State Retirement and Pension System of Maryland

June 30, 2008 Actuarial Valuation

Produced by Cheiron



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November 14, 2008

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

At your request, we have produced this report containing the full results of the June 30, 2008 actuarial valuation of the retirement plan for the State Retirement and Pension System of Maryland.

In performing this valuation, Cheiron used assumptions and methods that meet the parameters set by Government Accounting Standards Board (GASB) Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans. The actuarial assumptions used in this valuation have been recommended by the actuary and adopted by the Board of Trustees based upon the most recent review of the experience of the retirement plans in the programs administered by State Retirement and Pension System of Maryland completed in 2007. We believe the assumptions used, in the aggregate, represent our best estimate of anticipated future experience of the System. The results of this report are dependent upon future experience conforming to these assumptions. It is certain that actual experience will not conform exactly to these assumptions. Actual amounts will differ from projected amounts to the extent actual experience differs from expected experience. The Board of Trustees has the final decision regarding the appropriateness of the assumptions.

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

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

The results in this report are only applicable to the 2010 fiscal year. Future years' results may differ significantly.

We hereby certify that, to the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board, and that as a Member of the American Academy of Actuaries, we meet the Qualification Standards to render the opinion contained in this report.

Sincerely, Cheiron

Tiona Ehista Fiona Liston, FSA, EA, MAAA

Consulting Actuary

Margaret A. Tempkin, FSA, EA, MAAA Actuary



SECTION I BOARD SUMMARY

This report presents the results of the June 30, 2008 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 2010;
- 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

This is the first year in which Cheiron has prepared the actuarial valuation for the State Retirement and Pension system of Maryland. The numbers displayed under the 2007 column headings are those produced by the Segal Group as contained in their revised report dated June 6, 2008.

Assets returns presented in this summary report have been calculated on a dollar-weighted basis, which recognizes the cashflows into and out of the fund over the course of the year; thus, the return rate of negative 5.25% for the fiscal year ended June 30, 2008 thus developed and presented throughout this summary report differs from the time-weighted return of negative 5.4% for the same period.

As a result of System's assets earning a **negative 5.25%**, considerably below the 7.75% assumption, the System has a total unfunded actuarial liability of \$10,740 million as of June 30, 2008. This compares to a \$9,257 million liability measured at the June 30, 2007 valuation. In relative terms, the overall System funding ratio of assets to liabilities fell from 80.36% in 2007, to 78.62% this year.



SECTION I BOARD SUMMARY

As a function of the asset smoothing method, the resulting impact from this year's investment performance was minimized. The actuarial, or smoothed, rate of return measured from this past year was a **positive 6.47%**, or approximately 1.3% less than our assumption. This investment loss results in an increase in the unfunded liability of \$504 million more than expected. Combined with a liability loss of \$565 million, the total System plan experienced a net loss of \$1.069 million.

The Teachers Combined System and the State portion of the Employees Combined System are funded using a corridor method. Under this funding approach, the State appropriation was fixed at the June 30, 2000 valuation rate for as long as the actuarial funded status of these Systems remains in a corridor of 90% funded to 110% funded (funded defined as the ratio of actuarial asset value divided by the actuarial accrued liability). Once the ratio falls outside of this corridor, the appropriated rate has been annually adjusted towards the underlying actuarially calculated rate. The results of this valuation report disclose that actuarially calculated rate which will be used for purposes of disclosing the Annual Required Contribution rate defined 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 rate where applicable.

Finally, while the results this year are not positive, we emphasize that financing of any retirement system is a long-term proposition, and that 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 sound. The continued applicability of the corridor method should be questioned, since its original intent was to maintain a certain level of funding. Now that the funded ratio has dropped below 100%, the corridor method continues to maintain the current funded level which may not be the appropriate goal.

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

Prior Year Experience

ASSETS (State and Municipal)

Plan assets for this Fund are measured on both a market value and an actuarial or smoothed value. The actuarial smoothing method explicitly recognizes each year's investment gain or loss over a 5-year period with the final actuarial value not less than 80% nor more than 110% of the market value of assets. In periods of high returns, this method significantly discounts the amount of asset gains above the assumed return of 7.75%. Conversely, in periods when the return falls short of the 7.75% assumption, the losses are similarly discounted. The primary advantage of this smoothing technique is contribution stability.

For the plan year ending June 30, 2008, the dollar-weighted market returns were a **negative** 5.25%, however the smoothed assets returned a **positive** 6.47%. This resulted in the Fund experiencing an investment loss of \$5,073 million using the market value. The actuarial or



SECTION I BOARD SUMMARY

smoothed basis produced a loss of \$504 million. The specific changes between the prior year amounts and this year's are presented below.

