv)		-	(894,843) \$16,241,790

OPEB Plan Provisions Summary

This section summarizes overall provisions for the OPEB Plan.

Covered Employees

Commonwealth retirees entitled to a pension or retirement allowance from SERS may continue Basic Life and Health Insurance coverage, and Additional Life Insurance by applying to continue the coverage and continue paying the required premium. Membership in the SERS is mandatory for nearly all state employees who are regularly employed on a part-time (minimum of half-time) or full-time permanent basis. SERS also covers active and retirees who are non-Commonwealth employees.

There are four group classifications in SERS:

Group 1: Officials and general employees including clerical, administrative and technical workers, laborers, mechanics, and all others not otherwise classified

Group 2: Probation officers, court officers, certain correctional positions whose major duties require them to have the care, custody, instruction or supervision of prisoners, and certain positions who provide direct care, custody, instruction, or supervision of persons with mental illness or developmental disabilities

Group 3: State police officers

Group 4: Certain public safety officers and officials, correction officers and certain other correction positions, and parole officers or parole supervisors

Covered Family Members

Spouses and dependents are eligible for subsidized Health Insurance coverage while the retiree is alive. Surviving spouses may elect to remain insured only for Health Insurance coverage until their remarriage or death.

Eligibility

Eligible employees who meet one of the following SERS eligibility criteria are eligible to receive subsidized Basic Life and Health Insurance coverage.

Superannuation Retirement

- An employee hired before April 2, 2012:
 - o completion of 20 years of creditable service; or
 - attainment of age 55 if hired prior to 1978 or classified in Group 4; or
 - attainment of age 55 with 10 years of service, if hired after 1978, and classified in Group 1 or 2
- An employee hired on or after April 2, 2012:
 - o attainment of age 60 with 10 years of creditable service if classified in Group 1; or
 - o attainment of age 55 with 10 years of creditable service if classified in Group 2; or
 - attainment of age 55 if classified in Group 4
- An employee classified in Group 3:
 - o completion of 20 years of creditable service; or
 - o attainment of age 55

Deferred Vested

Deferred retirees (eligible employees who have at least ten years of full-time creditable service upon termination) retain the right to receive a retirement allowance from SERS so long as they do not withdraw their pension monies from SERS.

OPEB Plan Provisions Summary (cont.)

Disability Retirement

Ordinary Disability: Non-veterans who become totally and permanently disabled by reason of a non-job related condition with at least ten years of creditable service

Accidental Disability: Applies to members who became permanently and totally unable to perform the essential duties of the position as a result of a personal injury sustained or hazard undergone while in the performance of duties. There is no minimum age or service requirement.

Death in Active Service

If a participant dies during active service and had GIC health coverage, their survivor is eligible to continue health coverage.

Retiree Contributions

Eligible retirees and surviving spouses are required to contribute a specified percentage of the health care/benefit costs, as determined by the GIC.

- Retirements on or before July 1, 1994: 10%
- Retirements after July 1, 1994 and on or before October 1, 2009: 15%
- Retirements after October 1, 2009: 20%
- Surviving spouses of deceased retirees, regardless of retirement date: 10%

Changes in OPEB Plan Provisions

None.

GIC Benefits Provisions Summary

This section summarizes the various medical and prescription drug plans, and life insurance coverage offered by the GIC effective July 1, 2024.

Non-Medicare Medical Plans

The following tables list the non-Medicare medical plans and sample 10% retiree contribution rate effective July 1, 2024 offered to retirees and provide the basic benefit provisions.

No. di sal	D (54 D		Sample 10%
Medical	Benefit Pro	ovisions	Monthly Retiree Contribution Rate
	Out-of-pocket Maximum	\$5,000 individual, \$10,000 family	Individual: \$126.20
Harvard Pilgrim	Fiscal Year Deductible	\$500 individual, \$1,000 family	Family: \$280.73
Access America	Primary Care Provider Office Visit	\$20/visit	1 anniy. 4200.73
Access Afficia	Specialist Physician Office Visit	\$45/visit (no tiering)	
PPO	Retail Clinic and Urgent Care Center	-	
., 0	Emergency Room Care	\$100/visit (waived if admitted)	
	Out-of-pocket Maximum	\$5,000 individual, \$10,000 family	Individual: \$150.33
Wellpoint Total	Fiscal Year Deductible	\$500 individual, \$1,000 family	Family: \$332.82
Choice	Primary Care Provider Office Visit	\$20/visit	
	Specialist Physician Office Visit	\$45/visit (no tiering)	
Indemnity	Retail Clinic and Urgent Care Center	\$20/visit	
	Emergency Room Care	\$100/visit (waived if admitted)	
	Out-of-pocket Maximum	\$5,000 individual, \$10,000 family	Individual: \$96.22
	Fiscal Year Deductible	\$500 individual, \$1,000 family	Family: \$228.36
	Primary Care Provider Office Visit	Tier 1: \$10/visit	
Wellpoint Plus		Tier 2: \$20/visit	
Wenpomerius		Tier 3: \$40/visit	
PPO-Type	Specialist Physician Office Visit	Tier 1: \$30/visit	
- 71		Tier 2: \$60/visit	
		Tier 3: \$75/visit	
	Retail Clinic and Urgent Care Center	\$20/visit	
	Emergency Room Care	\$100/visit (waived if admitted)	
	Out-of-pocket Maximum	\$5,000 individual, \$10,000 family	Individual: \$107.11
	Fiscal Year Deductible	\$500 individual, \$1,000 family	Family: \$264.44
Hamsand Bilawin	Primary Care Provider Office Visit	Tier 1: \$10/visit	
Harvard Pilgrim		Tier 2: \$20/visit	
Explorer		Tier 3: \$40/visit	
	Specialist Physician Office Visit	Tier 1: \$30/visit	
POS		Tier 2: \$60/visit	
		Tier 3: \$75/visit	
	Retail Clinic and Urgent Care Center		
	Emergency Room Care	\$100/visit (waived if admitted)	

GIC Benefits Provisions Summary (cont.)

