Maine State Retirement System State Employee and Teacher Plan Actuarial Valuation as of June 30, 2004

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A MILLIMAN GLOBAL FIRM

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February 2, 2005

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

Dear Members of the Board:

At your request, we have conducted our annual actuarial valuation of the State Employee and Teacher Plan of the Maine State Retirement System. The results of the valuation are contained in the following report.

In performing this valuation, Milliman 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 have been recommended by the actuary and adopted by the Board of Trustees based on Milliman's most recent review of the System's experience completed during Fiscal Year 1998. We believe the assumptions used, in the aggregate, reflect 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 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 compared the census data and financial information with the previous year's information and reviewed the results for reasonableness. 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.

Board of Trustees Maine State Retirement System February 2, 2005 Page 2

We understand this report is considered a public document and, as such, may be subject to disclosure to third parties. However, we do not intend to benefit, and assume no liability to, any third party who receives the report in this fashion. Any distribution of this report must be in its entirety including this cover letter, unless prior written consent from Milliman is obtained.

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 Guides to Professional Conduct, Amplifying Opinions, and Supporting Recommendations and Interpretations of the American Academy of Actuaries.

Sincerely,

Milliman, Inc.

I, Althea Schwartz, am a consulting actuary for Milliman, Inc. I am also a member of the American Academy of Actuaries and meet their Qualification Standards to render the actuarial opinion contained herein.

Althen Schwartz

Althea Schwartz, F.S.A. Principal

I, Theresa Leatherbury, am a consulting actuary for Milliman, Inc. I am also a member of the American Academy of Actuaries and meet their Qualification Standards to render the actuarial opinion contained herein.

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Theresa Leatherbury, F.S.A. Principal

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SECTION I

BOARD SUMMARY



This report presents the results of the June 30, 2004 actuarial valuation of the State Employee and Teacher Plan of the Maine State Retirement System (MSRS). The primary purposes of performing the annual actuarial valuation are to:

- 1) Determine the contributions that will be paid by the State effective July 1, 2005 (fiscal year 2006), and effective July 1, 2006 (fiscal year 2007);
- Measure and disclose, as of the valuation date, the financial condition of the Plan;
- 3) Indicate trends in the financial progress of the Plan;
- 4) **Provide specific information** and documentation required by the Government Accounting Standards Board (GASB).

In this section of the report, we present a summary of the above information in the form of:

- The actuary's comments;
- The prior year's experience of the Plan's assets, liabilities, contributions, and membership;
- A series of graphs highlighting key trends experienced by the Plan; and
- A tabular summary, intended for quick reference purposes, of all principal results from this year's valuation, compared to the prior year.

Actuary's Comments

As of the June 30, 2004 actuarial valuation, the Plan's unfunded actuarial liability was **\$2,989 million**. This is a slight increase from last year's unfunded actuarial liability of \$2,921 million. During the year ended June 30, 2004, the Plan's assets earned **16.6%** on a market value basis. This favorable return followed 3 years of market performance below the 8% target. Due to the Plan's asset-smoothing technique, the return on the actuarial asset value was **6.6%**, reflecting prior years' market losses. This return is below the assumed rate of return of 8.0%. The result is a small actuarial loss on investments of **\$83 million**. The actuarial loss on investments is mostly offset by a **\$57 million** actuarial gain on plan liabilities. The Plan's funded ratio (actuarial assets divided by actuarial liability) increased to **68.3%** as of June 30, 2004 from 67.4% as of June 30, 2003.

In FY 2003, the Legislature established a 25-year amortization period effective July 1, 2003. As a result of this lengthened amortization period, the actuarially determined contribution rate established for FY 2004 by the June 30, 2002 valuation decreased from 19.32% to 15.92%. The effect of this longer amortization period carried into FY 2005, resulting in a lower employer contribution rate in FY 2005 than would have been required had the shorter amortization period not been changed by the Legislature. The



actuarially determined contribution rate for FY 2005 was 17.26%. Without the enactment by the Legislature to lengthen the amortization period, the contribution rate would have been 21.43%. The Legislature also provided, in the same enactment, that at July 1, 2005 (FY 2006) the amortization period would revert to the prior shorter period, at the same year thereof that FY 2006 would have been had the shorter period not been lengthened for FY 2004 and FY 2005. Therefore, at July 1, 2005 (FY 2006) there will be 14 years remaining in the amortization period. This valuation reflects the reversion to the shorter amortization period. The State contribution rate for FY 2006 is 23.26%. The increase in contribution rate is due to the reinstatement of the shorter amortization period.

Overall, the results this year were as expected. The plan experienced a small asset loss that was mostly offset by a small liability gain. The increase in the contribution rate for FY 2006 reflects the shorter amortization period. It is always important to note that the financing of any retirement plan is a long-term proposition. Annual fluctuations, both up and down, are to be expected and should not by themselves be cause for either concern or optimism. The overall financial condition of the Plan is healthy and there are procedures, assumptions and methods in place that in our opinion adequately and appropriately finance the emerging long-term liabilities of the Plan.

The balance of this section summarizes Plan trends, and provides the principal details of this year's experience.



Prior Year Experience

Assets

The actuarial value of assets is calculated on the total invested assets of the System. This consists of assets attributable to the State Employee and Teacher Plan, the Judicial Plan, the Legislative Plan and the Consolidated and non-consolidated participating local district plans.

There are two relevant measures of the plans' assets: (i) the market value and (ii) the actuarial value. The market value is a snapshot of the asset value as of June 30, 2004.

The actuarial value is a smoothed asset value that recognizes 33% of the difference between the expected actuarial value and the market value of assets. The expected actuarial value equals the prior year's actuarial value adjusted with contributions, payments and investment earnings of 8.0%. This method tempers the volatile fluctuations in market value.

The actuarial value of assets for all of the System's plans as of June 30, 2004 exceeds the market value by \$220 million. The actuarial value of assets is higher because there are still investment losses from prior years that have not yet been recognized because of the smoothing methodology. Some of these "stored" or "unrecognized" losses were offset by the FY 2004 market value gain. It may take market returns above 8% for two or more years in a row before all of the "stored" losses are offset.

For the plan year ended June 30, 2004, the assets earned 16.6% on a market value basis and 6.6% on an actuarial value basis. We compare these returns to our assumption of 8.0%. On a market value basis, there was a gain of \$589 million and on an actuarial value basis, there was a loss of \$110 million. The specific changes between the prior year amounts and this year's are presented on the following page.

All Plans of System						
Item (In Millions)	Mar	ket Value	Actua	rial Value		
June 30, 2003 value	\$	6,936	\$	7,787		
Employer Contributions		291		291		
Member Contributions		132		132		
Benefit Payments		(448)		(448)		
Expected Investment Earnings (8%)		554		622		
Expected Value June 30, 2004	\$	7,465	\$	8,384		
Gain (Loss) on Investments		589		(110)		
June 30, 2004 value	\$	8,054	\$	8,274		

Market value, actuarial value and asset gain (or loss) are allocated to the separate plans. For the State Employee and Teacher Plan, the market value of assets at June 30, 2004 was \$6,281 million and the corresponding actuarial value was \$6,453 million. The Plan's share of the \$110 million loss on the actuarial assets was \$83 million. The specific changes for the State Employee and Teacher Plan are presented below.

State Employee and Teacher Plan						
Item (In Millions) Market Value Actuarial Va				rial Value		
June 30, 2003 value	\$	5,382	\$	6,042		
Employer Contributions		272		272		
Member Contributions		111		111		
Benefit Payments		(373)		(373)		
Expected Investment Earnings (8%)		430		484		
Expected Value June 30, 2004	\$	5,822	\$	6,536		
Gain (Loss) on Investments		459		(83)		
June 30, 2004 value	\$	6,281	\$	6,453		

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Liabilities

Three different measures of liabilities are calculated for the State Employee and Teacher Plan: a total present value of future obligations, an actuarial liability, and an accrued benefit liability. The actuarial liability is used to determine the Plan's contribution rate and the GASB disclosures. Plan experience is expressed by changes in the actuarial liability. During the plan year ending in 2004, the actuarial liability experienced a gain of \$57 million for funding purposes, which is 0.6% of the total actuarial liability. We will continue to monitor gains and losses to assure that no significant new patterns of liability gains and losses emerge unexpectedly.

Liabilities (In Millions)	Total Value	Actuarial	Accrued Benefit
June 30, 2003	\$10,438	\$8,963	\$7,293
June 30, 2004	\$10,925	\$9,442	\$7,764

Unfunded Liabilities And Funding Ratios

When the liabilities of an actuarially funded retirement plan are greater than the plan's assets, the plan is said to have an unfunded liability. This is the case with the State Employee and Teacher Plan. The unfunded liability is measured in two ways: (i) unfunded actuarial liability, which compares the actuarial liability to the actuarial asset value, and (ii) unfunded accrued benefit liability, which compares the accrued benefit liability to the market value of assets. Here we show the June 30, 2003 and June 30, 2004 unfunded liability/(surplus) amounts for the Plan, as well as the corresponding funding ratios for each (assets divided by liabilities).

