

**State Retirement and Pension
System of Maryland
Actuarial Valuation
as of June 30, 2003**

A MILLIMAN GLOBAL FIRM

November 2003



Milliman USA
Consultants and Actuaries

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Milliman USA
Consultants and Actuaries

8000 Towers Crescent Drive, Suite 1000
Vienna, VA 22182-2700
Tel +1 703 917.0143
Fax +1 703 827.9266

CORRESPONDENCE ADDRESS
323 W. Camden St., Ste. 400
Baltimore, MD 21201-2435
Tel +1 410 468.0420
Fax +1 410 468.0423
www.milliman.com

November 24, 2003

Board of Trustees
State Retirement and Pension
System of Maryland
120 East Baltimore Street
Baltimore, MD 21202

Dear Members of the Board:

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

The actuarial assumptions used in performing this valuation 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 2002. 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. To the extent that future experience deviates from these assumptions, the true cost of the plan could vary from our results. Since the prior valuation there have been only minor changes to plan benefit features that did not materially impact the overall contribution rate for the System.

The assumptions and methods used in performing this valuation 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 Contributions Plans*.

In preparing our report we relied, without audit, on information (some oral and some written) supplied by the State Retirement Agency. This information includes, but is not limited to, plan provisions, employee data, and financial information. Census data provided to us by the Agency has been reviewed for reasonableness, and for consistency with the data certified by the System's auditors. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.



Board of Trustees
State Retirement and Pension System of Maryland
November 24, 2003
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The funding objective of the plan is to establish contribution rates that over time will remain level, as a percentage of payroll.

I, Robert S. Dezube, am a consulting actuary for Milliman USA. I am also a member of the American Academy of Actuaries and meet their Qualification Standards to render the actuarial opinion contained herein.

I hereby certify that, to the best of my knowledge, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the applicable Guides to Professional Conduct, Amplifying Opinions, and Supporting Recommendations and Interpretations of the American Academy of Actuaries.

Sincerely,

Milliman USA

Robert S. Dezube, FSA
Principal and Consulting Actuary

RSD/MSR/10

SECTION I

BOARD SUMMARY

BOARD SUMMARY

This report presents the results of the June 30, 2003 actuarial valuation of the State Retirement and Pension System of Maryland (SRPS). The primary purposes of performing the annual actuarial valuation are to:

- 1) **determine the contributions** to be paid by the State in Fiscal Year 2005;
- 2) **measure and disclose**, as of the valuation date, the financial condition of the fund;
- 3) **indicate trends** in the financial progress of the fund;
- 4) **provide specific information** and documentation required by the Government Accounting Standards Board (GASB).

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

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

Actuary's Comments

During 2002 Milliman conducted a formal experience review of the actuarial assumptions used to finance the System. Milliman recommended to the Board a specific set of changes to be incorporated in the current and future actuarial valuations of the System. In summary the approved changes are as follows:

Actuarial Assumption:	Change:
1. Investment Assumption	decrease from 8.00% to 7.75%
2. Cost of Living Adjustment	decrease from 5.00% to 3.00%
3. Wage Inflation	decrease from 5.00% to 4.00%
4. Other Actuarial Assumptions*	refine to bring in line with experience study results

* these include inactive mortality, disability, withdrawal, early retirement and normal retirement

BOARD SUMMARY

The System's assets earned **3.1%** for the year, which is **4.9%** below the 8% assumption. This was a significant factor leading to the System's unfunded actuarial liability of **\$2,343 million** as of June 30, 2003. This compares to a **\$1,808 million** unfunded liability measured as of the June 30, 2002 valuation. In relative terms, the overall System funding ratio of assets to liabilities fell from **94.7%** in 2002, to **93.3%** this year. This funded status is still substantially better than would have been expected when the State first established the goal to extinguish unfunded liabilities by the year 2020.

This marks the third consecutive period of unfavorable market return (i.e. less than the 8.0% assumption). Therefore, the impact on the actuarial, or smoothed, value of assets is more significant without the help of stored gains as in prior years. The actuarial, or smoothed, rate of return measured from this past year was a positive **3.3%**, or approximately 4.7% less than our assumption. This investment loss increased the unfunded liability by **\$1,496 million** more than expected. Combined with a liability gain of **\$489 million**, the total System experienced a net actuarial loss of **\$1,007 million**.

In the 2001 legislative session, the Legislature changed the method used to fund the two largest Systems of the SRPS, the Teachers Combined System and the State portion of the Employees Combined System to a corridor method. Under this funding approach, the State appropriation is fixed at the June 30, 2000 valuation rate as long as the actuarial funded status of these Systems remains in a corridor of 90% funded to 110% funded. Once the ratio falls outside of this corridor, the appropriated rate will be adjusted towards the underlying actuarially calculated rate.

The results of this valuation report disclose the actuarially calculated rate which will be used for purposes of disclosing the Annual Required Contribution rate under Government Accounting Standards Board Statement No. 25. The analysis in this report will focus on the actuarially determined rate but will strive to footnote the appropriated or budgeted rate where applicable.

Finally, while the results are not on the favorable side this year, we emphasize again, as we have so often in the past, that financing of any retirement system is a long term proposition. Annual fluctuations are to be expected and should not by themselves be cause for concern. We continue to maintain that the overall System's financial condition is healthy, and that there are procedures, assumptions and methods in place, which in our opinion adequately and appropriately finance the emerging long-term liabilities of the System.

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

Prior Year Experience

ASSETS

Plan assets for this Fund are measured on both a market value and an actuarial or smoothed value basis. The actuarial smoothing method, described in detail in Appendix C, essentially reflects only 20% of a current year's actual market performance. In periods of high returns, this method significantly discounts the amount of asset gains above the assumed return of 8%. Conversely, in periods of returns below assumed, the losses are discounted. The primary advantage of this smoothing technique is contribution stability. The System does not feel the full impact of lower (or higher) costs when assets increase (or decrease) dramatically.

For the plan year ending June 30, 2003, the Fund earned a positive 3.1% on a market value basis and a positive 3.3% on a smoothed basis. While on a market basis, the Fund experienced an investment loss of **\$1,285** million, the actuarial or smoothed basis produced a loss of **\$1,496** million. The specific changes between the prior year amounts and this year's are presented below.

Item (In Millions)	Market Value	Actuarial Value
June 30, 2002 value	\$ 26,587	\$ 32,323
June 30, 2002 Municipal Withdrawals	(6)	(7)
Employer Contributions	601	601
Member Contributions	208	208
Benefit Payments	(1,554)	(1,554)
Expected Investment Earnings (8%)	2,097	2,556
Expected Value June 30, 2003	\$ 27,933	\$ 34,127
INVESTMENT GAIN (LOSS)	(1,285)	(1,496)
June 30, 2003 value	\$ 26,648	\$ 32,631

LIABILITIES

Three different measures of liabilities are calculated for this fund: a total value of future obligations (PVB), an actuarial liability (EAN), and an accounting liability (PVAB). Section III of this report describes the development of each. Only the actuarial liability is analyzed in terms of a gain or loss experience, which then is used to determine the System's funding and accounting (GASB) disclosures. During the plan year ending in 2003, the actuarial liabilities experienced an overall gain of **\$489 million**, which is

BOARD SUMMARY

1.43% of the total actuarial liability being measured. The primary cause for liability experience being better than anticipated this past year was annual salary increases being less than anticipated.

LIABILITIES (In Millions)	Total Value (PVB)	Actuarial (EAN)	Accounting (PVAB)
June 30, 2002	\$ 41,299	\$ 34,131	\$ 27,747
June 30, 2003	\$ 42,549	\$ 34,975	\$ 29,010

UNFUNDED LIABILITIES AND FUNDING RATIOS

The difference between assets and liabilities is the unfunded liability. This is measured in two ways: unfunded *actuarial* liabilities, which compare the actuarial liabilities to the actuarial asset value, and unfunded *accrued* benefits, which compare the present value of benefits accrued as of the valuation date to the market value of assets. These amounts are shown for June 30, 2002 and June 30, 2003, as well as the corresponding funding ratios for each (assets divided by liabilities).

Item (In Millions)	Actuarial	PVAB
6/30/2002 Net Surplus (Unfunded)	\$ 1,808	\$ 1,160
Funding Ratio	94.7%	95.8%
6/30/2003 Net Surplus (Unfunded)	\$ 2,343	\$ 2,362
Funding Ratio	93.3%	91.9%

CONTRIBUTIONS

In Section IV, we show the various contribution rates by system. In this summary, we present overall the State contribution rate, and compare it to the rate developed in the June 30, 2002 actuarial valuation. In summary, due to the net impact of investment losses and liability gains, the overall System contribution requirement, payable in FY 2005 on the GASB disclosure basis, has increased by 0.53% of payroll. It is important to note that this is not the contribution rate upon which the State will base its budget in either FY 2004 or FY 2005. This analysis compares the underlying cost calculations which will be used to disclose the State's pension expense for GASB reporting purposes. The actual appropriations are calculated on a Corridor Funding Method for the two largest plans. This approach produced payroll-weighted averages of 8.06% at June 30, 2002, decreasing to 7.97% as of June 30, 2003.

Rate as Percent of Covered Payroll – GASB Disclosure	
June 30, 2002 State Rate	9.44%
Decrease due to Assumption Changes	(0.27%)
Increase due to Investment Loss	1.08%
Decrease due to Liability Gain	(0.28%)
June 30, 2003 State Rate	9.97%

Rate as Percent of Covered Payroll – Budget (Corridor Method)	
June 30, 2002 State Rate	8.06%
Decrease in Systems not within the Corridor	(0.09%)
Increase due to Shift in Payroll	0.00%
June 30, 2003 State Rate	7.97%

MEMBERSHIP

There are four types of plan participants, current active workers, previous terminations who retain a right to a deferred vested benefit, previous terminations who are not vested but have member contributions in the System (inactives), and participants in pay status. In Appendix B, we present extensive details on membership statistics. Below, we compare totals in each group between June 30, 2002 and 2003.

As shown below, there was an overall increase in participation during the year of **1.4%**.

	June 30, 2003	June 30, 2002	Change
Active Participants	190,021	190,123	(0.1%)
Terminated Vested Participants	35,302	30,733	14.9%
Inactive Participants	10,271	13,622	(24.6%)
Participants In Pay Status	90,803	87,367	3.9%
Total Participants	326,397	321,845	1.4%

Trends

One of the best ways to measure or evaluate the financial condition of a pension plan, is to examine the historical trends that are evolving. Below, we present three charts which present trend information from 1993 through the end of 2003, on the System's assets and liabilities, annual cash flows in and out of the fund, and the State contribution rate. Our comments on each follow.

Chart A: ASSET / LIABILITIES

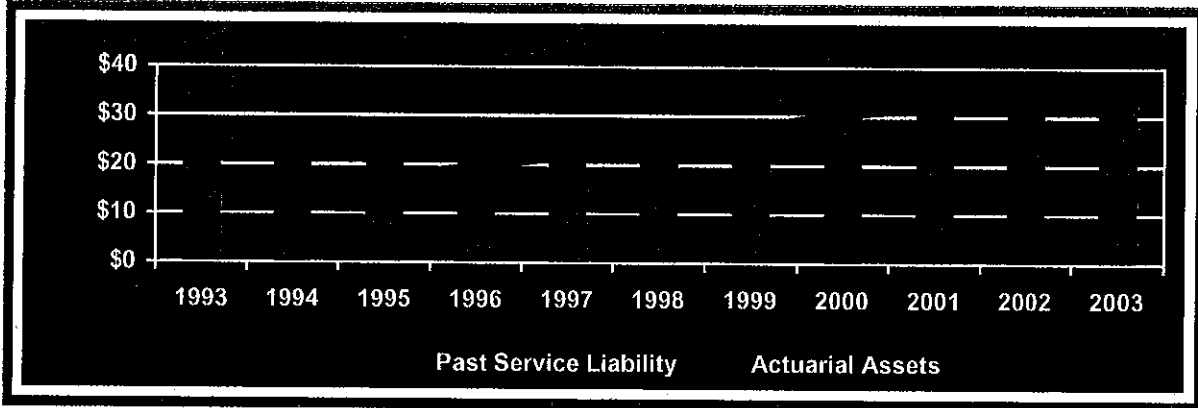


Chart B: CASH FLOWS

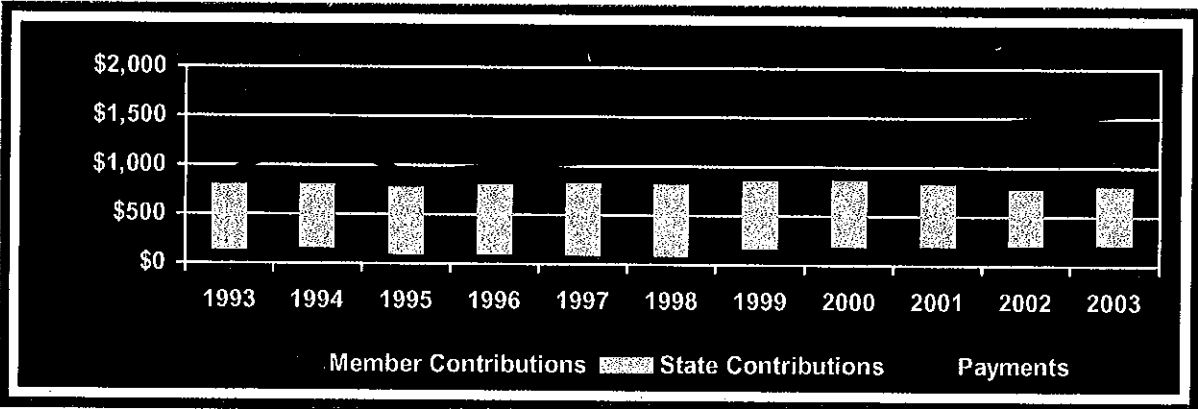
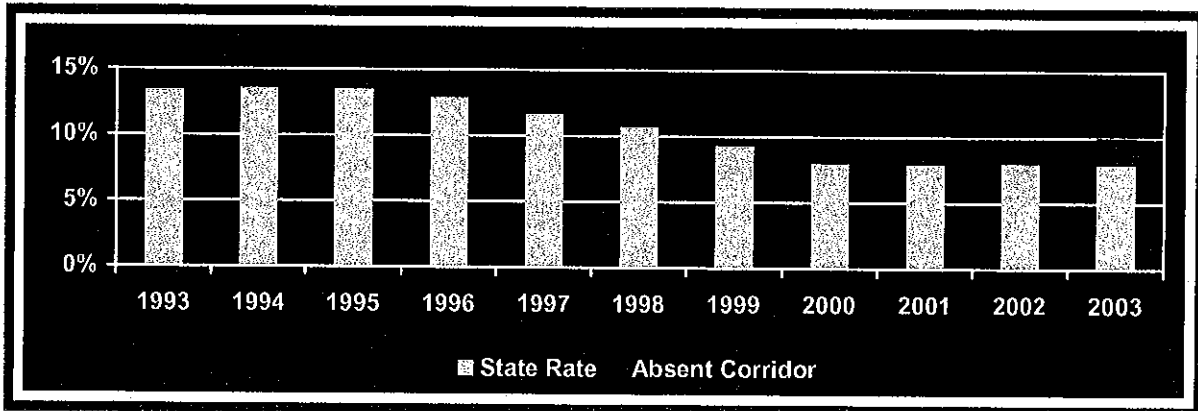


Chart C: STATE CONTRIBUTION RATE



Comments

Chart A places into perspective the aforementioned investment and liability performance losses of this past year. The ratio of assets to liabilities (i.e., funding ratio), has grown, not just over the period in the chart but since early 1980's. Despite the investment losses of the past two years, this year's funding ratio is still among the best ever for the State.

Chart B presents an emerging trend that will have investment implications. It is a trend being faced by many state-wide retirement systems, with the aging of our baby boomer generations. Payments to retirees are on the increase, while cash into the fund, from employer and employee contributions, is stable or declining. This is not unanticipated, and essentially explains the past need for total fund buildup.

Finally, Chart C, looks only at the State contribution rate which is used each year to determine the upcoming fiscal year State appropriation. It shows the impact of the past decade's sustained investment gains, a continuous lowering of the rate until 2000. Effective with the 2001 valuation, the State appropriations are performed under a corridor funding method for the two largest plans. The appropriation has remained essentially level since that time.

BOARD SUMMARY

TOTAL SRPS (STATE AND MUNICIPAL) SUMMARY OF PRINCIPAL PLAN RESULTS			
Valuation As Of -->	6/30/2003	6/30/2002	% change
PARTICIPANT COUNTS			
ACTIVES	190,021	190,123	-0.1%
TERMINATED VESTEDS	35,302	30,733	14.9%
INACTIVES	10,271	13,622	-24.6%
IN-PAY STATUS	<u>90,803</u>	<u>87,367</u>	3.9%
TOTAL	326,397	321,845	1.4%
Annual Salaries of Active Members	\$ 8,182,626,004	\$ 7,937,530,373	3.1%
Covered Annual Salaries of Active Members	\$ 8,134,419,291	\$ 7,867,794,200	3.4%
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 1,478,091,946	\$ 1,393,043,522	6.1%
ASSETS & LIABILITIES			
Total Actuarial Liability	\$ 34,974,600,866	\$ 34,131,284,012	2.5%
Assets for Valuation Purposes	<u>32,631,464,884</u>	<u>32,323,263,153</u>	1.0%
Unfunded Actuarial Liability	\$ 2,343,135,982	\$ 1,808,020,859	29.6%
Funding Ratio	93.3%	94.7%	N/A
Present Value of Accrued Benefits	\$ 29,009,910,574	\$ 27,747,088,286	4.6%
Market Value of Assets	<u>26,648,106,847</u>	<u>26,586,894,393</u>	0.2%
Unfunded FASB Accrued Liability	\$ 2,361,803,727	\$ 1,160,193,893	103.6%
Accrued Benefit Funding Ratio	91.9%	95.8%	N/A
CONTRIBUTIONS AS % OF PAYROLL (STATE PORTION ONLY)			
	Fiscal Year 2005	Fiscal Year 2004	
GASB Method:			
Normal Cost Contribution	8.02%	7.96%	
Unfunded Actuarial Liability Contribution	<u>1.95</u>	<u>1.48</u>	
Total State Contribution	9.97%	9.44%	
Corridor Method:			
Certified Rate Using Corridor Method	7.97%	8.06%	

BOARD SUMMARY

TOTAL SRPS (TEACHERS)			
SUMMARY OF PRINCIPAL PLAN RESULTS			
Valuation As Of -->	6/30/2003	6/30/2002	% change
PARTICIPANT COUNTS			
ACTIVES	97,298	96,356	1.0%
TERMINATED VESTEDS	13,642	11,416	19.5%
INACTIVES	5,219	6,624	-21.2%
IN PAY STATUS	<u>43,675</u>	<u>41,920</u>	4.2%
TOTAL	159,834	156,316	2.3%
Annual Salaries of Active Members Covered	\$ 4,609,991,902	\$ 4,426,831,826	4.1%
Annual Salaries of Active Members	\$ 4,522,202,402	\$ 4,323,053,923	4.6%
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 907,422,987	\$ 857,620,744	5.8%
ASSETS & LIABILITIES			
Total Actuarial Liability	\$ 21,152,062,565	\$ 21,117,046,756	0.2%
Assets for Valuation Purposes	<u>19,626,676,057</u>	<u>19,424,000,237</u>	1.0%
Unfunded Actuarial Liability	\$ 1,525,386,508	\$ 1,693,046,519	-9.9%
Funding Ratio	92.8%	92.0%	N/A
Present Value of Accrued Benefits	\$ 17,671,561,409	\$ 17,434,637,904	1.4%
Market Value of Assets	<u>16,108,367,651</u>	<u>16,052,071,028</u>	0.4%
Unfunded FASB Accrued Liability	\$ 1,563,193,758	\$ 1,382,566,876	13.1%
Accrued Benefit Funding Ratio	91.2%	92.1%	N/A
CONTRIBUTIONS AS % OF PAYROLL			
	Fiscal Year 2005	Fiscal Year 2004	
GASB Method:			
Normal Cost Contribution	7.70%	8.10%	
Unfunded Actuarial Liability Contribution	<u>2.33</u>	<u>2.38</u>	
Total State Contribution	10.03%	10.48%	
Corridor Method:			
Certified Rate Using Corridor Method	9.35%	9.35%	

