Actuarial Valuation Report
as of
June 30, 2010

Maine Public Employees
Retirement System
Retiree Group Life Insurance

Presented by Cheiron

October 2010

CHEIRON Classic Values, Innovative Advice

Table of Contents

CHEIRON

October 26, 2010

Ms Sandy Matheson
Executive Director
Maine Public Employees Retirement System
#46 State House Station
Augusta, ME 04333-0046

Dear Sandy:

As requested, we have calculated the Postretirement Group Life Insurance obligations as of June 30, 2010 for the Maine Public Employees Retirement System (MainePERS). The enclosed Sections contain the data the auditors need to prepare the disclosure section of the annual report.

Sections I, II and III contain the Liability and Asset information as of June 30, 2010. Per the System's direction, this is the information needed for the auditors. The assets represent the total group life reserve, and adjustments may be necessary if any reserves are not available to satisfy retiree liabilities. The liabilities are based on the biennial valuation as of June 30, 2010. The next biennial valuation is scheduled to be performed as of June 30, 2012.

Section IV describes the Participant Data, Assumptions, and Methods used in the calculation of the disclosure items contained in Sections I-III.

Section V contains the substantive Plan Provisions provided by the System.

In preparing our report, we relied without audit on information (some oral and some written) provided by the System. This information includes, but is not limited to, the plan provisions, employee data and financial information.

Actuarial computations provided in this report are for purposes of fulfilling employee benefit plan financial accounting requirements. The calculations reported in the enclosed sections have been made on a basis consistent with our understanding of the associated Actuarial Standards of Practice. Determinations for purposes other than meeting the employee benefit plan's financial accounting requirements (for example, establishing a long-term funding strategy) may be significantly different from the results in this report.

We hereby certify that, to the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the applicable Actuarial Standards of Practice as Promulgated by the Actuarial Standards Board. We are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

Sincerely,
Cheiron

John L. Colberg, FSA
Consulting Actuary

Michael J. Noble, FSA
Consulting Actuary

INTRODUCTION

Maine Public Employees Retirement System (MainePERS) engaged Cheiron to provide an analysis of the Postretirement Group Life Insurance liabilities as of June 30, 2010. The primary purposes of performing this actuarial valuation are to:

- Estimate the annual required contribution (ARC) for the Postretirement Group Life Insurance using GASB 43/45 methodology under the current funding strategy; and
- Provide disclosures for financial statements; and
- Estimate revenue based on current premium rates in force to be used for budgeting purposes.

We have determined costs and liabilities for the substantive Plan using actuarial assumptions and methods that we consider reasonable.

Below is a summary of the key results of our calculations:

- The ARC for fiscal year ending June 30, 2011 is $8,168,095.
- The actuarial liability under the Entry Age Normal Actuarial Cost Method as of July 1, 2010 is $150,890,316

The fundamental principal underlying our analysis, as well as the GASB standard, is that the cost of its benefits should be related to the period in which benefits are earned, rather than to the period of benefit distribution. The *normal cost (*which is a component of the *ARC)* is the annual amount which would be sufficient to fund the substantive Plan benefits (net of retiree contributions) if it were paid from each employee's entry into the Plan until termination or retirement. The *actuarial liability* represents the portion of the value of the projected benefit at retirement that is allocated to service earned prior to the valuation date. The *unfunded actuarial liability* (UAL) represents the excess of the actuarial liability over Plan assets.

GASB's Statement 43 refers to the financial reporting for postemployment benefit plans other than pension plans and Statement 45 refers to the employer accounting for these plans. Statement 43 is generally applicable where an entity has a separate trust or fund for OPEB benefits. Statement 45 requires the plan sponsor to book the actuarial cost (net of employee, retiree, and their dependents' contributions) of the plan as an expense on its financial statements and then accrue a liability to the extent actual contributions were less than this expense. Additional disclosures include a description of the substantive plan, summary of significant accounting policies (not included in this report), contributions, and a statement of funding progress, along with the methods and assumptions used for those disclosures.

