



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

June 30, 2021

Prepared by Deloitte Consulting LLP

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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, 2021. 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, 2021. 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, 2022 and June 30, 2023 (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.

Background and Comments (Cont.)

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	
	Years in Medical	% Retiree Premium	Years in Medical	% Retiree Premium
100% of 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 Substantive 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.

Background and Comments (Cont.)

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.

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

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.

Background and Comments (Cont.)

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 6.50%. 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 2.16% as of the measurement date, June 30, 2021 (3.50% as of June 30, 2019).

Claim costs for those covered by the State of Maine self-insured plan were developed with consideration of the 2021 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, 2021 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 6.50% for the State plan and 2.16% for the Ancillary Groups;
- The Medicare Advantage claims costs are no longer age-graded;
- Healthcare cost trend rates were updated based on industry observations, an update to the most current SOA-Getzen model, and an adjustment to short-term trend rates to estimate the impact of the current general inflation environment;
- The following assumptions were updated to be consistent with the June 30, 2021 MainePERS valuation reports, which are based on the experience study released in June 2021:
 - Salary increase
 - Termination
 - Retirement
 - Disability
 - Mortality (base table and longevity improvement)

- The headcount-weighted base tables were selected by the State of Maine rather than the benefits-weighted base tables used for MainePERS
- The two-month premium holiday for the year ended June 30, 2022 and the estimated four-month premium holiday for the year ending June 30, 2023 are reflected in the liability calculation.

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, 2021	June 30, 2019
1. Actuarial Accrued Liability	\$1,057,381	\$1,154,160
2. Actuarial Value of Assets	321,098	264,818
3. Unfunded Actuarial Accrued Liability (UAAL) (1) - (2)	\$736,283	\$889,342
4. Funded ratio (2 / 1)	30.37%	22.94%
5. UAAL as a percentage of covered payroll (3 / 8b)	99.98%	141.98%
6. Normal Cost	\$17,706	\$17,777
7. Discount Rate	6.50%	6.75%
8. Actuarially Determined Contribution	\$52,922	\$56,241
9. Census Data Used		
a. Count of Covered Participants		
Actives	12,113	11,886
Terminated Vested - Eligible for Participation	173	134
Retirees	8,767	8,848
Total	21,053	20,868
b. Covered Payroll	\$736,411	\$626,384
10. Expected Benefit Payments	\$65,098	\$68,290

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.

Baxter School

	Valuation Date	
	June 30, 2021	June 30, 2019
1. Actuarial Accrued Liability	\$6,644	\$5,912
2. Actuarial Value of Assets	-	-
3. Unfunded Actuarial Accrued Liability (UAAL) (1) - (2)	\$6,644	\$5,912
4. Funded ratio (2 / 1)	0.00%	0.00%
5. UAAL as a percentage of covered payroll (3 / 8b)	171.68%	172.11%
6. Normal Cost	\$257	\$218
7. Discount Rate	2.16%	3.50%
8. Census Data Used		
a. Count of Covered Participants		
Actives	77	81
Terminated Vested - Eligible for Participation	8	3
Retirees	37	38
Total	122	122
b. Covered Payroll	\$3,870	\$3,435
9. Expected Benefit Payments	\$289	\$291

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, 2021	June 30, 2019
1. Actuarial Accrued Liability	\$555	\$480
2. Actuarial Value of Assets	-	-
3. Unfunded Actuarial Accrued Liability (UAAL) (1) - (2)	\$555	\$480
4. Funded ratio (2 / 1)	0.00%	0.00%
5. UAAL as a percentage of covered payroll (3 / 8b)	61.87%	70.59%
6. Normal Cost	\$39	\$29
7. Discount Rate	2.16%	3.50%
8. Census Data Used		
a. Count of Covered Participants		
Actives	10	11
Terminated Vested - Eligible for Participation	0	0
Retirees	2	1
Total	12	12
b. Covered Payroll	\$897	\$680
9. Expected Benefit Payments	\$7	\$4