BOARD SUMMARY

TOTAL SRPS (EMPLOYEES COMBINED SYSTEM)			
SUMMARY OF PRINCIPAL PLAN RESULTS			
Valuation As Of -->	6/30/2003	6/30/2002	% change
PARTICIPANT COUNTS			
ACTIVES	89,286	90,306	1.1%
TERMINATED VESTEDS	21,593	19,274	12.0%
INACTIVES	4,968	6,902	-28.0%
IN PAY STATUS	<u>44,591</u>	<u>43,109</u>	3.4%
TOTAL	160,438	159,591	0.5%
Annual Salaries of Active Members	\$ 3,387,705,450	\$ 3,322,041,557	2.0%
Covered Annual Salaries of Active Members	\$ 3,424,054,274	\$ 3,356,670,791	2.0%
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 483,702,850	\$ 456,344,866	6.0%
ASSETS & LIABILITIES			
Total Actuarial Liability	\$ 12,083,197,248	\$ 11,385,748,668	6.1%
Assets for Valuation Purposes	<u>11,244,007,832</u>	<u>11,162,264,863</u>	0.7%
Unfunded Actuarial Liability	\$ 839,189,416	\$ 223,483,805	275.5%
Funding Ratio	93.1%	98.0%	N/A
Funding Ratio For Corridor Method (excludes municipal component)	91.6%	96.3%	N/A
Present Value of Accrued Benefits	\$ 9,728,910,255	\$ 8,914,453,515	9.1%
Market Value of Assets	<u>9,156,181,278</u>	<u>9,147,398,773</u>	0.1%
Unfunded FASB Accrued Liability	\$ 572,728,977	\$ (232,945,258)	345.9%
Accrued Benefit Funding Ratio	94.1%	102.6%	N/A
CONTRIBUTIONS AS % OF PAYROLL (STATE PORTION ONLY)			
	Fiscal Year 2005	Fiscal Year 2004	
<u>GASB Method:</u>			
Normal Cost Contribution	7.50%	6.15%	
Unfunded Actuarial Liability Contribution	<u>1.69</u>	<u>0.47</u>	
Total State Contribution	9.19%	6.62%	
<u>Corridor Method:</u>			
Certified Rate Using Corridor Method	4.73%	4.73%	

BOARD SUMMARY

TOTAL SRPS (STATE POLICE)			
SUMMARY OF PRINCIPAL PLAN RESULTS			
Valuation As Of -->	6/30/2003	6/30/2002	% change
PARTICIPANT COUNTS			
ACTIVES	1,542	1,589	-3.0%
TERMINATED VESTEDS	28	20	40.0%
INACTIVES	13	7	85.7%
IN PAY STATUS	<u>1,695</u>	<u>1,598</u>	6.1%
TOTAL	3,278	3,214	2.0%
Annual Salaries of Active Members	\$ 79,268,691	\$ 81,137,818	-2.3%
Covered Annual Salaries of Active Members	\$ 80,838,519	\$ 83,141,520	-2.8%
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 56,691,315	\$ 51,669,491	9.7%
ASSETS & LIABILITIES			
Total Actuarial Liability	\$ 1,062,383,238	\$ 1,030,575,150	3.1%
Assets for Valuation Purposes	<u>1,285,200,743</u>	<u>1,300,401,695</u>	-1.2%
Unfunded Actuarial Liability	\$ (222,817,505)	\$ (269,826,545)	17.4%
Funding Ratio	121.0%	126.2%	N/A
Present Value of Accrued Benefits	\$ 986,821,179	\$ 880,447,034	12.1%
Market Value of Assets	<u>996,338,671</u>	<u>1,029,851,036</u>	-3.3%
Unfunded FASB Accrued Liability	\$ (9,517,492)	\$ (149,404,002)	93.6%
Accrued Benefit Funding Ratio	101.0%	117.0%	N/A
CONTRIBUTIONS AS % OF PAYROLL			
	Fiscal Year 2005	Fiscal Year 2004	
Normal Cost Contribution	25.05%	33.50%	
Unfunded Actuarial Liability Contribution	<u>(25.53)</u>	<u>(25.92)</u>	
Total State Contribution	(0.00%)	7.58%	

BOARD SUMMARY

TOTAL SRPS (JUDGES AND SURVIVING SPOUSES)			
SUMMARY OF PRINCIPAL PLAN RESULTS			
Valuation As Of -->	6/30/2003	6/30/2002	% change
PARTICIPANT COUNTS			
ACTIVES	287	281	2.1%
TERMINATED VESTEDS	10	10	0.0%
INACTIVES	3	0	N/A
IN PAY STATUS	<u>306</u>	<u>311</u>	-1.6%
TOTAL	606	602	0.7%
Annual Salaries of Active Members	\$ 32,524,743	\$ 32,609,995	-0.3%
Covered Annual Salaries of Active Members	\$ 33,168,859	\$ 31,824,096	4.2%
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 17,171,254	\$ 17,222,280	-0.3%
ASSETS & LIABILITIES			
Total Actuarial Liability	\$ 279,008,117	\$ 267,532,209	4.3%
Assets for Valuation Purposes	<u>240,207,561</u>	<u>234,558,099</u>	2.4%
Unfunded Actuarial Liability	\$ 38,800,556	\$ 32,974,110	17.7%
Funding Ratio	86.1%	87.7%	N/A
Present Value of Accrued Benefits	\$ 265,105,527	\$ 238,645,966	11.1%
Market Value of Assets	<u>193,773,533</u>	<u>192,192,005</u>	0.8%
Unfunded FASB Accrued Liability	\$ 71,331,994	\$ 46,453,961	53.6%
Accrued Benefit Funding Ratio	73.1%	80.5%	N/A
CONTRIBUTIONS AS % OF PAYROLL			
	Fiscal Year 2005	Fiscal Year 2004	
Normal Cost Contribution	28.15%	37.00%	
Unfunded Actuarial Liability Contribution	<u>8.57</u>	<u>6.74</u>	
Total State Contribution	36.72%	43.74%	

BOARD SUMMARY

TOTAL SRPS (LAW ENFORCEMENT OFFICERS (LEOPS))

SUMMARY OF PRINCIPAL PLAN RESULTS

Valuation As Of --> 6/30/2003 6/30/2002 % change

PARTICIPANT COUNTS

ACTIVES	1,481	1,410	5.0%
TERMINATED VESTEDS	18	8	125.0%
INACTIVES	44	58	-24.1%
IN PAY STATUS	<u>503</u>	<u>403</u>	24.8%
TOTAL	2,046	1,879	8.9%
Annual Salaries of Active Members	\$ 68,356,726	\$ 67,543,310	1.2%
Covered Annual Salaries of Active Members	\$ 69,469,540	\$ 65,915,519	5.4%
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 12,479,011	\$ 9,683,261	28.9%

ASSETS & LIABILITIES

Total Actuarial Liability	\$ 382,287,032	\$ 312,057,677	22.5%
Assets for Valuation Purposes	<u>225,111,179</u>	<u>191,099,965</u>	17.8%
Unfunded Actuarial Liability	\$ 157,175,853	\$ 120,957,712	29.9%
Funding Ratio	58.9%	61.2%	N/A
Present Value of Accrued Benefits	\$ 342,486,608	\$ 266,438,611	28.5%
Market Value of Assets	<u>184,658,278</u>	<u>156,055,488</u>	18.3%
Unfunded FASB Accrued Liability	\$ 157,828,330	\$ 110,383,123	43.0%
Accrued Benefit Funding Ratio	53.9%	58.6%	N/A

CONTRIBUTIONS AS % OF PAYROLL (STATE PORTION ONLY)

	Fiscal Year 2005	Fiscal Year 2004
Normal Cost Contribution	21.25%	23.15%
Unfunded Actuarial Liability Contribution	<u>16.48</u>	<u>11.98</u>
Total State Contribution	37.73%	35.13%

BOARD SUMMARY

TOTAL SRPS (LOCAL FIRE AND POLICE SYSTEM)			
SUMMARY OF PRINCIPAL PLAN RESULTS			
Valuation As Of -->	6/30/2003	6/30/2002	% change
PARTICIPANT COUNTS			
ACTIVES	127	181	-29.8%
TERMINATED VESTEDS	11	5	120.0%
INACTIVES	24	31	-22.6%
IN PAY STATUS	<u>33</u>	<u>26</u>	26.9%
TOTAL	195	243	-19.8%
Annual Salaries of Active Members	\$ 4,778,492	\$ 7,365,867	-35.1%
Covered Annual Salaries of Active Members	\$ 4,685,697	\$ 7,188,351	-34.8%
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 624,529	\$ 502,880	24.2%
ASSETS & LIABILITIES			
Total Actuarial Liability	\$ 15,662,666	\$ 18,323,552	-14.5%
Assets for Valuation Purposes	<u>10,261,512</u>	<u>10,938,294</u>	-6.2%
Unfunded Actuarial Liability	5,401,154	7,385,258	-26.9%
Funding Ratio	65.5%	59.7%	N/A
Present Value of Accrued Benefits	\$ 15,025,596	\$ 12,465,256	20.5%
Market Value of Assets	<u>8,787,437</u>	<u>9,326,064</u>	-5.8%
Unfunded FASB Accrued Liability	\$ 6,238,159	\$ 3,139,192	98.7%
Accrued Benefit Funding Ratio	58.5%	74.8%	N/A
CONTRIBUTIONS AS % OF PAYROLL (STATE PORTION ONLY)			
	Fiscal Year 2005	Fiscal Year 2004	
Normal Cost Contribution	N/A	N/A	
Unfunded Actuarial Liability Contribution	<u>N/A</u>	<u>N/A</u>	
Total State Contribution	N/A	N/A	

SECTION II

ASSETS

Pension plan assets play a key role in the financial operation of the plan and in the decisions the Trustees may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact upon benefit levels, negotiated contributions, and the ultimate security of participants' benefits.

In this section we present detailed information on plan assets including:

- **Disclosure** of plan assets at June 30, 2003 and June 30, 2002;
- Statement of the **changes** in market values during the year;
- Development of the Actuarial Value of Assets; and
- An assessment of **investment performance**.

Disclosure:

Market values represent "snap-shot" or "cash-out" values which provide the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the market place. As a result, market values are usually not suitable for long range planning.

Actuarial values, or "carrying values," are market values which have been smoothed and are the actuary's best estimate of long term asset values. They are used for evaluating the Fund's ongoing ability to meet its obligations.

Current methods employed by this Fund set the actuarial values equal to the expected adjusted market value plus 20% of the difference between a smoothed value of assets and the actual market value.

Disclosure of Plan Market Value Of Assets

STATEMENT OF ASSETS AT MARKET VALUE		
	June 30,	
	2003	2002
INVESTMENTS		
Equities	\$ 16,574,693,174	\$ 16,958,356,282
Fixed Income	8,346,320,777	7,933,891,144
Real Estate	<u>1,701,382,553</u>	<u>1,620,379,089</u>
Total Investments	\$ 26,622,396,504	\$ 26,512,626,515
OTHER ASSETS		
Other Assets	\$ 25,710,343	\$ 74,267,878
Net Assets Available for Benefits	<u>\$ 26,648,106,847</u>	<u>\$ 26,586,894,393</u>

Changes in Market Value:

The components of asset change are:

- Contributions
- Benefit payments
- Expenses
- Investment Income (realized and unrealized)

The specific changes during 2003 are represented below:

CHANGES IN MARKET VALUES	
Value of Assets – JUNE 30, 2002	\$ 26,586,894,393
RECEIPTS	
Member Contributions	\$ 207,583,371
Employer Contributions	601,329,970
Investment Returns	<u>806,105,298</u>
Total Receipts	\$ 1,615,018,639
DISBURSEMENTS	
Benefit Payments	<u>\$ 1,553,806,185</u>
Total Disbursements	\$ 1,553,806,185
TOTAL	
Value of Assets – June 30, 2003	\$ 26,648,106,847

Actuarial Value of Assets:

The Actuarial Value of Assets represents a "smoothed" value developed by the actuary to reduce, or eliminate, erratic results which could develop from short term ups and downs in the Market Value of Assets. For this Fund, the Actuarial Value has been calculated by adding 20% of any deviation from Market Value and Expected Adjusted Market Value to the Expected Adjusted Market Value. The following table illustrates the calculation of the Actuarial Value of Assets for the June 30, 2003 valuation.

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS AS OF JUNE 30, 2003		
1.	Actuarial Value of Assets at June 30, 2002	\$ 32,323,263,153
2.	Amount in (1) with interest to June 30, 2003	34,909,124,205
3.	Employer & member contributions for the Plan Year ended June 30, 2003	808,913,341
4.	Interest on Employer and member contributions assuming payments made uniformly throughout the year to June 30, 2003	32,213,680
5.	Disbursements from Trust except investment expenses, June 30, 2002 through June 30, 2003	1,560,525,802
6.	Interest on disbursements to June 30, 2003 at 8.00% per year	62,421,032
7.	Expected adjusted Market Value of Assets at June 30, 2003 = (2) + (3) + (4) - (5) - (6)	34,127,304,393
8.	Actual Market Value of Assets at June 30, 2003	26,648,106,847
9.	Excess of (8) over (7)	(7,479,197,546)
10.	Actuarial Value of Assets at June 30, 2003 = (7) + 20% of (9)	32,631,464,884

Investment Performance:

The Market Value of Assets (MVA) returned 3.10% during 2003. This is lower than the assumed 8% and reflects the poor performance of the "market" in general.

The Actuarial Value of Assets (AVA) returned 3.32% for the year. This is primarily the result of the Asset Valuation method being utilized for the calculation of the Actuarial Value of Assets. Since only 20% of the "gain" from the performance of the Fund is recognized in a given year, in periods of very good performance, the AVA can lag significantly behind the MVA, while in a period of negative returns, the AVA does not decline as rapidly as the MVA. Because the MVA value now is less than the AVA, the market value must earn in excess of the new assumption of 7.75% for the AVA to earn at least 7.75%.

SECTION III

LIABILITIES

In this section we present detailed information on plan liabilities including:

- **Disclosure** of plan liabilities at June 30, 2003 and June 30, 2002;
- Statement of **changes** in these liabilities during the year; and
- A **projection** of future liabilities.

Disclosure:

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures, and the purpose for which they are using them.

- **Total Future Obligations:** Used for analyzing the financial outlook of the Fund, this represents the amount of money needed today to fully pay off all future benefits and expenses of the Fund, 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. This method is referred to as the **Entry Age Normal** funding method.
- **Accrued 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.

LIABILITIES

The table below discloses each of these liabilities for the current and prior valuation. With respect to each disclosure, a subtraction of the appropriate value of Fund assets yields, for each respective type, a **net surplus** or an **unfunded liability**.

LIABILITIES/NET SURPLUS (UNFUNDED)	6/30/2003	6/30/2002
Total Future Obligations		
Active Participant Benefits	\$ 24,975,927,418	\$ 24,515,459,904
Retiree and Inactive Benefits	17,573,117,822	16,783,959,580
Total Future Obligations	\$ 42,549,045,240	\$ 41,299,419,484
Total Resources		
Market Value of Assets	\$ 26,648,106,847	\$ 26,586,894,393
Future Member Contributions	1,658,758,707	1,602,937,253
Future State Contributions	14,242,179,686	13,109,587,838
Total Resources	\$ 42,549,045,240	\$ 41,299,419,484
Actuarial Liability		
Total Future Obligations	\$ 42,549,045,240	\$ 41,299,419,484
Present Value of Future Normal Costs		
Less Employer Portion	(5,769,673,683)	(5,424,770,065)
Less Employee Portion	(1,658,758,707)	(1,602,937,657)
Less Present Value of Future UAL Amounts	(146,011,984)	(140,428,154)
Actuarial Liability	\$ 34,974,600,866	\$ 34,131,284,012
Less Actuarial Value of Assets	(32,631,464,884)	(32,323,263,153)
Net (Surplus) Unfunded	\$ 2,343,135,982	\$ 1,808,020,859
Accrued Liability		
Total Future Obligations	\$ 42,549,045,240	\$ 41,299,419,484
Less Present Value of Future Benefit Accruals	(13,539,134,666)	(13,552,331,198)
Accrued Liability	\$ 29,009,910,574	\$ 27,747,088,286
Less Market Value of Assets	(26,648,106,847)	(26,586,894,393)
Net (Surplus) Unfunded	\$ 2,361,803,727	\$ 1,160,193,893

Changes in Liabilities:

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

- new hires since the last valuation
- benefits accrued since the last valuation
- plan amendments increasing benefits
- 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
- a change in actuarial or investment assumptions
- a change in the actuarial funding method

Unfunded liabilities will change because of all the above, and also due to changes in Fund assets resulting from:

- employer contributions different than expected
- investment earnings different than expected
- 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 fund. Below we present the key changes in liabilities since the last valuation.

	TOTAL FUTURE OBLIGATION	\$ in Millions ACTUARIAL LIABILITY	ACCRUED LIABILITY
Liabilities 6/30/2002	\$ 41,299	\$ 34,131	\$ 27,747
Liabilities 6/30/2003	\$ 42,549	\$ 34,975	\$ 29,010
Liability Increase (Decrease)	\$ 1,250	\$ 844	\$ 1,263
Change due to:			
Plan Amendment	\$ 0	\$ 0	\$ 0
Assumption Change	\$ (375)	\$ (700)	\$ (93)
Actuarial (Gain)/Loss	N/A	\$ (489)	N/A
Benefits Accumulated and Other Sources	\$ 1,625	\$ 1,968	\$ 1,356

LIABILITIES

ACTUARIAL LIABILITY BY SYSTEM AS OF JUNE 30, 2003

	Total Systems	Teachers' Retirement & Pension	Employees' Retirement & Pension	State Police	Judges	LEOPS	Local Fire and Police
1. Actuarial Liabilities for:							
a. Active Members	\$ 17,401,483,044	\$ 10,370,392,698	\$ 6,360,813,280	\$ 338,784,528	\$ 119,200,033	\$ 205,722,683	\$ 6,569,822
b. Retired, Disabled and Beneficiary Members	16,851,546,911	10,452,181,938	5,342,414,366	720,328,622	154,065,372	173,710,541	8,846,072
c. Vested Deferred and Inactive Status Members	<u>721,570,911</u>	<u>329,487,929</u>	<u>379,969,602</u>	<u>3,270,088</u>	<u>5,742,712</u>	<u>2,853,808</u>	<u>246,772</u>
2. Total Actuarial Liability (1(a) + 1(b) + 1(c))	\$ 34,974,600,866	\$ 21,152,062,565	\$ 12,083,197,248	\$ 1,062,383,238	\$ 279,008,117	\$ 382,287,032	\$ 15,662,666
3. Actuarial Value of Assets	<u>32,631,464,884</u>	<u>19,626,676,057</u>	<u>11,244,007,832</u>	<u>1,285,200,743</u>	<u>240,207,561</u>	<u>225,111,179</u>	<u>10,261,512</u>
4. Unfunded Actuarial Liability (2 - 3)	\$ <u>2,343,135,982</u>	\$ <u>1,525,386,508</u>	\$ <u>839,189,416</u>	\$ <u>(222,817,505)</u>	\$ <u>38,800,556</u>	\$ <u>157,175,853</u>	\$ <u>5,401,154</u>

SECTION IV

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 maintain the funding status of the Plan. Typically, the actuarial process will utilize a funding scheme that will result in a pattern of contributions that are both stable and predictable.

Actuarially Determined Rate (for GASB disclosure)

For this Fund, the funding scheme employed is the **Entry Age Actuarial Cost Method**. Under this method there are two components to the total contribution, a **normal cost**, and an **amortization payment**. A normal cost is determined for each individual participant which, when added up for all participants, represents the Fund's total normal cost. Each year's normal cost represents the cost to fund that portion of the total future obligations which has been allocated to the current year, based upon the actuarial cost method in use.

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

In Appendix C we describe more fully this technical topic.

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

ACTUARIALLY DETERMINED CONTRIBUTION (for GASB Disclosure)	7/1/2003	7/1/2002
Entry Age Normal Cost	8.02%	7.96%
Amortization Payment	<u>1.95%</u>	<u>1.48%</u>
Total State Contribution	9.97%	9.44%

On the following pages we display the contribution rates developed for each System.

