

Maine Legislative Retirement Program Actuarial Valuation Report

as of June 30, 2009

**Produced by Cheiron** 

November 2009



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November 18, 2009

Board of Trustees Maine Public Employees Retirement System #46 State House Station Augusta, Maine 04333-0046

Dear Members of the Board:

At your request, we have produced this report containing the full results of the June 30, 2009 actuarial valuation of the retirement plan for legislators in the Maine Legislative Retirement Program.

In performing this valuation, Cheiron used assumptions and methods that meet the parameters set by Government Accounting Standards Board (GASB) Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans. The actuarial assumptions used in this valuation have been recommended by the actuary and adopted by the Board of Trustees based upon the most recent review of the experience of the retirement plans in the programs administrated by Maine PERS completed in 2006. We believe the assumptions used, in the aggregate, represent our best estimate of anticipated future experience of the plan. The results of this report are dependent upon future experience conforming to these assumptions. It is certain that actual experience will not conform exactly to these assumptions. Actual amounts will differ from projected amounts to the extent actual experience differs from expected experience. The Board of Trustees has the final decision regarding the appropriateness of the assumptions.

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

We did not audit this data. However, we reviewed the census data for reasonableness and for consistency with the prior year's data. We found the data to be reasonably consistent and comparable with data used in the prior valuation. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

The results in this report are only applicable to the 2011 fiscal year. Future years' results may differ significantly.

I hereby certify that, to the best of my 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 Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board, and that as a Member of the American Academy of Actuaries, I meet the Qualification Standards to render the opinion contained in this report.

Sincerely, Cheiron

Gene Kalwarski, FSA, EA Consulting Actuary Fiona E. Liston, FSA, EA Consulting Actuary

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#### INTRODUCTION

This report presents the results, as of June 30, 2009, of the actuarial valuation of the retirement plan for legislators in the Maine Legislative Retirement Program. Schedule A, following this introduction, contains the cost results, assets, liabilities, and accounting disclosure information. Schedule B presents a summary of plan provisions and Schedule C presents a description of actuarial assumptions and methods used in determining costs, including a description of the funding method.

The results of this valuation produce a zero required contribution under either method.



# SCHEDULE A PARTICIPANT DATA, COSTS, AND ACCOUNTING INFORMATION

Valuation Results as of June 30, 2009	
A. Participant Data	
Number of:	
Active Members	172
Retired Members	108
Beneficiaries of Retired Members	18
Survivors of Deceased Members	4
Disabled Members	0
Vested Deferred Members	80
Inactive Non-Vested Members	<u>113</u>
Total	495
Active Payroll	\$ 2,326,785
Annual Benefits for Retired Members, Beneficiaries, Survivors and Disabled Members	\$ 229,960
B. Cost Results	
Employer Normal Cost	12.35%
Unfunded Actuarial Liability	(15.88%)
Total Cost*	0.00%

<sup>\*</sup> Not less than zero.



# SCHEDULE A PARTICIPANT DATA, COSTS, AND ACCOUNTING INFORMATION

C. Accounting Information					
1.	1. GASB Disclosure				
	a. Actuarial Accrued Liability				
	- Retirees and beneficiaries currently receiving benefits				
	and terminated vested employees not yet receiving				
	benefits	\$	3,636,651		
	- Current employees		, ,		
	Accumulated employee contributions including				
	allocated investment earnings		2,005,895		
	Employer-financed vested		328,157		
	Employer-financed nonvested		(470,894)		
	- Total Actuarial Accrued Liability (AAL)	\$	5,499,809		
	b. Actuarial Value of Assets (AVA)		8,717,885		
	c. Unfunded Actuarial Accrued Liability	\$	(3,218,076)		
2.	Other Accounting Information		,		
	a. Market Value of Assets	\$	6,932,518		
	b. Unfunded Accrued Liability, (not less than \$0)	\$	0		
	c. Amortization Period		10 Years		



### SCHEDULE B SUMMARY OF PLAN PROVISIONS

### 1. Membership

Except as provided by statute, membership is mandatory for every Legislator in service in the Legislature on or after December 3, 1986, and optional for those who were members of the Retirement System on December 2, 1986.

