



State of Maine State Retiree Healthcare Plan **Actuarial Valuation Report**

June 30, 2023

Prepared by Deloitte Consulting LLP

August 2024

Contents

Actuarial Valuation Opinion.....	3
Background and Comments.....	4
Valuation Results.....	9
Section 1 – Summary of Actuarial Valuation Results.....	9
Section 2 – Actuarial Value of Assets.....	12
Section 3 – Actuarial Experience.....	13
Section 4 – Development of Unfunded Actuarial Accrued Liability.....	16
Section 5 – Schedule of Amortization Balances for Actuarially Determined Contributions.....	19
Section 6 – Determination of Actuarially Determined Contributions.....	20
Section 7 – 10-Year Projection of Employer Benefit Payments.....	21
Basis for the Valuation.....	22
Section 8 – Summary of Actuarial Methods & Assumptions.....	22
Section 9 – Rationale for Assumptions.....	30
Section 10 – Summary of Substantive Plan Provisions.....	31
Section 11 – Monthly Premiums.....	33
Section 12 – Summary of Participant Demographic Information.....	34
Glossary.....	37

Actuarial Valuation Opinion

This report presents the results of the actuarial valuation of the "Other" Post-Employment Benefits ("OPEB") provided under the State of Maine Retiree Healthcare Plan for State Employees ("State Employees"), Maine Educational Center for the Deaf and Hard of Hearing ("Baxter School"), and Northern New England Passenger Rail Authority ("NNEPRA") as of June 30, 2023. Throughout this report, the Baxter School and NNEPRA will be referred to collectively as the "Ancillary Groups". In our opinion, this report is complete and accurate and represents fairly the actuarial position of the Plan for the purposes stated herein.

The actuarial valuation has been prepared based on participant data, financial information, and plan descriptions as of June 30, 2023. The actuary has analyzed the data and other information provided for reasonableness but has not independently audited the data. Estimates were made where data was missing or unavailable. The actuary has no reason to believe the data and other information is not 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, which are each reasonable (or consistent with authoritative guidance) for the purposes described herein taking into account the experience of the Plans 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 end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Our scope 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.

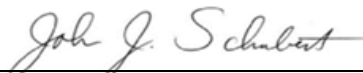
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Background and Comments

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 plans. GASB No. 75 requires employers and non-employer contributing entities to accrue the cost of post-employment benefits other than pensions ("OPEB") while eligible employees are providing services to the employer. The State of Maine first adopted GASB No. 74 for the June 30, 2017 Reporting Date and GASB No. 75 for the June 30, 2018 Reporting Date (using a Measurement Date of June 30, 2017).

The purpose of this actuarial valuation report is to provide information that will serve as the basis for the State of Maine's trust and employer financial reporting. The information provided herein will be used for the Reporting Dates for fiscal years ending June 30, 2024 and June 30, 2025 (for GASB No. 75 the State of Maine has elected to use a measurement date as of the end of the prior fiscal year). GASB Nos. 74 and 75 disclosures will be provided under separate cover.

Overview of Plan

The State of Maine provides a Retiree Healthcare Plan for State and Ancillary Groups. To be eligible for reimbursement from the State, a retiree must be receiving a retirement benefit from the Maine Public Employees Retirement System ("MainePERS"). For employees retiring after January 1, 2012 (July 1, 2012 for Baxter School) the reimbursement from the State shall begin when the retiree reaches normal retirement age with at least one year of service under MainePERS; normal retirement age defined as:

Tier 1 - Be at least 60 years of age with at least 10 years of service on 7/1/1993

Tier 2 - Be at least 62 years of age with less than 10 years of service on 7/1/1993 or hired on/after 7/1/1993 but had 5 years of service on 7/1/2011

Tier 3 - Be at least 65 years of age with less than 5 years of service on 7/1/2011 or hired on/after 7/1/2011

Normal retirement eligibility occurs upon attainment of 25 years of service, if earlier.

Additional eligibility provisions for MainePERS special plans are discussed in Section 10 – Summary of Substantiative Plan Provisions of this report.

State of Maine Contributions

The State of Maine contributes the following towards retiree premiums.

Hire Date ≤ 7/1/91	7/1/91 < Hire Date < 7/1/11		Hire Date ≥ 7/1/11	
100% of Retiree Premium	Years in Medical	% Retiree Premium	Years in Medical	% Retiree Premium
	< 5	0%	< 10	0%
	5	50%	10-14	50%
	6	60%	15-19	75%
	7	70%	≥ 20	100%
	8	80%		
	9	90%		
	≥ 10	100%		

- Percent of the retiree-only medical premium above based on:
 - Single rate for single and employee + child(ren) coverage
 - 50% of 2-party rate for 2-party and family coverage
- No State cash subsidy until retiree reaches normal retirement age for non-special plan service retirements ≥ 1/1/12 (7/1/12 for Baxter School and teachers in unorganized territories)
- Disability retirement benefits are 100% vested and cash subsidy begins at disability retirement

Retirees pay the remaining portion of the retiree-only premium and/or the full additional premium for spouse and family coverage. There is no explicit benefit for surviving spouses.

As of July 1, 2018, retirees who were currently over the age of 65 and not eligible for Medicare were given the option to remain on State's self-insured plan or to move to a fully-insured Medicare Advantage plan. It is our understanding the same level of benefits continue to be provided for these individuals in the Medicare Advantage plan and this change was implemented to more cost-effectively deliver post-65 benefits. All future retirees will not be given the option to stay on the State's self-insured plan and will be covered by a fully-insured Medicare Advantage plan.

- For those who elected the Medicare Advantage Plan, the State of Maine is also reimbursing the Medicare Part B premium and any applicable penalty. Only those who were given the option to move to this plan will have these amounts covered by the State.

The substantive plan benefits are described in Section 10 – Summary of Substantiative Plan Provisions of this report.

Implicit Rate Subsidy

GASB Nos. 74 and 75 require that employers/non-employer contributing entities recognize the Implicit Rate Subsidy that exists in many postretirement medical plans provided by governmental employers. The Implicit Rate Subsidy refers to the concept that retirees under the age of 65 (i.e., not eligible for Medicare) generate higher claims on average than active participants.

When a medical plan is self-insured through a third-party administrator or fully insured, a premium is usually determined by analyzing the claims of the entire population in that plan and adjusting for administrative costs. The resulting premium is called a blended premium because it blends the claims of active and retired participants. Since individuals generally have more and higher claims as they get older, the blended premium paid for retirees is lower than their expected claims. Another way of considering this is that if the retirees were removed from the plan, the

premium for the active group would be lower; therefore, the retirees' premiums are being subsidized by the active group. Since the employer generally pays a large portion or all of the premiums for the active group, this subsidy creates a liability for the employer. The difference between the expected claims for the retiree group and the blended premium is called the Implicit Rate Subsidy.

Valuations for both State employees and Ancillary Groups include the implicit rate subsidy for retirees, spouses, and surviving spouses to age 65, other than the following:

- As of July 1, 2018, retirees who were currently over the age of 65 and not eligible for Medicare were given the option to remain on State's self-insured plan or to move to a fully-insured Medicare Advantage plan. For those remaining on the State's self-insured plan the implicit subsidy is valued for life.