CONTRIBUTIONS

**TABLE IV-1
STATE CONTRIBUTION RATES
FISCAL YEAR 2005 – ENTRY AGE NORMAL**

	Total State	Teachers' Retirement and Pension	State Employees Retirement and Pension	State Police	Judges	LEOPS
New Entrant Normal Contributions as Percent of Payroll	8.02%	7.70%	7.50%	25.05%	28.15%	21.25%
Unfunded Actuarial Liability Contribution as Percent of Payroll	<u>1.95</u>	<u>2.33</u>	<u>1.69</u>	<u>(25.53)</u>	<u>8.57</u>	<u>16.48</u>
Total Contributions as Percent of Payroll	<u>9.97%</u>	<u>10.03%</u>	<u>9.19%</u>	<u>(0.00%)</u>	<u>36.72%</u>	<u>37.73%</u>

CONTRIBUTIONS

**TABLE IV-2
TOTAL STATE CONTRIBUTION RATES BY SYSTEM
JUNE 30, 1990 – JUNE 30, 2003**

Valuation Date June 30	Total Systems	Teachers' Combined	Employees' Combined	State Police	Judges	LEOPS	Local Fire and Police
- 2003	9.97%	10.03%	9.19%	(0.00%)	36.72%	37.73%	N/A
- 2002	9.44	10.48	6.62	7.58	43.74	35.13	N/A
- 2001	8.70	9.87	5.74	5.78	43.92	36.10	N/A
- 2000	7.98	9.35	4.73	5.83	42.66	32.41	14.85
- 1999	9.31	10.95	5.71	8.44	46.75	23.38	15.00
- 1998	10.70	12.54	7.15	1.26	48.18	22.96	14.99
- 1997	11.67	13.99	7.13	10.91	52.12	25.60	16.42
- 1996	12.90	15.48	8.21	13.08	52.49	26.27	16.29
- 1995	13.50	16.09	8.54	17.65	52.56	35.15	16.19
- 1994	13.61	16.22	8.61	19.13	52.51	35.68	16.31
- 1993	13.43	15.92	8.70	19.36	52.84	34.07	16.17
- 1992	13.40	15.76	8.70	25.74	54.25	32.56	15.85
- 1991	13.89	16.31	9.15	28.72	54.98	33.58	15.43
- 1990	13.83	16.44	8.94	26.79	56.87	N/A	N/A

Budgeted Rates (based on Corridor Method)

For the State Police, Judges and LEOPs Systems, the State's total contribution rate is equal to the normal cost plus the unfunded actuarial contribution rate. The unfunded actuarial contribution rate consists of the July 1, 2000 unfunded actuarial liability being amortized over 20 years (17 years remaining) plus 25 year amortization of the unfunded actuarial liability that emerges each subsequent year.

For the Teachers Combined System and the Employees' Combined System, the State's contribution is equal to the 2000 valuation contribution percentage (first applicable for fiscal 2002) as long as each System's actuarial funded status remains within a corridor of 90% to 110%. The normal cost rate and actuarial liability will continue to be measured using the entry age funding method. If the funded status falls outside the corridor a credit (if above 110%) or charge (if below 90%) will be established equal to the one-fifth of the difference between the budgeted rate and the actuarially determined rate. Once the funded status is within the corridor the contribution rate will return to "corridor rate." The corridor limits (i.e. 90%/110%) are not impacted by the change in assumptions.

The table below presents and compares the budgeted determined contributions for the State for this valuation and the prior one.

	7/1/2003	7/1/2002
Budgeted State Rate (based on Corridor Method)	7.97%	8.06%

On the following page we show the budgeted rate by System for this valuation and the prior one.

CONTRIBUTIONS

**TABLE IV-3
SUMMARY OF CONTRIBUTIONS BASED ON CORRIDOR METHOD**

	Total State	Teachers' Retirement and Pension	State Employees' Retirement and Pension	State Police	Judges	LEOPS
7/1/2002 Valuation Results*						
Unfunded Actuarial Liability	\$1,924,531,805	\$1,693,046,519	\$352,115,642	(\$209,626,545)	\$32,974,110	\$116,222,979
Contribution	608,095,576	\$434,604,215	128,077,870	\$6,457,759	\$14,976,792	\$24,318,436
Total Contributions as Percentage of Payroll**	8.06%	9.46%	4.73%	7.58%	43.74%	35.13%
Corridor Percentage		92.0%	96.3%			
7/1/2003 Valuation Results with New Assumptions**						
Unfunded Actuarial Liability	\$2,326,410,272	\$1,525,386,508	\$843,164,979	(\$222,817,505)	\$38,800,556	\$141,875,734
Contribution	\$612,963,841	\$448,275,613	\$128,444,519	\$0	\$12,420,809	\$24,412,504
Total Contributions as Percentage of Payroll**	7.97%	9.35%	4.73%	0.00%	36.72%	37.73%
Corridor Percentage		92.8%	91.6%			

* This table shows the impact on Fiscal Year 2004.

** This table shows the impact on Fiscal year 2005.

*** Total Contributions as Percent of Payroll remains fixed for Teachers and State Employees, because they remain within the Corridor Percentage.

SECTION V

**ACCOUNTING STATEMENT
INFORMATION**

ACCOUNTING STATEMENT INFORMATION

Statement No. 35 of the Financial Accounting Standards Board requires the System 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 liabilities if contributions stopped and 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 GASB 25 actuarial accrued liability is the same as the actuarial liability amount calculated for funding purposes.

Both the present value of accrued benefits (FASB-35) and the actuarial accrued liability (GASB-25) are determined assuming that the plan is on going and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities are discounted at the assumed valuation interest rate of 7.75% per annum.

FASB Statements No. 35 specifies that a comparison of the present value of accrued (accumulated) benefits with the market value of the assets as of the valuation date must be provided. GASB Statement #25 requires the actuarial accrued liability be compared with the actuarial value of assets for funding purposes. The relevant amounts as of June 30, 2003 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, 2002, to the liabilities as of June 30, 2003.

ACCOUNTING STATEMENT INFORMATION

**TABLE V-1
ACCOUNTING STATEMENT INFORMATION
THE TOTAL SYSTEMS OF THE STATE OF MARYLAND**

	2003	2002
A. FASB #35 Basis		
1. Present Value of Benefits Accrued to Date:		
a. Members Currently Receiving Payments	\$ 16,851,546,911	\$ 16,188,035,658
b. Former Vested Members	721,570,911	595,923,922
c. Active Members	<u>11,436,792,752</u>	<u>10,963,128,706</u>
2. Total Present Value of Accrued Benefits (1(a) + 1(b) + 1(c))	<u>\$ 29,099,910,574</u>	<u>\$ 27,747,088,286</u>
3. Assets at Market Value	<u>\$ 26,648,106,847</u>	<u>\$ 26,586,894,393</u>
4. Unfunded Value to Value of Benefits (2 - 3)	\$ 2,361,803,727	\$ 1,160,193,893
5. Ratio of Assets to Value of Benefits (3 / 2)	91.86%	95.82%
B. GASB #25 Basis		
1. Actuarial accrued liabilities for retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$ 17,573,117,822	\$ 16,783,959,580
2. Actuarial accrued liabilities for current Employees	<u>17,401,483,044</u>	<u>17,347,324,432</u>
3. Total actuarial accrued liability (1 + 2)	\$ 34,974,600,866	\$ 34,131,284,012
4. Net actuarial assets available for benefits	<u>\$ 32,631,464,884</u>	<u>\$ 32,323,263,153</u>
5. Unfunded actuarial accrued liability (3 - 4)	<u>\$ 2,343,135,982</u>	<u>\$ 1,808,020,859</u>

ACCOUNTING STATEMENT INFORMATION

TABLE V-2 ACCOUNTING STATEMENT INFORMATION – FASB 35 AS OF JUNE 30, 2003

	Total Systems	Teachers' Retirement & Pension	Employees' Retirement & Pension	State Police	Judges	LEOPS	Local Fire and Police
1. Present Value of Benefits Accrued to Date:							
a. Members Currently Receiving Payments	\$16,851,546,911	\$10,452,181,938	\$ 5,342,414,366	\$ 720,328,622	\$ 154,065,372	\$ 173,710,541	\$ 8,846,072
b. Former Vested Members	721,570,911	329,487,929	379,969,602	3,270,088	5,742,712	2,853,808	246,772
c. Active Members of Accrued Benefits (1(a) + 1(b) + 1(c))	<u>11,436,792,752</u>	<u>6,889,891,542</u>	<u>4,006,526,287</u>	<u>263,222,469</u>	<u>105,297,443</u>	<u>165,922,259</u>	<u>5,932,752</u>
2. Total Present Value of Accrued Benefits (1(a) + 1(b) + 1(c))	\$29,009,910,574	\$17,671,561,409	\$ 9,728,910,255	\$ 986,821,179	\$ 265,105,527	\$ 342,486,608	\$ 15,025,596
3. Assets at Market Value	<u>26,648,106,847</u>	<u>16,108,367,651</u>	<u>9,156,181,278</u>	<u>996,338,671</u>	<u>193,773,533</u>	<u>184,658,278</u>	<u>8,787,437</u>
4. Unfunded Value of Accrued Benefits (2 - 3)	<u>\$ 2,361,803,727</u>	<u>\$ 1,563,193,758</u>	<u>\$ 572,728,977</u>	<u>\$ (9,517,492)</u>	<u>\$ 71,331,994</u>	<u>\$ 157,828,330</u>	<u>\$ 6,238,159</u>
5. Ratio of Assets to Value of Accrued Benefits (3 / 2)	91.86%	91.15%	94.11%	100.96%	73.09%	53.92%	58.48%

ACCOUNTING STATEMENT INFORMATION

TABLE V-3 ACCOUNTING STATEMENT INFORMATION – GASB #25 AS OF JUNE 30, 2003

	Total Systems	Teachers' Retirement & Pension	Employees' Retirement & Pension	State Police	Judges	LEOPS	Local Fire and Police
1. Actuarial Accrued Liability:							
a. Active Member Contributions	\$ 1,973,371,055	\$ 1,164,068,094	\$ 709,225,645	\$ 68,661,591	\$ 20,015,705	\$ 11,375,594	\$ 24,427
b. Retirees, Term Vesteds & Inactives	17,573,117,822	10,781,669,867	5,722,383,968	723,598,710	159,808,084	176,564,349	9,092,844
c. Active Members	<u>15,428,111,989</u>	<u>9,206,324,604</u>	<u>5,651,587,635</u>	<u>270,122,937</u>	<u>99,184,328</u>	<u>194,347,089</u>	<u>6,545,395</u>
2. Total Actuarial Accrued Liability (1(a) + 1(b) + 1(c))	\$34,974,600,866	\$21,152,062,565	\$ 12,083,197,248	\$1,062,383,238	\$ 279,008,117	\$ 382,287,032	\$ 15,662,666
3. Actuarial Value of Assets	32,631,464,884	19,626,676,057	11,244,007,832	1,285,200,743	240,207,561	225,111,179	10,261,512
4. Unfunded Actuarial Accrued Liability (2 - 3)	<u>\$ 2,343,135,982</u>	<u>\$ 1,525,386,508</u>	<u>\$ 839,189,416</u>	<u>\$ (222,817,505)</u>	<u>\$ 38,800,556</u>	<u>\$ 157,175,853</u>	<u>\$ 5,401,154</u>
5. Funded Ratio	93.30%	92.79%	93.05%	120.97%	86.09%	58.89%	65.52%
6. Annual Covered Payroll	\$ 8,134,419,291	\$ 4,522,202,402	\$ 3,424,054,274	\$ 80,838,519	\$ 33,168,859	\$ 69,469,540	\$ 4,685,697
7. UAAL as % of Covered Payroll	28.81%	33.73%	24.51%	(275.63%)	116.98%	226.25%	115.27%

ACCOUNTING STATEMENT INFORMATION

TABLE V-4
Statement of Changes in Total Actuarial
Present Value of All Accrued Benefits

(In millions)	Accumulated Benefit Obligation (FASB 35)
Actuarial Present Value of Accrued Benefits at June 30, 2002	\$ 27,747
Increase (Decrease) During years Attributable to:	
Passage of Time	2,159
Benefits Paid – FY 2002	(1,554)
Benefits Accrued, Other (Gains)/Losses	751
Plan Amendment	-0-
Actuarial Assumption Change	<u>(93)</u>
Net Increase (Decrease)	1,263
Actuarial Present Value of Accrued Benefits at June 30, 2003	\$ 29,010

APPENDIX A

DETAILED ACTUARIAL INFORMATION

APPENDIX A – DETAILED ACTUARIAL INFORMATION

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND (State Portion)		
	Actuarial Valuation Performed	
	June 30, 2003 (for FY 2005)	June 30, 2002 (for FY 2004)
1. Present value of projected benefits attributable to:		
a. Retired and disabled members, and beneficiaries	\$ 15,906,478,152	\$ 15,329,954,487
b. Terminated vested members	664,681,405	552,614,162
c. Active members	<u>23,142,860,169</u>	<u>22,931,020,027</u>
d. Total present value	<u>\$ 39,714,019,726</u>	<u>\$ 38,813,588,676</u>
2. Present value of future earnings for present active members	\$ 65,517,711,222	\$ 63,535,719,472
3. Employer normal cost rate	8.02%	7.96%
4. Present value of Employer future normal costs	\$ 5,254,520,440	\$ 5,057,443,270
5. Present value of members' future contributions (incl. Extra 2%)	\$ 1,544,445,036	\$ 1,502,946,765
6. Present value of future special UAL contributions	\$ 76,267,329	\$ 76,221,680
7. Total Actuarial Liability (1)d – (4) – (5) – (6)	\$ 32,838,786,921	\$ 32,176,976,961
8. Actuarial value of assets	<u>30,512,376,649</u>	<u>30,252,445,156</u>
9. Unfunded Actuarial Liability on valuation date (7) – (8)	\$ 2,326,410,272	\$ 1,924,531,805
10. Less Window Payments	<u>2,401,342</u>	<u>4,510,458</u>
11. UAL for Amortization (9) – (10)	<u>\$ 2,324,008,930</u>	<u>\$ 1,920,021,347</u>
12. Present value of future payroll for amortization purposes	\$ 119,303,090,872	\$ 129,731,172,100
13. Unfunded Liability Rate	1.95%	1.48%
14. TOTAL EMPLOYER CONTRIBUTION RATE (GASB) (3) + (13)	9.97%	9.44%
15. TOTAL EMPLOYER CONTRIBUTION RATE (Corridor)	7.97%	8.06%

APPENDIX A – DETAILED ACTUARIAL INFORMATION

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND (TEACHERS' COMBINED SYSTEM)		
	Actuarial Valuation Performed	
	June 30, 2003 (for FY 2005)	June 30, 2002 (for FY 2004)
1. Present value of projected benefits attributable to:		
a. Retired and disabled members, and beneficiaries	\$ 10,452,181,938	\$ 10,368,658,244
b. Terminated vested members	329,487,929	286,787,273
c. Active members	<u>14,547,847,979</u>	<u>14,729,715,615</u>
d. Total present value	<u>\$ 25,329,517,846</u>	<u>\$ 25,385,161,132</u>
2. Present value of future earnings for present active members	\$ 42,120,454,481	\$ 41,240,407,284
3. Employer normal cost rate	7.70%	8.10%
4. Present value of Employer future normal costs	\$ 3,243,274,995	\$ 3,340,472,990
5. Present value of members' future contributions (incl. Extra 2%)	\$ 934,180,286	\$ 927,641,386
6. Present value of future special UAL contributions	\$ 0	\$ 0
7. Total Actuarial Liability: (1)d – (4) – (5) – (6)	\$ 21,152,062,565	\$ 21,117,046,756
8. Actuarial value of assets	<u>19,626,676,057</u>	<u>19,424,000,237</u>
9. Unfunded Actuarial Liability on valuation date (7) – (8)	\$ 1,525,386,508	\$ 1,693,046,519
10. Less Window Payments	<u>0</u>	<u>0</u>
11. UAL for Amortization (9) – (10)	<u>\$ 1,525,386,508</u>	<u>\$ 1,693,046,519</u>
12. Present value of future payroll for amortization purposes	\$ 65,467,232,103	\$ 71,136,408,361
13. Unfunded Liability Rate	2.33%	2.38%
14. TOTAL EMPLOYER CONTRIBUTION RATE (GASB (3) + (13))	10.03%	10.48%
15. TOTAL EMPLOYER CONTRIBUTION RATE (Corridor)	9.35%	9.35%

APPENDIX A – DETAILED ACTUARIAL INFORMATION

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND EMPLOYEES' COMBINED SYSTEM (State Portion)		
	Actuarial Valuation Performed	
	June 30, 2003 (for FY 2005)	June 30, 2002 (for FY 2004)
1 Present value of projected benefits attributable to		
a. Retired and disabled members, and beneficiaries	\$ 4,412,129,246	\$ 4,147,488,434
b. Terminated vested members	323,427,082	256,667,329
c. Active members	7,489,115,526	6,833,436,946
d. Total present value	<u>\$ 12,224,671,854</u>	<u>\$ 11,237,592,709</u>
2 Present value of future earnings for present active members	\$ 21,882,535,853	\$ 19,839,982,455
3 Employer normal cost rate	7.50%	6.15%
4 Present value of Employer future normal costs	\$ 1,641,190,189	\$ 1,220,158,921
5 Present value of members' future contributions (incl. Extra 2%)	\$ 520,669,844	\$ 484,582,015
6 Present value of future special UAL contributions	\$ 76,267,329	\$ 76,221,680
7 Total Actuarial Liability (1)d + (4) + (5) + (6)	\$ 9,986,544,492	\$ 9,456,630,093
8 Actuarial value of assets	<u>\$ 9,143,379,513</u>	<u>\$ 9,104,514,451</u>
9 Unfunded Actuarial Liability on valuation date (7) – (8)	\$ 843,164,979	\$ 352,115,642
10 Less Window Payments	<u>2,401,342</u>	<u>4,510,458</u>
11 UAL for Amortization (9) – (10)	<u>\$ 840,763,637</u>	<u>\$ 347,605,184</u>
12 Present value of future payroll for amortization purposes	\$ 49,891,418,876	\$ 74,981,221,702
13 Unfunded Liability Rate	1.69%	0.47%
14 TOTAL EMPLOYER CONTRIBUTION RATE (GASB) (3) + (13)	9.19%	6.62%
15 TOTAL EMPLOYER CONTRIBUTION RATE (Corridor)	4.73%	4.73%

APPENDIX A – DETAILED ACTUARIAL INFORMATION

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND (STATE POLICE)		
	Actuarial Valuation Performed	
	June 30, 2003 (for FY 2005)	June 30, 2002 (for FY 2004)
1. Present value of projected benefits attributable to:		
a. Retired and disabled members and beneficiaries	\$ 720,328,622	\$ 569,053,442
b. Terminated vested members	3,270,088	2,902,210
c. Active members	<u>578,978,349</u>	<u>760,396,950</u>
d. Total present value	<u>\$ 1,302,577,059</u>	<u>\$ 1,332,352,602</u>
2. Present value of future earnings for present active members	\$ 726,592,723	\$ 726,873,746
3. Employer normal cost rate	25.05%	33.50%
4. Present value of Employer future normal costs	\$ 182,011,477	\$ 243,502,705
5. Present value of members' future contributions (incl. Extra 2%)	\$ 58,182,344	\$ 58,274,747
6. Present value of future special UAL contributions	\$ 0	\$ 0
7. Total Actuarial Liability (1)d + (4) – (5) – (6)	\$ 1,062,383,238	\$ 1,030,575,150
8. Actuarial value of assets	<u>\$ 1,285,200,743</u>	<u>\$ 1,300,401,695</u>
9. Unfunded Actuarial Liability on valuation date (7) – (8)	\$ (222,817,505)	\$ (269,826,545)
10. Less Window Payments	<u>NA</u>	<u>NA</u>
11. UAL for Amortization (9) – (10)	<u>\$ (222,817,505)</u>	<u>\$ (269,826,545)</u>
12. Present value of future payroll for amortization purposes	\$ 872,767,352	\$ 1,040,997,473
13. Unfunded Liability Rate	-25.53%	-25.92%
14. TOTAL EMPLOYER CONTRIBUTION RATE (3) + (13)	0.00%	7.58%