			Sample 10%
Medical	Benefit	Provisions	Monthly Retiree
			Contribution Rate
	Out-of-pocket Maximum	\$5,000 individual, \$10,000 family	Individual: \$98.11
	Fiscal Year Deductible	\$500 individual, \$1,000 family	Family: \$258.41
Mass General	Primary Care Provider Office Visit	Tier 1: \$10/visit	
Brigham Health		Tier 2: \$20/visit	
		Tier 3: \$40/visit	
Plan Complete	Specialist Physician Office Visit	Tier 1: \$30/visit	
НМО		Tier 2: \$60/visit	
TINIO		Tier 3: \$75/visit	
	Retail Clinic and Urgent Care Center		
	Emergency Room Care	\$100/visit (waived if admitted)	
	Out-of-pocket Maximum	\$5,000 individual, \$10,000 family	Individual: \$79.21
	Fiscal Year Deductible	\$400 individual, \$800 family	Family: \$200.62
Harvard Pilgrim	Primary Care Provider Office Visit	\$20/visit	
Quality	Specialist Physician Office Visit	Tier 1: \$30/visit	
quanty		Tier 2: \$60/visit	
НМО		Tier 3: N/A	
	Retail Clinic and Urgent Care Center	\$20/visit	
	Emergency Room Care	\$100/visit (waived if admitted)	
	Out-of-pocket Maximum	\$5,000 individual, \$10,000 family	Individual: \$74.91
	Fiscal Year Deductible	\$400 individual, \$800 family	Family: \$185.00
Wellpoint	Primary Care Provider Office Visit	\$20/visit	
Community Choice	Specialist Physician Office Visit	Tier 1: \$30/visit	
		Tier 2: \$60/visit	
РРО-Туре		Tier 3: \$75/visit	
	Retail Clinic and Urgent Care Center	\$20/visit	
	Emergency Room Care	\$100/visit (waived if admitted)	
	Out-of-pocket Maximum	\$5,000 individual, \$10,000 family	Individual: \$78.23
	Fiscal Year Deductible	\$400 individual, \$800 family	Family: \$186.78
Health New England	Primary Care Provider Office Visit	\$20/visit	
i leaith ivew Eligiallu	Specialist Physician Office Visit	Tier 1: \$30/visit	
НМО		Tier 2: \$60/visit	
Tivio		Tier 3: N/A	
	Retail Clinic and Urgent Care Center		
	Emergency Room Care	\$100/visit (waived if admitted)	

GIC Benefits Provisions Summary (cont.)

Medicare Medical Plans

The following tables list the Medicare medical plans and sample 10% retiree contribution rate effective July 1, 2024 offered to retirees and provide the basic benefit provisions.

			Sample 10%
Medical	Benefi	Monthly Retiree	
			Contribution Rate
	Calendar Year Deductible	None	\$36.92 per person
Tufts Medicare	Physician's Office Visit	\$15/visit	
Preferred	(except behavioral health)		
	Retail Clinic	\$15/visit	
Medicare Advantage	Emergency Room Care	\$50/visit (waived if admitted)	
	(includes out-of-area)		
	Calendar Year Deductible	None	\$44.12 per person
Harvard Pilgrim	Physician's Office Visit	\$15/visit	
Medicare Enhance	(except behavioral health)		
	Retail Clinic	\$15/visit	
Medicare Supplement	Emergency Room Care	\$50/visit (waived if admitted)	
	(includes out-of-area)		
Health New England	Calendar Year Deductible	None	\$44.39 per person
Medicare	Physician's Office Visit	\$15/visit	
	(except behavioral health)		
Supplement Plus	Retail Clinic	\$15/visit	
	Emergency Room Care	\$50/visit (waived if admitted)	
Medicare Supplement	(includes out-of-area)		
	Calendar Year Deductible	None	\$44.98 per person
Wellpoint Medicare	Physician's Office Visit	\$10/visit	
Extension	(except behavioral health)		
	Retail Clinic	\$10/visit	
Medicare Supplement	Emergency Room Care	\$50/visit (waived if admitted)	
	(includes out-of-area)		

GIC Benefits Provisions Summary (cont.)

Prescription Drug

Prescription Drug Deductible: \$100 for individual coverage and \$200 for family coverage, separate from the health plan deductible. Once the prescription drug deductible is reached, covered prescriptions are subject to a copay.

The co-payments for all prescriptions covered by the plan are:

Retail (30-day supply): \$10 Tier 1 / \$30 Tier 2 / \$65 Tier 3

Mail Order Maintenance Drugs (90-day supply): \$25 Tier 1 / \$75 Tier 2 / \$165 Tier 3

Life Insurance

\$5,000 in basic life insurance coverage.

Sample 10% retiree contribution rate: \$0.64/month

Changes in GIC Benefits Provisions

None.

Actuarial Methods

Actuarial Cost Method

The Actuarial Cost Method used to determine the Total OPEB Liability is the Entry Age Normal (EAN) method as prescribed by GASB Nos. 74/75. This method is in the family of future benefit cost methods, which requires an estimate of the projected benefit payable at retirement to determine costs and liabilities.

The Normal Cost (or Service Cost) is the annual allocation required for each participant from entry date to the assumed retirement date so that the accumulated allocation at retirement is equal to the liability for the projected benefit. The projected benefits are based on estimates of future years of service and projected health benefit costs. The normal cost is developed as a level percent of compensation as prescribed by GASB Nos. 74/75.

The Present Value of Future Benefits is equal to the value of the projected benefit payable at retirement discounted back to the participant's current age. Discounts include such items as interest and mortality. The present value of future normal cost allocations is equal to the discounted value of the normal costs allocated from the participant's current age to retirement age.

The difference between the Present Value of Future Benefits and the Present Value of Future Normal Cost allocations represents the Total OPEB Liability at the participant's current age.

The Total OPEB Liability for participants currently receiving payments is calculated as the actuarial present value of future benefits expected to be paid. No normal cost is allocated for these participants.

Financial and Census Data

The Commonwealth of Massachusetts provided the participant data, financial information and plan descriptions used in this valuation. The actuary has checked the data for reasonableness but has not independently audited the data. The actuary has no reason to believe the data is not complete and accurate and knows of no further information that is essential to the preparation of the actuarial valuation.

Plan Fiduciary Net Position

Market Value of Assets as of the measurement date.

Census Date

January 1, 2024.

Measurement Date

June 30, 2024.

Method Changes Since Prior Valuation

None.

Actuarial Assumptions

Economic Assumptions

The economic assumptions were selected for consistency with SERS where applicable. The discount rate was selected based on the requirements prescribed in GASB Nos. 74/75.

Discount Rate	4.61% (4.34% in 2023)			
Long-Term Expected Rate of Return ¹	7.00%			
Inflation ¹	2.50%			
Payroll Growth ¹	4.00%			
Salary Scale ¹	Percent of salary increase	es each year is based on Group	classifications and years o	of service.
		Salary Incre	eases (%)	
	Service	Groups 1 and 2	Group 3	Group 4
	0	7.00	7.00	9.00
	1	6.50	7.00	8.00
	2	6.00	7.00	7.50
	3	5.50	7.00	7.00
	4	5.50	6.75	6.75
	5	5.25	6.25	6.25
	6	5.00	5.25	5.75
	7	4.75	4.75	5.25
	8-12	4.75	4.75	4.75
	13-15	4.50	4.75	4.75
	16-19	4.25	4.75	4.75
	20+	4.00	4.50	4.50

¹ For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of January 1, 2024 and experience study issued in 2014.

Demographic Assumptions

The demographic assumptions were selected for consistency with SERS where applicable. The retiree health specific assumptions were selected based on recent experience.