Item (In Millions)	Market Value		Actu	arial Value
June 30, 2007 Value	\$	39,445	\$	37,887
Employer Contributions		1,048		1,048
Member Contributions		420		420
Benefit Payments		(2,253)		(2,253)
Expected Investment Earnings (7.75%)		3,027		2 <u>,906</u>
Expected Value June 30, 2008	\$	41,687	\$	40,008
INVESTMENT GAIN (LOSS)		(5,073)		(504)
June 30, 2008 Value	\$	36,614	\$	39,504

LIABILITIES (State and Municipal)

Three different measures of liabilities are calculated for this fund: a present value of all future benefits (PVB), an actuarial accrued liability (AAL) under the entry age normal cost method (EAN), and an accounting liability or present value of accrued benefit (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 2008, the actuarial liabilities experienced an overall loss of \$565 million, which is 1.13% of the total actuarial liability being measured. The primary cause for liability experience were salary increases higher than expected, new hires who enter the valuation with an average of ½ year of service and more retirements than anticipated.

LIABILITIES	Total Value	Actuarial	Accounting (PVAB)
(In Millions)	(PVB)	(EAN)	
June 30, 2007	\$ 57,704	\$ 47,144	\$ 41,010
June 30, 2008	\$ 60,796	\$ 50,244	\$ 43,495

UNFUNDED LIABILITIES AND FUNDING RATIOS (State and Municipal)

The difference between assets and liabilities is the unfunded liability. This is measured in two ways: unfunded <u>actuarial</u> liabilities, which compare the actuarial liabilities to the actuarial asset value, and unfunded <u>accrued</u> 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, 2007 and June 30, 2008, as well as the corresponding funding ratios for each (assets divided by liabilities).



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	Actuarial	PVAB
6/30/2007 Net Surplus (Unfunded)	\$ (9,257)	\$ (1,565)
Funding Ratio	80.4%	96.2%
6/30/2008 Net Surplus (Unfunded)	\$ (10,740)	\$ (6,882)
Funding Ratio	78.6%	84.2%

CONTRIBUTIONS (State Pension)

In our report, 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, 2007 actuarial valuation. In summary, due to the net impact of investment losses and liability losses, the overall System contribution requirement, payable in FY 2010, has increased by **0.53%** of payroll. This analysis compares the corridor cost calculations which will be used to make appropriations. This approach produced payroll-weighted averages of **12.09%** at June 30, 2007, increasing to 12.62% as of June 30, 2008.

Rate as Percent of Covered Payroll	
June 30, 2007 State Rate	12.09%
Increase due to Plan Changes	0.00%
Increase due to Investment Loss	0.32%
Increase due to Liability Loss	0.42%
Decrease due to Other	(0.21%)
June 30, 2008 State Rate	12.62%

MEMBERSHIP (State and Municipal)

There are three types of plan participants, current active workers, previous terminations who retain a right to a deferred vested benefit, and participants in pay status. Below, we compare totals in each group between June 30, 2007 and 2008.

As shown below, there was an overall increase in participation during the year of 1.9%.

	6/30/2008	6/30/2007	Change
Active Participants	199,255	196,262	1.5%
Retired Members and Beneficiaries	112,422	108,355	3.8%
Vested Former Members	<u>51,795</u>	<u>52,027</u>	(0.4%)
TOTAL PARTICIPANTS	363,472	356,644	1.9%



SECTION I BOARD SUMMARY

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 2008, on the System's assets and liabilities, annual cash flows in an out of the fund, and the State contribution rate. Our comments on each follow.

Chart A: ASSET / LIABILITIES

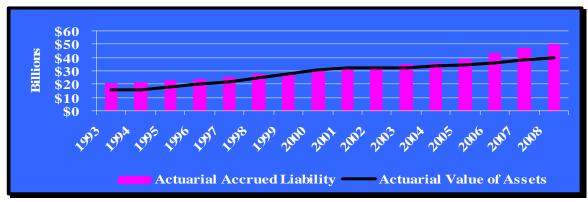


Chart B: CASH FLOWS

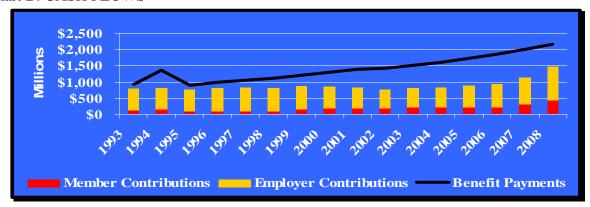
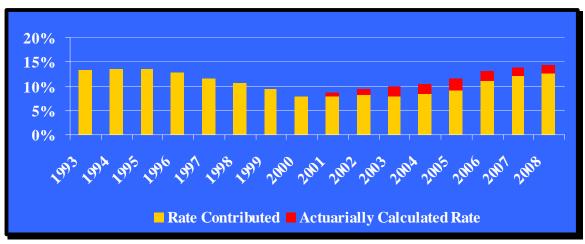


Chart C: STATE CONTRIBUTION RATE





SECTION I BOARD SUMMARY

Comments

Chart A presents a comparison of the actuarial value of assets with the actuarial accrued liability each year. Both values have risen steadily since the early 90's as the System has matured. The increase in liability relative to the asset increase in the last few years is the result of two key factors. These are: the benefit enhancements recognized in 2006, the changes in assumptions and funding method reflected in 2007.

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 increasing at a slower rate. The ECS contribution rate started increasing in FY 2006 and the TCS contribution rate began increasing in FY 2007 under the corridor method. Additional employee contributions will increase as the employee contribution rate increase under the new plan provisions.