APPENDIX A – DETAILED ACTUARIAL INFORMATION

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND (JUDGES)		
	Actuarial Valuation Performed	
	June 30, 2003 (for FY 2005)	June 30, 2002 (for FY 2004)
1. Present value of projected benefits attributable to:		
a. Retired and disabled members, and beneficiaries	\$ 154,065,372	\$ 141,812,561
b. Terminated vested members	5,742,712	3,972,477
c. Active members	<u>196,098,248</u>	<u>261,199,576</u>
d. Total present value	<u>\$ 355,906,332</u>	<u>\$ 406,984,614</u>
2. Present value of future earnings for present active members	\$ 242,508,089	\$ 347,758,908
3. Employer normal cost rate	28.15%	37.00%
4. Present value of Employer future normal costs	\$ 68,266,027	\$ 128,670,796
5. Present value of members' future contributions (incl. Extra 2%)	\$ 8,632,188	\$ 10,781,609
6. Present value of future special UAL contributions	\$ 0	\$ 0
7. Total Actuarial Liability (1)d – (4) – (5) – (6)	\$ 279,008,117	\$ 267,532,209
8. Actuarial value of assets	<u>\$ 240,207,561</u>	<u>\$ 234,558,099</u>
9. Unfunded Actuarial Liability on valuation date (7) – (8)	\$ 38,800,556	\$ 32,974,110
10. Less Window Payments	<u>NA</u>	<u>NA</u>
11. UAL for Amortization (9) – (10)	<u>\$ 38,800,556</u>	<u>\$ 32,974,110</u>
12. Present value of future payroll for amortization purposes	\$ 452,748,611	\$ 489,230,119
13. Unfunded Liability Rate	8.57%	6.74%
14. TOTAL EMPLOYER CONTRIBUTION RATE (3) + (13)	36.72%	43.74%

APPENDIX A – DETAILED ACTUARIAL INFORMATION

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND LEOPS (State Portion)		
	Actuarial Valuation Performed	
	June 30, 2003 (for FY 2005)	June 30, 2002 (for FY 2004)
1. Present value of projected benefits attributable to:		
a. Retired and disabled members, and beneficiaries	\$ 167,772,974	\$ 102,941,806
b. Terminated vested members	2,753,594	2,284,873
c. Active members	<u>330,820,067</u>	<u>346,270,940</u>
d. Total present value	<u>\$ 501,346,635</u>	<u>\$ 451,497,619</u>
2. Present value of future earnings for present active members	\$ 563,660,009	\$ 538,392,475
3. Employer normal cost rate	21.25%	23.15%
4. Present value of Employer future normal costs	\$ 119,777,752	\$ 124,637,858
5. Present value of members' future contributions (incl. Extra 2%)	\$ 22,780,374	\$ 21,667,008
6. Present value of future special UAL contributions	\$ 0	\$ 0
7. Total Actuarial Liability (1)d – (4) – (5) – (6)	\$ 358,788,509	\$ 305,192,753
8. Actuarial value of assets	<u>\$ 216,912,775</u>	<u>\$ 188,970,674</u>
9. Unfunded Actuarial Liability on valuation date (7) – (8)	\$ 141,875,734	\$ 116,222,079
10. Less Window Payments	<u>NA</u>	<u>NA</u>
11. UAL for Amortization (9) – (10)	<u>\$ 141,875,734</u>	<u>\$ 116,222,079</u>
12. Present value of future payroll for amortization purposes	\$ 860,896,444	\$ 970,134,215
13. Unfunded Liability Rate	16.48%	11.98%
14. TOTAL EMPLOYER CONTRIBUTION RATE (9) + (13)	37.73%	35.13%

APPENDIX B

MEMBERSHIP INFORMATION

APPENDIX B – MEMBERSHIP INFORMATION

STATE RETIREMENT AND PENSION SYSTEM SUMMARY OF MEMBERSHIP DATA AS OF JUNE 30, 2003 COMBINED SYSTEMS

		Active Members		Retirees & Beneficiaries			Vested Former Members (includes inactives)	Total Counts
		Count	Salary	Count	Benefits	Avg. Age	Count	
Teachers' Retirement	Total	8,199	\$ 566,524,088					
	Vested	8,198	\$ 566,486,335					
	Non-vested	1	\$ 37,753	30,305	\$ 731,911,540	72.3	1,577	40,081
Teachers' Pension	Total	89,099	\$ 4,043,467,814					
	Vested	55,132	\$ 2,879,170,583					
	Non-vested	33,967	\$ 1,164,297,231	13,370	\$ 175,511,447	65.2	17,284	119,753
Employees Retirement	Total	11,347	\$ 454,928,340					
	Vested	8,669	\$ 380,656,585					
	Non-vested	2,678	\$ 74,271,755	24,662	\$ 338,562,248	73.1	1,349	37,358
Employees Pension	Total	77,939	\$ 2,932,777,110					
	Vested	50,224	\$ 2,079,311,101					
	Non-vested	27,715	\$ 853,466,009	19,929	\$ 145,140,602	65.8	25,212	123,080
State Police	Total	1,542	\$ 79,268,691					
	Vested	1,182	\$ 67,632,834					
	Non-vested	360	\$ 11,635,857	1,695	\$ 56,691,315	58.6	41	3,278
Judges	Total	287	\$ 32,524,743					
	Vested	287	\$ 32,524,743					
	Non-vested	0	\$ 0	306	\$ 17,171,254	77.2	13	606
LEOPS	Total	1,481	\$ 68,356,726					
	Vested	1,039	\$ 52,871,460					
	Non-vested	442	\$ 15,485,266	503	\$ 12,479,011	56.1	62	2,046
Local F & P	Total	127	\$ 4,778,492					
	Vested	80	\$ 3,349,846					
	Non-vested	47	\$ 1,428,646	33	\$ 624,529	52.0	35	195
Total Systems -	Total	190,021	\$ 8,182,626,004					
	Vested	124,811	\$ 6,062,003,487					
	Non-Vested	65,210	\$ 2,120,622,517	90,803	\$ 1,478,091,946	69.7	45,573	326,397

APPENDIX B – MEMBERSHIP INFORMATION

STATE RETIREMENT AND PENSION SYSTEM SUMMARY OF MEMBERSHIP DATA AS OF JUNE 30, 2003 MUNICIPAL CORPORATIONS

		Active Members		Retirees & Beneficiaries			Vested Former Members (includes inactives)	Total Counts
		Count	Salary	Count	Benefits	Avg. Age	Count	
Employees Retirement	Total	785	\$ 35,077,914					
	Vested	785	\$ 35,077,914					
	Non-vested	0	\$ 0	4,924	\$ 52,485,878	75.0	142	5,851
Employees' Pension	Total	22,938	\$ 741,542,021					
	Vested	13,240	\$ 496,129,719					
	Non-vested	9,698	\$ 245,412,302	5,241	\$ 33,070,738	66.1	5,349	33,528
LEOPS	Total	142	\$ 6,142,144					
	Vested	96	\$ 4,663,954					
	Non-vested	46	\$ 1,478,190	17	\$ 410,548	54.3	5	164
Local F & P	Total	127	\$ 4,778,492					
	Vested	80	\$ 3,349,846					
	Non-vested	47	\$ 1,428,646	33	\$ 624,529	52.0	35	195
Total Systems -	Total	23,992	\$ 787,540,571					
	Vested	14,201	\$ 539,221,433					
	Non-Vested	9,791	\$ 248,319,138	10,215	\$ 86,591,693	70.3	5,531	39,738

APPENDIX B – MEMBERSHIP INFORMATION

STATE RETIREMENT AND PENSION SYSTEM SUMMARY OF MEMBERSHIP DATA AS OF JUNE 30, 2003 STATE ONLY

		Active Members		Retirees & Beneficiaries			Vested Former Members (includes inactives)	Total Counts
		Count	Salary	Count	Benefits	Avg. Age	Count	
Teachers' Retirement	Total	8,199	\$ 566,524,088					
	Vested	8,198	\$ 566,486,335					
	Non-vested	1	\$ 37,753	30,305	\$ 731,911,540	72.3	1,577	40,081
Teachers' Pension	Total	89,099	\$ 4,043,467,814					
	Vested	55,132	\$ 2,879,170,583					
	Non-vested	33,967	\$ 1,164,297,231	13,370	\$ 175,511,447	65.2	17,284	119,753
Employees Retirement	Total	10,562	\$ 419,850,426					
	Vested	7,884	\$ 345,578,671					
	Non-vested	2,678	\$ 74,271,755	19,738	\$ 286,076,370	72.6	1,207	31,507
Employees' Pension	Total	55,001	\$ 2,191,235,089					
	Vested	36,984	\$ 1,583,181,382					
	Non-vested	18,017	\$ 608,053,707	14,688	\$ 112,069,864	65.7	19,863	89,552
State Police	Total	1,542	\$ 79,268,691					
	Vested	1,182	\$ 67,632,834					
	Non-vested	360	\$ 11,635,857	1,695	\$ 56,691,315	58.6	41	3,278
Judges	Total	287	\$ 32,524,743					
	Vested	287	\$ 32,524,743					
	Non-vested	0	\$ 0	306	\$ 17,171,254	77.2	13	606
LEOPS	Total	1,339	\$ 62,214,582					
	Vested	943	\$ 48,207,506					
	Non-vested	396	\$ 14,007,076	486	\$ 12,068,463	56.2	57	1,882
Total Systems -	Total	166,029	\$ 7,395,085,433					
	Vested	110,610	\$ 5,522,782,054					
	Non-Vested	55,419	\$ 1,872,303,379	80,588	\$ 1,391,500,253	69.6	40,042	286,659

APPENDIX B – MEMBERSHIP INFORMATION

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND MEMBERSHIP STATISTICS June 30, 2003					
System	Count	Average Age	Average Service	Average Salary	
Teachers' Retirement	8,199	55.6	28.672	\$ 69,097	
Teachers' Pension	89,099	43.0	10.204	45,382	
Employees' Retirement – State	3,288	54.5	28.438	50,971	
Employees' Retirement – Municipal	785	55.8	28.198	44,685	
Employees' Retirement – Legislators	181	53.7	9.073	32,322	
Employees' Retirement – Correctional Officers	7,093	38.9	9.105	34,739	
Employees' Retirement – Total	11,347	44.8	16.028	40,092	
Employees' Pension – State	55,001	46.0	12.217	39,840	
Employees' Pension – Municipal	22,938	46.0	9.444	32,328	
Employees' Pension – Total	77,939	46.0	11.400	37,629	
State Police	1,542	35.7	11.510	51,406	
Judges	287	55.7	9.516	113,327	
LEOPS – State	1,339	40.0	11.596	46,464	
LEOPS – Municipal	142	36.2	10.793	43,254	
LEOPS – Total	1,481	39.6	11.519	46,156	
Local P&F	127	36.5	11.132	37,626	
TOTAL SYSTEMS	190,021	44.8	11.860	43,062	
		Teachers	State and Municipal Employees		
		Count	Earnings	Count	Earnings
Unlimited COLA	5,605	\$ 391,397,092	2,596	\$ 128,931,350	
5% COLA Cap	1,721	116,005,363	1,209	60,460,678	
Bifurcate	873	59,121,633	268	13,278,764	
	<u>8,199</u>	<u>\$ 566,524,088</u>	<u>4,073</u>	<u>\$ 202,670,792</u>	

APPENDIX B – MEMBERSHIP INFORMATION

Active Membership - Age Distributions

Total Systems 2003			
Age	Number of People	Total Salary	Average Salary
Under 20	82	\$1,646,719	\$20,082
20 To 24	4,415	\$131,896,394	\$29,875
25 To 29	14,930	\$521,500,295	\$34,930
30 To 34	25,005	\$857,963,324	\$34,312
35 To 39	19,711	\$799,879,117	\$40,580
40 To 44	23,287	\$956,681,225	\$41,082
45 To 49	28,605	\$1,257,005,239	\$43,944
50 To 54	32,199	\$1,593,285,394	\$49,482
55 To 59	24,931	\$1,264,822,634	\$50,733
60 To 64	12,158	\$590,264,372	\$48,549
65 & UP	4,698	\$207,681,290	\$44,206
Totals	190,021	\$8,182,626,003	\$43,062

Teachers' Retirement

Age	All Years	
	Count	Salary
Under 20	0	\$0
20 To 24	0	\$0
25 To 29	0	\$0
30 To 34	0	\$0
35 To 39	0	\$0
40 To 44	18	\$818,782
45 To 49	930	\$59,304,271
50 To 54	2,963	\$205,546,561
55 To 59	2,453	\$172,956,141
60 To 64	1,298	\$90,429,641
65 & UP	537	\$37,468,690
Totals	8,199	\$566,524,086

Teachers' Pension

Age	All Years	
	Count	Salary
Under 20	22	\$417,308
20 To 24	2,745	\$88,476,865
25 To 29	10,067	\$369,623,748
30 To 34	14,592	\$539,828,842
35 To 39	9,051	\$404,582,745
40 To 44	9,534	\$421,562,845
45 To 49	11,851	\$552,993,735
50 To 54	14,267	\$751,279,775
55 To 59	10,890	\$598,236,119
60 To 64	4,631	\$248,982,137
65 & UP	1,449	\$67,483,695
Totals	89,099	\$4,043,467,814

APPENDIX B – MEMBERSHIP INFORMATION

Employees' Retirement State Regular

Age	Count	All Years	
		Count	Salary
Under 20	0		\$0
20 To 24	0		\$0
25 To 29	0		\$0
30 To 34	0		\$0
35 To 39	0		\$0
40 To 44	90		\$3,659,230
45 To 49	608		\$28,039,649
50 To 54	1,022		\$52,413,339
55 To 59	932		\$50,125,597
60 To 64	442		\$22,699,799
65 & UP	194		\$10,655,266
Totals	3,288		\$167,592,880

Employees' Retirement Municipal

Age	Count	All Years	
		Count	Salary
Under 20	0		\$0
20 To 24	0		\$0
25 To 29	0		\$0
30 To 34	0		\$0
35 To 39	0		\$0
40 To 44	34		\$1,490,114
45 To 49	146		\$7,006,717
50 To 54	172		\$8,916,284
55 To 59	186		\$8,586,765
60 To 64	162		\$6,403,379
65 & UP	85		\$2,674,656
Totals	785		\$35,077,915

Employees' Retirement Legislative

Age	Count	All Years	
		Count	Salary
Under 20	0		\$0
20 To 24	0		\$0
25 To 29	5		\$169,150
30 To 34	9		\$297,140
35 To 39	8		\$264,776
40 To 44	17		\$564,849
45 To 49	25		\$825,227
50 To 54	25		\$753,169
55 To 59	27		\$884,800
60 To 64	29		\$924,800
65 & UP	36		\$1,166,572
Totals	181		\$5,850,283

Employees' Retirement Correctional Officers

Age	Count	All Years	
		Count	Salary
Under 20	0		\$0
20 To 24	223		\$6,049,605
25 To 29	758		\$22,402,178
30 To 34	1,589		\$47,246,657
35 To 39	1,334		\$47,855,355
40 To 44	1,282		\$48,535,128
45 To 49	962		\$37,437,098
50 To 54	543		\$21,094,706
55 To 59	317		\$12,352,493
60 To 64	73		\$2,954,811
65 & UP	12		\$479,231
Totals	7,093		\$246,407,262

Employees' Pension State Regular

Age	Count	All Years	
		Count	Salary
Under 20	19		\$386,052
20 To 24	720		\$18,561,344
25 To 29	2,768		\$88,211,523
30 To 34	5,803		\$181,099,054
35 To 39	5,969		\$227,299,460
40 To 44	8,126		\$326,291,456
45 To 49	9,710		\$407,706,334
50 To 54	9,575		\$413,565,105
55 To 59	7,269		\$315,870,432
60 To 64	3,667		\$154,990,992
65 & UP	1,375		\$57,253,336
Totals	55,001		\$2,191,235,088

Employees' Pension Municipal

Age	Count	All Years	
		Count	Salary
Under 20	33		\$662,760
20 To 24	551		\$13,031,149
25 To 29	967		\$26,394,010
30 To 34	2,293		\$60,099,532
35 To 39	2,676		\$85,240,988
40 To 44	3,642		\$122,359,235
45 To 49	3,988		\$139,691,833
50 To 54	3,352		\$120,270,692
55 To 59	2,682		\$91,869,644
60 To 64	1,784		\$56,014,691
65 & UP	970		\$25,907,486
Totals	22,938		\$741,542,020

APPENDIX B – MEMBERSHIP INFORMATION

State Police

Age	All Years	
	Count	Salary
Under 20	7	\$143,418
20 To 24	107	\$3,449,352
25 To 29	200	\$8,724,317
30 To 34	409	\$17,898,556
35 To 39	372	\$20,978,938
40 To 44	250	\$15,361,094
45 To 49	121	\$7,620,326
50 To 54	56	\$3,751,531
55 To 59	20	\$1,341,160
60 To 64	0	\$0
65 & UP	0	\$0
Totals	1,542	\$79,268,692

Judges

Age	All Years	
	Count	Salary
Under 20	0	\$0
20 To 24	0	\$0
25 To 29	0	\$0
30 To 34	0	\$0
35 To 39	1	\$109,335
40 To 44	17	\$1,909,015
45 To 49	40	\$4,505,407
50 To 54	64	\$7,200,662
55 To 59	74	\$8,359,788
60 To 64	52	\$5,888,877
65 & UP	39	\$4,551,660
Totals	287	\$32,524,744

LEOPS

Age	All Years	
	Count	Salary
Under 20	1	\$37,181
20 To 24	65	\$2,212,515
25 To 29	140	\$5,198,793
30 To 34	272	\$10,276,832
35 To 39	278	\$12,654,664
40 To 44	265	\$13,583,995
45 To 49	217	\$11,540,214
50 To 54	148	\$7,930,860
55 To 59	75	\$3,940,638
60 To 64	19	\$940,337
65 & UP	1	\$40,698
Totals	1,481	\$68,356,727

Local Fire and Police

Age	All Years	
	Count	Salary
Under 20	0	\$0
20 To 24	4	\$115,564
25 To 29	25	\$776,576
30 To 34	38	\$1,216,711
35 To 39	22	\$892,856
40 To 44	12	\$545,482
45 To 49	7	\$334,428
50 To 54	12	\$562,710
55 To 59	6	\$299,257
60 To 64	1	\$34,908
65 & UP	0	\$0
Totals	127	\$4,778,492

APPENDIX B – MEMBERSHIP INFORMATION

Retiree, Beneficiary and Disability Membership - Age Distributions

Total Systems 2003			
Age	Number of People	Total Benefits	Average Benefit
Under 25	2	\$10,937	\$5,469
25 To 29	8	\$172,873	\$21,609
30 To 34	55	\$1,105,528	\$20,101
35 To 39	239	\$4,411,421	\$18,458
40 To 44	606	\$10,106,789	\$16,678
45 To 49	1,458	\$25,591,003	\$17,552
50 To 54	3,396	\$66,624,597	\$19,619
55 To 59	8,995	\$189,619,290	\$21,081
60 To 64	13,776	\$247,162,817	\$17,942
65 To 69	16,972	\$267,391,552	\$15,166
70 To 74	15,789	\$242,053,112	\$15,330
75 To 79	13,009	\$193,387,259	\$14,866
80 & Up	16,498	\$240,454,784	\$14,575
Totals	90,803	\$1,478,091,962	\$16,278

Teachers' Retirement

Age	Count	All Years Benefit
Under 25	1	\$10,043
25 To 29	0	\$0
30 To 34	0	\$0
35 To 39	1	\$8,533
40 To 44	2	\$24,717
45 To 49	37	\$589,105
50 To 54	597	\$16,690,105
55 To 59	2,832	\$86,903,367
60 To 64	3,949	\$112,457,807
65 To 69	4,683	\$121,573,190
70 To 74	5,491	\$132,369,807
75 To 79	5,235	\$111,744,571
80 & Up	7,477	\$149,540,298
Totals	30,305	\$731,911,543

Teachers' Pension

Age	Count	All Years Benefit
Under 25	0	\$0
25 To 29	0	\$0
30 To 34	7	\$150,424
35 To 39	19	\$271,467
40 To 44	60	\$813,652
45 To 49	143	\$2,345,690
50 To 54	450	\$8,733,388
55 To 59	2,049	\$35,275,164
60 To 64	3,448	\$49,413,203
65 To 69	3,687	\$41,963,891
70 To 74	2,310	\$25,583,976
75 To 79	943	\$8,941,276
80 & Up	254	\$2,019,330
Totals	13,370	\$175,511,451

APPENDIX B – MEMBERSHIP INFORMATION

Employees' Retirement State Regular

Age	Count	All Years	
		Count	Benefit
Under 25	0		\$0
25 To 29	2		\$14,616
30 To 34	16		\$267,683
35 To 39	59		\$945,127
40 To 44	150		\$2,180,536
45 To 49	421		\$5,911,655
50 To 54	756		\$12,461,290
55 To 59	1400		\$26,934,232
60 To 64	1836		\$34,895,023
65 To 69	2389		\$40,942,802
70 To 74	3002		\$45,831,413
75 To 79	3541		\$48,551,920
80 & Up	5948		\$64,965,741
Totals	19,520		\$283,682,038

Employees' Retirement Municipal

Age	Count	All Years	
		Count	Benefit
Under 25	1		\$694
25 To 29	0		\$0
30 To 34	0		\$0
35 To 39	0		\$0
40 To 44	0		\$0
45 To 49	23		\$400,164
50 To 54	77		\$1,697,869
55 To 59	207		\$4,529,187
60 To 64	411		\$7,298,931
65 To 69	693		\$9,717,148
70 To 74	831		\$9,328,179
75 To 79	982		\$8,993,834
80 & Up	1699		\$10,519,677
Totals	4,924		\$52,485,883

Employees' Retirement Legislative

Age	Count	All Years	
		Count	Benefit
Under 25	0		\$0
25 To 29	0		\$0
30 To 34	0		\$0
35 To 39	0		\$0
40 To 44	0		\$0
45 To 49	0		\$0
50 To 54	1		\$6,424
55 To 59	3		\$24,205
60 To 64	29		\$343,514
65 To 69	42		\$492,288
70 To 74	45		\$534,791
75 To 79	45		\$437,110
80 & Up	53		\$555,994
Totals	218		\$2,394,326

Employees' Pension State Regular

Age	Count	All Years	
		Count	Benefit
Under 25	0		\$0
25 To 29	0		\$0
30 To 34	12		\$191,321
35 To 39	69		\$958,017
40 To 44	193		\$2,593,875
45 To 49	403		\$5,019,926
50 To 54	840		\$10,484,178
55 To 59	1,559		\$16,458,216
60 To 64	2,836		\$24,403,764
65 To 69	3,779		\$26,413,272
70 To 74	2,844		\$16,286,635
75 To 79	1,549		\$7,033,572
80 & Up	604		\$2,227,098
Totals	14,688		\$112,069,874

Employees' Pension Municipal

Age	Count	All Years	
		Count	Benefit
Under 25	0		\$0
25 To 29	0		\$0
30 To 34	6		\$95,933
35 To 39	37		\$568,055
40 To 44	111		\$1,680,928
45 To 49	170		\$2,318,335
50 To 54	272		\$3,646,322
55 To 59	440		\$4,466,587
60 To 64	873		\$6,196,032
65 To 69	1,422		\$7,475,275
70 To 74	1,057		\$4,235,272
75 To 79	587		\$1,774,767
80 & Up	266		\$615,233
Totals	5,241		\$33,070,739

APPENDIX B – MEMBERSHIP INFORMATION

State Police

Age	All Years	
	Count	Benefit
Under 25	0	\$0
25 To 29	4	\$117,010
30 To 34	12	\$358,144
35 To 39	46	\$1,448,499
40 To 44	70	\$2,326,639
45 To 49	194	\$7,112,882
50 To 54	262	\$9,365,110
55 To 59	364	\$11,751,664
60 To 64	294	\$8,997,587
65 To 69	188	\$5,276,649
70 To 74	124	\$3,673,765
75 To 79	61	\$2,129,551
80 & Up	76	\$4,133,812
Totals	1,695	\$56,691,312

*100 DROP participants were included.