Mortality ¹	Pre-Retirement	Mortality:					
	RP-2014 Blue Co females.	llar Employees table	projected generational	lly with Scale MP-2021 s	set forward 1 year for		
	Post-Retiremen	t Mortality:					
		•	nt table projected gene lle is set forward 1 year	rationally with Scale MF 	2-2021 set forward 1 ye		
Disability Incidence ¹	Percent of emplo	oyees expected to be	come disabled each ye	ar is based on Group cl	assifications and age.		
			Sample Disability	Sample Disability Rates (%)			
	Age	Group 1	Group 2	Group 3	Group 4		
	25	0.01	0.062	0.11	0.20		
	30	0.01	0.072	0.16	0.21		
	35	0.034	0.10	0.23	0.40		
	40	0.068	0.21	0.36	0.71		
	45	0.10	0.30	0.58	1.00		
	50	0.133	0.42	0.94	1.10		
	55	0.14	0.50	1.90	0.80		

¹ For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of January 1, 2024 and experience study issued in 2014.

Withdrawal¹

Percent of employees expected to terminate each year is based on Group classifications. age and years of service. No withdrawal is assumed after a member is first assumed to retire.

Sample Withdrawal Rates (%)

		Group 1 and 2											
		Years of Service											
Age	0	1	2	3	4	5	6	7	8	9	10+		
20	27.0	25.0	22.0	15.0	15.0	12.0	9.0	8.0	8.0	6.0	4.5		
25	25.0	22.0	19.0	14.0	13.0	11.0	9.0	8.0	8.0	6.0	4.5		
30	23.0	18.0	15.0	13.0	12.0	10.0	9.0	8.0	5.5	5.5	4.5		
35	18.0	14.0	13.0	12.0	11.0	9.0	8.0	6.5	5.0	5.0	3.3		
40	16.0	12.0	11.0	9.5	9.0	8.0	7.0	6.0	4.5	3.5	3.0		
45	15.0	10.0	8.5	8.0	7.0	7.0	5.5	5.0	4.0	3.5	3.0		
50	18.0	9.0	8.0	7.0	6.5	6.0	5.0	5.0	3.5	3.0	3.0		
55	18.0	10.0	8.0	6.0	6.0	5.0	4.0	4.0	3.0	2.5	0.0*		
60	18.0	10.0	8.0	7.5	7.5	5.0	5.0	3.5	3.5	3.5	0.0		
65+	25.0	15.0	15.0	15.0	15.0	12.0	10.0	10.0	8.0	7.0	0.0		

^{*} For members hired on or after April 2, 2012, probability of withdrawal is 3.0% for ages 55 to 59 with 10+ years of service.

		All Ages							
		Years of Service							
Group	1	1 5 10 15 20+							
3	0.7	0.7	0.5	0.5	0.5				
4	9.0	6.0	3.5	2.0	1.5				

Retirement¹

Percent of employees expected to retire each year is based on Group classifications. age and years of service.

Sample Retirement Rates (%)

	Group 1		Group 2		Gro	up 3	Group 4		
Age	Male	Female	Male	Female	Male	Female	Male	Female	
50*	3.0	3.0	2.0	2.0	5.0	5.0	6.0	6.0	
55*	3.5	5.0	7.5	7.5	10.0	10.0	25.0	25.0	
60	9.0	7.5	15.0	15.0	14.0	14.0	20.0	20.0	
65	20.0	20.0	20.0	20.0	25.0	25.0	50.0	50.0	
70	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

^{*} For Group 1 and 2 members hired on or after April 2, 2012, probability of retirement is 0% until retirement eligibility.

¹ For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of January 1, 2024 and experience study issued in 2014.

Spouse Age Difference ¹	Females are assun	ned to be 3 years your	ger than males.					
	For all retired participants, spouse age is based on actual data.							
Proportion of Retirees	60% of active emp	loyees are assumed to	cover an adult member at r	etirement.				
Covering a Spouse	Retirees are assum	ned to continue their c	urrent coverage status (Indiv	idual/Family cove	erage).			
Participation Rate	100% of employee	s currently electing he	althcare coverage are assum	ed to elect cover	age at retirement.			
	In addition, 35% of employees currently opting out of active employee health coverage are assumed to elect to enroll in retiree coverage. An 8% load was applied to the active liability to estimate the impact of this population. This assumption is based on the percentage of actives and retirees in the OPEB plan vs. SERS and assumes SERS and the OPEB plan have an exact overlap of participant eligibility.							
	85% of current and the participant's cu		ated participants will elect he	ealth care benefit	s at age 55 or, if later,			
	Retirees who curre	ently elect to waive the	ir coverage are assumed to r	emain uncovered	d in the future.			
Surviving Spouse Continuing Coverage	100% of spouses a	re assumed to elect to	continue coverage after the	retiree's death.				
Health Plan Election	assumed to move to remain in their of Advantage/POS/PF Future retirees are	to a Medicare Suppler currently elected prod PO). assumed to enroll in ble below. These prop	nd spouses (if covered) under nent plan if they are Medicar uct type (Indemnity-Medicare the existing plans in the sam ortions are established sepan	e eligible at 65. A Supplement/HM	Il others are assumed IO-Medicare he current retiree mix,			
		Non-Medicare		Medicare	7			
	Indemnity	18%	Medicare Supplement	96%				
	НМО	10%	Medicare Advantage	4%				
	POS/PPO	72%			_			
Medicare Eligibility	Current non-Medicare eligible retirees and spouses (if covered) over age 65 are assumed to remain non-Medicare eligible.							
	Current Medicare eligible.	eligible retirees and s	pouses (if covered) under age	e 65 are assumed	to remain Medicare			
		•	d) are assumed to be non-Me spouse is over age 65 and no		J			

¹ For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of January 1, 2024 and experience study issued in 2014.

Benefit Assumptions

Per Capita Claims Costs

The per capita claims costs used in the valuation were developed from the Fiscal Year 2025 premiums which represents the expected claims costs and administrative expenses effective July 1, 2024. Adjustments were made to offset cross-subsidizations between plans, Medicare and non-Medicare groups, and coverage tiers.

The first-year per capita claims costs below are on a "net basis" – they reflect plan costs after reduction from the total benefit costs of the member cost-sharing (deductibles, coinsurance, co-pays, provider savings, Medicare, etc.). These claims were blended based on the current enrollment mix by plan (see Health Plan Election section above), separately for the non-Medicare eligible and Medicare eligible population, resulting in an average claims cost per member.

Age-graded claims were developed to project the increases in costs related to aging for retirees, spouses, and surviving spouses. Average claims costs associated with the Medicare Supplement and Non-Medicare plans were age-graded using the retiree age and gender distribution. The aging factors are based on the Society of Actuaries age-curve study "Health Care Costs—From Birth to Death." The Medicare Advantage Plan was not age-graded as "the age-independent cost curve created by federal subsidies supports the practice of not agerating the premiums for these individual or group MA, MA-PD, or stand-alone Medicare Part D drug plans."* These claims costs are the basis for projecting the gross cost for each individual, before member contributions for coverage. Future year per capita costs were projected by applying trend assumptions to the first-year costs.