Membership ceases on the earlier of withdrawal of contributions, retirement, or death.

#### 2. Member Contributions

Members are required to contribute 7.65% of earnable compensation.

## 3. Average Final Compensation

For purposes of determining benefits payable, average final compensation is the average annual rate of earnable compensation for the three years of creditable service (not necessarily consecutive) as a legislator which produce the highest such average.

#### 4. Creditable Service

Creditable service includes the following:

- a. all legislative service as a member after December 2, 1986;
- b. all legislative service before December 3, 1986, for which contributions have been made to the Retirement System at the applicable rate, including appropriate interest;

- c. service credited while receiving disability benefits under the Program; and
- d. all service creditable under the Retirement System as a State Employee, provided the member elects to have the member's own and the employer's contributions on behalf of such service transferred to the Legislative Program.

#### 5. Service Retirement Benefits

#### **Eligibility**

- a. Eligibility for Members with at Least Ten Years of Creditable Service on July 1, 1993
  - i. Eligibility for members in active service and inactive members:
    - 25 years of creditable service.
  - ii. Eligibility alternative for members in active service:

Attainment of age 60.

iii. Eligibility for members not in active service at retirement, and not in active service on or after October 1, 1999:

Attainment of age 60 and ten years of creditable service.

iv. Eligibility for members not in active service at retirement, but in active service on or after October 1, 1999:



#### SCHEDULE B SUMMARY OF PLAN PROVISIONS

Attainment of age 60 and five years of creditable service.

# b. Eligibility for Members with Less Than Ten Years of Creditable Service on July 1, 1993

i. Eligibility for members in active service and inactive members:

25 years of creditable service.

ii. Eligibility alternative for members in active service:

Attainment of age 62.

iii. Eligibility for members not in active service at retirement, and not in active service on or after October 1, 1999:

Attainment of age 62 with ten years of creditable service.

iv. Eligibility for members not in active service at retirement, but in active service on or after October 1, 1999:

Attainment of age 62 and five years of creditable service.

#### **Benefit**

1/50 of average final compensation multiplied by years of creditable service, reduced for retirement before age 60 at the rate of approximately 21/4% for each year retirement age is less

than age 60, for members with at least ten years creditable service on July 1, 1993; reduced for retirement before age 62 at the rate of 6% for each year retirement age is less than age 62, for members with less than ten years creditable service on July 1, 1993; minimum benefit \$100 per month if at least ten years of creditable service.

#### Form of Payment

Life annuity.

# 6. Disability Retirement Benefits Other Than No Age Benefits (See Item 7)

#### **Eligibility**

Disabled as defined in the MainePERS statutes, prior to normal retirement age; employed prior to October 16, 1992 and did not elect No Age Disability Option.

#### **Benefit**

66-2/3% of average final compensation, reduced by employment earnings over the specified statutory limit, and to the extent that the benefit, in combination with worker's compensation and Social Security, exceeds 80% of average final compensation.

# Form of Payment

Payment begins on termination of service and ceases on cessation of disability or after five years, unless the member is unable to engage in any substantially gainful activity; in which case payments cease on the earlier of ten years following



#### SCHEDULE B SUMMARY OF PLAN PROVISIONS

normal retirement age or the date the service retirement benefit equals or exceeds the disability benefit.

#### **Conversion to Service Retirement**

During the period of disability, average final compensation is increased with cost-of-living adjustments and service is credited. On the date when service benefits reach a level of 66-2/3% of average final compensation or ten years after the normal retirement date, if earlier, the disability benefit converts to a service retirement benefit based on service and average final compensation at that point.

