



**Maine Judicial Retirement Program  
Actuarial Valuation Report**

**as of June 30, 2010**

**Produced by [Cheiron](#)**

**October 2010**

## Table of Contents

Letter of Transmittal .....	i
Introduction.....	ii
Schedule A – Participant Data, Costs, and Accounting Information.....	1
Schedule B – Summary of Plan Provisions .....	2
Schedule C – Actuarial Assumptions and Methods.....	10

October 27, 2010

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, 2010 actuarial valuation of the retirement plan for judges in the Maine Judicial 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 administered by MainePERS completed in 2006. We believe the assumptions used, in the aggregate, represent our best estimate of anticipated future experience of the retirement plan for judges. 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 Retirement System. This information includes, but is not limited to, plan provisions, employee census data and financial information.

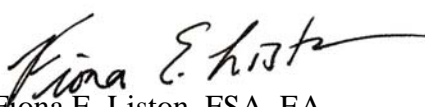
We did not audit this data. However, we reviewed the census data for reasonableness and for consistency with the prior year's data. We found the data to be reasonably consistent and comparable with data used in the prior valuation. If the underlying data or information is inaccurate or incomplete, the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

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 Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board, and that as Members of the American Academy of Actuaries, we meet the Qualification Standards to render the 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



Gene Kalwarski, FSA, EA  
 Consulting Actuary



Fiona E. Liston, FSA, EA  
 Consulting Actuary



**MAINE JUDICIAL RETIREMENT PROGRAM  
ACTUARIAL VALUATION AS OF JUNE 30, 2010**

**INTRODUCTION**

This report presents the results, as of June 30, 2010, of the actuarial valuation of the retirement plan for judges in the Maine Judicial 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 State of Maine's annual contributions to the plans in this Program are determined on a biennial basis. Starting with Fiscal Years 2012 and 2013, the contribution rates used in the State's budgeting process to produce the applicable State budget contributions will be based on a roll forward of valuation results from every odd-numbered year. This means the contribution rates developed in this valuation will not be used to develop applicable State budget contributions for FY 2012 and FY 2013. In July of 2010, a roll forward of the 2009 valuation contribution rates were developed for that purpose. The roll forward consisted of projecting the June 30, 2009 actuarial liability to June 30, 2010 using generally accepted actuarial techniques, and assuming that there was no cost of living adjustments for members in pay status during fiscal year ending 2010. The roll forward unfunded actuarial liability as of June 30, 2010 was then based on actual assets known as of June 30, 2010.

MAINE JUDICIAL RETIREMENT PROGRAM  
ACTUARIAL VALUATION AS OF JUNE 30, 2010

**SCHEDULE A**  
**PARTICIPANT DATA, COSTS, AND ACCOUNTING INFORMATION**

**Valuation Results as of June 30, 2010**

**A. Participant Data**

Number of:

Active Members	59
Retired Members	39
Beneficiaries of Retired Members	17
Survivors of Deceased Members	0
Disabled Members	0
Vested Deferred Members	1
Inactive Non-Vested Members	1
<b>Total</b>	<b>117</b>

Active Payroll \$ 6,956,364

Annual Benefits for Retired Members, Beneficiaries,  
Survivors and Disabled Members \$ 2,794,145

**B. Cost Results**

Employer Normal Cost*	19.20%
Unfunded Actuarial Liability	9.34%
Total Cost	28.54%

**C. Accounting Information**

1. GASB Disclosure

a. Actuarial Accrued Liability

- Retirees and beneficiaries currently receiving benefits and terminated vested employees not yet receiving benefits	\$ 26,915,670
- Current employees	
-- Accumulated employee contributions including allocated investment earnings	8,510,723
-- Employer-financed vested	19,216,774
-- Employer-financed nonvested	(1,493,468)
- Total Actuarial Accrued Liability (AAL)	\$ 53,149,699

b. Actuarial Value of Assets (AVA) 47,677,635

c. Unfunded Actuarial Accrued Liability \$ 5,472,064

2. Other Accounting Information

a. Market Value of Assets	\$ 41,517,520
b. Unfunded Accrued Liability, (not less than \$0)	\$ 9,611,608
c. Amortization Period	10 Years

\* Employer Normal Cost includes Retirement Benefits, Disability, and Survivor Benefit costs.

**SCHEDULE B**  
**SUMMARY OF PLAN PROVISIONS**

**1. Membership**

Membership is a condition of employment for all judges serving on or after December 1, 1984.

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

Judges who retired prior to December 1, 1984 are covered under a different plan.

**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) which produce the highest such average.

For active judges as of July 1, 2003, July 1, 2004 and July 1, 2010, average final compensation shall be increased to reflect missed salary increases.

**4. Creditable Service**

Creditable service includes the following:

- a. all judicial service as a member after November 30, 1984;
- b. all judicial service before December 1, 1984;
- c. service credited while receiving disability benefits under the Program; and
- d. all service creditable under the State Employee and Teacher or Participating Local District Retirement Programs provided the member elects to have the member's own and the employer's contributions on behalf of the service transferred to the Judicial Program.

**SCHEDULE B**  
**SUMMARY OF PLAN PROVISIONS**

**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 70 with at least one year of service immediately before retirement.

- 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:

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 70 with at least one year of service immediately before retirement.

- 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.