Judges

Age	All Years	
	Count	Benefit
Under 25	0	\$0
25 To 29	0	\$0
30 To 34	0	\$0
35 To 39	0	\$0
40 To 44	0	\$0
45 To 49	0	\$0
50 To 54	1	\$37,167
55 To 59	2	\$62,911
60 To 64	24	\$1,389,805
65 To 69	36	\$2,397,548
70 To 74	62	\$3,736,201
75 To 79	60	\$3,670,020
80 & Up	121	\$5,877,601
Totals	306	\$17,171,253

LEOPS

Age	All Years	
	Count	Benefit
Under 25	0	\$0
25 To 29	1	\$19,659
30 To 34	1	\$23,272
35 To 39	7	\$182,510
40 To 44	18	\$463,727
45 To 49	63	\$1,811,776
50 To 54	131	\$3,313,191
55 To 59	129	\$3,063,104
60 To 64	72	\$1,895,259
65 To 69	52	\$1,122,805
70 To 74	23	\$473,073
75 To 79	6	\$110,638
80 & Up	0	\$0
Totals	503	\$12,479,014

*68 DROP participants were included.

Local Fire and Police

Age	All Years	
	Count	Benefit
Under 25	0	\$0
25 To 29	1	\$21,588
30 To 34	1	\$18,751
35 To 39	1	\$29,223
40 To 44	2	\$42,715
45 To 49	4	\$83,470
50 To 54	9	\$189,553
55 To 59	10	\$150,653
60 To 64	4	\$71,892
65 To 69	1	\$16,684
70 To 74	0	\$0
75 To 79	0	\$0
80 & Up	0	\$0
Totals	33	\$624,529

APPENDIX C

**ACTUARIAL ASSUMPTIONS
AND METHOD**

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. ACTUARIAL ASSUMPTIONS (adopted for the 2003 valuation)

	1. Valuation Interest Rate	2. Rate of Increase in Cost of Living
Teachers' Retirement	7.75%	3%
Teachers' Pension	7.75%	3%
Employees' Retirement Regular & Correctional	7.75%	3%
Legislative	7.75%	4%*
Employees' Pension	7.75%	3%**
State Police Retirement	7.75%	3%
Judges Pension	7.75%	4%
LEOPS	7.75%	3%***
Local Fire & Police Retirement	7.75%	3%
Pension	7.75%	3%***

* A 5% compound rate is applicable for some pre-71 Legislative members.

** A 3% simple rate is applicable for municipal members of these Systems, who do not elect to be covered under the improved plan.

*** A 3% simple rate is applicable for former EPS members.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. ACTUARIAL ASSUMPTIONS (adopted for the 2003 valuation)

3a. Rates of Salary Increase (% for first 10 years of service)

	0	1	2	3	4	5	6	7	8	9
Teachers' Retirement & Pension	10.76	8.37	8.37	8.37	8.37	8.37	8.16	7.90	7.43	7.22
Employees' Retirement										
Regular	9.56	9.56	8.94	8.16	7.64	7.12	6.86	6.39	5.98	5.82
Correctional	9.46	8.94	7.12	6.86	5.25	4.78	4.36	4.36	4.36	4.36
Legislative	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Employees' Pension	9.56	9.56	8.94	8.16	7.64	7.12	6.86	6.39	5.98	5.82
State Police Retirement	15.96	15.96	13.36	11.28	9.72	8.16	7.12	6.08	5.56	5.30
Judges' Pension	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
LEOPS	15.96	15.96	13.36	11.28	9.72	8.16	7.12	6.08	5.56	5.30
Local Fire & Police	15.96	15.96	13.36	11.28	9.72	8.16	7.12	6.08	5.56	5.30

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. ACTUARIAL ASSUMPTIONS (adopted for the 2003 valuation)

3b. Rates of Salary Increase (% at selected ages thereafter)

	30	35	40	45	50	55	60	65
Teachers' Retirement & Pension	7.22	6.60	5.35	4.78	4.52	4.31	4.31	4.31
Employees' Retirement								
Regular	5.82	5.82	5.46	5.25	5.14	4.94	4.94	4.94
Correctional	4.36	4.36	4.31	4.26	4.21	4.00	4.00	4.00
Legislative	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Employees' Pension	5.82	5.82	5.46	5.25	5.14	4.94	4.94	4.94
State Police Retirement	5.27	4.98	4.74	4.25	4.25	4.25	4.25	4.25
Judges' Pension	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
LEOPS	5.27	4.98	4.74	4.25	4.25	4.25	4.25	4.25
Local Fire & Police	5.27	4.98	4.74	4.25	4.25	4.25	4.25	4.25

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. ACTUARIAL ASSUMPTIONS (adopted for the 2003 valuation)

4a. Annual Rates of Withdrawal for first 10 Years of Service (number of withdrawals per 1,000 members)

	0	1	2	3	4	5	6	7	8	9
Teachers' Retirement										
Male	149	149	116	99	81	78	56	54	45	39
Female	128	128	106	93	74	70	63	51	49	49
Teachers' Pension										
Male	149	149	116	99	81	78	56	54	45	39
Female	128	128	106	93	74	70	63	51	49	49
Employees' Retirement										
Regular										
Male	161	161	111	99	92	76	76	60	60	53
Female	150	150	106	100	78	78	64	60	51	45
Correctional										
Male	134	134	96	93	63	63	52	39	35	30
Female	151	151	82	82	70	70	53	53	45	45
Legislative	*	*	*	*	*	*	*	*	*	*
Employees' Pension										
Male	161	161	111	99	92	76	76	60	60	53
Female	150	150	106	100	78	78	64	60	51	45
State Police Retirement										
Male	86	86	57	29	14	14	8	8	7	7
Judges' Pension										
Male	0	0	0	0	0	0	0	0	0	0
LEOPS										
Male	86	86	57	29	14	14	8	8	7	7
Local Fire & Police										
Male	86	86	57	29	14	14	8	8	7	7

* 200 withdrawals per 1,000 members are assumed after 8 years of service and each fourth year thereafter.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. ACTUARIAL ASSUMPTIONS (adopted for the 2003 valuation)

4b. Annual Rates of Withdrawal at Selected Ages (number of withdrawals per 1,000 members)

	30	35	40	45	50	55
Teachers' Retirement						
Male	39	27	16	11	14	24
Female	49	36	16	13	15	26
Teachers' Pension						
Male	39	27	16	11	14	24
Female	49	36	16	13	15	26
Employees' Retirement						
Regular						
Male	52	46	34	27	28	33
Female	44	34	25	22	21	28
Correctional						
Male	29	27	24	12	12	12
Female	45	33	32	27	27	27
Legislative	*	*	*	*	*	*
Employees' Pension						
Male	52	46	34	27	28	33
Female	44	34	25	22	21	28
State Police Retirement	7	7	7	7	7	7
Judges' Pension	0	0	0	0	0	0
LEOPS	7	7	7	7	7	7
Local Fire & Police	7	7	7	7	7	7

* 200 withdrawals per 1,000 members are assumed after 8 years of service and each fourth year thereafter.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. ACTUARIAL ASSUMPTIONS (adopted for the 2003 valuation)
 5a. Annual Rates of Mortality at Selected Ages - Active Members
 (number of deaths per 10,000 members)

45 50 55 60 65 70 75 80

Teachers' Retirement & Pension

Healthy Members

Male	21	34	55	89	148	257	423	662
Female	15	24	38	59	92	152	261	439

Disabled Members

Male	297	330	378	446	545	701	938	1275
Female	181	202	238	290	364	474	643	904

Employees' Retirement & Pension Regular

Healthy Members

Male	28	46	73	120	206	350	555	855
Female	19	31	50	81	133	230	386	607

Disabled Members

Male	311	349	400	474	589	765	1012	1374
Female	240	271	317	382	475	622	846	1165

Employees' Retirement Correctional & Legislative

Healthy Members

Male	31	49	79	134	231	388	610	912
Female	21	34	54	88	150	258	427	663

Disabled Members

Male	349	376	420	488	595	763	1022	1417
Female	263	289	329	391	490	645	885	1253

State Police Retirement

Healthy Members

Male	110	142	193	272	397	591	891	1346
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Disabled Members

Female	378	348	377	435	529	675	903	1251
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Judges' Pension

Healthy Members

Male	33	54	85	133	213	345	546	866
Female	19	31	50	79	124	201	325	516

Disabled Members

Male	311	349	400	474	589	765	1012	1374
Female	240	271	317	382	475	622	846	1165

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

5a. Annual Rates of Mortality at Selected Ages - Active Members
(number of deaths per 10,000 members)
(continued)

45 50 55 60 65 70 75 80

LEOPS

Healthy Members	110	142	193	272	397	591	891	1346
Disabled Members	378	348	377	435	529	675	903	1251

Local Fire & Police Systems

Healthy Members	110	142	193	272	397	591	891	1346
Disabled Members	378	348	377	435	529	675	903	1251

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. ACTUARIAL ASSUMPTIONS (adopted for the 2003 valuation)

5b. Annual Rates of Mortality at Selected Ages - Retired Members (number of deaths per 10,000 members)

45 50 55 60 65 70 75 80

Teachers' Retirement & Pension

Inactive Members

Male	13	18	31	57	108	189	322	547
Female	10	14	23	43	83	142	239	390

Inactive Disabled Members

Male	432	496	784	992	1168	1424	1696	2304
Female	162	186	294	372	438	534	636	864

Employees' Retirement & Pension

Inactive Members

Male	19	31	53	96	174	285	447	744
Female	11	17	27	51	97	167	281	459

Inactive Disabled Members

Male	226	290	354	420	502	626	821	1094
Female	202	231	266	298	333	370	443	671

State Police Retirement

Inactive Members

Male	17	24	40	74	140	244	416	708
Female	13	19	31	58	112	193	323	528

Inactive Disabled Members

Male	81	93	147	186	219	267	318	432
Female	95	109	171	217	255	312	371	504

Judges' Pension

Inactive Members

Male	13	18	31	57	108	189	322	547
Female	10	14	23	43	83	142	239	390

Inactive Disabled Members

Male	432	496	784	992	1168	1424	1696	2304
Female	162	186	294	372	438	534	636	864

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

5b. Annual Rates of Mortality at Selected Ages -
Retired Members
(number of deaths per 10,000 members)
(continued)

45 50 55 60 65 70 75 80

LEOPS

Inactive Members

Male	17	24	40	74	140	244	416	708
Female	13	19	31	58	112	193	323	528

Inactive Disabled Members

Male	81	93	147	186	219	267	318	432
Female	95	109	171	217	255	312	371	504

Local Fire & Police Systems

Inactive Members

Male	17	24	40	74	140	244	416	708
Female	13	19	31	58	112	193	323	528

Inactive Disabled Members

Male	81	93	147	186	219	267	318	432
Female	95	109	171	217	255	312	371	504

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. ACTUARIAL ASSUMPTIONS (adopted for the 2003 valuation)

6. Annual Rates of Disablement at Selected Ages (number becoming disabled per 10,000 members)

	25	30	35	40	45	50	55
Teachers' Retirement*							
Male	1	1	1	4	9	13	18
Female	2	2	4	8	14	21	36
Teachers' Pension*							
Male	3	3	3	10	20	31	41
Female	3	3	6	13	22	32	56
Employees' Retirement							
Ordinary Disability							
Regular							
Male	8	8	14	27	34	41	54
Female	5	5	9	16	24	34	47
Correctional							
Male	30	36	45	57	71	101	131
Female	46	46	46	51	59	77	117
Legislative	0	0	0	0	0	0	0
Accidental Disability							
Regular							
Male	2	2	3	4	3	3	3
Female	1	1	2	2	2	2	2
Correctional							
Male	5	6	8	10	13	18	23
Female	8	8	8	9	10	14	21
Legislative	0	0	0	0	0	0	0
Employees' Pension							
Ordinary Disability							
Male	12	12	21	40	51	61	82
Female	9	9	15	27	41	58	81
Accidental Disability							
Male	3	3	4	6	5	4	4
Female	2	2	3	4	4	4	4

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

6. Annual Rates of Disablement at Selected Ages (number becoming disabled per 10,000 members) (continued)

	25	30	35	40	45	50	55
State Police Retirement							
Ordinary Disability							
Male	35	44	56	74	99	142	182
Female	108	116	117	136	165	217	332
Accidental Disability							
Male	23	25	30	35	39	54	71
Female	72	64	63	64	65	83	128
Judges' Pension							
Male	3	3	3	10	21	31	41
Female	3	3	6	13	22	32	55
LEOPS							
Ordinary Disability							
Male	34	43	54	71	96	137	176
Female	55	59	60	70	85	111	170
Accidental Disability							
Male	22	24	29	34	37	52	68
Female	37	33	32	33	33	43	66
Local Fire & Police Systems							
Ordinary Disability							
Male	29	37	47	62	83	119	154
Female	22	23	23	27	33	43	66
Accidental Disability							
Male	20	21	26	30	33	46	59
Female	14	13	13	13	13	17	26

* It is assumed that 1% of disability retirements is due to accidents in the performance of duty.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. ACTUARIAL ASSUMPTIONS (adopted for the 2003 valuation)

7. Annual Rates of Retirement at Selected Ages (number retiring per 1,000 members)

45 50 55 60 65 70

Teachers' Retirement

Early

First Year Eligible

Male	30	35	70	--	--	--
------	----	----	----	----	----	----

Female	10	30	100	--	--	--
--------	----	----	-----	----	----	----

Subsequent Years

Male	10	20	30	--	--	--
------	----	----	----	----	----	----

Female	10	20	50	--	--	--
--------	----	----	----	----	----	----

Normal

First Year Eligible

Male	300	300	300	300	300	300
------	-----	-----	-----	-----	-----	-----

Female	350	350	350	350	350	350
--------	-----	-----	-----	-----	-----	-----

Subsequent Years

Male	170	170	170	200	300	250
------	-----	-----	-----	-----	-----	-----

Female	150	150	200	220	350	250
--------	-----	-----	-----	-----	-----	-----

Teachers' Pension

Early

First Year Eligible

Male	--	--	30	100	--	--
------	----	----	----	-----	----	----

Female	--	--	50	150	--	--
--------	----	----	----	-----	----	----

Subsequent Years

Male	--	--	--	40	--	--
------	----	----	----	----	----	----

Female	--	--	--	80	--	--
--------	----	----	----	----	----	----

Normal

First Year Eligible

Male	150	150	250	300	300	300
------	-----	-----	-----	-----	-----	-----

Female	150	150	250	400	200	200
--------	-----	-----	-----	-----	-----	-----

Subsequent Years

Male	120	120	120	200	220	220
------	-----	-----	-----	-----	-----	-----

Female	100	100	150	200	250	220
--------	-----	-----	-----	-----	-----	-----

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

7. Annual Rates of Retirement at Selected Ages (number retiring per 1,000 members) (continued)

	45	50	55	60	65	70
--	----	----	----	----	----	----

Employees' Retirement

Early

First Year Eligible

Male

	55	80	80	--	--	--
--	----	----	----	----	----	----

Female

	80	100	100	--	--	--
--	----	-----	-----	----	----	----

Subsequent Years

Male

	30	30	40	--	--	--
--	----	----	----	----	----	----

Female

	40	50	50	--	--	--
--	----	----	----	----	----	----

Normal

First Year Eligible

Male

	270	270	270	270	270	270
--	-----	-----	-----	-----	-----	-----

Female

	300	300	300	300	300	300
--	-----	-----	-----	-----	-----	-----

Subsequent Years

Male

	50	50	100	150	300	200
--	----	----	-----	-----	-----	-----

Female

	100	100	120	250	450	250
--	-----	-----	-----	-----	-----	-----

Correctional

Early

	--	--	--	--	--	--
--	----	----	----	----	----	----

Normal

First Eligible

	400	400	400	500	1000	1000
--	-----	-----	-----	-----	------	------

Subsequent

	120	150	150	200	500	1000
--	-----	-----	-----	-----	-----	------

Legislative

Early

	--	--	--	--	--	--
--	----	----	----	----	----	----

Normal

	--	--	--	1000	1000	1000
--	----	----	----	------	------	------

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

7. Annual Rates of Retirement at Selected Ages (number retiring per 1,000 members) (continued)

45 50 55 60 65 70

Employees' Pension						
Early						
First Year Eligible						
Male	--	--	60	60	--	--
Female	--	--	40	100	--	--
Subsequent Years						
Male	--	--	--	40	--	--
Female	--	--	--	60	--	--
Normal						
First Year Eligible						
Male	150	150	250	250	250	250
Female	150	150	250	300	300	300
Subsequent Years						
Male	50	50	70	120	250	200
Female	50	50	70	100	250	220
State Police Retirement						
First Year Eligible	200	200	200	1000	1000	1000
Subsequent Years	200	200	400	1000	1000	1000
Judges' Pension						
First Year Eligible						
Male	100	100	100	100	100	100
Female	300	300	300	300	300	300
Subsequent Years						
Male	100	100	100	100	100	1000
Female	200	200	200	200	200	1000
LEOPS						
First Year Eligible	350	150	150	150	150	150
Subsequent Years	150	150	200	300	1000	1000
Local Fire & Police Retirement						
First Year Eligible	350	150	150	150	150	150
Subsequent Years	150	150	200	300	1000	1000

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. ACTUARIAL ASSUMPTIONS (adopted for the 2003 valuation)

8. Social Security Covered Compensation

Teachers' Retirement	Not applicable
Teachers' Pension	Future covered compensation levels, used to estimate member contributions and retirement allowances, were calculated using a 4% per annum compounded increase in the 2002 Social Security Maximum Wage Base.
Employees' Retirement	Not applicable
Employees' Pension	Future covered compensation levels, used to estimate member contributions and retirement allowances, were calculated using a 4% per annum compounded increase in the 2002 Social Security Maximum Wage Base.
State Police Retirement	Not applicable
Judges' Pension	Not applicable
LEOPS	Future covered compensation levels, used to estimate member contributions and retirement allowances, were calculated using a 4% per annum compounded increase in the 2002 Social Security Maximum Wage Base.
Local F&P Retirement	Not applicable
Local F&P Pension	Future covered compensation levels, used to estimate member contributions and retirement allowances, were calculated using a 4% per annum compounded increase in the 2002 Social Security Maximum Wage Base.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

B. ACTUARIAL ASSUMPTIONS (prior valuations)

	1. Valuation Interest Rate	2. Rate of Increase in Cost of Living	3. Rates of Salary Increase (% at selected Ages)											
			25	30	35	40	45	50	55	60	65			
Teachers' Retirement	8.0%	5%	11.82	10.86	8.76	7.29	6.58	6.23	6.06	5.98	5.94			
Teachers' Pension	8.0%	3%	11.82	10.86	8.76	7.29	6.58	6.23	6.06	5.98	5.94			
Employees' Retirement Regular & Correctional	8.0%	5%	10.00	9.17	8.48	7.90	7.42	7.01	6.68	6.40	6.17			
Legislative	8.0%	6%*	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00			
Employees' Pension	8.0%	3%**	10.00	9.17	8.48	7.90	7.42	7.01	6.68	6.40	6.17			
State Police Retirement	8.0%	5%	8.62	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00			
Judges Pension	8.0%	6%	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00			
LEOPS	8.0%	5%***	8.62	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00			
Local Fire & Police Retirement Pension	8.0%	5%	8.62	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00			
	8.0%	3%***	8.62	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00			

* A 5% compound rate is applicable for some pre-71 Legislative members.