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, 2021	June 30, 2020
1. Market value of assets (MVA) at beginning of year	\$291,559	\$277,703
a. Contributions	77,095	71,200
b. Benefit Payments	(75,095)	(71,200)
c. Administrative Expenses	(3)	(3)
d. Expected Investment Earnings	19,680	18,745
2. Expected MVA at end of year: (1a)+(1b)+(1c)+(1d)	\$313,236	\$296,445
3. Actual MVA at end of year	\$382,842	\$291,559
4. Actuarial value of assets (AVA) at beginning of year	\$284,464	\$264,818
a. Contributions	77,095	71,200
b. Benefit Payments	(75,095)	(71,200)
c. Administrative Expenses	(3)	(3)
d. Expected Investment Earnings	19,201	17,875
5. Expected AVA at end of year: (4a)+(4b)+(4c)+(4d)	\$305,662	\$282,690
6. MVA - Expected AVA: (3) - (5)	\$77,180	\$8,869
7. 1/5 of (MVA - Expected AVA)	\$15,436	\$1,774
8. Preliminary AVA: (5) + (7)	\$321,098	\$284,464
9. Minimum AVA (80% of MVA)	\$306,274	\$233,247
10. Maximum AVA (120% of MVA)	\$459,410	\$349,870
11. AVA at the end of the year	\$321,098	\$284,464

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, 2019 to June 30, 2021. Dollar amounts are in thousands.

State Employees

1. Actuarial Accrued Liability as of June 30, 2019		\$1,154,160
2. Normal Cost for year ending June 30, 2020		17,777
3. Actual Benefit Payments for the year ending June 30, 2020		(71,200)
4. Interest at 6.75% on (1), (2) and (3)		76,742
5. Expected Actuarial Accrued Liability as of June 30, 2020 (1) + (2) + (3) + (4)		\$1,177,479
6. Normal Cost for year ending June 30, 2021		18,311
7. Actual Benefit Payments for the year ending June 30, 2021		(75,095)
8. Interest at 6.75% on (5), (6) and (7)		78,223
9. Expected Actuarial Accrued Liability as of June 30, 2021 (5) + (6) + (7) + (8)		\$1,198,918
10. (Gain)/Loss		
i. Demographic Experience ¹	(64,172)	
ii. Change in Discount Rate to 6.50%	26,375	
iii. Change in Assumptions	(104,294)	
iv. Plan Change - Premium Holiday	554	
v. Total (Gain)/Loss		(141,537)
11. Actual Actuarial Accrued Liability as of June 30, 2021 (9) + (10)(v)		\$1,057,381

¹ Includes Claims and Premiums experience

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, 2019 to June 30, 2021. Dollar amounts are in thousands.

Baxter School

1. Actuarial Accrued Liability as of June 30, 2019		\$5,912
2. Normal Cost for year ending June 30, 2020		218
3. Actual Benefit Payments for the year ending June 30, 2020		(115)
4. Interest at 3.50% on (1), (2) and (3)		213
5. Expected Actuarial Accrued Liability as of June 30, 2020 (1) + (2) + (3) + (4)		\$6,228
6. Normal Cost for year ending June 30, 2021		225
7. Actual Benefit Payments for the year ending June 30, 2021		(86)
8. Interest at 3.50% on (5), (6) and (7)		224
9. Expected Actuarial Accrued Liability as of June 30, 2021 (5) + (6) + (7) + (8)		\$6,591
10. (Gain)/Loss		
i. Demographic Experience ¹	(296)	
ii. Change in Discount Rate to 2.16%	1,150	
iii. Change in Other Assumptions	(814)	
iv. Plan Change - Premium Holiday	13	
v. Total (Gain)/Loss		53
11. Actual Actuarial Accrued Liability as of June 30, 2021 (9) + (10)(v)		\$6,644

¹ Includes Claims and Premiums experience

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, 2019 to June 30, 2021. Dollar amounts are in thousands.