The current premiums rates were developed from a 2005 experience study. We recommend that the premium rates be reviewed for the next full valuation as part of the re-evaluation of the experience of the program. A review of the premium rates would also include reviewing the assumptions behind those premiums, particularly mortality and the expense assumptions, which could materially affect the cost. As a result of the investment markets of 2008-09, it is likely that the study would result in a rate increase for State and PLDs unless the investment experience is offset by improvements in mortality or other experience.

Section I: Financial Statement Information

The following chart shows Actuarial Liability, the assets as of the valuation date, and the Unfunded Actuarial Liability**.** The Actuarial Liability is calculated taking the Present Value of Future Benefits (shown in Section II) and subtracting the present value of future Normal Costs under the **Entry Age Normal** funding method.

As of June 30, 2010 (in millions)	**State**	**Teachers**	**PLDs**[1]	**Judges**	**Legislators**	**Total**
Actuarial Liability						
- Active Employees	$28.4	$29.1	$ 9.2	$0.6	$0.0[2]	$ 67.3
- Retirees	41.8	31.3	9.8	0.5	0.2	83.6
Total	**$70.2**	**$60.4**	**$19.0**	**$1.1**	**$0.2**	**$150.9**
Less: Assets at Valuation Date	19.3	21.4	9.7	0.3	0.1	50.8
Unfunded Actuarial Liability (UAL)	**$50.9**	**$39.0**	**$ 9.3**	**$0.8**	**$0.1**	**$100.1**

The ARC consists of two parts: (1) the *normal cost*, which represents the annual cost attributable to service earned in a given year, and (2) the amortization of the UAL. In the table below, we show the computed FYE 2011 ARC.

For Fiscal 2011 (in millions)	**State**	**Teachers**	**PLDs**[1]	**Judges**	**Legislators**	**Total**
Actuarial Required Contribution (ARC)						
- Normal Cost	$ 1.2	$ 0.6	$ 0.5	$0.0[2]	$0.0[2]	$ 2.3
- UAL Amortization[3]	2.9	2.2	0.7	0.1	0.0[2]	5.9
Total	**$ 4.1**	**$ 2.8**	**$ 1.2**	**$0.1**	**$0.0**[2]	**$ 8.2**

[1]Net of PLD premiums ($0.46 per month per $1000 of benefit)
[2]Less than $0.05 million
[3]Amortized as a level percent of pay over 27 years (PLDs over 20 years)

Section II: Balance Sheet Information

The following chart develops the Present Value of Future Benefits for the purpose of analyzing the overall financial obligations and the prospective funding source for Postretirement Life Insurance Benefits. The Present Value of Benefits represents the amount of money needed today to fully pay off all future benefits, assuming participants continue to earn salary increases and accrue benefits under the current program and plan provisions.

As of June 30, 2010 (in millions)	State	Teachers	PLDs[1]	Judges	Legislators	Total
Assets						
- Current Value of Assets	$19.3	$21.4	$ 9.7	$0.3	$0.1	$ 50.8
- Future State Contributions	57.8	42.3	11.9	0.9	0.1	113.0
Total Present Value of Assets	**$77.1**	**$63.7**	**$21.6**	**$1.2**	**$0.2**	**$163.8**
Liabilities						
- Active Accrued Benefits	$20.8	$20.2	$ 7.5	$0.6	$0.0[2]	$ 49.1
- Active Future Accruals	14.5	12.2	4.3	0.1	0.0[2]	31.1
- Active Present Value of Benefits	$35.3	$32.4	$11.8	$0.7	$0.0[2]	$ 80.2
- Inactive Present Value of Benefits	41.8	31.3	9.8	0.5	0.2	83.6
Total Present Value of Benefits	**$77.1**	**$63.7**	**$21.6**	**$1.2**	**$0.2**	**$163.8**

[1]Net of PLD premiums ($0.46 per month per $1000 of benefit)
[2]Less than $0.05 million

Section III: Estimated Revenue

The following chart develops estimated revenues generated by premiums paid on behalf of active participants.