** A 3% simple rate is applicable for municipal members of these Systems, who do not elect to be covered under the improved plan.

*** A 3% simple rate is applicable for former EPS members.



APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

B. ACTUARIAL ASSUMPTIONS (prior valuations)

4. Annual Rates of Withdrawal at Selected Ages (number of withdrawals per 1,000 members)

	25	30	35	40	45	50	55
Teachers' Retirement							
Male	126	86	57	27	20	15	16
Female	106	80	58	42	31	27	26
Teachers' Pension							
Male	126	86	57	27	20	15	16
Female	106	80	58	42	31	27	26
Employees' Retirement							
Regular	151	112	88	70	56	56	46
Correctional	151	112	88	70	56	56	46
Legislative	*	*	*	*	*	*	*
Employees' Pension	151	112	88	70	56	56	46
State Police Retirement	26	18	12	9	7	0	0
Judges' Pension	0	0	0	0	0	0	0
LEOPS	26	18	12	9	7	0	0
Local Fire & Police							
Retirement	26	18	12	9	7	0	0
Pension	26	18	12	9	7	0	0

* 200 withdrawals per 1,000 members are assumed after 8 years of service and each fourth year thereafter

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

B. ACTUARIAL ASSUMPTIONS (prior valuations)

5a. Annual Rates of Mortality at Selected Ages - Active Members and Members Retired on or After July 1, 1998 (number of deaths per 10,000 members)

	45	50	55	60	65	70	75	80
Teachers' Retirement & Pension								
Healthy Members								
Male	21	34	55	89	148	257	423	662
Female	15	24	38	59	92	152	261	439
Disabled Members								
Male	297	330	378	446	545	701	938	1275
Female	181	202	238	290	364	474	643	904
Employees' Retirement & Pension Regular								
Healthy Members								
Male	28	46	73	120	206	350	555	855
Female	19	31	50	81	133	230	386	607
Disabled Members								
Male	311	349	400	474	589	765	1012	1374
Female	240	271	317	382	475	622	846	1165
Employees' Retirement Correctional & Legislative								
Healthy Members								
Male	31	49	79	134	231	388	610	912
Female	21	34	54	88	150	258	427	663
Disabled Members								
Male	349	376	420	488	595	763	1022	1417
Female	263	289	329	391	490	645	885	1253
State Police Retirement								
Healthy Members								
Male	110	142	193	272	397	591	891	1346
Disabled Members								
Male	378	348	377	435	529	675	903	1251
Judges' Pension								
Healthy Members								
Male	33	54	85	133	213	345	546	866
Female	19	31	50	79	124	201	325	516
Disabled Members								
Male	311	349	400	474	589	765	1012	1374
Female	240	271	317	382	475	622	846	1165

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

5a. Annual Rates of Mortality at Selected Ages - Active Members and Members Retired on or After July 1, 1998 (number of deaths per 10,000 members) (continued)

	45	50	55	60	65	70	75	80
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LEOPS

Healthy Members	110	142	193	272	397	591	891	1346
Disabled Members	378	348	377	435	529	675	903	1251

Local Fire & Police Systems

Healthy Members	110	142	193	272	397	591	891	1346
Disabled Members	378	348	377	435	529	675	903	1251

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

B. ACTUARIAL ASSUMPTIONS (prior valuations)

5b. Annual Rates of Mortality at Selected Ages - Members Retired Before July 1, 1998 (number of deaths per 10,000 members)

45 50 55 60 65 70 75 80

Teachers' Retirement & Pension

Inactive Members

Male	23	38	59	97	167	286	468	720
Female	18	27	41	63	100	165	281	475

Inactive Disabled Members

Male	349	376	420	488	595	763	1022	1417
Female	191	207	239	288	365	488	677	971

Employees' Retirement & Pension

Inactive Members

Male	31	49	79	134	231	388	610	912
Female	21	34	54	88	150	258	427	663

Inactive Disabled Members

Male	349	376	420	488	595	763	1022	1417
Female	263	288	329	391	490	645	885	1253

State Police Retirement

Inactive Members	110	142	193	272	397	591	891	1346
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Inactive Disabled Members	378	348	377	435	529	675	903	1251
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Judges' Pension

Inactive Members

Male	39	61	97	153	242	381	596	929
Female	21	34	54	85	135	213	336	527

Inactive Disabled Members

Male	349	376	420	488	595	763	1022	1417
Female	263	288	329	391	490	645	885	1253

LEOPS

Inactive Members	110	142	193	272	397	591	891	1346
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Inactive Disabled	378	348	377	435	529	675	903	1251
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Local Fire & Police Systems

Inactive	110	142	193	272	397	591	891	1346
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Inactive Disabled	378	348	377	435	529	675	903	1251
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APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

B. ACTUARIAL ASSUMPTIONS (prior valuations)

6. Annual Rates of Disablement at Selected Ages (number becoming disabled per 10,000 members)

	25	30	35	40	45	50	55
Teachers' Retirement & Pension*							
Male	1	1	13	13	20	33	33
Female	2	3	4	8	15	27	38
Employees' Retirement & Pension							
Ordinary Disability							
Regular	6	8	14	25	42	63	81
Correctional	4	6	9	14	20	26	30
Legislative	0	0	0	0	0	0	0
Accidental Disability							
Regular	1	2	3	3	4	5	4
Correctional	1	1	2	3	3	5	5
Legislative	0	0	0	0	0	0	0
State Police Retirement							
Ordinary Disability	12	18	25	37	64	110	160
Accidental Disability	8	10	13	18	25	42	62
Judges' Pension							
	5	7	11	17	23	30	35
LEOPS							
Ordinary Disability	12	18	25	37	64	110	160
Accidental Disability	8	10	13	18	25	42	62
Local Fire & Police Systems							
Ordinary Disability	12	18	25	37	64	110	160
Accidental Disability	8	10	13	18	25	42	62

* It is assumed that 1% of disability retirements is due to accidents in the performance of duty.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

B. ACTUARIAL ASSUMPTIONS (prior valuations)

7. Annual Rates of Retirement at Selected Ages (number retiring per 1,000 members)

45 50 55 60 65 70

Teachers' Retirement						
Early						
First Year Eligible	150	150	150	150	150	150
Subsequent Years	20	35	56	125	175	500
Normal						
First Year Eligible	500	500	500	500	500	500
Subsequent Years	200	200	200	200	200	1000
Teachers' Pension						
Early						
First Year Eligible	125	125	125	125	125	125
Subsequent Years	0	50	50	60	141	500
Normal						
First Year Eligible	250	250	250	250	250	250
Subsequent Years	250	250	250	250	250	1000
Employees' Retirement						
Early						
First Year Eligible	100	100	100	100	100	100
Subsequent Years	37	49	61	73	75	75
Normal						
First Year Eligible	400	400	400	400	400	400
Subsequent Years	250	250	250	250	250	1000
Correctional						
Early	--	--	--	--	--	--
Normal	135	142	158	1000	1000	1000
Legislative						
Early	--	--	--	--	--	--
Normal	--	--	--	1000	1000	1000

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

7. Annual Rates of Retirement at Selected Ages (number retiring per 1,000 members) (continued)

	45	50	55	60	65	70
Employees' Pension						
Early						
First Year Eligible	150	150	300	150	150	150
Subsequent Years	52	50	48	47	47	47
Normal						
First Year Eligible	400	400	400	400	400	400
Subsequent Years	50	50	100	150	300	1000
State Police Retirement						
Normal (Not Eligible for DROP)						
First Year Eligible	200	200	200	200	--	--
Subsequent Years	200	200	250	1000	--	--
Normal (DROP Eligible)	900	900	900	1000	--	--
Judges' Pension						
Normal	--	--	41	57	104	1000
LEOPS						
Normal (Not Eligible for DROP)						
First Year Eligible	200	200	200	200	--	--
Subsequent Years	200	200	250	1000	--	--
Normal (DROP Eligible)	900	900	900	1000	--	--
Local Fire & Police Retirement						
First Year Eligible	500	500	500	500	--	--
Subsequent Years	200	200	250	1000	--	--

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

B. ACTUARIAL ASSUMPTIONS (prior valuations)

8. Social Security Covered Compensation

Teachers' Retirement	Not applicable
Teachers' Pension	Future covered compensation levels, used to estimate member contributions and retirement allowances, were calculated using a 5% per annum compounded increase in the 2002 Social Security Maximum Wage Base.
Employees' Retirement	Not applicable
Employees' Pension	Future covered compensation levels, used to estimate member contributions and retirement allowances, were calculated using a 5% per annum compounded increase in the 2002 Social Security Maximum Wage Base.
State Police Retirement	Not applicable
Judges' Pension	Not applicable
LEOPS	Future covered compensation levels, used to estimate member contributions and retirement allowances, were calculated using a 5% per annum compounded increase in the 2002 Social Security Maximum Wage Base.
Local F&P Retirement	Not applicable
Local F&P Pension	Future covered compensation levels, used to estimate member contributions and retirement allowances, were calculated using a 5% per annum compounded increase in the 2002 Social Security Maximum Wage Base.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

C. ACTUARIAL PROCEDURES

1. Asset Valuation Method

Teachers' Retirement & Pension	<p>All six Systems use a method based on the principle that the difference between actual and expected investment returns should be subject to partial recognition to smooth out fluctuations in the total return achieved by the fund from year to year. Under this method, the actuarial value of the assets is one-fifth of the market value plus two-thirds of the expected value, where the expected value is last year's actuarial value and subsequent cashflows into and out of the fund accumulated with interest at last year's valuation rate (8.00%). This is equivalent to smoothing the difference between the experienced return and the assumed return. If the fund earns the actuarially assumed rate in any year no investment returns will be deferred.</p>
Employees' Retirement & Pension	
State Police	
Judges	
LEOPS	
Local F&P Retirement & Pension	

For the Employees' Retirement & Pension System and for LEOPS, assets must be allocated between State and Municipal Corporation members. Beginning July 1, 1984, this allocation is based upon actual cash flows and shared investment results.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

C. ACTUARIAL PROCEDURES

2. Funding Method

Teachers' Retirement & Pension	All six Systems use the aggregate entry age normal method with projection to determine costs. Under this funding method, a total contribution rate is determined which consists of two elements, the normal cost rate and the unfunded actuarial liability (UAL) rate.
Employees' Retirement & Pension	
State Police	
Judges	
LEOPS	For the Teachers' Pension, Employees' Pension, State Police, Judges', LEOPS and Local Fire & Police Systems an Individual Entry Age Normal cost rate is determined for a typical new entrant of each respective system. This rate is determined by taking the value, as of age at entry into the plan, of the member's projected future benefits, and dividing it by the value, also as of the member's entry age, of his expected future salary.
Local F&P Retirement & Pension	For members of the Teachers' and Employees' Retirement Systems, the new entrant normal cost rate is set at the same rate developed for the Teachers' and Employees' Pension Systems, respectively.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

C. ACTUARIAL PROCEDURES

2. Funding Method (Continued)

Teachers' Retirement & Pension	In addition to contributions required to meet the System's normal cost, contributions will be required to fund the System's unfunded actuarial liability. Actuarial liability is defined as the present value of future benefits less the present value of future normal costs. The unfunded actuarial liability is the total of the actuarial liability for all members less the actuarial value of the System's assets.
Employees' Retirement & Pension	
State Police	
Judges	
LEOPS	
Local F&P Retirement & Pension	If the System's unfunded actuarial liability is increased by plan changes or actuarial losses or decreased by actuarial gains, these amounts will be included as part of the unfunded actuarial liability and funded over a 25-year amortization period.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

C. ACTUARIAL METHODS

1. Asset Valuation Method:

The Actuarial Value of Assets is determined on an adjusted market value basis. Under this method, the adjusted market value is a weighted average of the actual market value (weight = 20 percent) and the expected value (weight = 80 percent). The expected value of assets is equal to the prior year's actuarial value increased by the assumed rate of return and adjusted for employer contributions and disbursements during the year preceding the valuation date.

2. Funding Method: Entry Age Normal Cost Method

Under the entry age normal actuarial cost method, the individual, entry age normal cost is determined for each participant by taking the value, as of his entry age into the plan, of the participant's projected future benefits (assuming the current plan benefit provisions had always been in existence), and dividing it by the value, as of the participant's entry age, of one dollar per year over his expected working lifetime. This cost for each participant is then multiplied by the present value, as of the valuation date, of one dollar per year over his future working lifetime. The sum of these values for all active participants is the present value (as of the valuation date) of all normal costs. The excess of the present value of all plan benefits over the present value of future normal costs is the accrued liability; the difference between the accrued liability and the value of the plan assets as of the valuation date is the unfunded accrued liability.

APPENDIX D

SUMMARY OF PLAN PROVISIONS

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APPENDIX D - SUMMARY OF PLAN PROVISIONS

TEACHER'S RETIREMENT SYSTEM OF THE STATE OF MARYLAND Established August 1, 1927

1. Membership

Membership is a condition of employment for teachers. Employees of various libraries and educational facilities were eligible to join. Certain eligible teachers elect to join an optional retirement program. Effective July 1, 1971 teachers and retired teachers of the City of Baltimore are included.

Members on December 31, 1979 continue to be members on January 1, 1980 and after unless they elect to join the Pension System at which time they are eligible for the return of a portion of their accumulated contributions with interest. No new members were accepted after December 31, 1979.

2. Member Contributions (See item 6 for contributions effective July 1, 1984)

Members entering the System on or after July 1, 1973 are required to contribute 5% of earnable compensation; members in the System before that date contribute the lesser of 5% of earnable compensation or the percentage they were contributing prior to July 1, 1973.

3. Service Retirement Allowance (See item 6 for Allowances after July 1, 1984)

Eligibility - 30 years of eligibility service or attainment of age 60.

Allowance - $1/55$ of average compensation for the three highest years as an employee for each year of eligibility service. The benefit of any member who discontinues contributions, or an employee who waives the right to contribute for past service credit, or a member who contributed to the plan on the basis of retirement at age 65, is reduced by the actuarial equivalent of unpaid contributions with interest to date of retirement. Eligibility service is given based on a full normal working time in one year (equal to ten months).

4. Early Retirement Allowance

Eligibility - 25 years of eligibility service.

Allowance - service retirement allowance, reduced by $1/2\%$ for each month that date of retirement precedes the earlier of age 60 and the date the member would have completed 30 years of eligibility service had he remained in employment.

APPENDIX D - SUMMARY OF PLAN PROVISIONS

5. Disability Retirement Allowance

Ordinary

Eligibility - 5 years of eligibility service and certification of the medical board designated by the Board of Trustees that the member is incapacitated for the performance of duty, and that the incapacity is permanent.

Allowance - The benefit is 1/55 of average compensation for the three highest years as an employee for each year of eligibility service, with a minimum of 25% of average compensation, and a maximum of 1/55 of average compensation for each year of eligibility service the member would have had if he continued in employment until age 60.

Accidental

Eligibility - total and permanent disability as certified by the medical board resulting from accident occurring in the performance of duty.

Allowance - The benefit is the annuity provided by accumulated contributions, plus 66 2/3% of average compensation for the three highest years as an employee with a maximum of average compensation.

6. Retirement Allowances after July 1, 1984

A member who is in service on July 1, 1984 (or an inactive member who returns to service on or after July 1, 1984) will have his benefit determined under one of the optional formulas described below, as elected by the member on or before January 1, 1985 (or within 90 days of return to service, for inactive members on July 1, 1984).

Bifurcated benefit - for eligibility service before election date, the amount determined by the Service Retirement Allowance formula described in item 3; for eligibility service on and after election date, the amount determined by the Service Retirement Allowance formula of the Teachers' Pension System. Eligibility for Early Retirement is based on Retirement System criteria. This is the benefit which is payable absent an alternative election by the member. Effective on the election date, the rate of member contributions is determined under the terms of the Teachers' Pension System.

5% contribution/5% CPI option - the amount determined by the Service Retirement Allowance formula described in item 3. The Cost-of-Living Adjustments described in item 9 are limited to 5% annually.

APPENDIX D - SUMMARY OF PLAN PROVISIONS

7% contribution/unlimited COLA option - the amount determined under the Service Retirement Allowance formula described in item 3. Effective July 1, 1984 the rate of member contributions is 7% of earnable compensation. The cost-of-living adjustments described in item 9 are unlimited.

Members subject to this provision who transfer to the Teachers' Pension System are eligible to receive a return of a portion of their accumulated contributions with the average rate of interest earned on Systems' assets over the five years preceding transfer.

7. Death Benefits

Eligibility - one year of eligibility service or death in the performance of duty.

Benefit – one-time payment of member's annual earnable compensation at time of death plus accumulated contributions. In lieu of the one time payment, a surviving spouse who was named sole primary beneficiary may elect to receive the monthly allowance she would have received under Option 2 if member was eligible to retire or was age 55 and had 15 years of eligibility service.

Regardless of length of service, member's accumulated contributions are paid.

8. Vested Retirement Allowance

Eligibility - 5 years of eligibility service.

Allowance - accrued retirement allowance payable at age 60. Member may elect to withdraw his accumulated contributions, or transfer to the Pension System, in lieu of receiving the vested retirement allowance in the Retirement System. If member does not withdraw his contributions, and dies before attaining age 60, his accumulated contributions are returned.

9. Cost-of-Living Adjustments

All retirement allowances are adjusted each year based on the Consumer Price Index. Cost-of-living adjustments are effective July 1 and are applied to all benefits which have been in payment for one year.

APPENDIX D - SUMMARY OF PLAN PROVISIONS

10. Optional Forms of Payment

- Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.
- Option 2: 100% joint and survivor annuity.
- Option 3: 50% joint and survivor annuity.
- Option 4: This option guarantees a return of accumulated member contributions.
- Option 5: 100% "pop-up" joint and survivor annuity.
- Option 6: 50% "pop-up" joint and survivor annuity.
- Option 7: Any other benefit which is actuarially equivalent to the retirement allowance and is approved by the Board of Trustees.

11. Reduction for Benefits Payable Under Workmen's Compensation

Disability retirement allowances, excluding annuity reserves, are reduced for workmen's compensation benefits payable after retirement from injury occurring during employment by the State or participating employer, if the workmen's compensation benefits are for the same injury for which retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

TEACHERS' PENSION SYSTEM OF THE STATE OF MARYLAND Established January 1, 1980

1. Membership

Membership is a condition of employment for all teachers hired on or after January 1, 1980. Certain eligible teachers may elect to join an optional program provided by the State. Included in the definition of teacher is any teacher, helping teacher, principal, supervisor, superintendent, or clerk employed in public day school within the State of Maryland, or controlled by the State; any faculty employee of an educational institution supported or controlled by the State; any librarian or clerical employee of a library established or operated under the Education Article; any professional or clerical employee of a community college established or operated under the Education Article.