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 considered in this valuation. On December 18, 2015, the Consolidated Appropriations Act, 2016 became law. This legislation delayed the effective date of the high cost plan excise tax from 2018 to 2020 and made it tax deductible. On January 22, 2018, the Federal Register Printing Savings Act further delayed the effective date from 2020 to 2022. 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
- Reflecting manufacturer discounts available to certain Medicare beneficiaries receiving applicable covered Part D drugs (mostly brand) while in the coverage gap
- 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 Section 8.

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 the Actuarial Assumptions Summary section of this report (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, including:
 - Define new standard Part D with three phases: deductible, initial coverage, catastrophic
 - Limit maximum out-of-pocket (“MOOP”) to \$2,000 for beneficiaries
 - 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 actuarial methods and assumptions are described in Section 8 – Summary of Actuarial Methods & Assumptions of this report.

The majority of the State and Ancillary Group Employees covered under this plan are participants in the MainePERS State and Teacher Retirement Program. For this reason, several demographic assumptions are selected to be consistent with the most recently available active lives actuarial valuation of that plan.

For the State Employees Plan, benefits are funded in the State Employees Trust Fund. The Trust is projected to have sufficient assets to meet projected benefit payments in all future years. As prescribed by GASB Nos. 74 and 75, the discount rate will be based on the expected long-term rate of future investment return on the assets that are expected to be used to finance the payment of benefits. State of Maine has elected to use a discount rate of 6.5%. Since the State of Maine has funded its liability with investments held in a separate trust, those assets should be used as the basis for the selection of the discount rate.

To recommend a discount rate for the State of Maine, we used a “building block” method, as outlined in the Actuarial Standards of Practice (“ASOP”) for “Selection of Economic Assumptions for Measuring Pension Obligations” (No. 27). Under the “building block” method, the expected future investment of a portfolio is estimated using the following information and estimates:

1. The expected long-term inflation level;
2. The broad asset classes making up the portfolio and their proportion of total assets; and
3. For each asset class, the expected long-term real return (excess above inflation) of that asset class.

The expected future return of each asset class is then the sum of (1) and (3) above, and the expected future portfolio return is the weighted average of the asset class returns, where the weights are the proportions in (2) above.

Since the Ancillary Groups’ postretirement medical plans are not being funded by assets in a separate trust, GASB No. 75 requires that the discount rate be based on the index rate as of the measurement date of a 20-year tax-exempt general obligation municipal bond index with an average rating of AA/Aa or higher. The State of Maine elected to determine the discount rate using the Bond Buyer 20-Bond General Obligation Index. The discount rate was 3.65% as of the measurement date, June 30, 2023 (2.16% as of June 30, 2021).

Claim costs for those covered by the State of Maine self-insured plan were developed with consideration of the 2023 premium rates developed by the State of Maine and by applying appropriate age factors to average annual costs per member.

Premium costs for those covered by a Group Medicare Advantage Plan are based on the applicable fully-insured premiums.

For the June 30, 2023 valuation, the valuation was based on the same plan provisions and actuarial methods and assumptions as the previous valuation with the exception of the following:

- The discount rate assumption was updated to 3.65% for the Ancillary Groups;
- The annual medical claims costs and premiums were updated based on recent experience; and
- Healthcare cost trend rates were updated based on 2024 premium rates and projected 2025 premium rates (if available), industry observations, the most current SOA-Getzen model, an adjustment to short-term trend rates to estimate the impact of the current general inflation environment, and an adjustment for expected IRA impact.

The effect of these changes on the Actuarial Accrued Liability is summarized in Section 3 – Actuarial Experience of the report. The actuarial methods and assumptions are described in more detail later in this report.

Valuation Results

Section 1 – Summary of Actuarial Valuation Results

Presented below are the current and prior actuarial valuation results. All information is provided as of the valuation date shown. Dollar amounts are in thousands.

State Employees

	Valuation Date	
	June 30, 2023	June 30, 2021
1. Actuarial Accrued Liability	\$778,598	\$1,057,381
2. Actuarial Value of Assets	429,414	321,098
3. Unfunded Actuarial Accrued Liability (UAAL) (1) - (2)	\$349,184	\$736,283
4. Funded ratio (2 / 1)	55.15%	30.37%
5. UAAL as a percentage of covered payroll (3 / 8b)	44.46%	99.98%
6. Normal Cost	\$12,482	\$17,706
7. Discount Rate	6.50%	6.50%
8. Actuarially Determined Contribution	\$27,551	\$52,922
9. Census Data Used		
a. Count of Covered Participants		
Actives	12,101	12,113
Terminated Vested - Eligible for Participation	182	173
Retirees	8,713	8,767
Total	20,996	21,053
b. Covered Payroll	\$785,462	\$736,411
10. Expected Benefit Payments	\$53,497	\$65,098

Section 1 – Summary of Actuarial Valuation Results (Cont.)

Presented below are the current and prior actuarial valuation results. All information is provided as of the valuation date shown. Dollar amounts are in thousands.

<i>Baxter School</i>	Valuation Date	
	June 30, 2023	June 30, 2021
1. Actuarial Accrued Liability	\$3,452	\$6,644
2. Actuarial Value of Assets	0	0
3. Unfunded Actuarial Accrued Liability (UAAL) (1) - (2)	\$3,452	\$6,644
4. Funded ratio (2 / 1)	0.00%	0.00%
5. UAAL as a percentage of covered payroll (3 / 8b)	77.56%	171.68%
6. Normal Cost	\$124	\$257
7. Discount Rate	3.65%	2.16%
8. Census Data Used		
a. Count of Covered Participants		
Actives	82	77
Terminated Vested - Eligible for Participation	2	8
Retirees	37	37
Total	121	122
b. Covered Payroll	4,451	3,870
9. Expected Benefit Payments	\$176	\$289

Section 1 – Summary of Actuarial Valuation Results (Cont.)

Presented below are the current and prior actuarial valuation results. All information is provided as of the valuation date shown. Dollar amounts are in thousands.

NNEPRA	Valuation Date	
	June 30, 2023	June 30, 2021
1. Actuarial Accrued Liability	\$394	\$555
2. Actuarial Value of Assets	0	0
3. Unfunded Actuarial Accrued Liability (UAAL) (1) - (2)	\$394	\$555
4. Funded ratio (2 / 1)	0.00%	0.00%
5. UAAL as a percentage of covered payroll (3 / 8b)	40.87%	61.87%
6. Normal Cost	\$16	\$39
7. Discount Rate	3.65%	2.16%
8. Census Data Used		
a. Count of Covered Participants		
Actives	10	10
Terminated Vested - Eligible for Participation	1	0
Retirees	2	2
Total	13	12
b. Covered Payroll	964	897
9. Expected Benefit Payments	\$5	\$7

Section 2 – Actuarial Value of Assets

This section provides a summary of the development of the actuarial value of assets. All information is provided as of the measurement date. This section is not applicable to the Baxter School or NNEPRA. Dollar amounts are in thousands.