Finally, Chart C reflects the State contribution rate which is used each year to determine the upcoming fiscal year State appropriation. For example, the rate shown for the 2008 valuation will apply to FY 2010. It shows the impact of the 1990'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. Plan amendments and assumption and method changes are not subject to the corridor method. The appropriation remained essentially level for a few years before increasing with the 2004 valuation. In the absence of favorable investment and/or demographic experience, the contribution rates can be expected to increase to the level indicated if the corridor method had not been adopted. Without the corridor method, the State contribution in FY 2010 would be 1.80% of payroll higher than the amount to be budgeted under the corridor method.



TOTAL SRPS (STATE AND MUNICIPAL) SUMMARY OF PRINCIPAL PLAN RESULTS							
Valuation As Of	·>	6/30/2008		6/30/2007	% change		
F	PARTI(CIPANT COUNTS	,				
Actives Members		199,255		196,262	1.5%		
Retired Members and Beneficiaries		112,422		108,355	3.8%		
Vested Former Members		51,795		52,027	(0.4%)		
Total	\$	363,472	\$	356,644	1.9%		
Covered Annual Salaries of Active Members Annual Retirement Allowances for	\$	10,542,806,018	\$	9,971,012,066	5.7%		
Retired Members and Beneficiaries	\$	2,176,157,705	\$	2,019,936,890	7.7%		
F	ASSETS & LIABILITIES						
Total Actuarial Liability	\$	50,244,047,207	\$	47,144,353,858	6.6%		
Assets for Valuation Purposes		39,504,284,202		37,886,935,596	4.3%		
Unfunded Actuarial Liability	\$	10,739,763,005	\$	9,257,418,262	16.0%		
Funding Ratio		78.6%		80.4%			
Present Value of Accrued Benefits	\$	43,495,415,094	\$	41,010,191,233	6.1%		
Market Value of Assets		36,613,710,023		39,444,781,232	(7.2%)		
Unfunded FASB Accrued Liability	\$	6,881,705,071	\$	1,565,410,001	339.6%		
Accrued Benefit Funding Ratio		84.2%		96.2%			
CONTRIBUTIONS AS	5 % OF	PAYROLL (STA	TE P(ORTION ONLY)			
		Fiscal Year 201	0	Fiscal Ye	ear 2009		
Normal Cost Contribution		6.91%		,	7.22%		
Unfunded Actuarial Liability Contribution		7.51%		<u></u>	<u>6.88%</u>		
Total State Contribution		14.42%		13	3.90%		
Certified Rate Using Corridor Method		12.62%		12	2.09%		



TEACHERS COMBINED SYSTEM SUMMARY OF PRINCIPAL PLAN RESULTS						
Valuation As Of>		6/30/2008	KES	6/30/2007	% change	
				0/30/2007	76 Change	
P	ARTIO	CIPANT COUNTS				
Actives Members		105,961		103,577	2.3%	
Retired Members and Beneficiaries		54,035		52,039	3.8%	
Vested Former Members		22,818		22,719	0.4%	
Total		182,814		178,335	2.5%	
Covered Annual Salaries of Active Members Annual Retirement Allowances for	\$	6,117,590,424	\$	5,709,765,331	7.1%	
Retired Members and Beneficiaries	\$	1,302,456,748	\$	1,213,307,292	7.3%	
AS	SSETS	S & LIABILITIES				
Total Actuarial Liability	\$	29,868,704,554	\$	28,122,547,855	6.2%	
Assets for Valuation Purposes		23,784,403,753		22,814,759,559	4.3%	
Unfunded Actuarial Liability	\$	6,084,300,801	\$	5,307,815,296	14.6%	
Funding Ratio		79.6%		81.1%		
Present Value of Accrued Benefits	\$	25,454,365,719	\$	24,167,855,817	5.3%	
Market Value of Assets		22,058,961,997		23,777,998,866	(7.2%)	
Unfunded FASB Accrued Liability	\$	3,395,403,722	\$	389,856,951	770.9%	
Accrued Benefit Funding Ratio		86.7%		98.4%		
CONTRIE	BUTIC	ONS AS % OF PA	YRO	LL		
		Fiscal Year 2010	0	Fiscal Y	ear 2009	
Normal Cost Contribution		6.85%			7.32%	
Unfunded Actuarial Liability Contribution		7.20%		_	<u>6.63%</u>	
Total State Contribution		14.05%		1	3.95%	
Certified Rate Using Corridor Method		13.15%		1	2.92%	