MAINE JUDICIAL RETIREMENT PROGRAM  
ACTUARIAL VALUATION AS OF JUNE 30, 2010

**SCHEDULE B**  
**SUMMARY OF PLAN PROVISIONS**

**Benefit**

Sum of:

- (1) for service after November 30, 1984 and before July 1, 1998 and creditable service allowed under Section 1302(3), 2% of average final compensation multiplied by years of service;
- (2) for service on or after July 1, 1998, 3% of average final compensation multiplied by years of service; and
- (3) for judicial service prior to December 1, 1984, 75% of November 30, 1984 salary for the position held at retirement, pro-rated for prior service less than ten years.

The benefit is reduced for retirement before age 60 at the rate of approximately 2¼% for each year retirement age is less than 60, for members with at least ten years creditable service on July 1, 1993; reduced for retirement before age 62 by 6% for each year the member's age is less than age 62, if less than ten years creditable service on July 1, 1993.

**Maximum Benefit**

Total benefit cannot exceed 70% of average final compensation except as provided under the minimum benefit provision.

**Minimum Benefit**

For a judge in service and age 50 or older on December 1, 1984, 75% of salary on 6/30/84 for the position held at retirement, increased by 6% per year from 6/30/84 to 6/30/89 or retirement date if earlier, and increased beyond 6/30/89 by the cost-of-living increase granted the previous September.

**Form of Payment**

Life annuity; except, for a judge in service and age 50 before December 1, 1984, 50% joint and survivor annuity to surviving spouse.

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

**Conditions**

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



**SCHEDULE B**  
**SUMMARY OF PLAN PROVISIONS**

**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 two years, unless the member is unable to engage in any substantially gainful activity; in which case payments cease on the earlier of age 70 and the date the service retirement benefit 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 at age 70, if earlier, the disability benefit converts to a service retirement benefit based on service and pay at that point.

**7. No Age Disability Retirement Benefits**

**Conditions**

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

**Benefit**

59% of average final compensation, reduced by the amount by which employment earnings plus the disability allowance exceeds the current salary of the position held at disability, and to the extent that the benefit, in combination with worker's compensation exceeds 80% of average final compensation. A member in service on November 30, 1984 may elect benefits applicable for retirement before December 1, 1984.

**Form of Payment**

Payment begins on termination of service and ceases on cessation of disability or after two 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 exceeds the disability benefit.

**SCHEDULE B**  
**SUMMARY OF PLAN PROVISIONS**

**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 pay 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.

**Minimum Benefit**

For a judge in service prior to December 1, 1984, one-half of the judge's retirement benefit determined on date of death, payable to the spouse and/or dependent children.

**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.

**SCHEDULE B**  
**SUMMARY OF PLAN PROVISIONS**

- 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**

Except as described below, 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. If the percentage change is negative then no adjustment is made in that year. In subsequent years the adjustment that would have been made will be adjusted downward to the extent necessary to recoup the full actuarial value of not having made the previous year's negative adjustment. This process of adjustment may occur over a multi-year period if needed to recoup the full value of the non-zero COLA.

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 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 the member reaches normal retirement age.

Minimum benefits are increased 6% per year from July, 1985 through June, 1989, and as described above thereafter.

**SCHEDULE B**  
**SUMMARY OF PLAN PROVISIONS**

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

At retirement, a member 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 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\*.

MAINE JUDICIAL RETIREMENT PROGRAM  
ACTUARIAL VALUATION AS OF JUNE 30, 2010

**SCHEDULE B**  
**SUMMARY OF PLAN PROVISIONS**

**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. Plan Change Since Last Valuation**

For active judges as of July 1, 2010, average final compensation is being increased to reflect missed salary increase.

MAINE JUDICIAL RETIREMENT PROGRAM  
ACTUARIAL VALUATION AS OF JUNE 30, 2010

**SCHEDULE C**  
**ACTUARIAL ASSUMPTIONS AND METHODS**

**A. Actuarial Assumptions**

1. **Annual Rate of Investment Return** 7.75%
2. **Annual Rate of Salary Increase** 4.00%
3. **Annual Cost-of-Living Increase** 3.75%
4. **Normal Retirement Age**

100% retirement assumed to occur at age 60 for members with at least ten years of creditable service on July 1, 1993.

For members with less than ten years of creditable service on July 1, 1993, 50% are assumed to retire each year after reaching age 62.

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

Age	Disability	Termination	Death	
			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

Rates are based on the 1994 Uninsured Pensioner Mortality Table for Males and Females.

MAINE JUDICIAL RETIREMENT PROGRAM  
ACTUARIAL VALUATION AS OF JUNE 30, 2010

SCHEDULE C  
ACTUARIAL ASSUMPTIONS AND METHODS

**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

Rates are based on the Revenue Ruling 96-7 Disabled Mortality Table for Males and Females.

**8. Family Composition Assumptions:**

80% of active members are married and have two children born when the member is 24 and 28; children are dependent until age 18; female spouse is three years younger than male spouse; member has no dependent parents; unmarried members have beneficiaries entitled to benefits worth 80% as much as those of married members' beneficiaries.

**9. Date of Adoption of Assumptions**

The assumptions were adopted by the Trustees as a result of the latest experience study review performed in 2006 and covering the period July 1, 1997 through June 30, 2005.

**10. 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 plan's normal cost, contributions will be required to fund the plan'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% 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.