(In Millions)	Actuarial	Accrued Benefit
6/30/2003 Net (Surplus) Unfunded	\$ 2,921	\$1,911
Funding Ratio	67.4%	73.8%
6/30/2004 Net (Surplus) Unfunded	\$ 2,989	\$1,483
Funding Ratio	68.3%	80.9%



Contributions

In Section IV, we show the various contribution rates by the plans within the State Employee and Teacher Plan. Below we present the State contribution rate for all of these plans combined, and compare it to the rate developed in the June 30, 2003 actuarial valuation.

In summary, the overall State contribution rate increased by **6.00%** of payroll. This is mostly due to the shortening of the amortization period. The actuarial loss on investments and the actuarial gain on liabilities also minimally affected the overall contribution rate. The small increase in the contribution rate due to payroll growth reflects the difference between the actual aggregate payroll increase and the assumed 5.5% increase used in the valuation. For actuarial purposes, we assume the unfunded liability payment will increase 5.5% per year. Since aggregate payroll growth in FY 2004 was less than 5.5%, the unfunded actuarial liability dollar payment increases when expressed as a percentage of payroll.

Because of the State's biennial budgeting practice and the way in which retirement contributions are incorporated into it, this valuation will set rates for the next biennium (fiscal year 2006 and fiscal year 2007).

Rate as Percent of Covered Payroll	
June 30, 2003 State Contribution Rate	17.26%
Increase / (Decrease) due to:	
Investments	0.31%
Liabilities	(0.21%)
Payroll Growth	0.28%
Change in Amortization Period	5.62%
June 30, 2004 State Contribution Rate	23.26%



Membership

There are three types of plan participants: (i) current active members; (ii) terminated members who retain a right to a deferred "vested" benefit; and (iii) benefit recipients, who may be retired former members, concurrent beneficiaries of living retired members, disabled members or beneficiaries of deceased active, retired or disabled members. In Appendix A, we present extensive details on membership statistics. Below, we compare totals in each group between June 30, 2003 and 2004.

As shown below, there was an overall increase in participation during the year of 1.5%.

	6/30/2004	6/30/2003	Change
Active Members	42,816	42,862	0.1%
Terminated "Vested" Members	4,693	4,179	12.3%
Benefit Recipients	24,388	23,768	2.6%
TOTAL	71,897	70,809	1.5%



Trends

One of the best ways to measure or evaluate the financial condition of a retirement plan is to examine the historical trends that are evolving. Below, we present three charts which present 10 years of trend information on the assets and liabilities of the State Employee and Teacher Plan, annual cash flows in and out of the State's plans as a whole, and the State's overall contribution rate to the State Employee and Teacher Plan. Our comments on each follow.



Chart A: ASSETS / LIABILITIES – State & Teacher Only









Comments

Chart A depicts the historical investment performance. The liabilities have grown as expected over the period but the assets have remained relatively level over the past few years.

Chart B presents an emerging trend being faced by many retirement systems due to the aging of the baby boomer generation. Payments to retirees are on the increase, while cash into plans from employer and employee contributions is stable or declining. This is not unanticipated, and essentially is the reason for funding and investment strategies that seek to build plan assets in earlier years when contributions being paid in exceed benefit payments out.

Chart C looks at changes in the State's overall contribution rate for the State Employee and Teacher Plan. It shows the State's commitment to pay off the unfunded actuarial liability. In years when investment performance helped reduce the unfunded actuarial liability and the State's economy and budget were in favorable condition, the State responded by shortening the amortization period. When the lower than expected investment return created increases in the unfunded actuarial liability and the economy and budget presented challenges, the State re-lengthened the amortization period for the 2004-2005 biennium. The contribution rate determined by the 2004 valuation reflects that the amortization period will revert to the shorter period at July 1, 2005 (FY 2006).

TOTAL STATE EMPLOYEE AND TEACHER PLAN					
SUMMARY OF PRINCIPAL RESULTS					
Valuation As Of>	6/30/2004	6/30/2003	% change		
PARTICIPANT COUNTS					
Actives	42,816	42,862	-0.1%		
Retired Members	16,667	16,267	2.5%		
Beneficiaries of Retirees	4,844	4,756	1.8%		
Survivors of Deceased Members	883	843	4.7%		
Disabled Members	1,994	1,902	4.8%		
Deferred "Vested" Members	4,693	4,179	12.3%		
TOTAL	71,897	70,809	1.5%		
Annual Salaries of Active Members	\$ 1,464,608,355	\$ 1,434,596,605	2.1%		
Annual Payments to Benefit Recipients	\$ 374,579,605	\$ 350,388,824	6.9%		
A	SSETS & LIABILITIE	S	3.5		
Total Actuarial Liability	\$ 9,442,389,399	\$ 8,963,272,498	5.3%		
Assets /Actuarial (Smoothed)	6,452,570,244	6,041,952,157	6.8%		
Unfunded Actuarial Liability	\$ 2,989,819,155	\$ 2,921,320,341	2.3%		
Funding Ratio	68.34%	67.41%	N/A		
Present Value of Accrued Benefits	\$ 7,763,787,479	\$ 7,292,512,668	6.5%		
Assets/Market Value	6,280,951,942	5,381,673,439	16.7%		
Unfunded PVAB	\$ 1,482,835,537	\$ 1,910,839,229	-22.4%		
Accrued Benefit Funding Ratio	80.90%	73.80%	N/A		
CONTRIE	BUTIONS AS % OF P	AYROLL			
	Fiscal Year 2006	Fiscal Year 2005			
Normal Cost Contribution	6.17%	6.17%			
Unfunded Actuarial Liability	0.1170	0/0			
Contribution	17.09	11.09			
Total State Contribution	23.26%	17.26%			



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TEACHERS					
SUMMARY OF PRINCIPAL RESULTS					
Valuation As Of>	6/30/2004	6/30/2003	% change		
PARTICIPANT COUNTS					
Actives	28,205	28,329	-0.4%		
Retired Members	9,327	9,044	3.1%		
Beneficiaries of Retirees	2,026	1,963	3.2%		
Survivors of Deceased Members	322	301	7.0%		
Disabled Members	781	751	4.0%		
Deferred "Vested" Members	3,157	2,692	17.3%		
TOTAL	43,818	43,080	1.7%		
Annual Salaries of Active Members	\$ 939,762,058	\$ 913,142,237	2.9%		
Annual Payments to Benefit Recipients	\$ 209,908,431	\$ 195,641,297	7.3%		
ł	ASSETS & LIABILITIE	S			
Total Actuarial Liability	\$ 6,072,362,895	\$ 5,737,908,352	5.8%		
Assets/Actuarial (Smoothed)	4,044,459,568	3,754,519,672	7.7%		
Unfunded Actuarial Liability	\$ 2,027,903,327	\$ 1,983,388,680	2.2%		
Funding Ratio	66.60%	65.43%	N/A		
Present Value of Accrued Benefits	\$ 4,876,744,316	\$ 4,557,125,703	7.0%		
Assets/Market Value	3,936,889,521	3,344,216,947	17.7%		
Unfunded PVAB	\$ 939,854,795	\$ 1,212,908,756	-22.5%		
Accrued Benefit Funding Ratio	80.73%	73.38%	N/A		
CONTRI	BUTIONS AS % OF F	PAYROLL			
	Fiscal Year 2006	Fiscal Year 2005			
Normal Cost Contribution	6.04%	6.04%			
Unfunded Actuarial Liability Contribution	18.08	11.83			
Total State Contribution	24.12%	17.87%			



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TOTAL STATE EMPLOYEES (Regular and Special Plans)					
SUMMARY OF PRINCIPAL RESULTS					
Valuation As Of>	6/30/2004	6/30/2003	% change		
PARTICIPANT COUNTS					
Actives	14,611	14,533	0.5%		
Retired Members	7,340	7,223	1.6%		
Beneficiaries of Retirees	2,818	2,793	0.9%		
Survivors of Deceased Members	561	542	3.5%		
Disabled Members	1,213	1,151	5.4%		
Deferred "Vested" Members	1,536	1,487	3.3%		
TOTAL	28,079	27,729	1.3%		
Annual Salaries of Active Members	\$ 524,846,297	\$ 521,454,368	0.7%		
Annual Payments to Benefit Recipients	\$ 164,671,174	\$ 154,747,527	6.4%		
AS	SETS & LIABILITIES	6			
Total Actuarial Liability	\$ 3,370,026,504	\$ 3,225,364,146	4.5%		
Assets/Actuarial (Smoothed)	2,408,110,676	2,287,432,485	5.3%		
Unfunded Actuarial Liability	\$ 961,915,828	\$ 937,931,661	2.6%		
Funding Ratio	71.46%	70.92%	N/A		
Present Value of Accrued Benefits	\$ 2,887,043,163	\$ 2,735,386,965	5.5%		
Assets/Market Value	2,344,062,421	2,037,456,492	15.0%		
Unfunded PVAB	\$ 542,980,742	\$ 697,930,473	-22.2%		
Accrued Benefit Funding Ratio	81.19%	74.49%	N/A		
CONTRIB	UTIONS AS % OF PA	AYROLL			
	Fiscal Year 2006	Fiscal Year 2005			
Normal Cost Contribution	6.40%	6.40%			
Unfunded Actuarial Liability Contribution	15.33	9.80			
Total State Contribution	21.73%	16.20%			