2024 Annual Per Capita Claims Costs

	Non-Medicare		ledicare Non-Medicare		Non	Non-Medicare		edicare	M	edicare
Age	Ind	lemnity		PPO		нмо	Sup	plement	Ad	/antage
45	\$	9,552	\$	8,763	\$	8,006	\$	3,798	\$	3,808
50		11,650		10,688		9,765		3,798		3,808
55		14,351		13,166		12,029		3,798		3,808
60		17,567		16,117		14,725		3,798		3,808
65		21,869		20,063		18,330		3,798		3,808
70		26,287		24,116		22,033		4,188		3,808
75		31,146		28,574		26,106		4,516		3,808
80		36,211		33,220		30,351		4,757		3,808
85		41,164		37,764		34,503		4,861		3,808
90		45,566		41,803		38,193		4,840		3,808
95		48,141		44,165		40,351		4,709		3,808

Actuarial Standard of Practice (ASOP) No. 6 Practice Note: Development of Age-Specific Retiree Health Cost Assumptions, Including Applications to Pooled and Non-Pooled Health Plans (www.actuary.org/sites/default/files/2021-03/ASOP_No_6_Practice_Note.pdf).

Expenses

Per Capita Claims Costs include administrative expenses.

Trend Rates

The trend rates illustrated below are used to project age-graded claims and flat rates into future years. Trend rates were developed based on the most recently published SOA-Getzen trend rate model, version 2024_1b. The short-term trend assumptions were based on a review of the Commonwealth's emerging experience and enrollment by plan type, along with industry surveys, separately for non-Medicare and Medicare benefits. The industry surveys were used to predict short-term future per capita cost increases. The most recently published SOA Getzen model was then used to determine the trend rates beginning in 2028 and thereafter, based on the plan's long-term inflation assumption and reasonable macro-economic assumptions for the growth of health care expenditures during this period relative to the general economy.

The short-term trend rates also reflect an estimated impact of recent general inflation. CPI-U for the 12-month period ending in June 2022 was 9.1%. Based on historical information available regarding how general inflation impacts medical inflation, 60% of the increase in general inflation (over the long-term assumption of 2.50%) is assumed to be reflected in higher medical costs. Based on historical observations of CPI-U for medical care lagging general CPI-U and considering that part of the inflation increase has already been reflected in recent plan experience, an inflation increase was included only in the 2025 trend assumption.

Year	Medicare Benefits	Non-Medicare Benefits				
2024	5.35%	7.42%				
2025	6.53%	8.03%				
2026	5.24%	6.85%				
2027	5.19%	6.57%				
2028	5.14%	6.29%				
2033	4.	87%				
2043	4.	48%				
2053	4.	42%				
2063	4.37%					
2073	4.	4.01%				
2075+	3.	94%				

Model Use

Actuarial Standard of Practice No. 56 – Modeling requires disclosure of certain information regarding the actuary's use of models when issuing actuarial reports for work performed on or after October 1, 2020. For this valuation, the liability calculations were determined using industry-leading defined benefit valuation software developed and maintained by a third-party vendor. The model was designed specifically for the measurement of defined benefit pension and postretirement medical plan liabilities and the actuary has updated the applicable parameters for the specific plan provisions and assumptions selected for this valuation.

The medical inflation trend rate assumptions were set using the Getzen Model of Long-Run Medical Cost Trends ("Getzen Model"), which adds transparency to the economic assumptions behind medical and prescription drug trends. The Getzen Model is an excel based projection of expected growth rates in medical premiums and expenditures from 2028 to 2103. Development of the model was sponsored by the Society of Actuaries, and it is used primarily in the estimation of reportable liabilities for retiree health benefits in accordance with FASB and GASB standards. It projects medical care cost increases and the health share of GDP for the next 80 years using linked formulas and assumptions developed by the author, Professor Thomas Getzen, with the assistance of a Society of Actuaries project oversight group.

Changes in Assumptions

Please see the Actuarial Experience section of this report for the changes and their impacts.

Rationale for Assumptions

Discount Rate	The single discount rate was based on the long-term expected rate of return on SRBT investments of 7.00% and a municipal bond rate of 3.93% (based on the 20-year Bond Buyer GO Index as of the end of June 2024). Based on the stated assumptions and the projection of cash flows, the Plan's Fiduciary Net Position and future contributions were not sufficient to finance the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on SRBT investments was applied to projected benefit payments through year 2043 and the municipal bond rate was applied to all remaining future years to determine the Total OPEB Liability. The projection of cash flows used to determine the single discount rate for each fiscal year end assumed that employer contributions will be made based on the current funding policy for future years.
Long-Term Expected Rate of Return, Inflation, Payroll Growth, Salary Scale, Mortality, Disability Incidence, Withdrawal, Retirement and Spouse Age Difference	Consistent with the assumptions used for the SERS Actuarial Valuation Report as of January 1, 2024 and experience study issued in 2014.
Proportion of Retirees Covering a Spouse	This assumption is based on the experience of the retiree population in 2015-2018. Due to the level of benefits, employees in this program are not expected to change their behavior upon retirement.
Participation Rate – Employees	This assumption is based on the percentage of actives and retirees in the OPEB plan vs. SERS and assumes SERS and OPEB have an exact overlap of participant eligibility.

Projection of Contributions

Year Ending June 30	Total Employer Contributions	Contributions Related to Service Cost of Future Employees*	Employer Contributions for Current Participants
	(a)	(b)	(c) = (a)-(b)
2025	686,827	33,318	653,509
2026	736,470	58,776	677,694
2027	785,874	83,900	701,974
2028	832,539	110,659	721,880
2029	877,998	141,433	736,565
2030	921,277	168,125	753,152
2031	963,878	194,347	769,531
2032	1,005,194	221,037	784,157
2033	1,044,497	252,634	791,863
2034	1,080,389	287,265	793,124
2035	1,112,015	317,882	794,133
2036	1,140,354	348,847	791,507
2037	1,167,599	379,413	788,186
2038	1,195,789	415,794	779,995
2039	1,225,197	453,768	771,429
2040	1,255,915	488,948	766,967
2041	1,287,206	525,028	762,178
2042	1,317,666	562,557	755,109
2043	1,347,709	604,331	743,378
2044	1,378,325	647,271	731,054
2045	1,406,643	688,915	717,728
2046	1,431,886	730,136	701,750
2047	1,454,220	774,191	680,029
2048	1,473,345	821,559	651,786
2049	1,488,420	872,826	615,594
2050	1,496,889	921,228	575,661
2051	1,500,282	971,433	528,849
2052	1,497,874	1,023,124	474,750
2053	1,486,981	1,079,095	407,886
2054	1,469,151	1,137,317	331,834

^{*} Determined using an open group valuation assuming a level population.