EMPLOYEES COMBINED SYSTEM (STATE & LOCAL) SUMMARY OF PRINCIPAL PLAN RESULTS						
SUMMARY Valuation As Of>		6/30/2008	RESU	6/30/2007	% change	
PARTICIPANT COUNTS						
Actives Members		89,202		88,699	0.6%	
Retired Members and Beneficiaries		54,920		53,039	3.5%	
Vested Former Members		28,725		29,107	(1.3%)	
Total		172,847		170,845	1.2%	
Covered Annual Salaries of Active Members Annual Retirement Allowances for	\$	4,165,012,635	\$	4,016,220,721	3.7%	
Retired Members and Beneficiaries	\$	734,343,434	\$	678,646,762	8.2%	
A	SSETS	S & LIABILITIES				
Total Actuarial Liability	\$	17,609,769,165	\$	16,385,823,014	7.5%	
Assets for Valuation Purposes		13,599,717,089		13,026,321,045	4.4%	
Unfunded Actuarial Liability	\$	4,010,052,076	\$	3,359,501,969	19.4%	
Funding Ratio		77.2%		79.5%		
Present Value of Accrued Benefits	\$	15,371,268,908	\$	14,307,265,472	7.4%	
Market Value of Assets		12,617,280,261		13,579,541,190	(7.1%)	
Unfunded FASB Accrued Liability	\$	2,753,988,647	\$	727,724,282	278.4%	
Accrued Benefit Funding Ratio		82.1%		94.9%		
CONTRIBUTIONS AS	% OF	PAYROLL (STA	ГЕ Р(ORTION ONLY)		
		Fiscal Year 2010	0	Fiscal Y	ear 2009	
Normal Cost Contribution		6.02%			6.07%	
Unfunded Actuarial Liability Contribution		7.59%		<u>-</u> -	<u>6.35%</u>	
Total State Contribution		13.61%		1	2.42%	
Certified Rate Using Corridor Method		9.93%			9.01%	



STATE POLICE SUMMARY OF PRINCIPAL PLAN RESULTS						
Valuation As Of>		6/30/2008	, ILLS	6/30/2007	% change	
	PAR'	TICIPANT COUNT	S			
Actives Members		1,426		1,416	0.7%	
Retired Members and Beneficiaries		2,149		2,063	4.2%	
Vested Former Members		61		54	13.0%	
Total		3,636		3,533	2.9%	
Covered Annual Salaries of Active Members Annual Retirement Allowances for	\$	86,464,247	\$	83,190,937	3.9%	
Retired Members and Beneficiaries	\$	87,639,631	\$	81,578,853	7.4%	
	ASSI	ETS & LIABILITIE	S			
Total Actuarial Liability	\$	1,601,575,853	\$	1,516,934,761	5.6%	
Assets for Valuation Purposes	_	1,343,208,496		1,334,374,954	0.7%	
Unfunded Actuarial Liability	\$	258,367,357	\$	182,559,807	41.5%	
Funding Ratio		83.9%		88.0%		
Present Value of Accrued Benefits	\$	1,571,642,305	\$	1,483,497,639	5.9%	
Market Value of Assets		1,222,164,139		1,354,584,328	(9.8%)	
Unfunded FASB Accrued Liability	\$	349,478,166	\$	128,913,311	171.1%	
Accrued Benefit Funding Ratio		77.8%		91.3%		
CONT	RIBU'	ΓΙΟΝS AS % OF PA	AYROI	CL		
		Fiscal Year 2010)	Fiscal Ye	ear 2009	
Normal Cost Contribution		24.02%		23	3.23%	
Unfunded Actuarial Liability Contribution		6.77%		_	2.04%	
Total State Contribution		30.79%		2:	5.27%	



JUDGES AND SURVIVING SPOUSES SUMMARY OF PRINCIPAL PLAN RESULTS					
Valuation As Of	·>	6/30/2008		6/30/2007	% change
P	ARTI(CIPANT COUNTS	S		
Actives Members		286		297	(3.7%)
Retired Members and Beneficiaries		342		335	2.1%
Vested Former Members		8		13	(38.5%)
Total		636		645	(1.4%)
Covered Annual Salaries of Active Members Annual Retirement Allowances for	\$	37,943,327	\$	37,638,491	0.8%
Retired Members and Beneficiaries	\$	23,135,728	\$	21,264,343	8.8%
A	SSETS	S & LIABILITIES	S		
Total Actuarial Liability	\$	406,781,743	\$	371,987,374	9.4%
Assets for Valuation Purposes		306,716,176		293,051,654	4.7%
Unfunded Actuarial Liability	\$	100,065,567	\$	78,935,720	26.8%
Funding Ratio		75.4%		78.8%	
Present Value of Accrued Benefits	\$	392,392,720	\$	363,900,519	7.8%
Market Value of Assets		283,759,913		302,939,369	(6.3%)
Unfunded FASB Accrued Liability	\$	108,632,807	\$	60,961,150	78.2%
Accrued Benefit Funding Ratio		72.3%		83.2%	
CONTRI	BUTIC	ONS AS % OF PA	YRO)LL	
		Fiscal Year 201	10	Fiscal Y	ear 2009
Normal Cost Contribution		28.54%		2	27.81%
Unfunded Actuarial Liability Contribution		20.35%		1	<u>16.28%</u>
Total State Contribution		48.89%		2	14.09%