State Employees

	June 30, 2023	June 30, 2022
1. Market value of assets (MVA) at beginning of year	\$331,180	\$382,842
a. Contributions	148,265	82,158
b. Benefit Payments	(83,265)	(80,158)
c. Administrative Expenses	(3)	(3)
d. Expected Investment Earnings	21,527	24,885
2. Expected MVA at end of year: (1a)+(1b)+(1c)+(1d)	\$417,704	\$409,724
3. Actual MVA at end of year	\$432,679	\$331,180
4. Actuarial value of assets (AVA) at beginning of year	\$341,409	\$321,098
a. Contributions	148,265	82,158
b. Benefit Payments	(83,265)	(80,158)
c. Administrative Expenses	(3)	(3)
d. Expected Investment Earnings	22,191	20,871
5. Expected AVA at end of year: (4a)+(4b)+(4c)+(4d)	\$428,597	\$343,966
6. MVA - Expected AVA: (3) - (5)	\$4,082	(\$12,786)
7. 1/5 of (MVA - Expected AVA)	\$816	(\$2,557)
8. Preliminary AVA: (5) + (7)	\$429,414	\$341,409
9. Minimum AVA (80% of MVA)	\$346,143	\$264,944
10. Maximum AVA (120% of MVA)	\$519,215	\$397,416
11. AVA at the end of the year	\$429,414	\$341,409

Amounts may be off by \$1,000 due to rounding

Section 3 – 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 Actuarial Accrued Liability due to these sources from June 30, 2021 to June 30, 2023. Dollar amounts are in thousands.

State Employees

1. Actuarial Accrued Liability as of June 30, 2021	\$1,057,381
2. Normal Cost for year ending June 30, 2022	17,706
3. Actual Benefit Payments for the year ending June 30, 2022	(80,158)
4. Interest at 6.50% on (1), (2) and (3)	67,317
5. Expected Actuarial Accrued Liability as of June 30, 2022 (1) + (2) + (3) + (4)	\$1,062,246
6. Normal Cost for year ending June 30, 2023	18,237
7. Actual Benefit Payments for the year ending June 30, 2023	(83,265)
8. Interest at 6.50% on (5), (6) and (7)	67,568
9. Expected Actuarial Accrued Liability as of June 30, 2023 (5) + (6) + (7) + (8)	\$1,064,786
10. (Gain)/Loss	
i. Demographic Experience	10,646
ii. Claims/Premiums Experience	(353,466)
iii. Change in Assumptions	56,632
iv. Total (Gain)/Loss	(286,188)
11. Actual Actuarial Accrued Liability as of June 30, 2023 (9) + (10)(iii)	\$778,598

Section 3 – Actuarial Experience (Cont.)

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 Actuarial Accrued Liability due to these sources from June 30, 2021 to June 30, 2023. Dollar amounts are in thousands.

Baxter School

1. Actuarial Accrued Liability as of June 30, 2021	\$6,644
2. Normal Cost for year ending June 30, 2022	257
3. Actual Benefit Payments for the year ending June 30, 2022	(92)
4. Interest at 2.16% on (1), (2) and (3)	148
5. Expected Actuarial Accrued Liability as of June 30, 2022 (1) + (2) + (3) + (4)	\$6,957
6. Normal Cost for year ending June 30, 2023	265
7. Actual Benefit Payments for the year ending June 30, 2023	(73)
8. Interest at 2.16% on (5), (6) and (7)	155
9. Expected Actuarial Accrued Liability as of June 30, 2023 (5) + (6) + (7) + (8)	\$7,304
10. (Gain)/Loss	
i. Demographic Experience	(865)
ii. Claims/Premiums Experience	(2,620)
iii. Change in Discount Rate to 3.65%	(759)
iv. Change in Other Assumptions	392
v. Total (Gain)/Loss	(3,852)
11. Actual Actuarial Accrued Liability as of June 30, 2023 (9) + (10)(iv)	\$3,452

Section 3 – Actuarial Experience (Cont.)

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 Actuarial Accrued Liability due to these sources from June 30, 2021 to June 30, 2023. Dollar amounts are in thousands.

NNEPRA

1. Actuarial Accrued Liability as of June 30, 2021	\$555
2. Normal Cost for year ending June 30, 2022	39
3. Actual Benefit Payments for the year ending June 30, 2022	(6)
4. Interest at 2.16% on (1), (2) and (3)	13
5. Expected Actuarial Accrued Liability as of June 30, 2022 (1) + (2) + (3) + (4)	\$601
6. Normal Cost for year ending June 30, 2023	40
7. Actual Benefit Payments for the year ending June 30, 2023	(7)
8. Interest at 2.16% on (5), (6) and (7)	14
9. Expected Actuarial Accrued Liability as of June 30, 2023 (5) + (6) + (7) + (8)	\$648
10. (Gain)/Loss	
i. Demographic Experience	223
ii. Claims/Premiums Experience	(382)
iii. Change in Discount Rate to 3.65%	(144)
iv. Change in Other Assumptions	49
v. Total (Gain)/Loss	(254)
11. Actual Actuarial Accrued Liability as of June 30, 2023 (9) + (10)(v)	\$394

Section 4 – Development of Unfunded Actuarial Accrued Liability

Presented below is the development of the Unfunded Actuarial Accrued Liability as of June 30, 2023, which is the Actuarial Accrued Liability minus the Actuarial Value of Assets. The Actuarial Accrued Liability is the portion of the Present Value of Future Benefits accrued to date. The Present Value of Future Normal Costs represents the portion of the Present Value of Future Benefits expected to accrue in the future, based on the current population. Dollar amounts are in thousands.

State Employees

	Explicit Subsidy	Implicit Subsidy	Total
1. Present Value of Future Benefits			
Actives	\$325,533	\$73,274	\$398,807
Terminated Vested	4,379	1,082	5,461
Retirees and beneficiaries	380,208	94,200	474,408
Total	<u>\$710,120</u>	<u>\$168,556</u>	<u>\$878,676</u>
2. Present Value of Future Normal Costs	\$81,092	\$18,986	\$100,078
3. Actuarial Accrued Liability			
Actives	\$244,441	\$54,288	\$298,729
Terminated Vested	4,379	1,082	5,461
Retirees and beneficiaries	380,208	94,200	474,408
Total	<u>\$629,028</u>	<u>\$149,570</u>	<u>\$778,598</u>
4. Actuarial Value of Assets			\$429,414
5. Unfunded Actuarial Accrued Liability (3) - (4)			\$349,184

Section 4 – Development of Unfunded Actuarial Accrued Liability (Cont.)

Presented below is the development of the Unfunded Actuarial Accrued Liability as of June 30, 2023, which is the Actuarial Accrued Liability minus the Actuarial Value of Assets. The Actuarial Accrued Liability is the portion of the Present Value of Future Benefits accrued to date. The Present Value of Future Normal Costs represents the portion of the Present Value of Future Benefits expected to accrue in the future, based on the current population. Dollar amounts are in thousands.