NNEPRA

1. Actuarial Accrued Liability as of June 30, 2019		\$480
2. Normal Cost for year ending June 30, 2020		29
3. Actual Benefit Payments for the year ending June 30, 2020		(7)
4. Interest at 3.50% on (1), (2) and (3)		18
5. Expected Actuarial Accrued Liability as of June 30, 2020 (1) + (2) + (3) + (4)		\$520
6. Normal Cost for year ending June 30, 2021		30
7. Actual Benefit Payments for the year ending June 30, 2021		(7)
8. Interest at 3.50% on (5), (6) and (7)		19
9. Expected Actuarial Accrued Liability as of June 30, 2021 (5) + (6) + (7) + (8)		\$562
10. (Gain)/Loss		
i. Demographic Experience ¹	(41)	
ii. Change in Discount Rate to 2.16%	115	
iii. Change in Other Assumptions	(81)	
iv. Plan Change - Premium Holiday	0	
v. Total (Gain)/Loss		(7)
11. Actual Actuarial Accrued Liability as of June 30, 2021 (9) + (10)(v)		\$555

¹ Includes Claims and Premiums experience

Section 4 – Development of Unfunded Actuarial Accrued Liability

Presented below is the development of the Unfunded Actuarial Accrued Liability as of June 30, 2021, 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	\$495,972	\$100,267	\$596,239
Terminated Vested	6,577	2,137	8,714
Retirees and beneficiaries	475,401	119,503	594,904
Total	<u>\$977,950</u>	<u>\$221,907</u>	<u>\$1,199,857</u>
2. Present Value of Future Normal Costs	\$119,680	\$22,796	\$142,476
3. Actuarial Accrued Liability			
Actives	\$376,292	\$77,471	\$453,763
Terminated Vested	6,577	2,137	8,714
Retirees and beneficiaries	475,401	119,503	594,904
Total	<u>\$858,270</u>	<u>\$199,111</u>	<u>\$1,057,381</u>
4. Actuarial Value of Assets			\$321,098
5. Unfunded Actuarial Accrued Liability (3) - (4)			\$736,283

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

Presented below is the development of the Unfunded Actuarial Accrued Liability as of June 30, 2021, 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	\$6,052	\$529	\$6,581
Terminated Vested	498	124	622
Retirees and beneficiaries	3,094	265	3,359
Total	<u>\$9,644</u>	<u>\$918</u>	<u>\$10,562</u>
2. Present Value of Future Normal Costs	\$3,705	\$213	\$3,918
3. Actuarial Accrued Liability			
Actives	\$2,347	\$316	\$2,663
Terminated Vested	498	124	622
Retirees and beneficiaries	3,094	265	3,359
Total	<u>\$5,939</u>	<u>\$705</u>	<u>\$6,644</u>
4. Actuarial Value of Assets			-
5. Unfunded Actuarial Accrued Liability (3) - (4)			\$6,644

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

Presented below is the development of the Unfunded Actuarial Accrued Liability as of June 30, 2021, 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	\$969	\$91	\$1,060
Retirees and beneficiaries	97	-	97
Total	<u>\$1,066</u>	<u>\$91</u>	<u>\$1,157</u>
2. Present Value of Future Normal Costs	\$557	\$45	\$602
3. Actuarial Accrued Liability			
Actives	\$412	\$46	\$458
Retirees and beneficiaries	97	-	97
Total	<u>\$509</u>	<u>\$46</u>	<u>\$555</u>
4. Actuarial Value of Assets			-
5. Unfunded Actuarial Accrued Liability (3) - (4)			\$555

Section 5 – Schedule of Amortization Balances for Actuarially Determined Contributions