LAW ENFORCEMENT OFFICERS (STATE & MUNICIPAL) SUMMARY OF PRINCIPAL PLAN RESULTS					
Valuation As Of		6/30/2008		6/30/2007	% change
P.	ARTIC	CIPANT COUNTS	S		
Actives Members		2,327		2,217	5.0%
Retired Members and Beneficiaries		958		863	11.0%
Vested Former Members		174		127	37.0%
Total		3,459		3,207	7.9%
Covered Annual Salaries of Active Members Annual Retirement Allowances for	\$	133,445,391	\$	122,015,164	9.4%
Retired Members and Beneficiaries	\$	28,250,389	\$	24,853,311	13.7%
A	SSETS	S & LIABILITIES	S		
Total Actuarial Liability	\$	748,005,298	\$	738,548,856	1.3%
Assets for Valuation Purposes		465,386,285		414,152,846	12.4%
Unfunded Actuarial Liability	\$	282,619,013	\$	324,396,010	(12.9%)
Funding Ratio		62.2%		56.1%	
Present Value of Accrued Benefits	\$	697,424,997	\$	680,135,670	2.5%
Market Value of Assets		426,877,468		425,110,452	0.4%
Unfunded FASB Accrued Liability	\$	270,547,529	\$	255,025,218	6.1%
Accrued Benefit Funding Ratio		61.2%		62.5%	
CONTRIBUTIONS AS	% OF	PAYROLL (STA	TE I	PORTION ONLY)
		Fiscal Year 201	0	Fiscal Y	ear 2009
Normal Cost Contribution		17.10%		1	6.91%
Unfunded Actuarial Liability Contribution		<u>21.53%</u>		<u>2</u>	<u>2.99%</u>
Total State Contribution		38.63%		39	9.90%



		AND POLICE SY INCIPAL PLAN										
Valuation As Of>		6/30/2008		6/30/2007	% change							
PARTICIPANT COUNTS												
Actives Members		53		56	(5.4%)							
Retired Members and Beneficiaries		18		16	12.5%							
Vested Former Members		9		7	28.6%							
Total		80		79	1.3%							
Covered Annual Salaries of Active Members Annual Retirement Allowances for Retired	\$	2,349,994	\$	2,181,422	7.7%							
Members and Beneficiaries	\$	331,775	\$	286,329	15.9%							
ASSETS & LIABILITIES												
Total Actuarial Liability	\$	9,210,594	\$	8,484,998	8.6%							
Assets for Valuation Purposes		4,852,403		4,275,538	13.5%							
Unfunded Actuarial Liability	\$	4,358,191	\$	4,209,460	3.5%							
Funding Ratio		52.7%		50.4%								
Present Value of Accrued Benefits	\$	8,320,445	\$	7,536,116	10.4%							
Market Value of Assets		4,666,245		4,607,027	1.3%							
Unfunded FASB Accrued Liability	\$	3,654,200	\$	2,929,089	24.8%							
Accrued Benefit Funding Ratio		56.1%		61.1%								
CONTRIBU	TIO	NS AS % OF PAY	YRO	LL								
		Fiscal Year 201	0	Fiscal Y	ear 2009							
Normal Cost Contribution		N/A%			8.46%							
Unfunded Actuarial Liability Contribution		N/A%		<u>1</u>	<u>1.57%</u>							
Total State Contribution		N/A%		2	0.03%							



SECTION II ASSETS

The System uses and discloses two different asset measurements which are presented in this Section of the report: market value and actuarial value of assets. The market value represents, as of the valuation date, the value of the assets if they were liquidated on that date. The actuarial value of assets is a value that attempts to smooth annual investment return performance over multiple years to reduce annual investment volatility, and is used in determining contribution rates for the three participating employer plans.

On the following pages we present detailed information on System assets:

- Disclosure of assets at June 30, 2008,
- Statement of cash flows during the year,
- Development of the actuarial value of assets,
- Disclosure of investment performance for the year.



SECTION II ASSETS

A. Disclosure

The market value of assets represents a "snap-shot" value as of the last day of the fiscal year that provides the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace. Because these fluctuations would cause volatility in employer contributions, an actuarial value of assets is developed. Table II-1 below discloses the market value by asset class of SRPS gross assets on June 30, 2008. Table II-2 below discloses the change in assets for each plan.

	Table II-1 STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND Change in Assets												
	Teachers Retirement System	Employees Retirement System	Judges Retirement System	State Police Retirement System	LEOPS	Local Fire & Police System	Total						
Market:													
Equity Fund	\$ 13,944,346,262	\$ 7,952,555,873	\$ 171,099,567	\$ 765,707,677	\$ 266,300,629	\$ 2,362,507	\$ 23,102,372,515						
Fixed Fund	6,656,635,247	3,783,553,356	81,673,894	365,849,743	127,049,685	1,127,736	11,015,889,661						
Real Estate Fund	1,420,002,664	811,393,095	17,422,234	78,086,186	27,092,383	240,563	2,354,237,125						
Other Assets	37,977,824	69,777,937	13,564,218	12,520,533	6,434,771	935,439	141,210,722						
Total Market	\$ 22,058,961,997	\$ 12,617,280,261	\$ 283,759,913	\$ 1,222,164,139	\$ 426,877,468	\$ 4,666,245	\$ 36,613,710,023						