Baxter School

	Explicit Subsidy	Implicit Subsidy	Total
1. Present Value of Future Benefits			
Actives	\$2,351	\$296	\$2,647
Terminated Vested	70	29	99
Retirees and beneficiaries	2,059	93	2,152
Total	<u>\$4,480</u>	<u>\$418</u>	<u>\$4,898</u>
2. Present Value of Future Normal Costs	\$1,258	\$188	\$1,446
3. Actuarial Accrued Liability			
Actives	\$1,093	\$108	\$1,201
Terminated Vested	70	29	99
Retirees and beneficiaries	2,059	93	2,152
Total	<u>\$3,222</u>	<u>\$230</u>	<u>\$3,452</u>
4. Actuarial Value of Assets			-
5. Unfunded Actuarial Accrued Liability (3) - (4)			\$3,452

Section 4 – Development of Unfunded Actuarial Accrued Liability (Cont.)

Presented below is the development of the Unfunded Actuarial Accrued Liability as of June 30, 2023, which is the Actuarial Accrued Liability minus the Actuarial Value of Assets. The Actuarial Accrued Liability is the portion of the Present Value of Future Benefits accrued to date. The Present Value of Future Normal Costs represents the portion of the Present Value of Future Benefits expected to accrue in the future, based on the current population. Dollar amounts are in thousands.

NNEPRA

	Explicit Subsidy	Implicit Subsidy	Total
1. Present Value of Future Benefits			
Actives	\$335	\$40	\$375
Terminated Vested	126	27	153
Retirees and beneficiaries	56	-	56
Total	<u>\$517</u>	<u>\$67</u>	<u>\$584</u>
2. Present Value of Future Normal Costs	\$171	\$19	\$190
3. Actuarial Accrued Liability			
Actives	\$164	\$21	\$185
Terminated Vested	126	27	153
Retirees and beneficiaries	56	-	56
Total	<u>\$346</u>	<u>\$48</u>	<u>\$394</u>
4. Actuarial Value of Assets			-
5. Unfunded Actuarial Accrued Liability (3) - (4)			\$394

Section 5 – Schedule of Amortization Balances for Actuarially Determined Contributions

State Employees

	Original Bases			Remaining Bases June 30, 2023		2023/24 End of Year Amortization Payment ²
	Date	Years	Amount ¹	Years	Balance ²	
Initial UAAL	6/30/2008	29	1,144,000	14	698,021	65,386
Experience Losses (Gains)	6/30/2015	10	(25,000)	2	(917)	(496)
	6/30/2016	10	(33,000)	3	(12,482)	(4,580)
	6/30/2017	10	7,139	4	1,428	400
	6/30/2018	10	4,459	5	1,303	296
	6/30/2019	10	(58,859)	6	(23,372)	(4,503)
	6/30/2020	10	(1,775)	7	(897)	(151)
	6/30/2021	10	(83,941)	8	(51,747)	(7,721)
	6/30/2022	10	26,378	9	20,390	2,748
	6/30/2023	10	(360,713)	10	(360,713)	(44,445)
Assumption Changes	6/30/2010	27	35,000	14	19,761	1,851
	6/30/2011	26	266,000	14	162,553	15,227
	6/30/2012	25	(32,000)	14	(19,124)	(1,791)
	6/30/2014	23	(16,000)	14	(10,199)	(955)
	6/30/2016	21	33,000	14	21,036	1,971
	6/30/2017	20	(13,044)	14	(8,456)	(792)
	6/30/2019	18	517	14	359	34
	6/30/2021	16	(77,919)	14	(60,036)	(5,624)
	6/30/2023	14	56,632	14	56,632	5,305
Plan Change	6/30/2011	26	(139,000)	14	(84,782)	(7,942)
	6/30/2021	16	554	14	427	40
Unfunded AAL					\$349,184	\$14,257

¹ All bases for years ending 6/30/2016 and earlier were determined by the prior plan actuary.

² Totals may not match the sum of individual amounts due to rounding.

Section 6 – Determination of Actuarially Determined Contributions

GASB 75 requires the disclosure of the Actuarially Determined Contribution (“ADC”). The following is a brief explanation of the components of the ADC:

- **Normal Cost:** The portion of the total present value of benefits attributed to employee service during the current fiscal year.
- **Amortization Payments:** Total amortization payments detailed in Section 5 – Schedule of Amortization Balances of Actuarially Determined Contributions.
 - Unfunded liability as of 6/30/2007 amortized over 30 years (fully recognized by 6/30/2037)
 - Experience losses (gains) amortized over 10 years
 - Assumptions changes and plan changes amortized over period to 6/30/2037 (14-year fixed period from 6/30/2023)
 - Actual contributions greater than or less than ADC are allocated to each existing amortization base

Presented below is an illustration of the ADC for the fiscal year ending June 30, 2024. Dollar amounts are in thousands.

State Employees

1. Normal Cost (with interest)	\$ 13,294
2. Sum of Amortizations from Section 6 (with interest)	<u>14,257</u>
3. Actuarially Determined Contribution: (1) + (2)	\$ 27,551
4. Expected Pay-as-you-go Cost for Fiscal Year Ending June 30, 2024	\$ 53,497

Section 7 – 10-Year Projection of Employer Benefit Payments

Presented below are the projected employer benefit payments for the next ten years based on the current plan design. These projected benefit payments are based on actuarial assumptions shown in Section 8 - Summary of Actuarial Methods & Assumptions. If actual experience differs from that expected by the actuarial assumptions, the actual employer benefit payments will vary from those presented below. Dollar amounts are in thousands.

State Employees

Year Ending	Explicit Subsidy	Implicit Subsidy	Total Benefit Payments
6/30/2024	\$40,173	\$13,324	\$53,497
6/30/2025	38,387	13,791	52,178
6/30/2026	40,755	13,939	54,694
6/30/2027	42,061	13,428	55,489
6/30/2028	43,020	13,498	56,518
6/30/2029	44,410	13,346	57,756
6/30/2030	45,462	13,176	58,638
6/30/2031	46,993	13,448	60,441
6/30/2032	48,019	13,328	61,347
6/30/2033	49,325	13,478	62,803

Baxter School

Year Ending	Explicit Subsidy	Implicit Subsidy	Total Benefit Payments
6/30/2024	\$156	\$20	\$176
6/30/2025	135	22	157
6/30/2026	135	11	146
6/30/2027	144	18	162
6/30/2028	149	20	169
6/30/2029	154	22	176
6/30/2030	163	25	188
6/30/2031	180	27	207
6/30/2032	188	38	226
6/30/2033	184	32	216

NNEPRA

Year Ending	Explicit Subsidy	Implicit Subsidy	Total Benefit Payments
6/30/2024	\$5	\$-	\$5
6/30/2025	4	-	4
6/30/2026	5	1	6
6/30/2027	13	4	17
6/30/2028	15	5	20
6/30/2029	17	7	24
6/30/2030	8	-	8
6/30/2031	8	1	9
6/30/2032	8	2	10
6/30/2033	10	-	10

Basis for the Valuation

Section 8 – Summary of Actuarial Methods & Assumptions

Actuarial Cost Method

The Actuarial Cost Method used in this valuation to determine the Actuarial Accrued Liability was the Entry Age Normal Percent of Pay method.