Projection of Fiduciary Net Position

(All dollar amounts are in thousands)

June 30 Position Participants Payments Expenses 7.00% Net Position (a) (b) (c) (d) (e) (f)=(a)+(b)-(c)-(d) (d) (e) (f)=(a)+(b)-(c)-(d) (f)=(a)+(b)-(c)-(d)+(d)+(d)+(d)+(d)+(d)			Employer			Projected	
Dine 30 Position Participants Payments Expenses 7.00% Net Position (a) (b) (c) (d) (e) (f)=(a)+(b)-(c)-(d) (d) (e) (f)=(a)+(b)-(c)-(d) (d) (e) (f)=(a)+(b)-(c)-(d) (f)=(a)+(b)-(c)-(d)+(d)-(d)+(d)+(d)+(d)+(d)+(d)+(d)+(d)+(d)+(d)+	Year	Beginning	Contributions	Projected	Projected	Investment	
(a) (b) (c) (d) (e) (f)=(a)+(b)-(c)-(d) 2025 2,525,645 653,509 660,827 223 175,641 2,693 2026 2,693,745 677,694 710,470 229 186,532 2,847 2027 2,847,272 701,974 759,874 213 196,415 2,985 2028 2,985,574 721,880 806,539 184 205,176 3,105 2029 3,105,907 736,565 851,998 149 212,542 3,202 2030 3,202,867 753,152 895,277 112 218,412 3,279 2031 3,279,042 769,531 937,878 77 222,843 3,333 2032 3,333,461 784,157 979,194 49 225,735 3,364 2033 3,364,110 791,863 1,018,497 30 226,794 3,364 2034 3,364,240 793,124 1,054,389 17 225,612 3,328 2035 3,328,570 794,133 1,086,015 9 222,062 3,258 2036 3,258,741 791,507 1,114,354 4 216,109 3,151 2037 3,151,999 788,186 1,141,599 2 207,585 3,006 2038 3,006,169 779,995 1,169,789 1 196,125 2,812 2039 2,812,499 771,429 1,199,197 - 181,262 2,565 2040 2,565,993 766,967 1,229,915 - 162,796 2,265 2041 2,265,841 762,178 1,261,206 - 140,544 1,907 2042 1,907,357 755,109 1,291,666 - 114,159 1,484 2043 1,484,959 743,378 1,321,709 - 83,153 989 2044 989,781 731,054 1,352,325 - 47,014 415 2045 415,524 717,728 1,380,643 - 5,383 2046 - 701,750 1,405,886 2047 - 680,029 1,428,220 2048 - 651,786 1,447,345	Ending	Fiduciary Net	for Current	Benefit	Administrative	Earnings at	Ending Fiduciary
2025 2,525,645 653,509 660,827 223 175,641 2,693,745 2026 2,693,745 677,694 710,470 229 186,532 2,847,202 2027 2,847,272 701,974 759,874 213 196,415 2,985,574 2028 2,985,574 721,880 806,539 184 205,176 3,105 2029 3,105,907 736,565 851,998 149 212,542 3,202 2030 3,202,867 753,152 895,277 112 218,412 3,279 2031 3,279,042 769,531 937,878 77 222,843 3,333 2032 3,333,461 784,157 979,194 49 225,735 3,364 2033 3,364,110 791,863 1,018,497 30 226,794 3,364 2034 3,364,240 793,124 1,054,389 17 225,612 3,28 2035 3,258,741 791,507 1,114,354 4 216,109 <	June 30	Position	Participants	Payments	Expenses	7.00%	Net Position
2026 2,693,745 677,694 710,470 229 186,532 2,847 2027 2,847,272 701,974 759,874 213 196,415 2,985 2028 2,985,574 721,880 806,539 184 205,176 3,105 2029 3,105,907 736,565 851,998 149 212,542 3,202 2030 3,202,867 753,152 895,277 112 218,412 3,279 2031 3,279,042 769,531 937,878 77 222,843 3,333 2032 3,333,461 784,157 979,194 49 225,735 3,364 2033 3,364,110 791,863 1,018,497 30 226,794 3,364 2034 3,364,240 793,124 1,054,389 17 225,612 3,288 2035 3,228,70 794,133 1,086,015 9 222,062 3,258 2036 3,258,741 791,507 1,114,354 4 216,109 3,151 <td></td> <td>(a)</td> <td>(b)</td> <td>(c)</td> <td>(d)</td> <td>(e)</td> <td>(f)=(a)+(b)-(c)-(d)+(e)</td>		(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
2027 2,847,272 701,974 759,874 213 196,415 2,985 2028 2,985,574 721,880 806,539 184 205,176 3,105 2029 3,105,907 736,565 851,998 149 212,542 3,202 2030 3,202,867 753,152 895,277 112 218,412 3,279 2031 3,279,042 769,531 937,878 77 222,843 3,333 2032 3,333,461 784,157 979,194 49 225,735 3,364 2033 3,364,240 791,863 1,018,497 30 226,794 3,364 2034 3,364,240 793,124 1,054,389 17 225,612 3,28 2035 3,28,570 794,133 1,086,015 9 222,062 3,258 2036 3,258,741 791,507 1,114,599 2 207,585 3,006 2038 3,061,699 779,995 1,169,789 1 196,125 2,812	2025	2,525,645	653,509	660,827	223	175,641	2,693,745
2028 2,985,574 721,880 806,539 184 205,176 3,105 2029 3,105,907 736,565 851,998 149 212,542 3,202 2030 3,202,867 753,152 895,277 112 218,412 3,279 2031 3,279,042 769,531 937,878 77 222,843 3,333 2032 3,333,461 784,157 979,194 49 225,735 3,364 2033 3,364,110 791,863 1,018,497 30 226,794 3,364 2034 3,364,240 793,124 1,054,389 17 225,612 3,328 2035 3,328,570 794,133 1,086,015 9 222,062 3,258 2036 3,258,741 791,507 1,114,354 4 216,109 3,151 2037 3,151,999 788,186 1,414,599 2 207,585 3,006 2038 3,006,169 779,995 1,169,789 1 196,125 2,812 <td>2026</td> <td>2,693,745</td> <td>677,694</td> <td>710,470</td> <td>229</td> <td>186,532</td> <td>2,847,272</td>	2026	2,693,745	677,694	710,470	229	186,532	2,847,272
2029 3,105,907 736,565 851,998 149 212,542 3,202 2030 3,202,867 753,152 895,277 112 218,412 3,279 2031 3,279,042 769,531 937,878 77 222,843 3,333 2032 3,333,461 784,157 979,194 49 225,735 3,364 2033 3,364,110 791,863 1,018,497 30 226,794 3,364 2034 3,364,240 793,124 1,054,389 17 225,612 3,28 2035 3,328,570 794,133 1,086,015 9 222,062 3,258 2036 3,258,741 791,507 1,114,354 4 216,109 3,151 2037 3,151,999 788,186 1,141,599 2 207,585 3,006 2038 3,006,169 779,995 1,169,789 1 196,125 2,812 2039 2,812,499 771,429 1,199,197 - 181,262 2,565 2040 2,565,993 766,967 1,229,915 - 162	2027	2,847,272	701,974	759,874	213	196,415	2,985,574
2030 3,202,867 753,152 895,277 112 218,412 3,279 2031 3,279,042 769,531 937,878 77 222,843 3,333 2032 3,333,461 784,157 979,194 49 225,735 3,364 2033 3,364,240 793,124 1,054,389 17 225,612 3,328 2035 3,328,570 794,133 1,086,015 9 222,062 3,258 2036 3,258,741 791,507 1,114,354 4 216,109 3,151 2037 3,151,999 788,186 1,141,599 2 207,585 3,006 2038 3,006,169 779,995 1,169,789 1 196,125 2,812 2039 2,812,499 771,429 1,199,197 - 181,262 2,565 2040 2,565,993 766,967 1,229,915 - 162,796 2,265 2041 2,265,841 762,178 1,261,206 - 114,159 1,484 2043 1,484,959 743,378 1,321,709 - 83,	2028	2,985,574	721,880	806,539	184	205,176	3,105,907
2031 3,279,042 769,531 937,878 77 222,843 3,333 2032 3,333,461 784,157 979,194 49 225,735 3,364 2033 3,364,110 791,863 1,018,497 30 226,794 3,364 2034 3,364,240 793,124 1,054,389 17 225,612 3,328 2035 3,328,570 794,133 1,086,015 9 222,062 3,258 2036 3,258,741 791,507 1,114,354 4 216,109 3,151 2037 3,151,999 788,186 1,141,599 2 207,585 3,006 2038 3,006,169 779,995 1,169,789 1 196,125 2,812 2039 2,812,499 771,429 1,199,197 - 181,262 2,565 2040 2,565,993 766,967 1,229,915 - 162,796 2,265 2041 2,265,841 762,178 1,261,206 - 140,544 1,907 2042 1,907,357 755,109 1,291,666 - 11	2029	3,105,907	736,565	851,998	149	212,542	3,202,867
2032 3,333,461 784,157 979,194 49 225,735 3,364 2033 3,364,110 791,863 1,018,497 30 226,794 3,364 2034 3,364,240 793,124 1,054,389 17 225,612 3,328 2035 3,328,570 794,133 1,086,015 9 222,062 3,258 2036 3,258,741 791,507 1,114,354 4 216,109 3,151 2037 3,151,999 788,186 1,141,599 2 207,585 3,006 2038 3,006,169 779,995 1,169,789 1 196,125 2,812 2039 2,812,499 771,429 1,199,197 - 181,262 2,565 2040 2,565,993 766,967 1,229,915 - 162,796 2,265 2041 2,265,841 762,178 1,261,206 - 1140,544 1,907 2042 1,907,357 755,109 1,291,666 - 114,159 1,484 2043 1,484,959 743,378 1,352,325 -	2030	3,202,867	753,152	895,277	112	218,412	3,279,042