As of June 30, 2010	State[1]	Teachers	PLDs[2]
Active Data			
- Total Payroll (in millions)	$615.6	$650.6	$253.3
- Insurance in Force[3]	$ 16.0	$ 16.9	$ 6.6
Current Total Premium[3,4]	**$ 0.26**	**$ 0.05**	**$ 0.21**
Revenue from Premium Rates[4,5]			
- FY 2012 (in millions)	$ 4.3	$ 0.9	$ 1.4
- FY 2013 (in millions)	$ 4.5	$ 0.9	$ 1.5

The following chart for teachers shows the development of retiree cost on an actuarial basis for use in State budgeting and the cost of Life Insurance for death during employment (Active Cost).

	Teachers	
Projected Costs[5]	FY 2012	FY 2013
Retiree Cost		
- Normal Cost	$ 596,671	$ 625,012
- UAL Amortization[6]	2,361,853	2,474,041
- Total ARC = Retiree Cost	$ 2,958,524	$ 3,099,053
Active Cost	886,009	928,095
Total Cost	$ 3,844,533	$ 4,027,148

[1]Including Judge and Legislator amounts, as these are not developed separately
[2]Net of PLD premiums ($0.46 per month per $1000 of benefit)
[3]Biweekly amount per thousand
[4]The Current Total Premium funds the cost of death benefits during employment and for State and PLDs the cost of postretirement benefits. For teachers, the premium does not include retiree costs, which are paid separately by the state.
[5]Based on the current premiums, which were not revised for this valuation
[6]Amortized as a level percent of pay over 26 and 25 years, respectively

Section IV: Participant Data, Assumptions and Methods

Participant Data as of June 30, 2010[1]

Actives				
Group	**Count**	**Average Age**	**Average Service**	**Average Salary**
State	13,394	47.6	13.4	$ 45,485
Teachers	14,316	46.7	15.9	$ 45,448
PLDs	6,021	49.4	11.7	$ 42,075
Judges	59	59.0	20.9	$104,576
Legislators	0	N/A	N/A	N/A
TOTAL	33,790	47.6	14.1	$ 44,969

Retirees			
Group	**Count**	**Average Age**	**Average Benefit[2]**
State	7,715	69.1	$ 14,311
Teachers	5,620	70.8	$ 16,208
PLDs	2,306	70.4	$ 13,123
Judges	34	74.3	$ 33,259
Legislators	30	77.1	$ 11,035
TOTAL	15,705	69.9	$ 14,850

[1]As per the biennial measurement as of June 30, 2010
[2]Ultimate benefit (40% of initial base benefit)

Note that all assumptions are based on the MainePERS Pension assumptions, except where indicated.

Economic Assumptions

Valuation Date: June 30, 2010

Investment Return: 7.75% per year

Cost-of-Living Increases in Life Benefits: N/A, unlike the Pension assumptions. (i.e., Life Benefits do not increase with Cost of Living increases)

Rates of Salary Increase
(experience-based sample rates by service):

Service	State	Teachers	PLDs	Judges	Legislators
0	10.00%	10.00%	10.50%	4.00%	4.75%
5	7.50%	7.50%	5.00%	4.00%	4.75%
10	5.28%	5.28%	4.50%	4.00%	4.75%
15	6.07%	6.07%	4.50%	4.00%	4.75%
20	4.90%	4.90%	4.50%	4.00%	4.75%
25+	4.75%	4.75%	4.50%	4.00%	4.75%

Section IV: Participant Data, Assumptions and Methods (continued)

Demographic Assumptions

Rates of Termination
(experience-based sample rates by service):

Service	State	Teachers	PLDs	PLDs Special
0	30.00%	37.00%	20.00%	25.00%
5	7.50%	12.50%	7.50%	4.00%
10	4.40%	6.00%	2.50%	2.50%
15	3.50%	4.50%	2.50%	2.50%
20	2.00%	3.00%	2.50%	2.50%
25+	2.00%	2.00%	2.50%	2.50%

(experience-based sample rates by age):

Age	Judge & Legislator
25	7.00%
30	6.00%
35	5.00%
40	4.00%
45	3.00%
50	2.00%
55	1.00%

Rates of Healthy Mortality
(experience-based sample deaths per 10,000 members by age):

	Teachers		All Other Plans	
Age	Male	Female	Male	Female
20	5	3	5	3
25	6	3	7	3
30	7	3	9	4
35	8	4	9	5
40	10	6	12	8
45	14	9	17	10
50	24	13	28	15
55	40	21	48	25
60	73	41	8	48
65	133	79	156	93
70	217	125	255	148