State Employees

	Original Bases			Remaining Bases June 30, 2021		2021/22 End of Year Amortization Payment ²
	Date	Years	Amount ¹	Years	Balance ²	
	Initial UAAL	6/30/2008	29	1,144,000	16	905,940
Experience Losses (Gains)	6/30/2012	10	(199,000)	1	(8,324)	(8,865)
	6/30/2013	10	(146,000)	2	(20,814)	(11,269)
	6/30/2014	10	56,000	3	13,938	5,114
	6/30/2015	10	(25,000)	4	(8,952)	(2,504)
	6/30/2016	10	(33,000)	5	(49,661)	(11,296)
	6/30/2017	10	7,139	6	3,921	755
	6/30/2018	10	4,459	7	2,893	485
	6/30/2019	10	(58,859)	8	(45,105)	(6,730)
	6/30/2020	10	(1,775)	9	(1,568)	(211)
	6/30/2021	10	(83,941)	10	(83,941)	(10,343)
Assumption Changes	6/30/2010	27	35,000	16	25,648	2,168
	6/30/2011	26	266,000	16	210,972	17,830
	6/30/2012	25	(32,000)	16	(24,820)	(2,098)
	6/30/2014	23	(16,000)	16	(13,237)	(1,119)
	6/30/2016	21	33,000	16	27,302	2,307
	6/30/2017	20	(13,044)	16	(10,975)	(928)
	6/30/2019	18	517	16	466	39
	6/30/2021	16	(77,919)	16	(77,919)	(6,585)
Plan Change	6/30/2011	26	(139,000)	16	(110,037)	(9,300)
	6/30/2021	16	554	16	554	47
Unfunded AAL					\$736,283	\$34,065

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 (16-year fixed period from 6/30/2021)
 - 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, 2022. Dollar amounts are in thousands.

State Employees

1. Normal Cost (with interest)	\$ 18,857
2. Sum of Amortizations from Section 6 (with interest)	<u>34,065</u>
3. Actuarially Determined Contribution: (1) + (2)	\$ 52,922
4. Expected Pay-as-you-go Cost for Fiscal Year Ending June 30, 2022	\$ 65,098

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
6/30/2022	\$42,449	\$22,649	\$65,098
6/30/2023	43,337	21,377	64,714
6/30/2024	49,644	17,436	67,080
6/30/2025	51,847	17,747	69,594
6/30/2026	54,015	17,331	71,346
6/30/2027	56,195	16,920	73,115
6/30/2028	58,328	16,826	75,154
6/30/2029	60,538	16,672	77,210
6/30/2030	62,358	16,198	78,556
6/30/2031	64,626	16,173	80,799

Baxter School

Year Ending	Explicit Subsidy	Implicit Subsidy	Total Benefit Payments
6/30/2022	\$182	\$107	\$289
6/30/2023	174	60	234
6/30/2024	201	65	266
6/30/2025	193	40	233
6/30/2026	203	41	244
6/30/2027	209	46	255
6/30/2028	217	48	265
6/30/2029	222	34	256
6/30/2030	230	33	263
6/30/2031	245	33	278

NNEPRA

Year Ending	Explicit Subsidy	Implicit Subsidy	Total Benefit Payments
6/30/2022	\$7	\$0	\$7
6/30/2023	6	-	6
6/30/2024	6	1	7
6/30/2025	7	-	7
6/30/2026	7	1	8
6/30/2027	16	5	21
6/30/2028	18	7	25
6/30/2029	19	10	29
6/30/2030	12	-	12
6/30/2031	12	1	13

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, 2021 Actual Allocation</u>
International Equity	25.0%	24.9%
US Fixed Income	25.0%	24.0%
US Equity	45.0%	46.0%
Real Estate	5.0%	5.1%
Cash	0.0%	0.0%
Total	100.0%	100.0%

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 (16-year fixed period from 6/30/2021)
- 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, 2021

Measurement Date

June 30, 2021

Method Changes Since Prior Valuation

None.