2. Member Contributions

Effective July 1, 1998, members are required to make contributions of 2% of earnable compensation.

3. Service Retirement Allowance

Eligibility - 30 years of eligibility service or attainment of one of the following:

- Age 62 and 5 years of eligibility service.
- Age 63 and 4 years of eligibility service.
- Age 64 and 3 years of eligibility service.
- Age 65 and 2 years of eligibility service.

Allowance - The larger of (i) or (ii), plus (iii), as described below:

- (i) 1.2% of average compensation for the three highest consecutive years as an employee for each year of eligibility service on or before June 30, 1998;
- (ii) 0.8% of average compensation for the three highest consecutive years as an employee up to the Social Security integration level plus 1.5% of average compensation over the integration level for each year of eligibility service on or before June 30, 1998;
- (iii) 1.4% of average compensation for the three highest consecutive years as an employee for each year of eligibility service after June 30, 1998.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

The Social Security integration level is the average annual earnings for which Social Security benefits are provided to an employee attaining age 65 in the year of termination of employment, who earned the maximum Social Security covered earnings in each year. Eligibility service is given based on a full normal working time in one year equal to ten months.

The pre-1998 formula (still applicable for those current and former Retirement System members who on or after April 1, 1998 elected to transfer to the Pension System) is 0.8% of average compensation for the three highest consecutive years as an employee up to the Social Security integration level plus 1.5% of average compensation over the integration level for each year of eligibility service.

4. Early Retirement Allowance

Eligibility - attainment of age 55 and 15 years of eligibility service.

Allowance - service retirement allowance computed as of early retirement date, reduced by 1/2% for each month that early retirement date precedes age 62.

5. Disability Retirement Allowance

Ordinary

Eligibility - 5 years of eligibility service and certification of the medical board designated by the Board of Trustees that the member is incapacitated for the performance of duty, and that the incapacity is permanent.

Allowance - The benefit is the service retirement allowance computed on the basis that service continued until age 62 without any change in rate of earnable compensation.

Accidental

Eligibility - total and permanent disability as certified by the medical board resulting from accident occurring in the performance of duty.

Allowance - The benefit is the annuity provided by accumulated contributions, plus $66 \frac{2}{3}\%$ of average compensation for the three highest consecutive years as an employee with a maximum of average compensation.

Any member who applies for disability retirement within 2 years of transfer from the Retirement System shall receive benefits as provided under the Retirement System, reduced by any contributions refunded.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

6. Death Benefits

Eligibility - one year of eligibility service or death in the performance of duty.

Benefit – one-time payment of member's annual earnable compensation at time of death plus accumulated contributions. In lieu of one-time payment, a surviving spouse named as sole primary beneficiary may elect to receive the monthly allowance she would have received under Option 2, determined as if the member were eligible to retire and retired 30 days before death, if member was age 62, was age 55 and had 15 years of eligibility service, or had at least 25 years of eligibility service.

Regardless of length of service, member's accumulated contributions are paid.

7. Vested Retirement Allowance

Eligibility - 5 years of eligibility service.

Allowance - accrued retirement allowance payable at age 62. A member who has completed 15 years of eligibility service may begin to receive benefit payments at any time after attainment of age 55, reduced by 1/2% for each month that benefit commencement date precedes age 62.

If member does not commence to receive benefit payments, and dies before attaining age 62, his accumulated contributions are returned.

If member does not have 5 years of eligibility service at termination of employment, his accumulated contributions are returned.

8. Cost-of-Living Adjustments

All retirement allowances are adjusted each year based on the Consumer Price Index. Effective July 1, 1998, the annual adjustment is limited to 3%, and is applied to all benefits which have been in payment for one year. However, former members of the Retirement System who elect to transfer to the Pension System on or after April 1, 1998 will receive annual adjustments limited to 3% of the initial benefit amount. Their retirement allowance payable is the sum of the initial retirement allowance and all adjustments. All increases are effective July 1.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

9. Optional Forms of Payment

Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: This option guarantees a return of accumulated member contributions.

Option 5: 100% "pop-up" joint and survivor annuity.

Option 6: 50% "pop-up" joint and survivor annuity.

Option 7: Any other benefit which is actuarially equivalent to the retirement allowance and is approved by the Board of Trustees.

10. Reduction for Benefits Payable Under Workmen's Compensation

Disability retirement allowances, excluding annuity reserves, are reduced for workmen's compensation benefits payable after retirement from injury occurring during employment by the State or participating employer, if the workmen's compensation benefits are for the same injury for which retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF MARYLAND Established October 1, 1941

1. Membership

Membership is a condition of employment for all classified and unclassified regular employees of the State of Maryland excluding those eligible for the Teachers' Retirement System, State Police Pension Fund, and certain judges. Also included are employees of the State Highway Administration and those engaged in county road maintenance under its supervision. Certain municipal corporations have joined the System, and persons employed in various capacities of State government (e.g., General Assembly, elected officials) may join at their option.

Members on December 31, 1979 continue to be members on January 1, 1980 and after unless they elect to join the Pension System, at which time they are eligible for the return of a portion of their accumulated contributions with interest. No new members are accepted after December 31, 1979 except correctional officers, or members of the General Assembly.

2. Member Contributions (See item 6 for contributions effective July 1, 1984)

Members entering the System on or after July 1, 1973 are required to contribute 5% of earnable compensation; members in the System before that date contribute the lesser of 5% of earnable compensation or the percentage they were contributing prior to July 1, 1973.

3. Service Retirement Allowance (See item 6 for Allowances after July 1, 1984)

Eligibility - 30 years of eligibility service or attainment of age 60.

Allowance - $1/55$ of average compensation for the three highest years as an employee for each year of eligibility service. The benefit of any member who discontinues contributions, or an employee who waives the right to contribute for past service credit, or a member who contributed to the plan on the basis of retirement at age 65, is reduced by the actuarial equivalent of unpaid contributions with interest to date of retirement.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

4. Early Retirement Allowance

Eligibility - 25 years of eligibility service.

Allowance - service retirement allowance, reduced by 1/2% for each month that date of retirement precedes the earlier of age 60 and the date the member would have completed 30 years of eligibility service had he remained in employment.

5. Disability Retirement Allowance

Ordinary

Eligibility - 5 years of eligibility service and certification of the medical board designated by the Board of Trustees that the member is incapacitated for the performance of duty and that the incapacity is permanent.

Allowance - The benefit is 1/55 of average compensation for the three highest years as an employee for each year of eligibility service, with a minimum of 25% of average compensation, and a maximum of 1/55 of average compensation for each year of eligibility service the member would have had if he continued in employment until age 60.

Accidental

Eligibility - total and permanent disability as certified by the medical board resulting from accident occurring in the performance of duty.

Allowance - The benefit is the annuity provided by accumulated contributions, plus 66 2/3% of average compensation for the three highest years as an employee with a maximum of average compensation.

6. Retirement Allowances after July 1, 1984

A member who is in service on July 1, 1984 (or an inactive member who returns to service on or after July 1, 1984) will have his benefit determined under one of the optional formulas described below, as elected by the member.

Bifurcated benefit - for eligibility service before election date, the amount determined by the Service Retirement Allowance formula described in item 3; for eligibility service on and after election date, the amount determined by the Service Retirement Allowance formula of the Employees' Pension System. Eligibility for Early Retirement is based on Retirement System criteria. This is the benefit which is payable absent an alternative election by the member.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

Effective at the election date, the rate of member contributions is determined under the terms of the Employees' Pension System.

5% contribution/5% COLA option - The amount determined by the Service Retirement Allowance formula described in item 3. The Cost-of-Living Adjustments described in item 9 are limited to 5% annually.

7% contribution/unlimited COLA option - the amount determined under the Service Retirement Allowance formula described in item 3. Effective July 1, 1984, the rate of member contributions is 7% of earnable compensation.

Members subject to this provision who transfer to the Employees' Pension System are eligible to receive a return of a portion of their accumulated contributions with the average rate of interest earned on the Systems' assets over the five years preceding transfer.

7. Death Benefits

Eligibility - one year of eligibility service or death in the performance of duty.

Benefit – one time payment of member's annual earnable compensation at time of death plus accumulated contributions. In lieu of the one time payments a surviving spouse who was named sole primary beneficiary may elect to receive the monthly allowance she would have received under Option 2 if member was eligible to retire or was age 55 with 15 years of eligibility service.

Regardless of length of service, member's accumulated contributions are paid.

8. Vested Retirement Allowance

Eligibility - 5 years of eligibility service.

Allowance - accrued retirement allowance payable at age 60. Member may elect to withdraw his accumulated contributions or transfer to the Pension System, in lieu of receiving the vested retirement allowance in the Retirement System. If member does not withdraw his contributions, and dies before attaining age 60, his accumulated contributions are returned.

9. Cost-of-Living Adjustments

All retirement allowances are adjusted each year based on the Consumer Price Index. Cost-of-living adjustments are effective July 1 and are applied to all benefits which have been in payment for one year.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

10. Optional Forms of Payment

- Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.
- Option 2: 100% joint and survivor annuity.
- Option 3: 50% joint and survivor annuity.
- Option 4: This option guarantees a return of accumulated member contributions.
- Option 5: 100% "pop-up" joint and survivor annuity.
- Option 6: 50% "pop-up" joint and survivor annuity.
- Option 7: Any other benefit which is actuarially equivalent to the retirement allowance and is approved by the Board of Trustees.

11. Reduction for Benefits Payable Under Workmen's Compensation

Disability retirement allowances, excluding annuity reserves, are reduced for workmen's compensation benefits payable after retirement from injury occurring during employment by the State, if the workmen's compensation benefits are for the same injury for which retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

12. Miscellaneous Provisions

For Members of the General Assembly

The retirement allowance is equal to 3.00% of highest earnable compensation for each year of eligibility service (maximum 22 years 3 months) upon attainment of age 60 and eight years of eligibility service. Reduced benefits are payable upon attainment of age 50 and completion of 8 years of eligibility service. The benefit is reduced by 0.5% for each month between ages 50 and 60 that the early retirement date precedes age 60. A member with eight years of eligibility service who has not attained age 60 may leave his contributions in and receive a retirement allowance at age 60 or a reduced benefit after age 50. If termination occurs before the completion of eight years of eligibility service, the member may make contributions equal to his and the State's required amount until he would have completed eight years of eligibility service, and receive 24% of last

APPENDIX D – SUMMARY OF PLAN PROVISIONS

earnable compensation at age 60 or a reduced benefit after age 50. Members contribute 5% of their earnable compensation during their first 22 years 3 months of service. A member who is certified as disabled after completing at least 8 years of eligibility service may resign his position and immediately receive a retirement allowance equal to 3.00% of highest earnable compensation for each year of eligibility service (maximum 22 years 3 months). The member's surviving spouse receives 1/2 of the member's entitlement if the member i) is retired, ii) is eligible for a deferred benefit, or iii) is active and has eight years of eligibility service. The surviving spouse of a member who had accrued less than eight years of eligibility service and dies in office shall receive a lump sum death benefit of accumulated contribution plus an amount equal to the deceased's annual earnable compensation at the time of death.

All retirement allowances are adjusted each year based on the increase in salaries of current members of the General Assembly.

For Correctional Officers

Correctional officers serving in the first six job classifications, or any security attendants at Clifton T. Perkins Hospital Center participate under this System. An immediate service retirement allowance is payable to a correctional officer if on or before the retirement, the officer has completed 20 years of eligibility service and served either at least 5 years as a security attendant at Clifton T. Perkins Hospital Center, or as a correctional officer in one of the first six job classifications, or a combination thereof immediately preceding retirement. The vested retirement allowance of a correctional officer who was in the first six job classifications for at least 5 years preceding retirement commences at age 55; for the security attendant it commences at age 60.

For Retirees Under the Workforce Reduction Act of 1996

Eligible members who applied to retire between July 1 and August 31, 1996 received one month of additional service credit for each year of eligibility service. In addition to the extra service, up to 18% of the reduction for early retirement was eliminated.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND Established January 1, 1980

1. Membership

Membership is a condition of employment for all classified and unclassified regular employees of the State of Maryland hired on or after January 1, 1980, excluding those eligible for the Teachers' Retirement System, Teachers' Pension System, State Police Pension Fund, certain judges, correctional officers, members of the General Assembly. Members of the Employees' Retirement System may elect to join any time on or after January 1, 1980. Certain municipal corporations have joined the System, and persons employed in various capacities of State government (e.g., General Assembly, elected officials) may join at their option.

2. Member Contributions

Effective July 1, 1998, members are required to make contributions of 2% of earnable compensation.

Note: Non-Cont. Pens. System members make contributions of 5% when salary exceeds SSTWB.

3. Service Retirement Allowance

Eligibility - 30 years of eligibility service or attainment of one of the following:

- Age 62 and 5 years of eligibility service
- Age 63 and 4 years of eligibility service
- Age 64 and 3 years of eligibility service
- Age 65 and 2 years of eligibility service

Allowance - The larger of (i) or (ii), plus (iii), as described below:

- (i) 1.2% of average compensation for the three highest consecutive years as an employee for each year of eligibility service on or before June 30, 1998;

APPENDIX D – SUMMARY OF PLAN PROVISIONS

- (ii) 0.8% of average compensation for the three highest consecutive years as an employee up to the Social Security integration level plus 1.5% of average compensation over the integration level for each year of eligibility service on or before June 30, 1998;
- (iii) 1.4% of average compensation for the three highest consecutive years as an employee for each year of eligibility service after June 30, 1998.

The Social Security integration level is the average annual earnings for which Social Security benefits are provided to an employee attaining age 65 in the year of termination of employment, who earned the maximum Social Security covered earnings in each year.

The pre-1998 formula (still applicable for those either current and former Retirement System members who on or after April 1, 1998 elected to transfer to the Pension System, and for members employed by certain Municipal Corporations) is 0.8% of average compensation for the three highest consecutive years as an employee up to the Social Security integration level plus 1.5% of average compensation over the integration level for each year of eligibility service.

4. Early Retirement Allowance

Eligibility - attainment of age 55 and 15 years of eligibility service.

Allowance - service retirement allowance computed as of early retirement date, reduced by 1/2% for each month that early retirement date precedes age 62.

5. Disability Retirement Allowance

Ordinary

Eligibility - 5 years of eligibility service and certification of the medical board designated by the Board of Trustees that the member is incapacitated for the performance of duty, and that the incapacity is permanent.

Allowance - The benefit is the service retirement allowance computed on the basis that service continued until age 62 without any change in rate of earnable compensation.

Accidental

Eligibility - total and permanent disability as certified by the medical board resulting from accident occurring in the performance of duty.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

Allowance - The benefit is the annuity provided by accumulated contributions, plus 66 2/3% of average compensation for the three highest consecutive years as an employee with a maximum of average compensation.

Any member who applies for disability retirement within 2 years of transfer from the Retirement System shall receive benefits as provided under the Retirement System, reduced by any contributions refunded.

6. Death Benefits

Eligibility - one year of eligibility service or death in the performance of duty.

Benefit – one-time payment of member's annual earnable compensation at time of death plus accumulated contributions. In lieu of one-time payment, a surviving spouse named as sole primary beneficiary may elect to receive the monthly allowance she would have received under Option 2, determined as if the member were eligible to retire and retired 30 days before death, if member was age 62, was age 55 and had 15 years of eligibility service, or had at least 25 years of eligibility service.

Regardless of length of service, member's accumulated contributions are paid.

7. Vested Retirement Allowance

Eligibility - 5 years of eligibility service.

Allowance - accrued retirement allowance payable at age 62. A member who has completed 15 years of eligibility service may begin to receive benefit payments at any time after attainment of age 55, reduced by 1/2% for each month that benefit commencement date precedes age 62.

If member does not commence to receive benefit payments, and dies before attaining age 62, his accumulated contributions are returned.

If member does not have 5 years of eligibility service at termination of employment, his accumulated contributions are returned.

8. Cost-of-Living Adjustments

All retirement allowances are adjusted each year based on the Consumer Price Index. Effective July 1, 1998, the annual adjustment is limited to 3%, and is applied to all benefits which have been in payment for one year. However, former members of the Retirement System who elect to transfer to the Pension

APPENDIX D – SUMMARY OF PLAN PROVISIONS

System on or after April 1, 1998, and members employed by a non-electing Municipal Corporation will receive annual adjustments limited to 3% of the initial benefit amount. Their retirement allowance payable is the sum of their initial retirement allowance and all adjustments. All increases are effective July 1.

9. Optional Forms of Payment

Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: This option guarantees a return of accumulated member contributions.

Option 5: 100% "pop-up" joint and survivor annuity.

Option 6: 50% "pop-up" joint and survivor annuity.

Option 7: Any other benefit which is actuarially equivalent to the retirement allowance and is approved by the Board of Trustees.

10. Reduction for Benefits Payable Under Workmen's Compensation

Disability retirement allowances, excluding annuity reserves, are reduced for workmen's compensation benefits payable after retirement from injury occurring during employment by the State, if the workmen's compensation benefits are for the same injury for which retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

11. Miscellaneous Provision

For Constitutional Officers

Constitutional officers who participate in the System are immediately vested upon taking office and will receive a benefit of not less than ten percent (10%) of their highest salary if they serve at least one full term. Cabinet members who participate in the System are immediately vested.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

For Retirees Under the Workforce Reduction Act of 1996

Eligible members who applied to retire between July 1 and August 31, 1996 received one month of additional service credit for each year of eligibility service. In addition to the extra service, up to 18% of the reduction for early retirement was eliminated.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

STATE POLICE RETIREMENT SYSTEM OF THE STATE OF MARYLAND Established July 1, 1949

1. Membership

Membership is a condition of employment (with limited exception) for all officers and employees of the Maryland State Police excluding those eligible for the Teachers' Retirement/Pension System, Employees' Retirement/Pension System, or the Pension Plan of Judges. The Superintendent of the Maryland State Police may elect membership in this System or the Employees' Pension System.

2. Member Contributions

Members are required to contribute 8% of earnable compensation.

3. Service Retirement Allowance

Eligibility - 22 years of eligibility service or attainment of age 50 (age 60 for the physician of the Department). Retirement at age 60 is mandatory for all but the Superintendent.

Allowance - 2.55% of average compensation for the three highest years as an employee for each of the first 28 years of eligibility service.

4. Early Retirement Allowance

Not applicable to this System.

5. Disability Retirement Allowance

Ordinary

Eligibility - 5 years of eligibility service and the certification of the medical board designated by the Board of Trustees that member is incapacitated for the performance of duty, and that the incapacity is permanent.

Allowance - 2.55% of average compensation for the three highest years as an employee for each of the first 28 years of eligibility service. Minimum payable is 35% of average compensation.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

Special

Eligibility - total and permanent disability as certified by the medical board arising out of or in the course of the actual performance of duty.

Allowance - The benefit is the annuity provided by accumulated contributions plus 66 2/3% of average compensation with a maximum of average compensation.

6. Death Benefits

For Retired Members

Eligibility - retired on service retirement allowance or ordinary disability retirement allowance, or retired on special disability retirement allowance. Also, beneficiaries are not eligible to receive survivor benefits from Social Security.

Benefits - lump sum and survivor benefits according to Title II of the Social Security Act, excluding any cost of living adjustments. For purposes of computing this benefit, the average monthly wage is the lesser of 1/12 of the member's average compensation and the maximum average monthly wage in effect as of date of death under the Social Security Act.

For Members in Service

i) Ordinary Death Benefit

Eligibility – One to two years of eligibility service and not eligible for special death benefit.

Benefit – One-time payment of member's annual earnable compensation at time of death plus accumulated contributions.

Regardless of length of service, members' accumulated contributions are paid.

ii) Special Death Benefit

Eligibility - two or more years of eligibility service or death in the performance of duty.

Benefit - accumulated contributions plus an allowance of one-half of the member's average compensation to the surviving spouse; if no surviving

APPENDIX D – SUMMARY OF PLAN PROVISIONS

spouse or spouse dies before youngest child reaches age 18, an allowance of one-half of average compensation continues until the youngest child reaches age 18; if no surviving spouse or children, an allowance of one-half of the member's average compensation to his or her dependent mother or father. If none of the above conditions are met, the ordinary death benefit is paid.

7. Vested Retirement Allowance

Eligibility - 5 years of eligibility service.

Allowance - service retirement allowance payable at age 50. Member may elect to withdraw his accumulated contributions in lieu of receiving his vested retirement allowance. If member does not withdraw his contributions and dies before attaining age 50, his accumulated contributions are returned.