This method is one of the family of projected benefit cost methods. An estimate of the projected benefit payable at retirement is initially required to determine costs and liabilities under this method.

The Normal Cost is the annual allocation required for each participant from entry date to 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 percentage of pay.

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 Costs is equal to the discounted value of the normal costs allocated from the member's current age to retirement age.

The difference between the Present Value of Future Benefits and the Present Value of Future Normal Costs represents the Actuarial Accrued Liability at the participant's current age.

The Actuarial Accrued Liability for participants currently receiving benefits and terminated vested participants is calculated as the Present Value of Future Benefits expected to be paid. No Normal Cost is payable for these participants.

This actuarial cost method is required by GASB No. 75.

Actuarial Value of Assets

Investment gains and losses are spread over a 5-year period, with the resulting Actuarial Value of Assets limited to be not less than 80% nor more than 120% of market value.

Investment Policy

Asset Class	<u>Target Allocation</u>	<u>June 30, 2023</u> <u>Actual Allocation</u>
International Equity	25.0%	23.7%
US Fixed Income	25.0%	20.0%
US Equity	45.0%	37.5%
Real Estate	5.0%	3.7%
Cash	0.0%	15.1%*
Total	100.0%	100.0%

*\$65M contribution from FY2023

Section 8 – Summary of Actuarial Methods & Assumptions (Cont.)

Funding Policy

For State employees:

- Initial prefunding contribution of \$100 million for 2007/08
- Phase into funding at least the full Actuarially Determined Contribution (“ADC”) funding over 10-year period beginning with 2009/10:

Fiscal Year	Funding Policy Contribution
2007/08	PayGo + \$100 million
2008/09	PayGo
2009/10	PayGo + 10% x (ADC – PayGo)
2010/11	PayGo + 20% x (ADC – PayGo)
2011/12	PayGo + 30% x (ADC – PayGo)
2012/13	PayGo + 40% x (ADC – PayGo)
2013/14	PayGo + 50% x (ADC – PayGo)
2014/15	PayGo + 60% x (ADC – PayGo)
2015/16	PayGo + 70% x (ADC – PayGo)
2016/17	PayGo + 80% x (ADC – PayGo)
2017/18	PayGo + 90% x (ADC – PayGo)
2018/19+	100% of ADC

The State is currently funding the State plan at a minimum of 100% of the ADC.

The State is currently funding the Ancillary plans on a pay-as-you-go basis. This valuation assumes the State will continue this policy.

Amortization Method and Periods

Amortization Method: Level percent of payroll

Amortization periods for determining the ADC for the State:

- Unfunded liability as of 6/30/2007 amortized over 30 years (fully recognized by 6/30/2037)
- Experience losses (gains) amortized over 10 years
- Assumptions changes and plan changes amortized over period to 6/30/2037 (14-year fixed period from 6/30/2023)
- Actual contributions greater than or less than ADC are allocated to each existing amortization base

Financial and Census Data

The State of Maine 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.

Section 8 – Summary of Actuarial Methods & Assumptions (Cont.)

Census Date

June 30, 2023

Measurement Date

June 30, 2023

Method Changes Since Prior Valuation

None.

Section 8 – Summary of Actuarial Methods & Assumptions (Cont.)

Discount Rate	<u>State</u> 6.50%, representing the expected long-term rate of return on the assets expected to be used to pay plan benefits. <u>Ancillary</u> 3.65%, based on a broad 20-year municipal bond index (Bond Buyer GO 20) as of June 30, 2023.																																																												
Healthy Mortality	Rates are based on the 2010 Public Plan General Headcount-Weighted Employee and Healthy Retiree Mortality Tables and MP-2020 Mortality Improvement Scale with the following adjustments: <ul style="list-style-type: none">Adjustment of 83.5% for males and 88.6% for females applied to the base Employee mortality ratesAdjustment of 112.1% for males and 118.5% for females applied to the base Healthy Retiree mortality ratesMP-2020 Mortality Improvement Scale adjusted to use an ultimate rate of 1.00% for ages 20-80, grading down to 0.05% at age 95, grading down to an ultimate rate of 0.00% at age 115, and convergence to the ultimate rate in the year 2027.																																																												
Disabled Mortality	Rates are based on the 2010 Public Plan Non-Safety Headcount-Weighted Disabled Retiree Mortality Tables and MP-2020 Mortality Improvement Scale with the following adjustments: <ul style="list-style-type: none">Adjustment of 107.3% for males and 103.2% for females applied to the base Disabled Retiree mortality ratesMP-2020 Mortality Improvement Scale adjusted to use an ultimate rate of 1.00% for ages 20-80, grading down to 0.05% at age 95, grading down to an ultimate rate of 0.00% at age 115, and convergence to the ultimate rate in the year 2027.																																																												
Termination	Sample Rates of Termination at Selected Years of Service: <table><tr><th><u>Service</u></th><th><u>State</u></th><th><u>Age</u></th><th><u>Judicial</u></th><th><u>Service</u></th><th><u>Legislative</u></th></tr><tr><td>0</td><td>32.5%</td><td>25</td><td>7.0%</td><td>0</td><td>0.0%</td></tr><tr><td>5</td><td>10.0%</td><td>30</td><td>6.0%</td><td>1</td><td>5.0%</td></tr><tr><td>10</td><td>6.0%</td><td>35</td><td>5.0%</td><td>2</td><td>10.0%</td></tr><tr><td>15</td><td>4.0%</td><td>40</td><td>4.0%</td><td>3</td><td>15.0%</td></tr><tr><td>20</td><td>3.0%</td><td>45</td><td>3.0%</td><td>4</td><td>20.0%</td></tr><tr><td>25</td><td>2.5%</td><td>50</td><td>2.0%</td><td>5</td><td>25.0%</td></tr><tr><td></td><td></td><td>55</td><td>1.0%</td><td>6</td><td>30.0%</td></tr><tr><td></td><td></td><td></td><td></td><td>7</td><td>40.0%</td></tr><tr><td></td><td></td><td></td><td></td><td>8+</td><td>50.0%</td></tr></table>	<u>Service</u>	<u>State</u>	<u>Age</u>	<u>Judicial</u>	<u>Service</u>	<u>Legislative</u>	0	32.5%	25	7.0%	0	0.0%	5	10.0%	30	6.0%	1	5.0%	10	6.0%	35	5.0%	2	10.0%	15	4.0%	40	4.0%	3	15.0%	20	3.0%	45	3.0%	4	20.0%	25	2.5%	50	2.0%	5	25.0%			55	1.0%	6	30.0%					7	40.0%					8+	50.0%
<u>Service</u>	<u>State</u>	<u>Age</u>	<u>Judicial</u>	<u>Service</u>	<u>Legislative</u>																																																								
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Disability	Disability at Selected Ages: <table><tr><th><u>Age</u></th><th><u>State</u></th><th><u>Special Plans</u></th></tr><tr><td>25</td><td>0.025%</td><td>0.054%</td></tr><tr><td>30</td><td>0.031%</td><td>0.065%</td></tr><tr><td>35</td><td>0.093%</td><td>0.099%</td></tr><tr><td>40</td><td>0.140%</td><td>0.158%</td></tr><tr><td>45</td><td>0.160%</td><td>0.244%</td></tr><tr><td>50</td><td>0.180%</td><td>0.364%</td></tr><tr><td>55</td><td>0.250%</td><td>0.426%</td></tr><tr><td>60</td><td>0.434%</td><td>0.464%</td></tr></table> <p>Legislative and Judicial: no disability assumed.</p>	<u>Age</u>	<u>State</u>	<u>Special Plans</u>	25	0.025%	0.054%	30	0.031%	0.065%	35	0.093%	0.099%	40	0.140%	0.158%	45	0.160%	0.244%	50	0.180%	0.364%	55	0.250%	0.426%	60	0.434%	0.464%																																	
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Section 8 – Summary of Actuarial Methods & Assumptions (Cont.)