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STATE EMPLOYEE REGULAR PLAN						
SUMMARY OF PRINCIPAL RESULTS						
Valuation As Of>	6/30/2004	6/30/2003	% change			
PARTICIPANT COUNTS						
Actives	12,715	12,611	.8%			
Retired Members	6,616	6,522	1.4%			
Beneficiaries of Retirees	2,531	2,515	0.6%			
Survivors of Deceased Members	558	539	3.5%			
Disabled Members	1,161	1,118	3.8%			
Deferred "Vested" Members	1,536	1,487	3.3%			
TOTAL	25,117	24,792	1.3%			
Annual Salaries of Active Members	\$ 444,899,467	\$ 440,628,719	1.0%			
Annual Payments to Benefit Recipients	\$ 142,770,879	\$ 134,469,725	6.2%			
AS	SETS & LIABILITIES	A PART AND A PART	Barris			
Total Actuarial Liability	\$ 2,856,852,953	\$ 2,729,464,467	4.7%			
Assets/Actuarial (Smoothed)	2,084,433,001	1,981,118,251	5.2%			
Unfunded Actuarial Liability	\$ 772,419,952	\$ 748,346,216	3.2%			
Funding Ratio	72.96%	72.58%	N/A			
Present Value of Accrued Benefits	\$ 2,424,750,063	\$ 2,297,868,032	5.5%			
Assets/Market Value	2,028,993,566	1,764,616,999	15.0%			
Unfunded PVAB	\$ 395,756,497	\$ 533,251,033	-25.8%			
Accrued Benefit Funding Ratio	83.68%	76.79%	N/A			
CONTRIB	UTIONS AS % OF PAY	ROLL				
	Fiscal Year 2006	Fiscal Year 2005				
Normal Cost Contribution	6.04%	6.04%				
Unfunded Actuarial Liability Contribution	14.55	9.25				
Total State Contribution	20.59%	15.29%				



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STATE EMPLOYEE SPECIAL PLANS (COMPOSITE)							
SUMMAR	Y OF P	RINCIPAL R	ESUI	TS			
Valuation As Of>	6/	30/2004		6/30/2003	% change		
PA	RTICIP	ANT COUNT	s		State State State		
Actives		1,896		1,922	-1.4%		
Retired Members		724		701	3.3%		
Beneficiaries of Retirees		287		278	3.2%		
Survivors of Deceased Members		3		3	0.0%		
Disabled Members		52		33	57.6%		
Deferred "Vested" Members		0	12 <u></u>	0	0.0%		
TOTAL		2,962		2,937	0.9%		
Annual Salaries of Active Members	\$ 79	9,946,830	\$	80,825,649	-1.1%		
Annual Payments to Benefit Recipients	\$ 21	,900,295	\$	20,277,802	8.0%		
AS	SETS	& LIABILITIE	s				
Total Actuarial Liability	\$ 513	3,173,551	\$	495,899,679	3.5%		
Assets/Actuarial (Smoothed)	323	3,677,675		306,314,234	5.7%		
Unfunded Actuarial Liability	\$ 189	9,495,876	\$	189,585,445	0.0%		
Funding Ratio		63.07%		61.77%	N/A		
Present Value of Accrued Benefits	\$ 462	2,293,100	\$	437,518,933	5.7%		
Assets/Market Value	318	5,068,855	_	272,839,493	15.5%		
Unfunded PVAB	\$ 147	7,224,245	\$	164,679,440	-10.6%		
Accrued Benefit Funding Ratio		68.15%		62.36%	N/A		
CONTRIE	UTION	S AS % OF P	AYR	OLL			
	Fisca	al Year 2006	Fi	scal Year 2005			
Normal Cost Contribution		8.25%		8.34%			
Unfunded Actuarial Liability Contribution		19.86		12.78			
Total State Contribution		28.11%		21.12%			



SECTION II

ASSETS



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The purpose of an actuarial valuation is to assess the funded status of a pension plan at a certain date and to establish the plan's funding requirements. On the asset side of a plan's funded status, the relevant measure is net assets available for benefits. "Assets" includes the System's investment portfolio committed for investment management to outside professionals, buildings and land owned by the System outside of the investment portfolio, and cash managed by the System outside of the investment portfolio.

The investment portfolio is by far the largest of these assets in dollar value, so much so that its value is often used, in contexts other than the actuarial valuation, as a proxy for total assets. However, for purposes of evaluating fairly the relationship of plan assets to plan liabilities, the value of all assets is included.

The value of plan assets for actuarial valuation purposes must be established and disclosed on a market value basis. Thereafter, for purposes of establishing rational plan funding requirements, the market value may be, and in the System's case is, smoothed. Market value represents a "snap-shot" or "cash-out" value which provides a basis for measuring investment performance from one year to the next. Market value, however, can fluctuate widely, particularly in the short term. As a result, market value is usually not suitable for long range planning.

In an ongoing pension plan, the long range is the important perspective. Actuarial value, or "carrying value" is market value that has been smoothed and is the actuary's best estimate of long-term asset value. It provides a more useful evaluation of the fund's ongoing ability to meet its obligations. The actuarial smoothing methodology employed in the valuation of the System's plans is explained later in this section.

In this section we present the following information on assets:

- Disclosure of the market value of plan assets measured at June 30, 2004 and June 30, 2003;
- Statement of the **changes** during the year in the market value of assets;
- Development of the actuarial value of assets by applying the smoothing methodology;
- Allocation of the actuarial value of assets among the System's plans; and
- A statement of the return on plan assets for the year, on both a market value basis and an actuarial value basis.



Disclosure of Plan Market Value Of Assets

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STATEMENT OF ASSETS AT MARKET VALUE (In Millions)					
June 30,					
	2004 2003				
Net Value of Investment Portfolio	\$ 8,035	\$ 6,917			
Buildings, land	5	5			
Cash external to portfolio	14	14			
Net Assets Available for Benefits	<u>\$ 8,054</u>	<u>\$ 6,936</u>			



Changes in Asset Value (market value based) in Valuation Year:

The components of asset value change are:

- · Contributions received from members and employers;
- Benefits paid out;
- Investment Income/(Loss) (realized and unrealized).

The specific changes during 2004 are presented below:

CHANGES IN MARKET VALUES					
Plan Assets/Market Value – June 30, 2003	\$ 6,936,201,398				
Member Contributions Received	132,254,631				
Employer Contributions Received	290,572,258				
Benefits Paid Out	(448,400,887)				
Investment Income/(Loss)	1,142,881,151				
Plan Assets/Market Value – June 30, 2004	\$ 8,053,508,551				



Development of the Actuarial Value of Assets:

The Actuarial Value of Assets represents a "smoothed" value developed by the actuary to reduce the volatility in rates caused by the investment markets, particularly over short time periods. Because the System's plans are regarded as virtually perpetual in nature, it is appropriate to manage their funding with strategies designed to place short-term events within the longer perspective. For the System, the actuarial value of assets at a given valuation date equals the Expected Actuarial Value at that date plus 33% of the difference between the Expected Actuarial Value and the Market Value of Assets at that date. The Expected Actuarial Value is the previous year's actuarial asset value adjusted by contributions, payments and investment earnings of 8.0%. The following table illustrates the calculation of the Actuarial Value of Assets for the June 30, 2004 valuation.

	DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS AS OF JUNE 30, 2004					
1.	Actuarial Value of Assets at June 30, 2003	\$ 7,787,205,499				
2.	Amount in (1) with interest to June 30, 2004 at 8.00% per year	8,410,181,939				
3.	Employer & member contributions for the Plan Year ended June 30, 2004	422,826,889				
4.	Interest on contributions assuming payments made uniformly throughout the year to June 30, 2004 at 8.00% per year	16,913,076				
5.	Disbursements from the Trust during the period June 30, 2003 through June 30, 2004	448,400,887				
6.	Interest on disbursements to June 30, 2004 at 8.00% per year	17,936,035				
7.	Expected Actuarial Value of Assets at June 30, 2004 = $(2) + (3) + (4) - (5) - (6)$	8,383,584,982				
8.	Actual Market Value of Assets at June 30, 2004	8,053,508,551				
9.	Difference Between (8) and (7)	(330,076,431)				
10.	Actuarial Value of Assets at June 30, 2004 = (7) + 33% of (9)	\$8,273,559,503				



Allocation of Actuarial Value of Assets:

In the investment portfolio, assets for all of the System's plans are commingled for investment purposes. Other assets are in effect commingled in that their value is allocated among all of the plans. The actuarial smoothing methodology is applied on the market value of total assets. This produces a smoothing factor which is then applied to the market value of assets attributable to each of the plans. The smoothing factor derived in this valuation is 1.0273 (\$8,273,559,503 ÷ \$8,053,508,551). The allocation of actuarial value of assets to each of the System's plans is shown in the following chart.

ALLOCATION OF ACTUARIAL VALUE OF ASSETS AS OF JUNE 30, 2004					
	Market Value	Actuarial Value			
Teachers	\$ 3,936,889,522	\$ 4,044,459,568			
State (Regular and Special)	2,344,062,420	2,408,110,676			
Judges	38,168,105	39,210,995			
Legislators	6,645,889	6,827,478			
Participating Local Districts (Consolidated and Non-Consolidated)	1,727,742,615	1,774,950,786			
Total Fund	\$ 8,053,508,551	\$ 8,273,559,503			

Investment Performance:

The Market Value of Assets (MVA) returned 16.6% during 2004. This is significantly higher than the plan's assumed return of 8%. This year's return was an improvement over the 2003 return of 5.3%. Year to year market volatility is to be expected.