2033 3,364,110 791,863 1,018,497 30 226,794 3,364 2034 3,364,240 793,124 1,054,389 17 225,612 3,328 2035 3,328,570 794,133 1,086,015 9 222,062 3,258 2036 3,258,741 791,507 1,114,354 4 216,109 3,151 2037 3,151,999 788,186 1,141,599 2 207,585 3,006 2038 3,006,169 779,995 1,169,789 1 196,125 2,812 2039 2,812,499 771,429 1,199,197 - 181,262 2,565 2040 2,565,993 766,967 1,229,915 - 162,796 2,265 2041 2,265,841 762,178 1,261,206 - 140,544 1,907 2042 1,907,357 755,109 1,291,666 - 114,159 1,484 2043 1,484,959 743,378 1,321,709 - 83,153 989 2045 415,524 717,728 1,380,643 - - <td>2031</td> <td>3,279,042</td> <td>769,531</td> <td>937,878</td> <td>77</td> <td>222,843</td> <td>3,333,461</td>	2031	3,279,042	769,531	937,878	77	222,843	3,333,461
2034 3,364,240 793,124 1,054,389 17 225,612 3,328 2035 3,328,570 794,133 1,086,015 9 222,062 3,258 2036 3,258,741 791,507 1,114,354 4 216,109 3,151 2037 3,151,999 788,186 1,141,599 2 207,585 3,006 2038 3,006,169 779,995 1,169,789 1 196,125 2,812 2039 2,812,499 771,429 1,199,197 - 181,262 2,565 2040 2,565,993 766,967 1,229,915 - 162,796 2,265 2041 2,265,841 762,178 1,261,206 - 140,544 1,907 2042 1,907,357 755,109 1,291,666 - 114,159 1,484 2043 1,484,959 743,378 1,321,709 - 83,153 989 2044 989,781 731,054 1,352,325 - 47,014 415 2045 415,524 717,728 1,380,643 - -	2032	3,333,461	784,157	979,194	49	225,735	3,364,110
2035 3,328,570 794,133 1,086,015 9 222,062 3,258 2036 3,258,741 791,507 1,114,354 4 216,109 3,151 2037 3,151,999 788,186 1,141,599 2 207,585 3,006 2038 3,006,169 779,995 1,169,789 1 196,125 2,812 2039 2,812,499 771,429 1,199,197 - 181,262 2,565 2040 2,565,993 766,967 1,229,915 - 162,796 2,265 2041 2,265,841 762,178 1,261,206 - 140,544 1,907 2042 1,907,357 755,109 1,291,666 - 114,159 1,484 2043 1,484,959 743,378 1,321,709 - 83,153 989 2044 989,781 731,054 1,352,325 - 47,014 415 2045 415,524 717,728 1,380,643 - 5,383 2046 - 701,750 1,405,886 - - -	2033	3,364,110	791,863	1,018,497	30	226,794	3,364,240
2036 3,258,741 791,507 1,114,354 4 216,109 3,151 2037 3,151,999 788,186 1,141,599 2 207,585 3,006 2038 3,006,169 779,995 1,169,789 1 196,125 2,812 2039 2,812,499 771,429 1,199,197 - 181,262 2,565 2040 2,565,993 766,967 1,229,915 - 162,796 2,265 2041 2,265,841 762,178 1,261,206 - 140,544 1,907 2042 1,907,357 755,109 1,291,666 - 114,159 1,484 2043 1,484,959 743,378 1,321,709 - 83,153 989 2044 989,781 731,054 1,352,325 - 47,014 415 2045 415,524 717,728 1,380,643 - 5,383 2046 - 701,750 1,405,886 - - - 2047 - 680,029 1,428,220 - - - 2048 <td>2034</td> <td>3,364,240</td> <td>793,124</td> <td>1,054,389</td> <td>17</td> <td>225,612</td> <td>3,328,570</td>	2034	3,364,240	793,124	1,054,389	17	225,612	3,328,570
2037 3,151,999 788,186 1,141,599 2 207,585 3,006 2038 3,006,169 779,995 1,169,789 1 196,125 2,812 2039 2,812,499 771,429 1,199,197 - 181,262 2,565 2040 2,565,993 766,967 1,229,915 - 162,796 2,265 2041 2,265,841 762,178 1,261,206 - 140,544 1,907 2042 1,907,357 755,109 1,291,666 - 114,159 1,484 2043 1,484,959 743,378 1,321,709 - 83,153 989 2044 989,781 731,054 1,352,325 - 47,014 415 2045 415,524 717,728 1,380,643 - 5,383 2046 - 701,750 1,405,886 - - 2047 - 680,029 1,428,220 - - 2048 - 651,786 1,447,345 - - -	2035	3,328,570	794,133	1,086,015	9	222,062	3,258,741
2038 3,006,169 779,995 1,169,789 1 196,125 2,812 2039 2,812,499 771,429 1,199,197 - 181,262 2,565 2040 2,565,993 766,967 1,229,915 - 162,796 2,265 2041 2,265,841 762,178 1,261,206 - 140,544 1,907 2042 1,907,357 755,109 1,291,666 - 114,159 1,484 2043 1,484,959 743,378 1,321,709 - 83,153 989 2044 989,781 731,054 1,352,325 - 47,014 415 2045 415,524 717,728 1,380,643 - 5,383 2046 - 701,750 1,405,886 - - 2047 - 680,029 1,428,220 - - 2048 - 651,786 1,447,345 - -	2036	3,258,741	791,507	1,114,354	4	216,109	3,151,999
2039 2,812,499 771,429 1,199,197 - 181,262 2,565 2040 2,565,993 766,967 1,229,915 - 162,796 2,265 2041 2,265,841 762,178 1,261,206 - 140,544 1,907 2042 1,907,357 755,109 1,291,666 - 114,159 1,484 2043 1,484,959 743,378 1,321,709 - 83,153 989 2044 989,781 731,054 1,352,325 - 47,014 415 2045 415,524 717,728 1,380,643 - 5,383 2046 - 701,750 1,405,886 - - 2047 - 680,029 1,428,220 - - 2048 - 651,786 1,447,345 - -	2037	3,151,999	788,186	1,141,599	2	207,585	3,006,169
2040 2,565,993 766,967 1,229,915 - 162,796 2,265 2041 2,265,841 762,178 1,261,206 - 140,544 1,907 2042 1,907,357 755,109 1,291,666 - 114,159 1,484 2043 1,484,959 743,378 1,321,709 - 83,153 989 2044 989,781 731,054 1,352,325 - 47,014 415 2045 415,524 717,728 1,380,643 - 5,383 2046 - 701,750 1,405,886 - - 2047 - 680,029 1,428,220 - - 2048 - 651,786 1,447,345 - -	2038	3,006,169	779,995	1,169,789	1	196,125	2,812,499
2041 2,265,841 762,178 1,261,206 - 140,544 1,907 2042 1,907,357 755,109 1,291,666 - 114,159 1,484 2043 1,484,959 743,378 1,321,709 - 83,153 989 2044 989,781 731,054 1,352,325 - 47,014 415 2045 415,524 717,728 1,380,643 - 5,383 2046 - 701,750 1,405,886 - - 2047 - 680,029 1,428,220 - - 2048 - 651,786 1,447,345 - -	2039	2,812,499	771,429	1,199,197	-	181,262	2,565,993
2042 1,907,357 755,109 1,291,666 - 114,159 1,484 2043 1,484,959 743,378 1,321,709 - 83,153 989 2044 989,781 731,054 1,352,325 - 47,014 415 2045 415,524 717,728 1,380,643 - 5,383 2046 - 701,750 1,405,886 - - 2047 - 680,029 1,428,220 - - 2048 - 651,786 1,447,345 - -	2040	2,565,993	766,967	1,229,915	-	162,796	2,265,841
2043 1,484,959 743,378 1,321,709 - 83,153 989 2044 989,781 731,054 1,352,325 - 47,014 415 2045 415,524 717,728 1,380,643 - 5,383 2046 - 701,750 1,405,886 - - 2047 - 680,029 1,428,220 - - 2048 - 651,786 1,447,345 - -	2041	2,265,841	762,178	1,261,206	-	140,544	1,907,357
2044 989,781 731,054 1,352,325 - 47,014 415 2045 415,524 717,728 1,380,643 - 5,383 2046 - 701,750 1,405,886 - - 2047 - 680,029 1,428,220 - - 2048 - 651,786 1,447,345 - -	2042	1,907,357	755,109	1,291,666	-	114,159	1,484,959
2045 415,524 717,728 1,380,643 - 5,383 2046 - 701,750 1,405,886 - - 2047 - 680,029 1,428,220 - - 2048 - 651,786 1,447,345 - -	2043	1,484,959	743,378	1,321,709	-	83,153	989,781
2046 - 701,750 1,405,886 - - - 2047 - 680,029 1,428,220 - - - 2048 - 651,786 1,447,345 - - -	2044	989,781	731,054	1,352,325	-	47,014	415,524
2047 - 680,029 1,428,220 - - - 2048 - 651,786 1,447,345 - - -	2045	415,524	717,728	1,380,643	-	5,383	-
2048 - 651,786 1,447,345	2046	-	701,750	1,405,886	-	-	-
	2047	-	680,029	1,428,220	-	-	-
2049 - 615 594 1 462 420	2048	-	651,786	1,447,345	-	-	-
2015	2049	-	615,594	1,462,420	-	-	-
2050 - 575,661 1,470,889	2050	-	575,661	1,470,889	-	-	-
2051 - 528,849 1,474,282	2051	-	528,849	1,474,282	-	-	-
2052 - 474,750 1,471,874	2052	-	474,750	1,471,874	-	-	-
2053 - 407,886 1,460,981	2053	-	407,886	1,460,981	-	-	-
2054 - 331,834 1,443,151	2054	-	331,834	1,443,151	-	-	-