Retirement	Retirement at Selected Ages (see Section 10 for Tier eligibility):			
	<u>Age</u>	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 3</u>
	57	4.0%	3.5%	0.0%
	59	26.0%	4.0%	0.0%
	60	21.0%	5.0%	2.0%
	61	21.0%	35.0%	2.0%
	62	21.0%	27.0%	5.0%
	63	25.0%	18.0%	8.0%
	64	19.0%	20.0%	30.0%
	65	21.0%	22.0%	25.0%
	70	20.0%	20.0%	20.0%
	75	35.0%	35.0%	25.0%
	80	100%	100%	100%
	<u>Legislative*</u>			
	<ul style="list-style-type: none"> • Tier 1: 12.5% every year starting at age 60 • Tier 2: 12.5% every year starting at age 62 • Tier 3: 12.5% every year starting at age 65 • 100% at age 70 			
	*Due to model constraints, the 12.5% assumption in each year is meant to approximate the 25.0% assumption in every other year used by the MainePERS Legislative Retirement Program.			
	<u>Judicial</u>			
	<u>Age</u>	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 3</u>
	60	100%	0.0%	0.0%
	61	100%	0.0%	0.0%
	62	100%	20.0%	0.0%
	63	100%	27.5%	0.0%
	64	100%	35.0%	0.0%
	65	100%	42.5%	40.0%
	70	100%	30.0%	30.0%
	75	100%	25.0%	25.0%
	80	100%	100%	100%
	<u>State 1998 Special Plan</u>			
		Service		
	<u>Age</u>	<u><25</u>	<u>>=25</u>	
	55	20.0%	25.0%	
	57	10.0%	25.0%	
	60	20.0%	30.0%	
	62	30.0%	30.0%	
	65	23.4%	30.0%	
	67	36.8%	50.0%	
	70	100.0%	100.0%	

Section 8 – Summary of Actuarial Methods & Assumptions (Cont.)

Retirement (Continued)	<u>25 and Out Plan</u>																																																													
	<u>Service</u>	<u>Rate</u>																																																												
	25	25.0%																																																												
	35	40.0%																																																												
	38+	100.0%																																																												
	<u>All Other Special Plans</u>																																																													
	50% per year once eligibility for unreduced benefits is reached, with a 100% assumed rate at age 70.																																																													
Healthcare Cost Increases	Medical trend rates were developed using a combination of trend surveys and the SOA-Getzen trend rate model. Initial trend rates start at -34.13% - 7.16% in 2024 based on 2024 premium rates (if available), industry observations, and survey data. The SOA-Getzen model was then used to determine the trend rates beginning in year 2028 and thereafter based on reasonable macro-economic assumptions for the growth of health care expenditures during this period relative to the general economy.																																																													
	The short-term trend rates 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 2.75%) is assumed to be reflected in higher medical costs. Based on historical observations of CPI-U for medical care lagging general CPI-U, this increase is spread out over a two-year period starting in the fiscal year ending 2024.																																																													
	<table><tr><th><u>Plan Year*</u></th><th><u>Rate</u></th></tr><tr><td>2024</td><td>7.16%**</td></tr><tr><td>2025</td><td>7.09%***</td></tr><tr><td>2026</td><td>5.65%</td></tr><tr><td>2027</td><td>5.58%</td></tr><tr><td>2028</td><td>5.50%</td></tr><tr><td>2029</td><td>5.43%</td></tr><tr><td>2030</td><td>5.35%</td></tr><tr><td>2031</td><td>5.28%</td></tr><tr><td>2032</td><td>5.20%</td></tr><tr><td>2033</td><td>5.13%</td></tr><tr><td>2034 - 2035</td><td>4.80%</td></tr><tr><td>2036</td><td>4.79%</td></tr><tr><td>2037</td><td>4.78%</td></tr><tr><td>2038</td><td>4.77%</td></tr></table>	<u>Plan Year*</u>	<u>Rate</u>	2024	7.16%**	2025	7.09%***	2026	5.65%	2027	5.58%	2028	5.50%	2029	5.43%	2030	5.35%	2031	5.28%	2032	5.20%	2033	5.13%	2034 - 2035	4.80%	2036	4.79%	2037	4.78%	2038	4.77%	<table><tr><th><u>Plan Year*</u></th><th><u>Rate</u></th></tr><tr><td>2039 - 2040</td><td>4.76%</td></tr><tr><td>2041</td><td>4.75%</td></tr><tr><td>2042</td><td>4.74%</td></tr><tr><td>2043 - 2044</td><td>4.73%</td></tr><tr><td>2045</td><td>4.72%</td></tr><tr><td>2046 - 2047</td><td>4.71%</td></tr><tr><td>2048 - 2049</td><td>4.70%</td></tr><tr><td>2050</td><td>4.69%</td></tr><tr><td>2051 - 2052</td><td>4.68%</td></tr><tr><td>2053 - 2054</td><td>4.67%</td></tr><tr><td>2055 - 2056</td><td>4.66%</td></tr><tr><td>2057 - 2058</td><td>4.65%</td></tr><tr><td>2059 - 2060</td><td>4.64%</td></tr><tr><td>2061 - 2062</td><td>4.63%</td></tr></table>	<u>Plan Year*</u>	<u>Rate</u>	2039 - 2040	4.76%	2041	4.75%	2042	4.74%	2043 - 2044	4.73%	2045	4.72%	2046 - 2047	4.71%	2048 - 2049	4.70%	2050	4.69%	2051 - 2052	4.68%	2053 - 2054	4.67%	2055 - 2056	4.66%	2057 - 2058	4.65%	2059 - 2060	4.64%	2061 - 2062	4.63%
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	*Year ending June 30																																																													
	**Adjusted to reflect known premium increases from July 1, 2023 to July 1, 2024; 6.40% for Non-Medicare Premiums, -34.13% for Medicare Part A&B Premiums, and -2.98% for Medicare Part B Only Premiums																																																													
	***Adjusted to reflect preliminary premium increases from July 1, 2024 to July 1, 2025, which include the expected impact of IRA; 28.21% for Medicare Part A&B Premiums and 1.14% for Medicare Part B Only Premiums																																																													

Section 8 – Summary of Actuarial Methods & Assumptions (Cont.)