On an actuarial value of assets basis, the return at June 30, 2004 was 6.6%. This return is less than the return on a market value basis because of the ongoing recognition in the actuarial value of losses in prior years not then fully recognized because of smoothing. As of June 30, 2004, these accumulated losses amounted to \$220 million. This is a decrease in the accumulated losses of \$851 million as of June 30, 2003.



SECTION III

LIABILITIES



In this section we present detailed information on liabilities of the State Employee and Teacher Plan including:

- Disclosure of Plan liabilities as measured at June 30, 2004 and June 30, 2003;
- Statement of changes in these liabilities during the year; and
- A projection of future liabilities.

Disclosure:

This report discloses three types of liabilities. The disclosure of each liability serves a specific purpose depending on the nature of the liability and the purpose for which the liability information is used.

- Total Obligations: Used for analyzing the financial outlook of the Plan, this represents the amount of money needed today to fully pay off all future benefits and expenses of the Plan, assuming participants continue to accrue benefits.
- Actuarial Liabilities: Used for funding calculations and GASB disclosures, this liability is calculated by taking the Total Obligations above and subtracting the present value of future Member Contributions and future Employer Normal Costs under an acceptable actuarial funding method. The method employed for the State Employee and Teacher Plan is the Entry Age Normal funding method.
- Accrued Benefit Liabilities: Used for communicating the current level of liabilities, this liability represents the total amount of money needed today to fully pay off the current accrued obligations of the fund, assuming no future accruals of benefits. These liabilities are also required for accounting purposes (FAS 35) and used to assess whether the Plan can meet its current benefit commitments.



The table below discloses each of these liabilities for the current and immediately prior State Employee and Teacher Plan valuations. With respect to the actuarial liability and accrued liability disclosures, a subtraction of the appropriate value of assets yields a **net surplus** or an **unfunded liability**.

LIABILITIES/NET (SURPLUS) UNFUNDED	6/30/2004	6/30/2003
Total Obligations		
Active Participant Benefits	\$ 6,537,464,996	\$ 6,376,031,676
Retiree and Inactive Benefits	4,387,963,456	4,062,300,865
Total Obligations	\$ 10,925,428,452	\$ 10,438,332,541
Market Value of Assets	6,280,951,942	5,381,673,439
Future Member Contributions	826,793,567	822,225,055
Future State Contributions	3,817,682,943	4,234,434,047
Total Resources	\$ 10,925,428,452	\$ 10,438,332,541
Actuarial Liability		
Total Obligations	\$ 10,925,428,452	\$ 10,438,332,541
Present Value of Future Normal Costs Under Entry Age Method	656,245,486	652,834,988
Present Value Of Future Member Contributions	826,793,567	822,225,055
Actuarial Liability	\$ 9,442,389,399	\$ 8,963,272,498
Actuarial Value of Assets	6,452,570,244	6,041,952,157
Net (Surplus) Unfunded	\$ 2,989,819,155	\$ 2,921,320,341
Accrued Benefit Liability		
Total Obligations	\$ 10,925,428,452	\$ 10,438,332,541
Less Present Value of Future Benefit Accruals	(3,161,640,973)	(3,145,819,873)
Accrued Benefit Liability	\$ 7,763,787,479	\$ 7,292,512,668
Market Value of Assets	6,280,951,942	5,381,673,439
Net (Surplus) Unfunded	\$ 1,482,835,537	\$ 1,910,839,229

Changes in Liabilities:

Each of the liabilities disclosed in the prior table is expected to change at each valuation. The components of that change, depending upon which liability is analyzed, can include:

- Benefits accrued since the last valuation;
- Passage of time which adds interest to the prior liability;
- Benefits paid to retirees since the last valuation;
- Participants retiring, terminating, or dying at rates different than expected;
- New hires since the last valuation;
- Plan amendments increasing benefits;
- A change in actuarial or investment assumptions; and
- A change in the actuarial funding method. .

Unfunded liabilities or surpluses will change because of all the above, and also because of changes in expected fund assets resulting from:

- Employer contributions different than expected;
- Investment earnings different than expected; and
- A change in the method used to measure plan assets.

In each valuation we report on those elements of change which are of particular significance, potentially affecting the long-term financial outlook of the Plan. Below we present the key changes in liabilities since the last valuation.

	C	TOTAL DBLIGATION	\$ A	in Millions ACTUARIAL LIABILITY	ACCRUED BENEFIT LIABILITY
Liabilities 6/30/2003	\$	10,438	\$	8,963	\$ 7,293
Liabilities 6/30/2004	\$	10,925	\$	9,442	\$ 7,764
Liability Increase (Decrease)		487	\$	479	\$ 471
Change due to:					
Plan Amendment	\$	0	\$	0	\$ 0
Assumption Change	\$	0	\$	0	\$ 0
Actuarial (Gain)/Loss		N/A	\$	(57)	N/A
Benefits Accumulated and Other Sources	\$	487	\$	536	\$ 471



ACTUARIAL LIABILITY AS OF JUNE 30, 2004

	Total Plan	Teachers	State Regular	Special Plans
1. Actuarial Liabilities for:				
a. Active Members	\$ 5,054,425,943	\$ 3,514,300,592	\$ 1,297,995,255	\$ 242,130,096
b. Retired, Disabled and Beneficiary Members	4,167,609,287	2,414,709,095	1,481,856,737	271,043,455
c. Vested Deferred and Inactive Status Members	220,354,169	143,353,208	77,000,961	0
2. Total Actuarial Liability (1(a) + 1(b) + 1(c))	\$ 9,442,389,399	\$ 6,072,362,895	\$ 2,856,852,953	\$ 513,173,551
3. Actuarial Value of Assets	6,452,570,244	4,044,459,568	2,084,433,001	323,677,675
 Unfunded Actuarial Liability (2 – 3) 	<u>\$_2,989,819,155</u>	<u>\$_2,027,903,327</u>	<u>\$ 772,419,952</u>	<u>\$ 189,495,876</u>



SECTION IV

CONTRIBUTIONS



CONTRIBUTIONS

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions is needed to properly fund the plan. Typically, the actuarial process will utilize a funding approach that will result in a pattern of contributions that is both stable and predictable.

For the State Employee and Teacher Plan, the funding approach employed is the Entry Age Normal Actuarial Cost Method. Under this method there are two components to the total contribution, a normal cost and, given the Plan's unfunded actuarial liability, an amortization payment. A normal cost is determined as a percent of compensation for a typical new entrant. Each year's normal cost represents the cost to fund that portion of the total future obligations that has been allocated to the current year, based upon the actuarial cost method in use. The normal cost shown in this report are net of member contributions.

The amortization payment, on the other hand, is not calculated for individual participants but calculated for the Plan as a whole, and represents an annual installment to fund the **unfunded actuarial liability (UAL)** of the Plan. The UAL is the excess of the actuarial liability over the actuarial value of assets. The unfunded actuarial liability amount represents the additional amount of funds that would have been accumulated by the valuation date, had all prior normal cost contributions been made, and all actuarial assumptions been realized.

In Appendix B we describe more fully this technical topic.

The table below presents and compares the actuarially determined contributions for the State/Teacher Plan for this valuation and the prior one, and includes a calculation of the average annual normal cost rate per participant for each year.

ACTUARIALLY DETERMINED CONTRIBUTION	7/1/2004	7/1/2003
Entry Age Normal Cost	6.17%	6.17%
Amortization Payment	<u>17.09%</u>	<u>11.09%</u>
Actuarially Determined Contribution	23.26%	17.26%

On the following pages we display the contribution rates developed for each of the member/plan groups within the Plan.



TABLE IV-1 STATE EMPLOYER CONTRIBUTION RATES FISCAL YEAR 2006– ENTRY AGE NORMAL

Valuation Date June 30	Total State	Teachers	State Regular	State Police Marine Resources Inland Fish & Wildlife (Closed)	Prison Employees (Closed)	Forest Rangers (Closed)	25 & Out Plan	1998 Special Plan
Normal Cost Contribution as Percent of Payroll Unfunded Actuarial Liability Contribution as Percent	6.17%	6.04%	6.04%	17.84%	9.04%	7.34%	9.15%	6.89%
of Payroll	17.09	<u>18.08</u>	14.55	42.92	21.75	<u>17.66</u>	22.01	<u>16.58</u>
Total Contribution as Percent of Payroll	23.26%	24.12%	20.59%	<u>60.76%</u>	30.79%	25.00%	31.16%	23.47%