SECTION II ASSETS

B. System Cash Flows for the Year June 30, 2007 through June 30, 2008

	CT A TE		Table II-2 ND PENSION SYS	STEEN.	A OE MADVI	AND		
	SIAIE		IND PENSION SYS Change in Assets) I EN	I OF MARYL	AND		
	Teachers	Employees (State)	State Police		Judges	LEOPS (State)	Local Fire & Police	Total State
State Sponsored Plans Market Value of Assets as of 6/30/2007 Employer Contributions Member Contributions Investment Returns Disbursements from the Trust Market Value of Assets as of 6/30/2008	\$ 23,777,998,866 622,314,072 245,733,840 (1,235,434,084) (1,351,650,697) \$ 22,058,961,997	\$ 10,768,438,222 263,511,298 128,529,366 (555,791,997) (681,605,677) \$ 9,923,081,212	\$ 1,354,584,328 13,282,360 6,751,139 (67,731,370) (84,722,318) \$ 1,222,164,139	\$	302,939,369 16,661,043 1,652,097 (14,659,153) (22,833,443) 283,759,913	\$ 363,083,858 34,355,141 3,393,389 (20,885,090) (23,274,546) \$ 356,672,752		\$ 36,567,044,643 950,123,914 386,059,831 (1,894,501,694) (2,164,086,681) \$ 33,844,640,013
Manistral Diagram		Employees (Municipal)				LEOPS (Municipal)	Local Fire & Police (Municipal)	Total Municipal
Municipal Plans Market Value of Assets as of 6/30/2007 Employer Contributions Member Contributions Investment Returns Disbursements from the Trust Market Value of Assets as of 6/30/2008		\$ 2,811,102,968 84,971,658 32,732,682 (148,368,192) (86,240,067) \$ 2,694,199,049				\$ 62,026,594 12,293,290 1,668,137 (3,512,736) (2,270,569) \$ 70,204,716	\$ 4,607,027 574,437 0 (177,426) (337,793) \$ 4,666,245	\$ 2,877,736,589 97,839,385 34,400,819 (152,058,354) (88,848,429) \$ 2,769,070,010
Total CDBC	Teachers	Employees (State)	State Police		Judges	LEOPS (State)	Local Fire & Police	Total State
Total SRPS Market Value of Assets as of 6/30/2007 Employer Contributions Member Contributions Investment Returns Disbursements from the Trust	\$ 23,777,998,866 622,314,072 245,733,840 (1,235,434,084) (1,351,650,697)	\$ 13,579,541,190 348,482,956 161,262,048 (704,160,189) (767,845,744)	\$ 1,354,584,328 13,282,360 6,751,139 (67,731,370) (84,722,318)	\$	302,939,369 16,661,043 1,652,097 (14,659,153) (22,833,443)	\$ 425,110,452 46,648,431 5,061,526 (24,397,826) (25,545,115)	\$ 4,607,027 574,437 0 (177,426) (337,793)	\$ 39,444,781,232 1,047,963,299 420,460,650 (2,046,560,048) (2,252,935,110)



SECTION II ASSETS

C. Actuarial Value of Assets

To determine on-going funding requirements, most pension funds utilize an actuarial value of assets that differs from the market value of assets. The actuarial value of assets represents an asset value based on averaging or smoothing year-to-year market value returns for purposes of reducing the resulting volatility on contributions.

The actuarial value is calculated by adjusting the market value to remove 80% of the prior year's investment gain or loss and 60% of the gain or loss from two years ago. The gain or loss is measured by comparing actual returns on a market value basis to those expected vs. the 7.75 % assumption.



SECTION II ASSETS

Table II-3 STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND Actuarial Value of Assets State Sponsored Plans

		Employees				LEOPS	
	Teachers	(State)	State Police		Judges	(State)	Total State
1. Market Value of Assets as of 6/30/2007	\$ 23,777,998,866	\$ 10,768,438,222	\$ 1,354,584,328	\$	302,939,369	\$ 363,083,858	\$ 36,567,044,643
Net of contributions and disbursements	(483,602,785)	(289,565,013)	(64,688,819)		(4,520,303)	14,473,984	(827,902,936)
3. Expected interest at 7.75%	1,824,404,961	823,542,681	102,520,365		23,305,908	28,689,401	2,802,463,316
Expected market value of assets							
as of 6/30/2008	25,118,801,042	11,302,415,890	1,392,415,874		321,724,974	406,247,243	38,541,605,023
Actual market value of assets							
as of 6/30/2008	22,058,961,997	9,923,081,212	1,222,164,139		283,759,913	356,672,752	33,844,640,013
6. Investment Gain/(Loss) from							
FY 2008 (5)-(4)	(3,059,839,045)	(1,379,334,678)	(170,251,735)		(37,965,061)	(49,574,491)	(4,696,965,010)
Amount to be excluded in Actuarial							
Value (6) x 80%	(2,447,871,236)	(1,103,467,742)	(136,201,388)		(30,372,049)	(39,659,593)	(3,757,572,008)
8. Investment Gain/(Loss) from FY 2007	1,204,049,134	545,217,700	25,261,718		12,359,643	10,899,737	1,797,787,932
Amount to be excluded in Actuarial							
Value (8) x 60%	722,429,480	327,130,620	15,157,031		7,415,786	6,539,842	1,078,672,759
Preliminary Actuarial Value of Assets							
as of 6/30/2008	23,784,403,753	10,699,418,334	1,343,208,496		306,716,176	389,792,503	36,523,539,262
11. Adjustment to Remain within 80%/120%							
of Market Value	0	0	0	-	0	0	0
13. Final Actuarial Value of Assets							
as of 6/30/2008	\$ 23,784,403,753	\$ 10,699,418,334	\$ 1,343,208,496	\$	306,716,176	\$ 389,792,503	\$ 36,523,539,262