Statutory Limit to Premium Increases	<p>Per Public Law Chapter 368 §H-1: “The total premium increase for fiscal years ending after June 30, 2015 is limited to no more than any percentage increase in the Consumer Price Index as defined in section 17001, subsection 9 plus 3%.” It is our understanding the State actively manages self-insured premium increases within this cap, so premium increases noted on the prior page are limited to no more than inflation plus 3% in any year.</p> <p>For the current valuation the self-insured healthcare premium increases are limited to 5.75% in any year. Claims costs and fully-insured premiums are not subject to this limit.</p>																								
Annual Claims Costs: HMO Choice Plan	<p>Sample Costs at Selected Ages:</p> <table><tr><td><u>Age</u></td><td><u>Males</u></td><td><u>Females</u></td></tr><tr><td>50</td><td>\$10,033</td><td>\$12,368</td></tr><tr><td>55</td><td>13,202</td><td>14,425</td></tr><tr><td>60</td><td>17,052</td><td>16,801</td></tr><tr><td>65</td><td>21,617</td><td>20,540</td></tr><tr><td>70</td><td>26,195</td><td>24,486</td></tr><tr><td>75</td><td>31,269</td><td>28,790</td></tr><tr><td>80</td><td>36,568</td><td>33,265</td></tr></table>	<u>Age</u>	<u>Males</u>	<u>Females</u>	50	\$10,033	\$12,368	55	13,202	14,425	60	17,052	16,801	65	21,617	20,540	70	26,195	24,486	75	31,269	28,790	80	36,568	33,265
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Salary Increases	<p>Sample rates past select years of service:</p> <table><tr><td><u>Service</u></td><td><u>Rate</u></td></tr><tr><td>0</td><td>9.43%</td></tr><tr><td>5</td><td>6.24%</td></tr><tr><td>10</td><td>5.32%</td></tr><tr><td>15</td><td>3.98%</td></tr><tr><td>20</td><td>3.78%</td></tr><tr><td>25+</td><td>3.26%</td></tr></table> <p>2.75% for Legislative and Judicial</p>	<u>Service</u>	<u>Rate</u>	0	9.43%	5	6.24%	10	5.32%	15	3.98%	20	3.78%	25+	3.26%										
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10	5.32%																								
15	3.98%																								
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25+	3.26%																								
Inflation Rate	2.75% annually																								
Aggregate Payroll Increases	3.00% annually																								
Coverage Election	<p>95% of active participants currently with coverage continue coverage at retirement; 20% cover a spouse at retirement</p> <p>20% of active participants who have currently waived coverage elect coverage at retirement.</p> <p>Same assumptions apply to vested terminated participants who have maintained eligibility for coverage at retirement.</p>																								

Section 8 – Summary of Actuarial Methods & Assumptions (Cont.)

Model Use	<p>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 and open group projections to develop service cost of future employees used in the development of the single discount rate 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.</p> <p>An Excel-based model that calculates a long-term rate of return on assets using a target asset allocation and publicly available capital market assumptions by asset class were used to assess the reasonableness of the long-term rate of return assumption.</p> <p>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 ("SOA"), 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 SOA project oversight group.</p>
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Section 9 – Rationale for Assumptions

Discount Rate	<p>State employees – Selected by the State of Maine based on the expected long-term rate of return on the assets expected to be used to pay plan benefits. The selected rate was supported by analyzing the target asset allocation and benchmark return expectations by asset class:</p> <table><thead><tr><th><u>Asset Class</u></th><th><u>Target Allocation</u></th><th><u>Real Return Above Inflation Expectation*</u></th></tr></thead><tbody><tr><td>US Equity</td><td>45%</td><td>6.90%</td></tr><tr><td>International Equity</td><td>25%</td><td>6.91%</td></tr><tr><td>Real Estate</td><td>5%</td><td>5.01%</td></tr><tr><td>US Fixed Income</td><td>25%</td><td>2.46%</td></tr><tr><td>Portfolio Arithmetic Return</td><td>100%</td><td>5.70%</td></tr><tr><td>Portfolio Geometric Return</td><td></td><td>4.89%</td></tr><tr><td>Long-Term Inflation</td><td></td><td>2.75%</td></tr><tr><td>Geometric Return + Inflation</td><td></td><td>7.64%</td></tr></tbody></table> <p>Ancillary Groups - Since the State funds the retiree health benefits on a pay-as-you-go basis for the Ancillary Groups, GASB No. 75 prescribes that the discount rate be based on the index rate of a 20-year tax-exempt general obligation municipal bond index with an average rating of AA/Aa or higher as of the measurement date. The State elected to determine the discount rate using the Bond Buyer 20-Bond General Obligation Index.</p> <p><i>*Horizon Actuarial Services, LLC publishes an annual survey of forward looking expectations by asset class from a number of investment advisors. These return expectations were pulled from the 2023 edition, which reflected the expectations of 42 investment advisors.</i></p> <p>https://www.horizonactuarial.com/survey-of-capital-market-assumptions</p>	<u>Asset Class</u>	<u>Target Allocation</u>	<u>Real Return Above Inflation Expectation*</u>	US Equity	45%	6.90%	International Equity	25%	6.91%	Real Estate	5%	5.01%	US Fixed Income	25%	2.46%	Portfolio Arithmetic Return	100%	5.70%	Portfolio Geometric Return		4.89%	Long-Term Inflation		2.75%	Geometric Return + Inflation		7.64%
<u>Asset Class</u>	<u>Target Allocation</u>	<u>Real Return Above Inflation Expectation*</u>																										
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Geometric Return + Inflation		7.64%																										
Mortality, Termination, Retirement, and Salary Scale	<p>The assumptions used in the actuarial valuation are the same assumptions as the June 30, 2023 actuarial valuation for the MainePERS State and Teacher Retirement Program, with the exception of the base mortality rates.</p> <p>Headcount-weighted base mortality rates were used in this valuation rather than the associated Amount-weighted rates used in the MainePERS valuation. Headcount-weighted mortality rates are more appropriate for retiree medical benefits where the level of benefit is not dependent on employee salary.</p>																											
Healthcare Cost Increases	Rationale described in Section 8 – Summary of Actuarial Methods & Assumptions.																											
Annual Claims Costs: HMO Choice Plan	Based on the 2023 premium rates for actives and non-Medicare-eligible retirees developed by the State of Maine and by applying appropriate age factors to average annual costs per member.																											
Inflation	Inflation is consistent with the assumption used in the June 30, 2023 MainePERS actuarial valuation.																											
Coverage Election	Based on recent experience of the plan.																											
Health Care Reform	Rationale described in the Background and Comments section.																											