Development of the Single Discount Rate

(All dollar amounts are in thousands)

					Present Value	Present Value	Present Value of
			Funded	Unfunded	of Funded	of Unfunded	Benfit Payments
Year	Beginning	Projected	Portion of	Portion of	Benefit	Benefit	Using the Single
Ending	Fiduciary Net	Benefit	Benefit	Benefit	Payments at	Payments at	Discount Rate of
June 30	Position	Payments	Payments	Payments	7.00%	3.93%	4.61%
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
2025	2,525,645	660,827	660,827	-	638,846	-	646,102
2026	2,693,745	710,470	710,470	-	641,904	-	664,027
2027	2,847,273	759,874	759,874	-	641,626	-	678,904
2028	2,985,575	806,539	806,539	-	636,476	-	688,841
2029	3,105,908	851,998	851,998	-	628,364	-	695,599
2030	3,202,868	895,277	895,277	-	617,088	-	698,722
2031	3,279,043	937,878	937,878	-	604,160	-	699,713
2032	3,333,462	979,194	979,194	-	589,509	-	698,344
2033	3,364,110	1,018,497	1,018,497	-	573,057	-	694,364
2034	3,364,241	1,054,389	1,054,389	-	554,440	-	687,155
2035	3,328,572	1,086,015	1,086,015	-	533,711	-	676,576
2036	3,258,743	1,114,354	1,114,354	-	511,811	-	663,637
2037	3,152,001	1,141,599	1,141,599	-	490,023	-	649,902
2038	3,006,172	1,169,789	1,169,789	-	469,274	-	636,603
2039	2,812,503	1,199,197	1,199,197	-	449,600	-	623,847
2040	2,565,996	1,229,915	1,229,915	-	430,950	-	611,631
2041	2,265,844	1,261,206	1,261,206	-	413,004	-	599,552
2042	1,907,361	1,291,666	1,291,666	-	395,307	-	586,972
2043		1,321,709	1,321,709	-	378,038	-	574,156
2044		1,352,325	-	1,352,325	-	637,725	561,568
2045	415,527	1,380,643	-	1,380,643	-	626,459	548,062
2046	-	1,405,886	-	1,405,886	-	613,791	533,488
2047	-	1,428,220	-	1,428,220	-	599,963	518,080
2048	-	1,447,345	-	1,447,345	-	585,006	501,880
2049	-	1,462,420	-	1,462,420	-	568,747	484,760
2050	-	1,470,889	-	1,470,889	-	550,410	466,081
2051	-	1,474,282	-	1,474,282	-	530,819	446,569
2052	-	1,471,874	-	1,471,874	-	509,912	426,192
2053	-	1,460,981	-	1,460,981	-	486,999	404,396
2054		1,443,151	-	1,443,151	-	462,865	381,856
2055	-	1,418,199	-	1,418,199	-	437,662	358,717
2056	-	1,386,962	-	1,386,962	-	411,837	335,356
2057	-	1,353,213	-	1,353,213	-	386,621	312,777
2058	-	1,315,091	-	1,315,091	-	361,522	290,570
2059		1,273,379	-	1,273,379	-	336,818	268,955
2060		1,228,192	-	1,228,192	-	312,582	247,979
2061		1,180,804	-	1,180,804	-	289,157	227,905
2062		1,135,147	-	1,135,147	-	267,465	209,437
2063		1,092,679	-	1,092,679	-	247,723	192,718
2064		1,058,335	-	1,058,335	-	230,864	178,434