SECTION II ASSETS

Table II-3 STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND Actuarial Value of Assets Municipal Plans

		Employees (Municipal)	LEOPS Municipal)	Local re & Police Municipal)	Т	otal Municipal
1.	Market Value of Assets as of 6/30/2007	\$ 2,811,102,968	\$ 62,026,594	\$ 4,607,027	\$	2,877,736,589
2.	Net of contributions and disbursements	31,464,273	11,690,858	236,644		43,391,775
3.	Expected interest at 7.75%	219,056,971	5,251,629	366,043		224,674,643
4.	Expected market value of assets					
	as of 6/30/2008	3,061,624,212	78,969,081	5,209,714		3,145,803,007
5.	Actual market value of assets					
	as of 6/30/2008	2,694,199,049	70,204,716	4,666,245		2,769,070,010
6.	Investment Gain/(Loss) from					
	FY 2008 (5)-(4)	(367,425,163)	(8,764,365)	(543,469)		(376,732,997)
7.	Amount to be excluded in Actuarial					
	Value (6) x 80%	(293,940,130)	(7,011,492)	(434,775)		(301,386,397)
8.	Investment Gain/(Loss) from FY 2007	146,400,707	2,704,044	414,361		149,519,112
9.	Amount to be excluded in Actuarial					
	Value (8) x 60%	87,840,424	1,622,426	248,617		89,711,467
10.	Preliminary Actuarial Value of					
	Assets as of 6/30/2008	2,900,298,755	75,593,782	4,852,403		2,980,744,940
11.	Adjustment to Remain within					
	80%/120% of Market Value	 0	 0	 0		0
12	Final Actuarial Value of Assets					
	as of 6/30/2008	\$ 2,900,298,755	\$ 75,593,782	\$ 4,852,403	\$	2,980,744,940



SECTION II ASSETS

Table II-3 STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND Actuarial Value of Assets Total SRPS

				Total SIXI S					
		Teachers	Employees (State)	State Police	Judges	LEOPS (State)	Fi	Local ire & Police	Total State
1.	Market Value of Assets as of 6/30/2007	\$ 23,777,998,866	\$ 13,579,541,190	\$ 1,354,584,328	\$ 302,939,369	\$ 425,110,452	\$	4,607,027	\$ 39,444,781,232
2.	Net of contributions and disbursements	(483,602,785)	(258,100,740)	(64,688,819)	(4,520,303)	26,164,842		236,644	(784,511,161)
3.	Expected interest at 7.75%	1,824,404,961	1,042,599,652	102,520,365	23,305,908	33,941,030		366,043	3,027,137,959
4.	Expected market value of assets								
	as of 6/30/2008	25,118,801,042	14,364,040,102	1,392,415,874	321,724,974	485,216,324		5,209,714	41,687,408,030
5.	Actual market value of assets								
	as of 6/30/2008	22,058,961,997	12,617,280,261	1,222,164,139	283,759,913	426,877,468		4,666,245	36,613,710,023
6.	Investment Gain/(Loss) from								
	FY 2008 (5)-(4)	(3,059,839,045)	(1,746,759,841)	(170,251,735)	(37,965,061)	(58,338,856)		(543,469)	(5,073,698,007)
7.	Amount to be excluded in Actuarial								
	Value (6) x 80%	(2,447,871,236)	(1,397,407,872)	(136,201,388)	(30,372,049)	(46,671,085)		(543,469)	(4,059,067,099)
8.	Investment Gain/(Loss) from FY 2007	1,204,049,134	691,618,407	25,261,718	12,359,643	13,603,781		414,361	1,947,307,044
9.	Amount to be excluded in Actuarial								
	Value (8) x 60%	722,429,480	414,971,044	15,157,031	7,415,786	8,162,268		248,617	1,168,384,226
10.	Preliminary Actuarial Value of Assets								
	as of 6/30/2008	23,784,403,753	13,599,717,089	1,343,208,496	306,716,176	465,386,285		4,852,403	39,504,284,202
11.	Adjustment to Remain within								
	80%/120% of Market Value	0	0	0	 0	 0		0	0
12.	Final Actuarial Value of Assets								
	as of 6/30/2008	\$ 23,784,403,753	\$ 13,599,717,089	\$ 1,343,208,496	\$ 306,716,176	\$ 465,386,285	\$	4,852,403	\$ 39,504,284,202



SECTION II ASSETS

D. Investment Performance

The dollar-weighted return on market assets was negative 5.24% for the year ending June 30, 2008. This is compared to an assumed return of 7.75%.

On an actuarial value of assets basis, the return for FY 2008 was 6.47%. This return produced an overall investment loss of \$504 million for the year ending June 30, 2008.



SECTION III LIABILITIES

In this section, we present detailed information on liabilities for the State Retirement and Pension Systems of Maryland.

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the purpose for which the figures are ultimately used.