Section 10 – Summary of Substantive Plan Provisions

<p>Eligibility</p>	<p>Retire with a retirement benefit from the Maine Public Employees Retirement System (MainePERS). For State Employees retiring after July 1, 2012 the reimbursement from the State shall begin when the retiree reaches normal retirement age with at least one year of service under MainePERS; normal retirement age defined as:</p> <p><u>Tier 1</u> - Be at least 60 years of age; with at least 10 years of service on 7/1/1993</p> <p><u>Tier 2</u> - Be at least 62 years of age; with less than 10 years of service on 7/1/1993 or hired on/after 7/1/1993 but had 5 years of service on 7/1/2011</p> <p><u>Tier 3</u> - Be at least 65 years of age; with less than 5 years of service on 7/1/2011 or hired on/after 7/1/2011</p> <p>Special Plans:</p> <p><u>1998 Special Plan</u> – 55&10 or 25 years</p> <p><u>25 & Out Plan</u> – 25 years</p> <p><u>State Police, Marine Resources Officers, and Inland Fisheries Wildlife Officers Plans</u> – 20 years</p> <p><u>State Prison Plan</u> – 50 & 20</p> <p><u>Forest Rangers Plan</u> – 50 & 25</p> <p>MainePERS disability retirement</p>
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Section 10 – Summary of Substantive Plan Provisions

Benefit	The State of Maine provides access to postretirement medical benefits for eligible participants. While covered by the State's self-insured plan, premiums for retirees are equal to the active member premium rates. In addition to access, the State provides an explicit subsidy to cover some of the premium cost based on the tables below.				
	Once covered by a Medicare Advantage Plan, the State continues to provide the same explicit subsidy to retirees.				
	Hire Date ≤ 7/1/91	7/1/91 < Hire Date < 7/1/11		Hire Date ≥ 7/1/11	
	100% of Retiree Premium	Years in Medical	% Retiree Premium	Years in Medical	% Retiree Premium
		< 5	0%	< 10	0%
		5	50%	10-14	50%
		6	60%	15-19	75%
		7	70%	≥ 20	100%
		8	80%		
		9	90%		
	≥ 10	100%			
	<ul style="list-style-type: none">Cash subsidy of the retiree premium above is based on:<ul style="list-style-type: none">Single rate for single and employee + child(ren) coverage50% of 2-party rate for 2-party and family coverageNo State cash subsidy until retiree reaches normal retirement age for non-special plan service retirements ≥ 1/1/12 (7/1/12 for Baxter School and Teachers in unorganized territories)				
	Disability retirement benefits are 100% vested and cash subsidy begins at disability retirement				
Medicare Part B Reimbursement	As of July 1, 2018, retirees who were currently over the age of 65 and not eligible for Medicare were given the option to remain on the State's self-insured plan or to move to a fully-insured Medicare Advantage plan. For those who elected the Medicare Advantage Plan, the State of Maine is also reimbursing the Medicare Part B premium and any applicable penalty. Only those who were given the option to move to this plan at that time will have these amounts covered by the State.				
	The applicable Part B premium and penalty, as applicable, are provided by the State of Maine in the census data.				
Dependent Benefits	No cash subsidy for spouse or dependents				
	Retiree must pay full cost to cover spouse and/or dependents. Surviving spouses are permitted to continue coverage by paying full cost.				
Dental, Vision, Life	None				

Section 11 – Monthly Premiums

Monthly Premiums

Retirees Monthly Premiums Effective 7/1/2023

State of Maine Self-Insured Plan: HMO Choice	Premiums
Single	\$1,031.70
2-Adult	2,157.88

Medicare Advantage	Premiums
Retirees Eligible for Medicare Part A	\$237.43
Retirees not Eligible for Medicare Part A	737.58

Section 12 – Summary of Participant Demographic Information

The table below presents a summary of the basic participant information as of June 30, 2023 for the active and inactive participants covered under the terms of the Plan. The participant data used in the valuation was provided by the State of Maine.

	State	Baxter	NNEPRA
Active participants			
a. Count	12,101	82	10
b. Average age	47.08	43.03	42.03
c. Average past service	12.02	7.14	7.00
Terminated vested participants			
a. Count	182	2	1
b. Average age	53.73	54.63	40.09
Retirees			
a. Count	8,713	37	2
b. Average age	73.35	74.60	77.15

The following table displays the distribution of Inactive participants by Age.

Age Group	State - Terminated Vested	State - Retirees	Baxter School - Terminated Vested	Baxter School - Retirees	NNEPRA - Retirees / Terminated Vested
<45	29	8	0	0	1*
45-49	19	19	1	0	0
50-54	26	73	0	0	0
55-59	56	170	0	1	0
60-64	42	826	1	2	0
65+	10	7,617	0	34	2
Total	182	8,713	2	37	3

* Terminated vested participant

Section 12 – Summary of Participant Demographic Information (Cont.)

The following table displays the distribution of Active participants by Age and Service.

State Employees

Age Group	Service Group										All Years
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0 - 24	193	283	12								488
25 - 29	118	547	220	6							891
30 - 34	121	562	407	139	7						1,236
35 - 39	108	429	332	239	117	8					1,233
40 - 44	85	412	270	210	228	118	12				1,335
45 - 49	64	357	215	161	191	280	100	8			1,376
50 - 54	73	348	282	155	211	250	183	123	32		1,657
55 - 59	71	303	242	175	165	247	168	160	216	21	1,768
60 - 64	59	215	188	171	147	184	110	115	180	63	1,432
65 - 69	22	67	75	61	50	66	36	31	28	47	483
70+	15	31	22	27	21	26	11	12	15	22	202
Total	929	3,554	2,265	1,344	1,137	1,179	620	449	471	153	12,101

Baxter School

Age Group	Service Group										All Years
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0 - 24	2	6									8
25 - 29		2	2								4
30 - 34	2	3	2	2							9
35 - 39	6	5	2	2	1						16
40 - 44	4	7	1			1					13
45 - 49	1	1	2	2	1						7
50 - 54		2	2		2	1					7
55 - 59		3	4	1	1		1				10
60 - 64		1	1			1	1				4
65 - 69			1	1						1	3
70+				1							1
Total	15	30	17	9	5	3	2			1	82

Section 12 – Summary of Participant Demographic Information (Cont.)

The following table displays the distribution of Active participants by Age and Service.

NNEPRA

Age Group	Service Group										All Years
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0 - 24											
25 - 29											
30 - 34	3										3
35 - 39		3									3
40 - 44											
45 - 49		1		1							2
50 - 54											
55 - 59				1		1					2
60 - 64											
65 - 69											
70+											
Total	3	4		2		1					10

Glossary

Brief explanations of terms used in this report and the accompanying GASB 74 and 75 results:

Annual OPEB Expense

The amount recognized by an employer in each accounting period for contributions to a defined benefit OPEB plan on the modified accrual basis of accounting.

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 Payroll

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

Net OPEB liability (NOL)

The liability of employers and nonemployer 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 No. 75 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).

Plan 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 No. 75 Statements. The total OPEB liability is the liability of employers and nonemployer 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 No. 75 Statements.