Development of the Single Discount Rate

Year Ending June 30	Beginning Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments at 7.00%	Present Value of Unfunded Benefit Payments at 3.93%	Present Value of Benfit Payments Using the Single Discount Rate of 4.61%
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
2065	-	1,028,974	-	1,028,974	-	215,972	165,839
2066	-	1,002,653	-	1,002,653	-	202,489	154,475
2067	-	980,840	-	980,840	-	190,594	144,455
2068	-	959,707	-	959,707	-	179,435	135,114
2069	-	937,724	-	937,724	-	168,696	126,201
2070	-	914,788	-	914,788	-	158,346	117,689
2071	-	890,346	-	890,346	-	148,288	109,497
2072	-	864,112	-	864,112	-	138,476	101,587
2073	-	836,125	-	836,125	-	128,925	93,965
2074	-	806,338	-	806,338	-	119,630	86,624
2075	-	774,677	-	774,677	-	110,587	79,555
2076	-	741,268	-	741,268	-	101,816	72,770
2077	-	706,341	-	706,341	-	93,350	66,285
2078	-	670,101	-	670,101	-	85,212	60,113
2079	-	632,686	-	632,686	-	77,412	54,256
2080	-	594,278	-	594,278	-	69,963	48,716
2081	-	555,093	-	555,093	-	62,879	43,499
2082	-	515,387	-	515,387	-	56,173	38,607
2083	-	475,451	-	475,451	-	49,861	34,046
2084	-	435,608	-	435,608	-	43,955	29,818
2085	-	396,188	-	396,188	-	38,466	25,925
2086	-	357,527	-	357,527	-	33,400	22,364
2087	-	319,963	-	319,963	-	28,760	19,132
2088	-	283,815	-	283,815	-	24,546	16,223
2089	-	249,390	-	249,390	-	20,753	13,627
2090	-	216,966	-	216,966	-	17,372	11,333
2091	-	186,775	-	186,775	-	14,390	9,326
2092	-	159,014	-	159,014	-	11,788	7,590
2093	-	133,824	-	133,824	-	9,545	6,106
2094	-	111,279	-	111,279	-	7,637	4,854
2095	-	91,390	-	91,390	-	6,035	3,811
2096	-	74,094	-	74,094	-	4,708	2,953
2097	-	59,274	-	59,274	-	3,624	2,258
2098	-	46,754	-	46,754	-	2,750	1,703

Development of the Single Discount Rate

(All dollar amounts are in thousands)

Year Ending June 30	Beginning Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments at 7.00%	Present Value of Unfunded Benefit Payments at 3.93%	Present Value of Benfit Payments Using the Single Discount Rate of 4.61%
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
2099	-	36,337	-	36,337	-	2,057	1,265
2100	-	27,808	-	27,808	-	1,514	926
2101	-	20,933	-	20,933	-	1,097	666
2102	-	15,487	-	15,487	-	781	471
2103	-	11,254	-	11,254	-	546	327
2104	-	8,027	-	8,027	-	375	223
2105	-	5,615	-	5,615	-	252	149
2106	-	3,852	-	3,852	-	166	98
2107	-	2,589	-	2,589	-	108	63
2108	-	1,705	-	1,705	-	68	40
2109	-	1,100	-	1,100	-	42	24
2110	-	695	-	695	-	26	15
2111	-	430	-	430	-	15	9
2112	-	261	-	261	-	9	5
2113	-	155	-	155	-	5	3
2114	-	90	-	90	-	3	2
2115	-	51	-	51	-	2	1
2116	-	29	-	29	-	1	-
2117	-	16	-	16	-	-	-
2118	-	8	-	8	-	-	-
2119	-	4	-	4	-	-	-
2120	-	2	-	2	-	-	-
2121	-	1	-	1	-	-	-
2122	-	-	-	-	-	-	-
Total					10,197,188	12,087,847	22,285,030

Glossary

Brief explanations of terms used in this report:

Annual OPEB Expense

The change in Net OPEB Liability less the change in the Deferred Outflows of Resources plus the change in the Deferred Inflows of Resources.

Collective deferred outflows of resources and deferred inflows of resources related to OPEB

Deferred outflows of resources and deferred inflows of resources related to OPEB arising from certain changes in the collective net OPEB liability or collective total OPEB liability.

Covered Employee Payroll

Annual compensation paid (or expected to be paid) to active employees covered by an OPEB plan, in aggregate.

Implicit Rate Subsidy

Many post-employment health plans charge the same premium rates for all participants in a non-Medicare plan regardless of their age. This single premium rate is called a blended premium rate because it blends the expected claims of both active and retired participants. Retirees are generally older than the average participant in a non-Medicare plan, which means they are expected to generate higher claims than the average participant of the plan; therefore, they are receiving a subsidy even if they pay 100% of the blended premium rate because they would be paying less in premiums than their expected claims costs. This subsidy is referred to as the "Implicit Rate Subsidy".

Net OPEB Liability (NOL)

The liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is administered through a trust that meets the criteria of the GASB Statements.

Normal Cost or Service Cost

The portion of the Total Present Value of Future Benefits attributed to employee service during the current fiscal year by the actuarial cost method. These terms are used interchangeably.

Other Postemployment Benefits (OPEB)

Retiree health care benefits and post-employment benefits provided separately from a pension plan (excluding termination offers and benefits).

Fiduciary Net Position (FNP)

Set equal to the market value of assets as of the measurement date

Present Value of Future Benefits (PVFB)

The value, as of the valuation date, of the projected benefits payable to all members for their accrued service and their expected future service, discounted to reflect the time value (present value) of money and adjusted for the probabilities of retirement, withdrawal, death and disability.

Total OPEB Liability (TOL)

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service in conformity with the GASB Statements. The total OPEB liability is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is not administered through a trust that meets the criteria of the GASB Statements.