TABLE IV-2 DERIVATION OF UNFUNDED ACTUARIAL LIABILITY RATES

	Valuation Date June 30	Teachers	State Regular	State Police Marine Resources Inland Fish & Wildlife (Closed)	Prison Employees (Closed)	Forest Rangers (Closed)	25 & Out Plan	1998 Special Plan
1.	Present Value of Future Benefits	7,058,601,043	3,286,939,346	248,318,438	49,048,301	25,126,738	70,345,254	187,049,332
2.	Normal Cost Rate	6.04%	6.04%	17.84%	9.04%	7.34%	9.15%	6.89%
3.	Present Value of Future Payroll	7,204,077,051	3,141,609,882	117,678	2,161,672	2,314,601	138,938,069	265,121,651
4.	Present Value of Future Normal Cost (2) x (3)	435,126,254	189,753,237	20,994	195,415	169,892	12,712,833	18,266,882
5.	Present Value of Future Member Contributions	551,111,894	240,333,156	10,179	186,985	200,213	12,018,143	22,932,997
6.	Actuarial Liability: (1) - (4) - (5)	6,072,362,895	2,856,852,953	248,287,265	48,665,901	24,756,633	45,614,278	145,849,453
7.	Actuarial Value of Assets	4,044,459,568	2,084,433,001	219,936,016	44,838,769	22,384,354	(6,417,218)	42,935,734
8.	Unfunded Actuarial Liability: (6) – (7)	2,027,903,327	772,419,952	28,351,249	3,827,132	2,372,279	52,031,496	102,913,719
9.	Estimated Payroll	939,762,058	444,899,467	5,533,844	1,474,194	1,125,432	19,801,350	52,012,010
10.	Amortization Factor	11.9361	11.9361	11.9361	11.9361	11.9361	11.9361	11.9361
11.	Unfunded Actuarial Liability Rate: (8)/(9)/(10)	18.08%	14.55%	42.92%	21.75%	17.66%	22.01%	16.58%



SECTION V

ACCOUNTING STATEMENT INFORMATION



Two types of liabilities are disclosed for accounting purposes:

- Statement No. 35 of the Financial Accounting Standards Board (FASB) requires the Plans to disclose certain information regarding its funded status.
- Statement No. 25 of the Governmental Standards Board (GASB) establishes standards for disclosure of pension information by public employee retirement systems (PERS) and governmental employers in notes to financial statements and supplementary information.

The FASB-35 disclosures provide a quasi "snap shot" view of how the plan's assets compare to its liability as of the valuation date. The liability is determined as if contributions stopped and the accrued benefit claims had to be satisfied. However, due to potential legal requirements and the possibility that alternative interest rates would have to be used to determine the liabilities, these values may not be a good indication of the amount of money it would take to buy the benefits for all members if the plan were to terminate. The FASB-35 liability is compared to the market value of assets to determine the funding ratio.

The GASB-25 actuarial accrued liability is the same as the actuarial liability amount calculated for funding purposes. The GASB-25 liability is compared to the actuarial value of assets to determine the funding ratio.

Both the present value of accrued benefits (FASB-35) and the actuarial accrued liability (GASB-25) are determined assuming that the plan is ongoing and participants continue to terminate employment, retire, and otherwise act in accordance with the actuarial assumptions. Liabilities are discounted at the assumed valuation interest rate of 8% per annum.

FASB Statement No. 35 specifies that a comparison of the present value of accrued (accumulated) benefits to the market value of the assets as of the valuation date must be provided. GASB Statement No. 25 requires the actuarial accrued liability to be compared with the actuarial value of assets for funding purposes. The relevant amounts as of June 30, 2004 are exhibited in Table V-1, Table V-2, and Table V-3. As directed by FASB-35, the liabilities shown in Section A of Table V-1 and Table V-2 do not include any projection for future service and salary. Finally, Table V-4 reconciles the FASB-35 liabilities determined as of the prior valuation, June 30, 2003, to the liabilities as of June 30, 2004.

	TABLE V-1 ACCOUNTING STATEMEN STATE EMPLOYEE AND TEAC	T INFORMATION CHER PLAN TOTAL	
		2004	2003
A.	FASB No. 35 Basis		
	 Present Value of Benefits Accrued to Date: 		
	a. Members Currently Receiving Paymentsb. Former Vested Membersc. Active Members	\$ 4,167,609,287 220,354,169 <u>3,375,824,023</u>	\$ 3,878,586,652 183,714,213 <u>3,230,211,803</u>
	 Total Present Value of Accrued Benefits (1(a) + 1(b) + 1(c)) 	<u>\$ 7,763,787,479</u>	<u>\$ 7,292,512,668</u>
	3. Assets at Market Value	6,280,951,942	5,381,673,439
	 Unfunded Value of Accrued Benefits (2) – (3) 	\$ 1,482,835,537	\$ 1,910,839,229
	 Ratio of Assets to Value of Accrued Benefits (3)/(2) 	80.90%	73.80%
В.	GASB No. 25 Basis		
	 Actuarial accrued liabilities for retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving 		
	benefits	\$ 4,387,963,456	\$ 4,062,300,865
	 Actuarial accrued liabilities for current Employees 	5,054,425,943	4,900,971,633
	 Total actuarial accrued liability (1) + (2) 	\$ 9,442,389,399	\$ 8,963,272,498
	4. Net actuarial assets available for benefits	6,452,570,244	6,041,952,157
	 Unfunded actuarial accrued liability (3) - (4) 	<u>\$ 2,989,819,155</u>	<u>\$ 2,921,320,341</u>

TABLE V-2 ACCOUNTING STATEMENT INFORMATION – FASB NO. 35 AS OF JUNE 30, 2004											
	Total System	Teachers	State Regular	State Special							
1. Present Value of Benefits Accrued to Date:											
a. Members Currently Receiving Payments	\$ 4,167,609,287	\$ 2,414,709,095	\$ 1,481,856,737	\$ 271,043,455							
b. Former Vested Members	220,354,169	143,353,208	77,000,961	0							
c. Active Members	3,375,824,023	2,318,682,013	865,892,365	191,249,645							
 Total Present Value of Accrued Benefits (1(a) + 1(b) + 1(c)) 	\$ 7 763 787 479	\$ 1 876 711 316	\$ 2 424 750 063	\$ 462 293 100							
3 Assets at Market Value	6 280 951 942	3 936 889 521	2 028 993 566	315 068 855							
J. Hefeeded Value of			2,020,333,000								
Accrued Benefits (2) – (3)	<u>\$1,482,835,537</u>	\$ <u>939,854,795</u>	<u>\$ 395,756,497</u>	<u>\$ 147,224,245</u>							
 Ratio of Assets to Value of Accrued Benefits (3)/(2) 	80.90%	80.73%	83.68%	70.02%							

No.

TABLE V-3 ACCOUNTING STATEMENT INFORMATION – GASB NO. 25 AS OF JUNE 30, 2004										
	Total System	Teachers	State Regular	State Special						
1. Actuarial Accrued Liability:										
a. Members Currently Receiving Payments	\$ 4,167,609,287	\$ 2,414,709,095	\$ 1,481,856,737	\$ 271,043,455						
b. Former Vested Members	220,354,169	143,353,208	77,000,961	0						
c. Active Members	5,054,425,943		1,297,995,255	242,130,096						
 Total Actuarial Accrued Liability (1(a) + 1(b) + 1(c)) 	\$ 9,442,389,399	\$ 6,072,362,895	\$ 2,856,852,953	\$ 513,173,551						
3. Actuarial Value of Assets	6,452,570,244	4,044,459,568	2,084,433,001	323,677,675						
 Unfunded Actuarial Accrued Liability (2 – 3) 	<u>\$ 2,989,819,155</u>	<u>\$ 2,027,903,327</u>	<u>\$ 772,419,952</u>	<u>\$ 189,495,876</u>						
5. Funded Ratio (3/2)	68.34%	66.60%	72.96%	63.07%						
6. Annual Payroll	\$ 1,464,608,355	\$ 939,762,058	\$ 444,899,467	\$ 79,946,830						
 UAAL as % of Payroll (4/6) 	204.14%	215.79%	173.62%	237.03%						

(second

TABLE V-4 Statement of Changes in Total Actuarial Present Value of All Accrued Benefits for FASB 35 (in Millions)								
Actuarial Present Value of Accrued Benefits at June 30, 2003	\$ 7,293							
Increase (Decrease) During years attributable to:								
Passage of Time (Interest Accrual)								
Benefits Paid – FY 2004	(373)							
Benefits Accrued, Other Gains/Losses	276							
Plan Amendment	0							
Net Increase (Decrease)								
Actuarial Present Value of Accrued Benefits at June 30, 2004	<u>\$ 7,764</u>							

APPENDIX A

MEMBERSHIP INFORMATION



MAINE STATE RETIREMEN ACTIVE MEMBER DATA AS OF	F SYSTEM JUNE 30, 2004
TEACHERS	
Count	28,205
Average Current Age	45.3
Average Service	13.9
Average Valuation Pay	\$ 33,319
STATE REGULA	R
Count	12,715
Average Current Age	46.2
Average Service	13.0
Average Valuation Pay	\$ 34,990
FOREST RANGERS (CLO	SED PLAN)
Count	24
Average Current Age	49.3
Average Service	25.
Average Valuation Pay	\$ 46,893
INLAND FISHERIES & WILDLIFE OFF	CERS (CLOSED PLAN)
Count	2
Average Current Age	52.3
Average Service	28.
Average Valuation Pay	\$ 49,423
PRISON EMPLOYEES (CLO	DSED PLAN)
Count	3
Average Current Age	51.
Average Service	24.
Average Valuation Pay	\$ 46,06