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

Discount Rate	<p><u>State</u> 6.50%, representing the expected long-term rate of return on the assets expected to be used to pay plan benefits.</p> <p><u>Ancillary</u> 2.16%, based on a broad 20-year municipal bond index (Bond Buyer GO 20) as of June 30, 2021.</p>																																																												
Healthy Mortality	<p>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:</p> <ul style="list-style-type: none"> • Adjustment of 83.5% for males and 88.6% for females applied to the base Employee mortality rates • Adjustment of 112.1% for males and 118.5% for females applied to the base Healthy Retiree mortality rates • MP-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	<p>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:</p> <ul style="list-style-type: none"> • Adjustment of 107.3% for males and 103.2% for females applied to the base Disabled Retiree mortality rates • MP-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	<p>Sample Rates of Termination at Selected Years of Service:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <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> </thead> <tbody> <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> </tbody> </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%
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Section 8 – Summary of Actuarial Methods & Assumptions (Cont.)

Retirement	Retirement at Selected Ages (see Section 10 for Tier eligibility):			
	Age	Tier 1	Tier 2	Tier 3
	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>				
Age	Tier 1	Tier 2	Tier 3	
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			
Age	<25	>=25		
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)	<p><u>25 and Out Plan</u></p> <table style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding-right: 20px;"><u>Service</u></th> <th style="text-align: left;"><u>Rate</u></th> </tr> </thead> <tbody> <tr> <td>25</td> <td>25.0%</td> </tr> <tr> <td>35</td> <td>40.0%</td> </tr> <tr> <td>38+</td> <td>100.0%</td> </tr> </tbody> </table> <p><u>All Other Special Plans</u></p> <p>50% per year once eligibility for unreduced benefits is reached, with a 100% assumed rate at age 70.</p>	<u>Service</u>	<u>Rate</u>	25	25.0%	35	40.0%	38+	100.0%																																																																																														
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Healthcare Cost Increases	<p>Medical trend rates were developed using a combination of trend surveys and the SOA-Getzen trend rate model. Initial trend rates start at 6.00% in 2022 based on survey data and client market expectations. The SOA-Getzen model was then used to determine the trend rates beginning in year 2026 and thereafter based on reasonable macro-economic assumptions for the growth of health care expenditures during this period relative to the general economy.</p> <p>The short-term trend rates reflect an estimated impact of recent general inflation. CPI-U for the 12-month period ending in May 2022 was 8.5%. 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 2023.</p> <table style="margin-left: 40px; border-collapse: collapse; width: 100%;"> <thead> <tr> <th style="text-align: left; padding-right: 10px;"><u>Plan Year*</u></th> <th style="text-align: left; padding-right: 10px;"><u>Rate</u></th> <th style="text-align: left; padding-right: 10px;"><u>Plan Year*</u></th> <th style="text-align: left; padding-right: 10px;"><u>Rate</u></th> <th style="text-align: left; padding-right: 10px;"><u>Plan Year*</u></th> <th style="text-align: left;"><u>Rate</u></th> </tr> </thead> <tbody> <tr><td>2022</td><td>6.00%**</td><td>2044</td><td>4.98%</td><td>2060</td><td>4.79%</td></tr> <tr><td>2023</td><td>7.63%</td><td>2045</td><td>4.96%</td><td>2061</td><td>4.78%</td></tr> <tr><td>2024</td><td>7.53%</td><td>2046</td><td>4.94%</td><td>2062</td><td>4.77%</td></tr> <tr><td>2025</td><td>5.76%</td><td>2047</td><td>4.93%</td><td>2063</td><td>4.77%</td></tr> <tr><td>2026</td><td>5.67%</td><td>2048</td><td>4.92%</td><td>2064</td><td>4.76%</td></tr> <tr><td>2027</td><td>5.58%</td><td>2049</td><td>4.90%</td><td>2065</td><td>4.75%</td></tr> <tr><td>2028</td><td>5.50%</td><td>2050</td><td>4.89%</td><td>2066</td><td>4.69%</td></tr> <tr><td>2029</td><td>5.41%</td><td>2051</td><td>4.88%</td><td>2067</td><td>4.63%</td></tr> <tr><td>2030</td><td>5.32%</td><td>2052</td><td>4.87%</td><td>2068</td><td>4.57%</td></tr> <tr><td>2031 – 2037</td><td>5.23%</td><td>2053</td><td>4.86%</td><td>2069</td><td>4.51%</td></tr> <tr><td>2038</td><td>5.13%</td><td>2054</td><td>4.85%</td><td>2070</td><td>4.46%</td></tr> <tr><td>2039</td><td>5.09%</td><td>2055</td><td>4.84%</td><td>2071</td><td>4.40%</td></tr> <tr><td>2040</td><td>5.06%</td><td>2056</td><td>4.83%</td><td>2072</td><td>4.35%</td></tr> <tr><td>2041</td><td>5.04%</td><td>2057</td><td>4.82%</td><td>2073</td><td>4.29%</td></tr> <tr><td>2042</td><td>5.01%</td><td>2058</td><td>4.81%</td><td>2074</td><td>4.24%</td></tr> <tr><td>2043</td><td>4.99%</td><td>2059</td><td>4.80%</td><td>2075+</td><td>4.19%</td></tr> </tbody> </table> <p style="margin-left: 40px;">*Year ending June 30</p> <p style="margin-left: 40px;">**Adjusted to reflect known premium increases from July 1, 2021 to July 1, 2022.</p>	<u>Plan Year*</u>	<u>Rate</u>	<u>Plan Year*</u>	<u>Rate</u>	<u>Plan Year*</u>	<u>Rate</u>	2022	6.00%**	2044	4.98%	2060	4.79%	2023	7.63%	2045	4.96%	2061	4.78%	2024	7.53%	2046	4.94%	2062	4.77%	2025	5.76%	2047	4.93%	2063	4.77%	2026	5.67%	2048	4.92%	2064	4.76%	2027	5.58%	2049	4.90%	2065	4.75%	2028	5.50%	2050	4.89%	2066	4.69%	2029	5.41%	2051	4.88%	2067	4.63%	2030	5.32%	2052	4.87%	2068	4.57%	2031 – 2037	5.23%	2053	4.86%	2069	4.51%	2038	5.13%	2054	4.85%	2070	4.46%	2039	5.09%	2055	4.84%	2071	4.40%	2040	5.06%	2056	4.83%	2072	4.35%	2041	5.04%	2057	4.82%	2073	4.29%	2042	5.01%	2058	4.81%	2074	4.24%	2043	4.99%	2059	4.80%	2075+	4.19%
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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 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 healthcare premium increases are limited to 5.75% in any year. Claims costs are not subject to this limit.</p>																					
Annual Claims Costs: HMO Choice Plan	<p>Sample Costs at Selected Ages:</p> <table style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;"><u>Age</u></th> <th style="text-align: left;"><u>Males</u></th> <th style="text-align: left;"><u>Females</u></th> </tr> </thead> <tbody> <tr> <td>50</td> <td>\$9,497</td> <td>\$12,537</td> </tr> <tr> <td>55</td> <td>12,497</td> <td>14,622</td> </tr> <tr> <td>60</td> <td>16,141</td> <td>17,031</td> </tr> <tr> <td>65</td> <td>20,634</td> <td>20,337</td> </tr> <tr> <td>70</td> <td>24,976</td> <td>24,232</td> </tr> <tr> <td>80</td> <td>34,545</td> <td>32,712</td> </tr> </tbody> </table>	<u>Age</u>	<u>Males</u>	<u>Females</u>	50	\$9,497	\$12,537	55	12,497	14,622	60	16,141	17,031	65	20,634	20,337	70	24,976	24,232	80	34,545	32,712
<u>Age</u>	<u>Males</u>	<u>Females</u>																				
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Salary Increases	<p>Sample rates ast select years of service:</p> <table style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;"><u>Service</u></th> <th style="text-align: left;"><u>Rate</u></th> </tr> </thead> <tbody> <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> </tbody> </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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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>																					
Premium Holiday	The premium holiday is assumed to continue for four months in the plan year beginning July 1, 2022 based on expectations provided by the State.																					