8. Cost-of-Living Adjustments

All retirement allowances are adjusted each year based on the Consumer Price Index. Cost-of-living adjustments are effective July 1 and are applied to all benefits which have been in payment for one year.

9. Optional Forms of Payment

Normal form is 50% joint and survivor annuity with spouse. If no spouse at time of retirement, member may select an optional allowance.

Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: This option guarantees a return of accumulated member contributions.

Option 5: 100% "pop-up" joint and survivor annuity.

Option 6: 50% "pop-up" joint and survivor annuity.

Option 7: Any other benefit which is actuarially equivalent to the retirement allowance and is approved by the Board of Trustees.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

10. Reduction for Benefits Payable Under Workmen's Compensation

Disability retirement allowances, excluding annuity reserves, are reduced for workmen's compensation benefits payable after retirement from injury occurring during employment if the workmen's compensation benefits are for the same injury for which retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

11. Deferred Retirement Option Program (DROP)

Members with 22 years of service may elect to enter the DROP program for a maximum of the lesser of four years and the number of years until they would have accrued 28 years of service. During this period, they will cease making member contributions and cease accruing additional benefits. Their accrued service retirement allowance, with annual COLA adjustments, will be credited to an account along with interest at the rate of 6% per annum, compounded monthly. At any time up to four years later the member may cease working and have the service retirement allowance paid to him along with the balance of the DROP account.

12. Special Death Benefits – Current Survivors

The monthly allowance payable to a current survivor of a deceased State Police member who was killed in the line of duty is increased from 50% to 66.67% of the deceased member's average final compensation (applied retroactively July 1, 1972 – December 31, 2001).

APPENDIX D – SUMMARY OF PLAN PROVISIONS

PENSION PLAN OF JUDGES AND THEIR SURVIVING SPOUSES OF THE STATE OF MARYLAND* Established June 30, 1969

1. Membership

Membership is automatic for an employee qualifying as a judge after June 30, 1969, and is optional for judges in office on that date.

2. Member Contributions

Members are required to make contributions of 6% of salary until they have served for 16 years.

3. Service Retirement Allowance (Immediate Service Pension)

Eligibility - attainment of age 60 or retired by order of the Court of Appeals. Retirement is mandatory at age 70.

Pension - if former judge served at least 16 years, 2/3 of current fiscal year salary earned by a judge holding the same level judicial position as that held by the former judge on termination of service. If he did not serve 16 years, the benefit is multiplied by the ratio of years of service to 16.

4. Early Retirement Allowance

Not applicable to this System.

5. Disability Retirement Allowance (Disability Pension)

Eligibility - retirement for disability before attainment of age 60.

Pension - same as immediate service pension, payable immediately. However, if a judge has at least three years of eligibility service, the pension will not be less than 1/3 of his salary.

* *This summary includes provisions of the contributory plan only, as all members currently belong to that plan.*

APPENDIX D – SUMMARY OF PLAN PROVISIONS

6. Death Benefits

Spouse Pension

Eligibility - death of a judge or former judge at any age, leaving a surviving spouse.

Pension - 1/2 of the pension that would have been payable to the judge or former judge at the date of death if he were then eligible to receive a pension, payable immediately to the spouse. If no spouse, pension paid to children under age 18.

Lump Sum

Eligibility - termination of service by death of a judge leaving no spouse, or children under age 18.

Benefit - return of contributions accumulated with interest at a rate of 4% per annum.

7. Vested Retirement Allowance (Deferred Service Pension)

Eligibility - termination of service prior to eligibility for an immediate pension.

Pension - same as immediate service pension based on service at termination, payable at age 60.

In lieu of a deferred retirement pension, a former judge may elect to withdraw his contribution accumulated with interest at 4% per annum, within six months following his termination of service.

8. Cost-of-Living Adjustments

None except as provided through the pension formula.

9. Optional Forms of Payment

Not applicable to this System; normal form is joint and 50% annuity with spouse. However, a judge or former judge, who at the time of retirement, does not have a spouse or eligible minor child may elect one of the following optional forms of payment:

APPENDIX D – SUMMARY OF PLAN PROVISIONS

Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: This option guarantees a return of accumulated member contributions.

Option 5: 100% "pop-up" joint and survivor annuity.

Option 6: "pop-up" joint and survivor annuity.

Option 7: Any other benefit which is actuarially equivalent to the retirement allowance and is approved by the Board of Trustees.

10. Reduction for Benefits Payable Under Workmen's Compensation

Not applicable to this System.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

LAW ENFORCEMENT OFFICERS PENSION SYSTEM - RETIREMENT SYSTEM OF THE STATE OF MARYLAND Established July 1, 1990

A. Retirement System Provisions

1. Membership

Retirement System provisions are applicable only to those law enforcement officers who are employed by the following employers as authorized in Section 26-201 of the Annotated Code of Maryland: Department of Natural Resources police and law enforcement officers, Maryland Investigative Services Unit, Maryland Transportation Authority Police force, Baltimore City Sheriff's Department deputy sheriffs, University of Maryland Police force, State Fire Marshall or a Deputy Fire Marshall, Morgan State University Police force, Martin State Airport Firefighters, or a participating governmental unit who elects to have their law enforcement officers included in the Plan. Eligible employees, as of the date they elect to participate in this System, are members of the Employees' Retirement System of the State of Maryland. This includes Retirement System members who had elected the 5% contribution/5% COLA option and the 7% contribution/full COLA option.

2. Member Contributions

Members are required to contribute 7% of earnable compensation, except that:

- any member who had previously elected the 5% contribution/5% COLA option shall continue to contribute 5% of earnable compensation.

3. Service Retirement Allowance

Eligibility - 25 years of eligibility service or attainment of age 50.

Allowance – 2.3% of average compensation for the three highest years as an employee for each of the first 30 years of eligibility service, plus 1.0% of average compensation for each additional year.

4. Early Retirement Allowance

Not applicable to this System.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

5. Disability Retirement Allowance

Ordinary

Eligibility - 5 years of eligibility service and certification of the medical board designated by the Board of Trustees that the member is incapacitated for the performance of duty and that the incapacity is permanent.

Allowance – 2.3% of average compensation for the highest years as an employee for each of the first 30 years of eligibility service, plus 1.0% of average compensation for each additional year, with a minimum of 25% of average compensation.

Accidental

Eligibility - total and permanent disability as certified by the medical board arising out of or in the course of the actual performance of duty.

Allowance - the benefit is the annuity provided by accumulated contributions, plus 66 2/3% of average compensation for the three highest years as an employee, with a maximum of average compensation.

6. Death Benefits

Ordinary

Eligibility - one year of eligibility service.

Benefit – one-time payment of member's annual earnable compensation at time of death plus accumulated contributions.

Special

Eligibility - two or more years of eligibility service or death in the performance of duty.

Allowance - the ordinary death retirement allowance or 50% of the ordinary disability retirement allowance to the surviving spouse, if any; or if there is no surviving spouse, to any children of the deceased under the age of 18 years, divided in a manner as the Board of Trustees determines.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

7. Vested Retirement Allowance

Eligibility - 5 years of eligibility service.

Allowance - accrued retirement allowance payable at age 50.

The member may elect to withdraw his accumulated contributions at any time after termination of employment, in lieu of receiving the vested retirement allowance in the Retirement System. However, by doing so, the member forfeits all benefits accruing to him on account of his previous membership.

If the member does not withdraw his contributions, and dies before attaining age 50, his accumulated contributions are returned.

If the member does not have 5 years of eligibility service at termination of employment, his accumulated contributions are returned.

8. Cost-of-Living Adjustments

All retirement allowances are adjusted each year based on the Consumer Price Index. Cost-of-living adjustments are effective July 1 and are applied to all benefits which have been in payment for one year. For members contributing 5% of earnable compensation, the cost-of-living adjustment is limited to 5% annually.

9. Optional Forms of Payment

The normal form is a 50% joint and survivor annuity with spouse, if any; or if there is no surviving spouse or upon the death of the surviving spouse, to any children of the deceased under the age of 18 years, until every child dies or becomes 18 years, divided in a manner as the Board of Trustees determines.

Other forms of payment may be elected if there is no spouse at time of retirement.

Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

- Option 4: This option guarantees a return of accumulated member contributions.
- Option 5: 100% "pop-up" joint and survivor annuity.
- Option 6: 50% "pop-up" joint and survivor annuity.
- Option 7: Any other benefit which is actuarial equivalent to the retirement allowance and is approved by the Board of Trustees.

10. Reduction for Benefits Payable under Workmen's Compensation

Disability retirement allowances, excluding the annuity reserves, are reduced for workmen's compensation benefits payable after retirement from injury occurring during employment with the Department of Natural Resources police and law enforcement officers, Maryland Investigative Services Unit, Maryland Transportation Authority Police force, Baltimore City Sheriff's Department deputy sheriffs, University of Maryland Police force, State Fire Marshall or a Deputy Fire Marshall, Morgan State University Police force, Martin State Airport Firefighters, or a participating governmental unit who elects to have their law enforcement officers included in the Plan, if the workmen's compensation benefits are for the same injury for which retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

11. Deferred Retirement Option Program (DROP)

Members with 25 years of service may elect to enter the DROP program for a maximum of the lesser of five years and the number of years until they would have accrued 30 years of service. During this period, they will cease making member contributions and cease accruing additional benefits. Their accrued service retirement allowance, with annual COLA adjustments, will be credited to an account along with interest at the rate of 6% per annum, compounded monthly. At any time up to five years later the member may cease working and have the service retirement allowance paid to him along with the balance of the DROP account.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

B. Pension System Provisions

1. Membership

Membership is a condition of employment for all law enforcement officers who are employees of the Department of Natural Resources police and law enforcement officers, Maryland Investigative Services Unit, Maryland Transportation Authority Police force, Baltimore City Sheriff's Department deputy sheriffs, University of Maryland Police force, State Fire Marshall or a Deputy Fire Marshall, Morgan State University Police force, Martin State Airport Firefighters, or a participating governmental unit who elects to have their law enforcement officers included in the Plan, and were hired after July 1, 1990. Pension System provisions are also applicable to those Natural Resources Law Enforcement Officers' Pension System members who, as of the date they elect to participate in this System, are members of the Employees' Pension System of the State of Maryland or members of the Employees' Retirement System who had previously elected the bifurcated benefit option.

2. Member Contributions

Members are required to make contributions of 4% of earnable compensation.

3. Service Retirement Allowance

Eligibility - 25 years of eligibility service or attainment of age 50.

Allowance - 2.0% of average compensation for the three highest consecutive years as an employee for each of the first 30 years of eligibility service.

4. Early Retirement Allowance

Not applicable to this System.

5. Disability Retirement Allowance

Ordinary

Eligibility - 5 years of eligibility service and certification of the medical board designated by the Board of Trustees that the member is incapacitated for the performance of duty and that the incapacity is permanent.

Allowance - The benefit is the service retirement allowance computed on the basis that service continued until age 50 without any change in the rate of earnable compensation.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

Accidental

Eligibility - total and permanent disability as certified by the medical board arising out of or in the course of the actual performance of duty.

Allowance - the benefit is the annuity provided by accumulated contributions, plus 66 2/3% of average compensation for the three highest years as an employee, with a maximum of average compensation.

6. Death Benefits

Ordinary

Eligibility - one year of eligibility service.

Benefit – One-time payment of member's annual earnable compensation at time of death plus accumulated contributions.

Special

Eligibility - two or more years of eligibility service or death in the performance of duty.

Allowance - the ordinary death retirement allowance or 50% of the ordinary disability retirement allowance to the surviving spouse, if any; or if there is no surviving spouse, to any children of the deceased under the age of 18 years, divided in a manner as the Board of Trustees determines.

7. Vested Retirement Allowance

Eligibility - Five years of eligibility service.

Allowance - accrued retirement allowance payable at age 50.

The member may elect to withdraw his accumulated contributions at any time after termination of employment, in lieu of receiving the vested retirement allowance in the Pension System. However, by doing so, the member forfeits all benefits accruing to him on account of his previous membership.

If the member does not withdraw his contributions, and dies before attaining age 50, his accumulated contributions are returned.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

If the member does not have 5 years of eligibility service at termination of employment, his accumulated contributions are returned upon request.

8. Cost-of-Living Adjustments

All retirement allowances are adjusted each year based on the Consumer Price Index. The annual adjustment is limited to 3% of the current benefit amount, and is applied to all benefits which have been in payment for one year.

9. Optional Forms of Payment

The normal form is a 50% joint and survivor annuity with spouse, if any; or if there is no surviving spouse or upon the death of the surviving spouse, to any children of the deceased under the age of 18 years, until every child dies or becomes 18 years, divided in a manner as the Board of Trustees determines.

Other forms of payment may be elected if there is no spouse at time of retirement.

Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: This option guarantees a return of accumulated member contributions.

Option 5: 100% "pop-up" joint and survivor annuity.

Option 6: 50% "pop-up" joint and survivor annuity.

Option 7: Any other benefit which is actuarial equivalent to the retirement allowance and is approved by the Board of Trustees.

10. Reduction for Benefits Payable under Workmen's Compensation

Disability retirement allowances, excluding the annuity reserves, are reduced for workmen's compensation benefits payable after retirement from injury occurring during employment if the workmen's compensation benefits are for the same injury for which retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

11. Deferred Retirement Option Plan (DROP)

Members with 25 years of service may elect to enter the DROP program for a maximum of the lesser of five years and the number of years until they would have accrued 30 years of service. During this period, they will cease making member contributions and cease accruing additional benefits. Their accrued service retirement allowance, with annual COLA adjustments, will be credited to an account along with interest at the rate of 6% per annum, compounded monthly. At any time up to five years later the member may cease working and have the service retirement allowance paid to him along with the balance of the DROP account.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

LOCAL FIRE & POLICE - RETIREMENT Established July 1, 1990

1. Membership

Retirement System provisions are applicable only to those Local Fire & Police participants who, as of the Municipal Corporation's date of participation in this plan, are members of the Employees' Retirement System of the State of Maryland, and elect to participate in this plan. This includes Retirement System members who had elected the bifurcated benefit option, the 5% contribution/5% COLA option and the 7% contribution/full COLA option.

2. Member Contributions

Members are required to contribute 7% of earnable compensation. Any member who had previously elected either the bifurcated benefit option or the 5% contribution/5% COLA option does not have to make up the difference between 7% of past compensation and actual contributions to receive full benefits from this plan.

3. Service Retirement Allowance

Eligibility - 25 years of eligibility service or attainment of age 60.

Allowance - 1/50 of average compensation for the three highest years as an employee for each of the first 30 years of eligibility service, plus 1/100 of average compensation for each additional year.

4. Early Retirement Allowance

Not applicable to this System.

5. Disability Retirement Allowance

Ordinary

Eligibility - 5 years of eligibility service and certification of the medical board designated by the Board of Trustees that the member is incapacitated for the performance of duty and that the incapacity is permanent.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

Allowance - the benefit is 1/50 of average compensation for the three highest years as an employee for each year of eligibility service plus 1/100 of average compensation for each additional year, with a minimum of 25% of average compensation.

Accidental

Eligibility - total and permanent disability as certified by the medical board resulting from an accident occurring in the performance of duty.

Allowance - The benefit is the annuity provided by accumulated contributions, plus 66 2/3% of average compensation for the three highest years as an employee, with a maximum of average compensation.

6. Death Benefits

Eligibility - one year of eligibility service or death in the performance of duty.

Benefit - member's annual earnable compensation at time of death plus accumulated contributions. A surviving spouse who was named sole primary beneficiary may elect to receive the monthly allowance she would have received under Option 2 if member was eligible to retire or was at least age 55 and had at least 15 years of eligibility service.

7. Vested Retirement Allowance

Eligibility - 5 years of eligibility service.

Allowance - accrued retirement allowance payable at age 60.

The member may elect to withdraw his accumulated contributions at any time after termination of employment, in lieu of receiving the vested retirement allowance. However, by doing so, the member forfeits all benefits accruing to him on account of his previous membership.

If the member does not withdraw his contributions, and dies before attaining age 60, his accumulated contributions are returned.

If the member does not have 5 years of eligibility service at termination of employment, his accumulated contributions are returned.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

8. Cost-of-Living Adjustments

All retirement allowances are adjusted each year based on the Consumer Price Index. Cost-of-living adjustments are effective July 1 and are applied to all benefits which have been in payment for one year.

9. Optional Forms of Payment

Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: This option guarantees a return of accumulated member contributions.

Option 5: 100% "pop-up" joint and survivor annuity.

Option 6: 50% "pop-up" joint and survivor annuity.

Option 7: Any other benefit which is actuarially equivalent to the retirement allowance and is approved by the Board of Trustees.

10. Reduction for Benefits Payable under Workmen's Compensation

Disability retirement allowances, excluding the annuity reserves, are reduced for workmen's compensation benefits payable after retirement from injury occurring during employment by the State or participating employer, if the workmen's compensation benefits are for the same injury for which retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

LOCAL FIRE & POLICE - PENSION Established July 1, 1990

1. Membership

Membership and the associated Pension System Provisions are applicable, as a condition of employment, for all Local Fire & Police employed after the Municipal Corporation begins to participate in this System. Pension System Provisions are also applicable to those Local Fire & Police participants who, as of the Municipal Corporation's date of participation in this plan are members of the Employees' Pension System of the State of Maryland, and elect to participant in this plan.

2. Member Contributions

Members are required to make contributions of 5% of earnable compensation in excess of the Social Security taxable wage base.

3. Service Retirement Allowance

Eligibility - 25 years of eligibility service or attainment of age 62.

Allowance - 1.0% of average compensation for the three highest consecutive years as an employee up to the Social Security integration level plus 1.5% of average compensation over the integration level for each year of eligibility service. The Social Security integration level is the average annual earnings for which Social Security benefits are provided to an employee attaining age 65 in the year of a termination of employment, who earned the maximum Social Security covered earnings in each year.

If the member is employed by a Municipality that does not contribute to Social Security, then the service retirement allowance is 1.5% of average compensation for each year of eligibility service.

4. Early Retirement Allowance

Not applicable to this System.

5. Disability Retirement Allowance

Ordinary

Eligibility - 5 years of eligibility service and certification of the medical board designated by the Board of Trustees that the member is incapacitated for the performance of duty, and that the incapacity is permanent.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

Allowance - the benefit is the service retirement allowance computed on the basis that service continued until age 62 without any change in the rate of earnable compensation.

Accidental

Eligibility - total and permanent disability as certified by the medical board resulting from an accident occurring in the performance of duty.

Allowance - the benefit is the annuity provided by accumulated contributions, plus 66 2/3% of average compensation for the three highest consecutive years as an employee, with a maximum of average compensation.

6. Death Benefits

Eligibility - one year of eligibility service or death in the performance of duty.

Benefit - member's annual earnable compensation at time of death plus accumulated contributions. A surviving spouse who was named sole primary beneficiary may elect to receive the monthly allowance she would have received under Option 2, determined as if the member were eligible to retire and retired 30 days before death if member was at least age 62, was at least age 55 and had at least 15 years of eligibility service, or had at least 25 years of eligibility service.

7. Vested Retirement Allowance

Eligibility - 5 years of eligibility service.

Allowance - accrued retirement allowance payable at age 62.

The member may elect to withdraw his accumulated contributions at any time after termination of employment, in lieu of receiving the vested retirement allowance in the Pension System. However, by doing so, the member forfeits all benefits accruing to him on account of his previous membership.

If the member does not withdraw his contributions, and dies before attaining age 62, his accumulated contributions are returned.

If the member does not have 5 years of eligibility service at termination of employment, his accumulated contributions are returned.

APPENDIX D – SUMMARY OF PLAN PROVISIONS

8. Cost-of-Living Adjustments

All retirement allowances are adjusted each year based on the Consumer Price Index. The annual adjustment is limited to 3% of the initial benefit amount, and is applied to all benefits which have been in payment for one year. The retirement allowance payable is the sum of the initial retirement allowance and all adjustments. Increases are effective July 1.

9. Optional Forms of Payment

Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: This option guarantees a return of accumulated member contributions.

Option 5: 100% "pop-up" joint and survivor annuity.

Option 6: 50% "pop-up" joint and survivor annuity.

Option 7: Any other benefit which is actuarially equivalent to the retirement allowance and is approved by the Board of Trustees.

10. Reduction for Benefits Payable Under Workmen's Compensation

Disability retirement allowances, excluding annuity reserves, are reduced for workmen's compensation benefits payable after retirement from injury occurring during employment by the State or participating employer, if the workmen's compensation benefits are for the same injury for which retirement was granted and are paid for the same period of time for which the retirement benefits are paid.