MAINE STATE RETIREMENT SYSTEM ACTIVE MEMBER DATA AS OF JUNE 30, 2004									
STATE POLICE (CLOSED PLAN)									
Count		62							
Average Current Age		48.3							
Average Service		23.7							
Average Valuation Pay	\$	67,293							
MARINE RESOURCES OFFICERS (CLOSED PL	.AN))							
Count		6							
Average Current Age		51.5							
Average Service		26.3							
Average Valuation Pay	\$	53,966							
25 & OUT PLAN									
Count		389							
Average Current Age		37.0							
Average Service		10.6							
Average Valuation Pay	\$	50,903							
1998 SPECIAL PLAN									
Count		1,362							
Average Current Age		42.8							
Average Service		9.9							
Average Valuation Pay	\$	38,188							
STATE TOTALS (EXCLUDES TEACHERS)		ale is							
Count		14,611							
Average Current Age		45.7							
Average Service		12.8							
Average Valuation Pay		\$35,921							

MAINE STATE RETIREMENT SYSTEM NON-ACTIVE MEMBER DATA AS OF JUNE 30, 2004 TEACHERS										
	Count	Total Annual Benefit	Average Annual Benefit							
Retired	9,327	\$ 176,590,668	\$ 18,933							
Retired – Concurrent Beneficiaries	1,252	\$ 5,545,437	\$ 4,429							
Disabilities/1122	4	\$ 83,274	\$ 20,819							
Disabilities/3 and 3-A	777	\$ 16,312,288	\$ 20,994							
Beneficiaries	774	\$ 9,701,758	\$ 12,535							
Pre-Retirement Death Benefits	322	\$ 1,675,006	\$ 5,202							
Terminated Vested	3,157	\$ 18,213,749	\$ 5,769							

MAINE STATE RETIREMENT SYSTEM NON-ACTIVE MEMBER DATA AS OF JUNE 30, 2004 STATE REGULAR										
	Count	Total Annual Benefit	Average Annual Benefit							
Retired	6,605	\$ 102,795,155	\$ 15,563							
Retired – Concurrent Beneficiaries	1,119	\$ 4,525,016	\$ 4,044							
Disabilities/1122	8	\$ 115,348	\$ 14,419							
Disabilities/3 and 3-A	1,153	\$ 18,149,153	\$ 15,741							
Beneficiaries	1,407	\$ 13,989,998	\$ 9,943							
Pre-Retirement Death Benefits	558	\$ 2,847,411	\$ 5,103							
Terminated Vested	1,536	\$ 11,003,352	\$ 7,164							



MAINE STATE RETIREMENT SYSTEM NON-ACTIVE MEMBER DATA AS OF JUNE 30, 2004 SPECIAL PLANS										
	Count	Т	otal Annual Benefit	Average Annual Benefit						
Retired	734	\$	18,806,758	\$	25,622					
Retired – Concurrent Beneficiaries	153	\$	687,715	\$	4,495					
Disabilities/1122	3	\$	46,570	\$	15,523					
Disabilities/3 and 3-A	49	\$	915,169	\$	18,677					
Beneficiaries	139	\$	1,704,762	\$	12,264					
Pre-Retirement Death Benefits	3	\$	57,672	\$	19,224					
Terminated Vested	0	\$	0	\$	0					



R

MAINE STATE RETIREMENT SYSTEM DISTRIBUTION OF ACTIVE MEMBERS As of JUNE 30, 2004

Teachers

1			100000000		Yea	rs of Service						VILLOCATION IN
	Under 1	1 TO 2	2 TO 4	5 TO 9	10 TO 14	15 TO 19	20 TO 24	25 TO 29	30 TO 34	35 TO 39	40 & UP	Total
Age Under 20	2											:
20 TO 24	252	183	224	28								687
25 TO 29	325	311	915	716	19							2,286
30 TO 34	248	203	504	965	631	2						2,553
35 TO 39	194	172	561	590	1,025	286	3					2,831
40 TO 44	204	199	627	656	568	872	462	2				3,590
45 TO 49	166	189	568	766	703	613	969	486	5		1	4,465
50 TO 54	129	130	420	626	771	831	674	1,429	546	6		5,562
55 TO 59	83	83	260	345	500	695	570	554	1,076	199		4,365
60 TO 64	33	48	91	130	137	236	225	202	147	169	19	1,437
65 & UP	20	16	65	73	45	49	48	44	23	19	25	427
Total	1.656	1.534	4.235	4.895	4,399	3.584	2.951	2.717	1.797	393	44	28.205



Age Distribution

Service Distribution



000 Milliman

MAINE STATE RETIREMENT SYSTEM DISTRIBUTION OF ACTIVE MEMBERS As of JUNE 30, 2004

Teachers

	N. A.L.S.			(Search)	Av	erage Salary		and Case	1. A. Y. S.			
	Under 1	1 TO 2	2 TO 4	5 TO 9	10 TO 14	15 TO 19	20 TO 24	25 TO 29	30 TO 34	35 TO 39	40 & UP	Total
Age Under 20	2,620											\$2,620
20 TO 24	10,114	15,683	14,987	16,680								\$13,454
25 TO 29	13,769	19,476	23,456	26,104	23,933							\$22,371
30 TO 34	15,940	20,401	25,535	29,349	32,601	30,157						\$27,387
35 TO 39	14,664	18,984	22,100	29,764	36,239	36,390	23,086					\$29,562
40 TO 44	12,040	15,797	21,474	26,661	35,130	39,837	40,945	49,123				\$30,713
45 TO 49	15,315	16,676	21,376	26,218	33,416	40,785	44,545	47,121	48,113			\$34,203
50 TO 54	17,666	21,746	25,106	28,419	33,986	40,297	44,125	48,050	49,010	49,437		\$39,301
55 TO 59	17,853	23,124	24,139	29,465	34,278	38,860	43,506	47,012	50,116	50,144		\$40,948
60 TO 64	10,584	10,782	19,232	28,025	34,123	36,412	43,009	44,867	48,922	49,509	51,493	\$38,139
65 & UP	5,609	5,258	11,142	14,826	27,926	29,828	32,389	33,265	39,744	45,328	45,679	\$24,957
Total	\$13,918	\$18,238	\$22,429	\$27,639	\$34,301	\$39,274	\$43,348	\$47,197	\$49,544	\$49,628	\$48,190	\$33,319







State

	the state of the		Sector Sector	Sector Sector	Yea	ars of Service		THE REAL PROPERTY.		and the state of the	- Constant of the second	
	Under 1	1 TO 2	2 TO 4	5 TO 9	10 TO 14	15 TO 19	20 TO 24	25 TO 29	30 TO 34	35 TO 39	40 & UP	Total
Age Under 20	34	10	2									46
20 TO 24	219	98	129	6								452
25 TO 29	185	119	359	170	3							836
30 TO 34	169	102	389	355	129	16						1,160
35 TO 39	126	77	364	330	293	296	8				18	1,494
40 TO 44	160	91	370	347	321	554	252	36				2,131
45 TO 49	122	99	379	363	325	529	387	380	23			2,607
50 TO 54	120	83	305	302	277	495	398	415	248	21	10	2,664
55 TO 59	84	51	215	225	252	324	305	269	259	161	3	2,148
60 TO 64	26	18	91	110	98	163	118	68	46	53	22	813
65 & UP	11	7	21	31	34	47	30	32	20	15	12	260
Total	1,256	755	2,624	2,239	1,732	2,424	1,498	1,200	596	250	37	14,611



Age Distribution

Service Distribution



000 Milliman

MAINE STATE RETIREMENT SYSTEM DISTRIBUTION OF ACTIVE MEMBERS As of JUNE 30, 2004

						State						
- Barris	12.20	24357		10.5	Av Yea	erage Salary ars of Service	No. 1945	86. C 38			1999	
a state of the s	Under 1	1 TO 2	2 TO 4	5 TO 9	10 TO 14	15 TO 19	20 TO 24	25 TO 29	30 TO 34	35 TO 39	40 & UP	Total
Age												
Under 20	2,304	8,614	4,230									\$3,759
20 TO 24	7,119	19,724	19,637	23,476								\$13,642
25 TO 29	11,945	28,275	29,532	32,266	22,159							\$25,991
30 TO 34	13,582	31,823	29,749	37,933	37,973	37,891						\$31,108
35 TO 39	12,314	29,480	31,678	36,493	40,780	38,265	35,938					\$34,108
40 TO 44	13,306	29,411	31,712	36,891	40,676	42,063	40,899	37,724				\$36,304
45 TO 49	14,035	32,987	30,714	36,699	37,860	42,498	43,555	42,060	41,288			\$37,789
50 TO 54	14,115	32,447	32,880	36,878	41,898	41,628	45,057	45,672	42,753	44,041		\$39,857
55 TO 59	16,080	36,019	32,558	37,204	38,950	40,955	44,113	44,778	48,239	47,241	38,253	\$40,669
60 TO 64	14,019	29,413	30,355	34,897	38,327	38,949	40,350	47,631	47,195	49,584	39,588	\$38,462
65 & UP	6,450	34,440	22,708	32,400	33,850	32,257	39,765	39,540	41,441	37,415	61,999	\$34,817
Total	\$11,955	\$29,328	\$30,445	\$36,449	\$39,609	\$41,030	\$43,252	\$44,037	\$45,379	\$46,880	\$46,748	\$35,921