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 2025 to 2100. 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

<p>Discount Rate</p>	<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 border="1" data-bbox="527 388 1388 703"> <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>6.42%</td> </tr> <tr> <td>International Equity</td> <td>25%</td> <td>6.55%</td> </tr> <tr> <td>Real Estate</td> <td>5%</td> <td>5.41%</td> </tr> <tr> <td>US Fixed Income</td> <td>25%</td> <td>1.14%</td> </tr> <tr> <td>Portfolio Arithmetic Return</td> <td>100%</td> <td>5.08%</td> </tr> <tr> <td>Portfolio Geometric Return</td> <td></td> <td>4.26%</td> </tr> <tr> <td>Long-Term Inflation</td> <td></td> <td>2.75%</td> </tr> <tr> <td>Geometric Return + Inflation</td> <td></td> <td>7.01%</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 2021 edition, which reflected the expectations of 39 investment advisors.</i></p> <p>http://www.horizonactuarial.com/blog/2021-survey-of-capital-market-assumptions</p>	<u>Asset Class</u>	<u>Target Allocation</u>	<u>Real Return Above Inflation Expectation*</u>	US Equity	45%	6.42%	International Equity	25%	6.55%	Real Estate	5%	5.41%	US Fixed Income	25%	1.14%	Portfolio Arithmetic Return	100%	5.08%	Portfolio Geometric Return		4.26%	Long-Term Inflation		2.75%	Geometric Return + Inflation		7.01%
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<p>Mortality, Termination, Retirement, and Salary Scale</p>	<p>The assumptions used in the actuarial valuation are the same assumptions as the June 30, 2021 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>																											
<p>Healthcare Cost Increases</p>	<p>Rationale described in Section 8 – Summary of Actuarial Methods & Assumptions.</p>																											
<p>Annual Claims Costs: HMO Choice Plan</p>	<p>Based on the 2021 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.</p>																											
<p>Inflation</p>	<p>Inflation is consistent with the assumption used in the June 30, 2021 MainePERS actuarial valuation.</p>																											
<p>Coverage Election</p>	<p>Based on recent experience of the plan.</p>																											
<p>Health Care Reform</p>	<p>Rationale described in the Background and Comments section.</p>																											

Section 10 – Summary of Substantive Plan Provisions

Eligibility	<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

<p>Benefit</p>	<p>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.</p> <p>Once covered by a Medicare Advantage Plan, the State continues to provide the same explicit subsidy to retirees.</p> <table border="1" data-bbox="581 598 1409 997"> <thead> <tr> <th rowspan="2">Hire Date ≤ 7/1/91</th> <th colspan="2">7/1/91 < Hire Date < 7/1/11</th> <th colspan="2">Hire Date ≥ 7/1/11</th> </tr> <tr> <th>Years in Medical</th> <th>% Retiree Premium</th> <th>Years in Medical</th> <th>% Retiree Premium</th> </tr> </thead> <tbody> <tr> <td>100% of Retiree Premium</td> <td>< 5</td> <td>0%</td> <td>< 10</td> <td>0%</td> </tr> <tr> <td></td> <td>5</td> <td>50%</td> <td>10-14</td> <td>50%</td> </tr> <tr> <td></td> <td>6</td> <td>60%</td> <td>15-19</td> <td>75%</td> </tr> <tr> <td></td> <td>7</td> <td>70%</td> <td>≥ 20</td> <td>100%</td> </tr> <tr> <td></td> <td>8</td> <td>80%</td> <td></td> <td></td> </tr> <tr> <td></td> <td>9</td> <td>90%</td> <td></td> <td></td> </tr> <tr> <td></td> <td>≥ 10</td> <td>100%</td> <td></td> <td></td> </tr> </tbody> </table> <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) 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) <p>Disability retirement benefits are 100% vested and cash subsidy begins at disability retirement</p>	Hire Date ≤ 7/1/91	7/1/91 < Hire Date < 7/1/11		Hire Date ≥ 7/1/11		Years in Medical	% Retiree Premium	Years in Medical	% Retiree Premium	100% of 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%		
Hire Date ≤ 7/1/91	7/1/91 < Hire Date < 7/1/11		Hire Date ≥ 7/1/11																																										
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	8	80%																																											
	9	90%																																											
	≥ 10	100%																																											
<p>Medicare Part B Reimbursement</p>	<p>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.</p> <p>The applicable Part B premium and penalty, as applicable, are provided by the State of Maine in the census data.</p>																																												
<p>Dependent Benefits</p>	<p>No cash subsidy for spouse or dependents</p> <p>Retiree must pay full cost to cover spouse and/or dependents. Surviving spouses are permitted to continue coverage by paying full cost.</p>																																												
<p>Dental, Vision, Life</p>	<p>None</p>																																												