#### 7. No Age Disability Retirement Benefits

#### **Eligibility**

Disabled as defined in the MainePERS statutes; employed on or after October 16, 1992 or employed prior to October 16, 1992 and elected the provisions of No Age Disability.

#### **Benefit**

59% of average final compensation, reduced by employment earnings over the specified statutory limit, and to the extent that the benefit, in combination with worker's compensation and Social Security, exceeds 80% of average final compensation.

#### **Form of Payment**

Payment begins on termination of service and ceases on cessation of disability or after five years, unless the member is unable to engage in any substantially gainful activity; in which case payments cease on the date the service retirement benefit equals or exceeds the disability benefit.

#### **Conversion to Service Retirement**

During the period of disability, average final compensation is increased with cost-of-living adjustments and service is credited. On the date when service benefits reach a level of 59% of average final compensation, the disability benefit converts to a service retirement benefit based on service and average final compensation at that point.

## 8. Pre-Retirement Ordinary Death Benefits

#### **Eligibility**

Death while active, inactive eligible to retire or disabled.

#### **Benefit**

Designated beneficiary, spouse, child(ren), or parents entitled to benefit calculated as if deceased member had retired under Option 2 (see item 12); however, beneficiary may elect survivor benefits payable to a surviving spouse, dependent child(ren), parents, or other designated beneficiaries in monthly amounts varying by status of beneficiary and number of eligible survivors. Otherwise, accumulated contributions with interest are payable to designated beneficiary, spouse, child(ren), older parent or estate.



#### SCHEDULE B SUMMARY OF PLAN PROVISIONS

#### 9. Pre-Retirement Accidental Death Benefits

#### **Eligibility**

Death while active or disabled resulting from injury received in the line of duty.

#### **Benefit**

If the member leaves no dependent children, two-thirds of the member's average final compensation to the surviving spouse until death.

- If the member is survived by a spouse who has the care of dependent child(ren) of the member, the surviving spouse shall receive an annual sum equal to the member's average final compensation. When there is no longer any dependent child, the surviving spouse shall receive two-thirds of member's average final compensation until death.
- If the member is survived by a spouse who does not have the care of the member's dependent child(ren), the surviving spouse and dependent child(ren) shall share equally an annual sum equal to the member's average final compensation. When there is no longer any dependent child, the surviving spouse shall receive two-thirds of member's average final compensation until death.
- If the member leaves no spouse, the dependent child(ren) shall be paid an annual amount equal to the member's average final compensation. Benefits will cease when the last dependent child no longer meets the definition of "dependent child."

#### 10. Refund of Contributions

#### **Eligibility**

Termination of service without retirement or death.

# **Benefit**

Member's accumulated contributions with interest.

#### 11. Cost-of-Living Adjustments

All service and disability retirement and survivor benefits are adjusted each year there is a percentage change in the Consumer Price Index, based on the Index.

Cost-of-living adjustments are effective September 1 and are applied to all benefits which have been in payment for 12 months. The maximum increase or decrease is 4%. Average final compensation used in determining disability benefits for disabled members is similarly adjusted for purposes of determining the recipient's service retirement benefit if and when the recipient moves to service retirement.

Members on service retirement who did not have at least ten years creditable service on July 1, 1993 are not eligible to receive a cost-of-living adjustment until 12 months after their normal retirement age.



#### SCHEDULE B SUMMARY OF PLAN PROVISIONS

### 12. Methods of Payment of Service Retirement Benefits

At retirement, a member who retires with a benefit must choose from the following methods of payment:

### **Full Benefit**

Unadjusted benefit is paid for the life of the member only.

#### Option 1

Cash refund equal to the remaining employee contribution balance, if any, at the date of death (where the employee contribution balance has been reduced each month by the portion of the monthly benefit deemed to be provided by employee contributions).

## Option 2

100% joint and survivor annuity.

# Option 3

50% joint and survivor annuity.

#### Option 4

Joint and survivor annuity at any percentage other than those available under Option 2 and Option 3.