MAINE STATE RETIREMENT SYSTEM STATE EMPLOYEE AND TEACHER PLAN Actuarial Valuation as of June 30, 2004 A-8

MAINE STATE RETIREMENT SYSTEM DISTRIBUTION OF RETIREES, DISABLED MEMBERS, BENEFICIARIES AND SURVIVORS As of JUNE 30, 2004

Teachers

A.00	Count	Annual	Ano	Count	Annual
AND.	Count	Denom	Alto	ooum	Denom
Under 25	55	\$190,421	65	452	\$8,533,385
25	3	21,595	66	424	7,929,641
26	2	13,195	67	491	8,809,930
27	3	6,163	68	454	8,257,691
28	1	8,197	69	414	7,361,883
29	2	12,371	70	437	7,025,400
30	2	21,150	71	401	6,898,626
31	1	3,611	72	425	7,327,928
32	3	14,422	73	401	6,567,171
33	4	19.631	74	387	6.074,170
34	2	19,025	75	324	4,637,354
35	9	43,841	76	288	4.099.441
36	3	38,094	77	264	3,893,176
37	7	65,136	78	287	3,972,814
38	5	48,490	79	238	3,141,748
39	6	18,654	80	209	2,714,019
40	5	22,395	81	230	3,054,588
41	5	64,296	82	192	2,540,242
42	7	97,519	83	197	2,420,453
43	9	92,351	84	193	2,462,743
44	10	100,174	85	158	1,908,759
45	13	149,963	86	162	2,161,751
46	11	146,949	87	143	1,987,051
47	14	173,098	88	140	1,754,511
48	18	305,539	89	138	1,894,947
49	23	374,024	90	117	1,657,930
50	27	356,454	91	131	1,710,847
51	54	1,019,250	92	98	1,331,385
52	61	1,088,045	93	93	1,372,795
53	102	1,663,262	94	73	1,061,736
54	138	2,414,915	95	67	829.012
55	192	3.665.634	96	40	534,932
56	213	3,948,371	97	27	418,588
57	325	6,455,866	98	18	221,202
58	315	6.299.572	99	20	206,730
59	300	6.448.477	100	16	206,257
60	379	7.624.740	101	3	28,962
61	507	10,452,483	102	2	7,720
62	494	10,418,032	103	0	0
63	494	9,430,498	104	0	0
64	477	9,516,380	over 104	1	18,633
			Total	12,456	\$209,908,431





MAINE STATE RETIREMENT SYSTEM DISTRIBUTION OF RETIREES, DISABLED MEMBERS, **BENEFICIARIES AND SURVIVORS** As of JUNE 30, 2004 State Annual Annual Benefit Benefit Age Count Count Age Annual Benefit Distribution \$273,503 Under 25 \$5,381,846 7.555 5.417.930 27,209 5,992,076 12,127 5,952,839 6,766 5,877,975 10.828 5.975.016 5.099 4.813.284 \$8,000,000 73 21,068 5,240,167 28,973 5,491,440 59,928 4.817.289 25.189 4.257,477 \$7,000,000 35,710 5,220,148 89,628 5,106,982 49,963 4,198,335 \$6,000,000 171,832 4,188,550 138,421 3,613,250 160,365 2,998,996 75,945 2,735,346 \$5,000,000 Annual Benefit 2,740,503 284,810 185,386 2,434,225 220,766 1,911,914 \$4,000,000 389,935 1.740.063 617,094 1,432,180 901,632 1,145,905 \$3,000,000 653,086 1,084,051 1.071.018 707,456 1,337,843 895,824 \$2,000,000 1,671,305 744.385 1,823,678 393,027 2,257,108 235,131 2,243,571 225,972 \$1,000,000 2,852,064 190,726 3,599,021 94,446 33,403 4,667,553 \$0 4,031,708 14,455 5-24 3,694,506 42,955 Age 4,869,246 39,657 5,715,892 6,031 6,796,455 4,924,782 3,500 over 104 5,267,851 Total 11,932 \$164,671,174



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS



Actuarial Assumptions

		State Employees	Teachers
1.	Rate of Investment Return	8.0%	8.0%
2.	Cost-of-Living Increases in Benefits	4.0%	4.0%
3.	Rates of Salary Increase (% at Selected Ages)	Age	State Employees and Teachers
		20 25 30 35	9.5 8.3 7.2 6.7
		40 45 50	6.2 5.7 5.5
		55 60 65	5.5 5.5 5.5

The above rates include a 51/2% across-the-board increase at each age.

Calculations have been adjusted to account for the 5% per year/10% over threeyears cap on final pay.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

	Age	State Employees Service		Teachers Service			
	2	0-1	1-2	2+	0-1	1-2	2+
Rates of	20	25.0	17.5	18.8	33.0	24.0	18.8
Termination	25	25.0	17.5	12.5	27.5	24.0	12.5
(% at	30	25.0	17.5	10.0	27.5	24.0	10.4
Selected	35	25.0	17.5	7.5	27.5	24.0	8.3
Ages) *	40	25.0	17.5	5.0	27.5	24.0	6.1
	45	25.0	17.5	5.0	27.5	24.0	4.0
	50	25.0	17.5	5.0	27.5	24.0	4.0
	55	20.0	17.5	5.0	27.5	24.0	4.0
	Rates of Termination (% at Selected Ages) *	Age Rates of 20 Termination 25 (% at 30 Selected 35 Ages) * 40 45 50 55	Age State Age 0-1 Rates of 20 25.0 Termination 25 25.0 (% at 30 25.0 Selected 35 25.0 Ages) * 40 25.0 50 25.0 55	$\begin{array}{c} \mbox{Age} & \begin{tabular}{c} State Employ\\ Service\\ 0-1 & 1-2 \end{tabular} \\ \hline 0-1 & 1-2 \end{tabular} $	$\begin{array}{c c} \mbox{Age} & \begin{tabular}{c} State \mbox{Employees} \\ Service \\ 0-1 & 1-2 & 2+ \end{tabular} \\ \hline \mbox{Rates of} & 20 & 25.0 & 17.5 & 18.8 \\ \hline \mbox{Termination} & 25 & 25.0 & 17.5 & 12.5 \\ (\% \ at & 30 & 25.0 & 17.5 & 10.0 \\ Selected & 35 & 25.0 & 17.5 & 7.5 \\ \mbox{Ages})^* & 40 & 25.0 & 17.5 & 5.0 \\ & 45 & 25.0 & 17.5 & 5.0 \\ & 50 & 25.0 & 17.5 & 5.0 \\ & 55 & 20.0 & 17.5 & 5.0 \end{tabular}$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

* Members with ten or more years of service and whose age plus service totals 60 or more are assumed to elect deferred vested benefits; other terminations are assumed to elect refunds

			State E	mployees	Tea	chers
		Age	Male	Female	Male	Female
5.	Rates of Mortality	20	5	3	5	3
	for Active Healthy	25	7	3	6	3
	Lives and post-	30	9	4	7	3
	7/1/1998 Retired	35	9	5	8	4
	Healthy Lives at	40	12	8	10	6
	selected Ages	45	17	10	14	9
	(number of deaths	50	28	15	24	13
	per 10,000	55	48	25	40	21
	members)*	60	86	48	73	41
		65	156	93	133	79
		70	255	148	217	125

* For State Regular and Teachers 5% of deaths assumed to arise out of and in the course of employment; for State Special 20% of deaths are assumed to arise out of and in the course of employment.



6. Rates of Mortality for pre-7/1/1998 Retired Healthy Lives at Selected Ages (number of deaths per 10,000 members)

State E	mployees	Tea	chers
Male	Female	Male	Female
5	3	5	2
6	3	6	3
8	5	7	4
11	7	10	6
16	9	14	8
29	14	23	12
53	22	42	18
85	33	71	27
131	55	109	44
213	96	174	77
361	165	292	129
	State E Male 5 6 11 16 29 53 85 131 213 361	State EmployeesMaleFemale5363851171692914532285331315521396361165	State EmployeesTeaMaleFemaleMale53563685711710169142914235322428533711315510921396174361165292

Teachers State Employees Male Female Male Female Age 7. Rates of Mortality for Future Disabled Lives and post-7/1/98 Retired **Disabled Lives at** Selected Ages (number of deaths per 10,000 members)

			State E	mployees	Tea	chers
		Age	Male	Female	Male	Female
8.	Rates of Mortality	25	391	528	391	528
	for pre-7/1/98	30	315	467	315	467
	Retired Disabled	35	321	326	321	326
	Lives at Selected	40	332	215	332	215
	Ages (number of	45	349	191	349	191
	deaths per 10,000	50	376	207	376	207
	members)	55	420	240	420	240
	3.63	60	488	288	488	288
		65	595	366	595	366
		70	763	487	763	487

		Age	State Employees*	Teachers
9.	Rates of Retirement at	45	35	25
	Selected Ages (number	50	57	25
	retiring per 1,000	55	150	113
	members)	59	180	183
	e	60	350	350
		61	350	350
		62	350	350
		63	350	350
		64	350	350
		65	350	350
		70	1000	1000

* Members of Special Groups are assumed to retire when first eligible for unreduced benefits

 Rates of Disability at Selected Ages (members becoming disabled per 10,000 members)**

25	6.8	4.6
30	7.6	5.0
35	10.2	5.0
40	19.0	6.8
45	27.9	15.5
50	42.7	24.3
55	81.0	33.0
60	119.3	41.8

State Employees

Teachers

** 10% assumed to receive Workers Compensation benefits offsetting disability benefit; also, rates for State Special groups are higher by 7 per 10,000 at all ages.