Section 11 – Monthly Premiums

Monthly Premiums

Retirees Monthly Premiums Effective 7/1/2021

State of Maine Self-Insured Plan: HMO Choice	Premiums
Single	\$969.96
2-Adult	2,028.72
Family	2,413.90
Adult w/ Child(ren)	1,595.66

Medicare Advantage	Premiums
Retirees Eligible for Medicare Part A	\$288.11
Retirees not Eligible for Medicare Part A	763.55

Section 12 – Summary of Participant Demographic Information

The table below presents a summary of the basic participant information as of June 30, 2021 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	12,113	77	10
b. Average age	47.50	42.84	43.26
c. Average past service	12.89	7.69	7.65
Terminated vested participants			
a. Count	173	8	0
b. Average age	53.77	55.59	N/A
Retirees			
a. Count	8,767	37	2
b. Average age	72.77	73.21	75.15

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
<45	23	9	1	0	0
45-49	21	16	1	0	0
50-54	28	73	1	1	0
55-59	62	212	2	0	0
60-64	32	989	2	5	0
65+	7	7,468	1	31	2
Total	173	8,767	8	37	2

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

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

State Employees

Service Group											
Age Group	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	All Years
0 - 24	120	318	15								453
25 - 29	80	597	200	5							882
30 - 34	70	551	427	88	8						1,144
35 - 39	50	401	363	190	140	10					1,154
40 - 44	41	372	319	195	237	156	2				1,322
45 - 49	45	297	276	141	192	308	74	11			1,344
50 - 54	48	343	272	177	217	331	151	202	32		1,773
55 - 59	35	290	290	180	186	281	124	253	215	21	1,875
60 - 64	34	182	221	160	168	219	103	163	147	85	1,482
65 - 69	14	52	92	70	53	68	35	35	30	64	513
70+	8	18	30	19	24	25	8	12	5	22	171
Total	545	3,421	2,505	1,225	1,225	1,398	497	676	429	192	12,113

Baxter School

Service Group											
Age Group	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	All Years
0 - 24	2	3									5
25 - 29		6		1							7
30 - 34	1	9	5	1							16
35 - 39		8	2	1							11
40 - 44	1	2	4		1						8
45 - 49	1	1		1	1						4
50 - 54		4		1	1	2					8
55 - 59	1	2	4				1	1			9
60 - 64		1			1	1			1		4
65 - 69		1	2	1		1					5
70+											
Total	6	37	17	6	4	4	1	1	1		77

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												
35 - 39		3			1							4
40 - 44		2	1									3
45 - 49				1								1
50 - 54				1								1
55 - 59						1						1
60 - 64												
65 - 69												
70+												
Total		5	1	2	1	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.