#### Option 5

Designated percentage of the benefit (not less than 51%) payable to the member, with the remaining percentage (the two

to equal 100%) payable to a beneficiary (may only be a sole beneficiary) while both are alive. At the death of either, the higher of the two percentages is paid to the survivor for the survivor's life, and the lower-percentage benefit ceases to be paid.

#### Option 6

100% joint and survivor annuity (Option 2) with pop-up\*.

#### Option 7

50% joint and survivor annuity (Option 3) with pop-up\*.

#### **Option 8**

Option 4 with pop-up\*.

\* The "pop-up" feature attached to a given Option means that in the case of a beneficiary predeceasing the member, the member's benefit will be revised prospectively to the amount that the benefit would have been had the member selected Full Benefit payment upon retirement.

### 13. Changes since last Valuation

None.



# SCHEDULE C ACTUARIAL ASSUMPTIONS AND METHODS

#### A. Actuarial Assumptions

1. Annual Rate of Investment Return 7.75%

2. Annual Rate of Salary Increase 4.75%

**3. Annual Cost-of-Living Increase** 3.75%

# 4. Normal Retirement Age

Age 60 for members with at least ten years of creditable service on July 1, 1993.

Age 62 for members with less than ten years of creditable service on July 1, 1993.

# 5. Probabilities of Employment Termination at Selected Ages Due to:

			De	eath
Age	Disability	Termination	Male	Female
25	.0006	.07	.0007	.0003
30	.0006	.06	.0009	.0004
35	.0007	.05	.0009	.0005
40	.0011	.04	.0012	.0008
45	.0022	.03	.0017	.0010
50	.0042	.02	.0028	.0015
55	.0072	.01	.0048	.0025

## 6. Rate of Healthy Life Mortality at Selected Ages:

Age	Male	Female
25	.0007	.0003
30	.0009	.0004
35	.0009	.0005
40	.0012	.0008
45	.0017	.0010
50	.0028	.0015
55	.0048	.0025

#### 7. Rates of Disabled Life Mortality at Selected Ages

Age	Male	Female
25	.0092	.0072
30	.0112	.0089
35	.0134	.0109
40	.0160	.0126
45	.0193	.0144
50	.0236	.0165
55	.0295	.0191

# 8. Assumption Changes Since Last Valuation

None.



#### SCHEDULE C ACTUARIAL ASSUMPTIONS AND METHODS

#### **B.** Actuarial Methods

#### 1. Funding Method:

The Entry Age Normal actuarial funding method is used to determine costs. Under this funding method, the total employer contribution rate consists of two elements, the normal cost rate and the unfunded actuarial liability (UAL) rate.

The normal cost rate is developed for a typical new entrant. This rate is determined by taking the value, as of entry age to the plan, of the member's projected future benefits, reducing it by the value of future member contributions, and dividing it by the value, also as of the member's entry age, of the member's expected future salary.

In addition to contributions required to meet the program's normal cost, contributions will be required to fund the program's unfunded actuarial liability. The actuarial liability is defined as the present value of future benefits, less the present value of future normal costs and future member contributions. The unfunded actuarial liability is the total actuarial liability less the actuarial value of plan assets.

The unfunded liability is amortized by annual payments over an open 10-year period. The payments are determined so that they will be a level percentage of pay, assuming total pay increases 4.75% per year.

#### 2. Asset Valuation Method:

For purposes of determining the State contribution to the plans in the Program, we use an actuarial value of assets. The asset adjustment method dampens the volatility in asset values that could occur because of fluctuations in market conditions. Use of an asset smoothing method is consistent with the long-term nature of the actuarial valuation process.

In determining the actuarial value of assets, we calculate an expected actuarial value based on cash flow for the year and imputed returns at the actuarial assumption. This expected value is compared to the market value and one-third of the difference is added to the preliminary actuarial value to arrive at the final actuarial value.