Ane

- 11. 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.
- 12. Vacation/Sick Leave Credits For members who had 10 years of service on July 1, 1993, credits for unused vacation and sick leave may be used to increase final average compensation and/or creditable service. In order to reflect this, projected benefits are increased by 1.0% for state employees and 1.3% for teachers.

Actuarial Methods

1. Funding Method

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

For Teachers and State Employees, including each of the State Special Plans, a normal cost rate is determined for a typical new entrant. This rate is determined by taking the value, as of age at entry into 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 System's normal cost, contributions are required to fund the System'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 of the actuarial liability for all members less the actuarial value of the System's assets. The actuarial liability includes projections of future member pay increases and future service credits and should not be confused with the Accrued Benefit Liability.

The unfunded actuarial liability is amortized by annual payments. The payments are determined so that they will be a level percentage of pay, assuming payroll increases 5.5% per year. The UAL measured as of June 30, 2004 is amortized over a 14 year period. This establishes the UAL rates for the biennial budget for FY's 06 and 07.

2. Asset Valuation Method

For purposes of this June 30, 2004 actuarial valuation, assets are valued at an "actuarial value" as described in Part II.

APPENDIX C

SUMMARY OF PLAN PROVISIONS



State Employees and Teachers

1. Membership

Membership is a condition of employment for state employees and teachers, and optional for elected and appointed officials.

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

2. Member Contributions

Except as otherwise described below, members are required to contribute 7.65% of earnable compensation.

Contribution requirements for special groups:

State police, inland fisheries and wildlife officers, and marine resources officers employed before 9/1/84 - 8.65% of earnable compensation for 20 years; 7.65% thereafter.

Forest rangers and state prison employees employed before 9/1/84 - 8.65% of earnable compensation until eligible for retirement; 7.65% thereafter.

1998 Special Plan employees which include state prison employees, airplane pilots, forest rangers, defense, veterans and emergency management firefighters employed at Bangor International Airport, corrections employees, Baxter State Park Authority rangers, fire marshals, investigators and inspectors, oil and hazardous materials emergency response workers and capital security officers -8.65% of earnable compensation for 25 years; 7.65% thereafter.

State police employed on or after 9/16/84 and special agent investigators hired before 6/21/82 - 8.65% of earnable compensation for 25 years; 7.65% thereafter.

Inland fisheries and wildlife officers and marine resources officers employed on or after 9/1/84 - 8.65% of earnable compensation for 25 years; 7.65% thereafter.

3. Average Final Compensation

For purposes of determining benefits payable under the System, 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 compensation paid on or after July 1, 1993, increases in earnable compensation of greater than 5% per year or 10% over the highest three years are not included in



calculating average final compensation unless the employer pays the cost of including such compensation. Earnable compensation does not include sick and vacation pay for those members who had less than 10 years of service at July 1, 1993. For members for whom sick and vacation pay is includible in earnable compensation, these payments are included in applying the caps described in the preceding paragraph.

4. Creditable Service

Creditable service includes service while a member, certain service prior to the establishment of the System, purchased military service credit, other purchased service credit, and service while receiving disability benefits under the System.

5. Service Retirement Benefits

A. Regular Plan (State Employees and Teachers)

Eligibility for members with at least 10 years of creditable service on July 1, 1993

Normal Retirement Age: 60

Eligibility for members in active service and inactive members: 25 years of creditable service.

Eligibility alternative for members in active service: at least one year of creditable service immediately before retirement and at least normal retirement age.

Eligibility for members not in active service at retirement, and not in active service on or after October 1, 1999: at least 10 years of creditable service and at least normal retirement age.

Eligibility for members not in active service at retirement, but in active service on or after October 1, 1999: at least 5 years of creditable service and at least normal retirement age.

Benefit – 1/50 of average final compensation multiplied by years of membership service up to 25 years of prior service, reduced by approximately 2-1/4% for each year retirement age is less than age 60.

Form of payment – life annuity.

Eligibility for members with less than 10 years of creditable service on July 1, 1993

Normal Retirement Age: 62

Eligibility for members in active service and inactive members: 25 years of creditable service.

Eligibility alternative for members in active service: at least one year of creditable service immediately before retirement age and at least normal retirement age.

Eligibility for members not in active service at retirement, and not in active service on or after October 1, 1999: at least 10 years of creditable service and at least normal retirement age.

Eligibility for members not in active service at retirement, but in active service on or after October 1, 1999: at least 5 years of creditable service and at least normal retirement age.

Benefit – 1/50 of average final compensation multiplied by years of membership service and up to 25 years of prior service, reduced by 6% for each year retirement age is less than age 62.

Form of payment - life annuity.

B. Special Plans (state employees)

State police employed before 9/16/84; inland fisheries and wildlife officers and marine resource officers employed before 9/1/84:

Eligibility - 20 years of creditable service in named positions.

Benefit $-\frac{1}{2}$ of average final compensation plus 2% for each year of service in excess of 20. If greater, the pro-rated portion of the benefit for service before July 1, 1976 is based on annual pay instead of average final pay.

Form of payment – 50% joint and survivor annuity, or life annuity.

Forest rangers employed before 9/1/84:

Eligibility – age 50 with 25 years of creditable service as a forest ranger.

Benefit – $\frac{1}{2}$ of average final compensation plus 2% for each year of service earned after qualification for retirement. If greater, the pro-rated portion of



APPENDIX C - SUMMARY OF PLAN PROVISIONS

the benefit for service before July 1, 1976 is based on annual pay instead of average final pay.

Form of payment – life annuity.

Airplane pilots employed before 9/1/84:

Eligibility - age 55 and 25 years of creditable service as an airplane pilot.

Benefit – greater of (1) $\frac{1}{2}$ of average final compensation plus 2% for each year of service earned after qualification for retirement, and (2) if retiring after age 60, the benefit under the general formula.

Form of payment – life annuity.

Liquor inspectors employed before 9/1/84:

Eligibility – age 55 and 25 years of creditable service as a liquor inspector.

Benefit – $\frac{1}{2}$ of average final compensation plus 2% for each year of service earned after qualification for retirement. If greater, the pro-rated portion of the benefit for service before July 1, 1976 is based on annual pay instead of average final pay.

Form of payment – life annuity.

State prison employees employed before 9/1/84:

Eligibility - age 50 and 20 years of creditable service as a prison employee.

Benefit $-\frac{1}{2}$ of average final compensation plus 2% for each year of service earned after qualification for retirement.

Form of payment – life annuity.

1998 Special Plan

1998 entrants: State prison employees, airplane pilots, forest rangers and liquor inspectors, employed after 8/31/84; defense, veterans and emergency management firefighters employed on and after 7/1/98.

2000 entrants: Baxter State Park Authority rangers, correctional employees and state fire marshals employed on or after 1/1/2000.

2002 entrants: Capital security officers, and oil and hazardous materials emergency response workers.

Eligibility – 10 years of creditable service under the 1998 Special Plan in one or a combination of the covered capacities, and the attainment of age 55 - OR - 25 years of creditable service in one or a combination of the covered capacities.

Benefit – for service prior to coverage in the 1998 Special Plan, 1/50 of average final compensation multiplied by years of service reduced for retirement before age 60 or 62, except certain prison employee benefits are reduced for retirement before age 55.

-AND-

for service under the 1998 Special Plan, 1/50 of average final compensation multiplied by years of service reduced for retirement before age 55.

Form of payment – life annuity.

25 & Out Plan

1998 entrants: State police employed on or after 9/16/84 and special agent investigators hired before 6/21/82.

2002 entrants: Inland fisheries and wildlife officers and marine resources officers employed on and after 8/31/84.

Eligibility – 25 years of creditable service in named positions.

Benefit – 1/50 of average final compensation multiplied by years of service.

Form of payment – life annuity.

Members in Special Plans who fail to qualify for special plan benefits can receive regular plan benefits when and as eligible and qualified.

6. Disability Retirement Benefits other than No Age Benefits

Eligibility – disabled as defined in the MSRS statutes, prior to normal retirement age; employed prior to October 16, 1992 and did not elect No Age Disability Benefits.

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 or two years, depending on disability plan, unless the member is unable to engage in any substantially gainful activity; in which case payments cease on the earlier of 10 years following normal retirement age or 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 10 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 MSRS 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 or two years, depending on disability plan, 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), parent, 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 parents, or estate.

9. Pre-Retirement Accidental Death Benefits

Eligibility – death while active or disabled resulting from an injury received in the line of duty.

Benefit – if the member leaves no dependent children, 2/3 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 2/3 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 2/3 of member's average final compensation until death.
- if the member leaves no spouse, the dependent child(ren) shall be paid an annual sum 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 that 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 twelve months. The maximum annual 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 10 years of service on July 1, 1993 will not receive a cost-of-living adjustment until 12 months after their normal retirement age.

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 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 with pop-up*.

Option 7: 50% joint and survivor annuity 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.