Section IV: Participant Data, Assumptions and Methods (continued)

Demographic Assumptions (continued)

Rates of Disabled Mortality
(experience-based sample deaths per 10,000 members by age):

Age	Male	Female
25	92	72
30	112	89
35	134	109
40	160	126
45	193	144
50	236	165
55	295	191
60	362	226
65	446	272
70	576	331

Rates of Retirement
(experience-based sample retirements per 1,000 members by age):

	State		Teachers	
Age	Tier 1	Tier 2	Tier 1	Tier 2
45	28	28	18	18
50	42	42	39	39
55	103	103	106	106
59	200	148	156	156
60	228	148	225	225
61	133	133	139	139
62	268	250	277	277
63	202	202	224	224
64	221	221	223	223
65	478	478	485	485
70	589	589	570	570

Judges: Members in Tier 1 are assumed to retire at age 60. Members in Tier 2 are assumed to retire at a rate of 50% each year from age 62 through age 70.

Legislatures: Members in Tier 1 are assumed to retire at age 60. Members in Tier 2 are assumed to retire at age 62.

Participants who are not members of MainePERS: Age 62.

Section IV: Participant Data, Assumptions and Methods (continued)

Demographic Assumptions (continued)

Rates of Disability
(experience-based sample disablements per 10,000 members by service):

Service	State	Teachers	PLDs	Judges & Legislators
25	6.8	4.6	3	6
30	7.6	5	4	6
35	10.2	5.5	5	7
40	19	6	7	11
45	27.9	15.5	15	22
50	42.7	24.3	33	42
55	81	33	61	72

Participation Percent for Future Retirees: 100% of those currently enrolled (unique to this valuation).

Other Assumptions (Unique to this Valuation)

Conversion Charges: Apply to the cost of active group life insurance not retiree group life insurance.

Form of Benefit Payment: Lump Sum

Actuarial Cost Method

To be consistent with past analyses and with the Pension Plan funding, the individual entry age normal method is used to determine liabilities. Under this funding method, a normal cost rate is calculated for each member. This rate is determined by taking the value, as of age at entry into the Plan, of the member's projected future benefits, and dividing it by the value, also as of the member's entry age, of his expected future salary. The normal cost for each member is the product of annual salary and the normal cost rate. The normal cost for the group is the sum of the normal costs for all members.

The actuarial liability is defined as the present value of future benefits less the present value of future normal costs. The unfunded actuarial liability is the total of the actuarial liability for all members less the actuarial value of the System's assets.

Asset Valuation Method

Figures are taken as reported by the MainePERS without audit or change, except that State assets are allocated to State, Judges and Legislators based on total actuarial liability.

Section V: Summary of Key Plan Provisions

Summary of Key Plan Provisions

Membership

Service Retirement: A retiree must have participated in the group life insurance program for at least ten years just prior to retirement.

Disability Retirement: An employee must have participated in the group life insurance program immediately prior to disablement.

Basic Insurance

Average final compensation calculated for retirement purposes.

Amount of Insurance for a Retiree

Service Retirement: The Basic Insurance will be reduced by 15% per year until the amount equal to the greater of (a) 40% of the initial Basic Insurance, or (b) $2,500.

Disability Retirement: The amount of basic life insurance in force prior to retirement will be continued until normal retirement age. At normal retirement age, the amount of insurance will be reduced as for service retirement.

Retiree Contributions

State Employees: None

Teachers: None

PLDs: PLD or member must pay $0.46 per month per $1,000 of base benefit, based on the coverage amounts declining from 100% to 40%.

Judges: None

Legislators: None

Normal Retirement Age

The specified age, the years of service requirement, or any age and years of service combination at which a participant may become eligible for unreduced service retirement benefits.

Discontinued Coverages at Retirement

- Supplemental Life
- Accidental Death and Dismemberment
- Dependent Life

(Discontinued coverages may be converted to individual policies at a charge to the MainePERS. Conversion charges are considered a cost of active, not retiree, group life insurance. Therefore, it is not included in these liabilities.)