- **Present Value of all Future Benefits:** Used for measuring all future State Retirement System obligations, represents the amount of money needed today to fully pay off all benefits of State Retirement System both earned as of the valuation date and those to be earned in the future by current plan participants, under the current Plan provisions.
- Actuarial Liability-Entry Age Normal (EAN): Used for determining employer contributions and GASB accounting disclosures. This liability is calculated taking the present value of all future benefits and subtracting the present value of future member contributions and future employer normal costs as determined under the EAN actuarial funding method.
- **Present Value of Accrued Benefits:** Disclosed in Section V of this report for accounting statement purposes (FASB 35). This liability represents the present value of future benefits payable to all plan participants if the plan were terminated as of the valuation date, and future accruals and contributions stopped.

Table III-1 on the following page discloses the first three of these liabilities for the current year valuation. Subtracting the actuarial value of assets from the actuarial liability results in a net surplus or an unfunded actuarial liability (UAL).



SECTION III LIABILITIES

Table III-1 STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND Plan Liabilities State Sponsored Plans

	Teachers	Employees (State)	State Police	Judges	LEOPS (State)	Total State
Present Value of Benefits for:						
Active Members	\$ 20,447,769,006	\$ 9,328,304,111	\$ 553,299,192	\$ 230,433,259	\$ 351,122,289	\$ 30,910,927,857
Inactive Members	14,649,903	6,625,901	162,735	0	211,139	21,649,678
Terminated Vested Members	542,246,873	510,179,483	6,651,097	2,090,167	11,617,481	1,072,785,101
Retirees, Beneficiaries & Disableds	15,607,093,599	7,040,978,021	1,234,993,433	252,792,048	377,317,729	24,513,174,830
Total	\$ 36,611,759,381	\$ 16,886,087,516	\$ 1,795,106,457	\$ 485,315,474	\$ 740,268,638	\$ 56,518,537,466
Entry Age Actuarial Accrued Liability						
for:						
Active Members	\$ 13,704,714,179	\$ 6,779,677,265	\$ 359,768,588	\$ 151,899,528	\$ 222,220,222	\$ 21,218,279,782
Inactive Members	14,649,903	6,625,901	162,735	0	211,139	21,649,678
Terminated Vested Members	542,246,873	510,179,483	6,651,097	2,090,167	11,617,481	1,072,785,101
Retirees, Beneficiaries & Disableds	15,607,093,599	7,040,978,021	1,234,993,433	252,792,048	377,317,729	24,513,174,830
Total	\$ 29,868,704,554	\$ 14,337,460,670	\$ 1,601,575,853	\$ 406,781,743	\$ 611,366,571	\$ 46,825,889,391
Actuarial Value of Assets	\$ 23,784,403,753	\$ 10,699,418,334	\$ 1,343,208,496	\$ 306,716,176	\$ 389,792,503	\$ 36,523,539,262
Unfunded Actuarial Liability	\$ 6,084,300,801	\$ 3,638,042,336	\$ 258,367,357	\$ 100,065,567	\$ 221,574,068	\$ 10,302,350,129
Funded Percent	79.6%	74.6%	83.9%	75.4%	63.8%	78.0%
Present Value of Accrued Benefits						
Active Members	\$ 9,290,375,344	\$ 5,017,220,710	\$ 329,835,040	\$ 137,510,505	\$ 184,467,395	\$ 14,959,408,994
Inactive Members	14,649,903	6,625,901	162,735	0	211,139	21,649,678
Terminated Vested Members	542,246,873	510,179,483	6,651,097	2,090,167	11,617,481	1,072,785,101
Retirees, Beneficiaries & Disableds	15,607,093,599	7,040,978,021	1,234,993,433	252,792,048	377,317,729	24,513,174,830
Total	\$ 25,454,365,719	\$ 12,575,004,115	\$ 1,571,642,305	\$ 392,392,720	\$ 573,613,744	\$ 40,567,018,603



SECTION III LIABILITIES

Table III-1 STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND Plan Liabilities Municipals

		Employees (Municipal)		LEOPS (Municipal)		Local ire & Police Municipal)	Т	otal Municipal
Present Value of Benefits for: Active Members	\$	2,488,205,955	\$	165,643,306	\$	7,266,926	\$	2,661,116,187
Inactive Members		1,918,058		78,793		0		1,996,851
Terminated Vested Members		101,824,701		1,668,073		63,976		103,556,750
Retirees, Beneficiaries & Disableds	_	1,458,705,545		48,339,034		4,395,639	_	1,511,440,218
Total	\$	4,050,654,259	\$	215,729,206	\$	11,726,541	\$	4,278,110,006
Entry Age Actuarial Accrued Liability for:								
Active Members	\$	1,709,860,191	\$	86,552,827	\$	4,750,979	\$	1,801,163,997
Inactive Members		1,918,058		78,793		0		1,996,851
Terminated Vested Members		101,824,701		1,668,073		63,976		103,556,750
Retirees, Beneficiaries & Disableds		1,458,705,545		48,339,034		4,395,639	_	1,511,440,218
Total	\$	3,272,308,495	\$	136,638,727	\$	9,210,594	\$	3,418,157,816
Actuarial Value of Assets	\$	2,900,298,755	\$	75,593,782	\$	4,852,403	\$	2,980,744,940
Unfunded Actuarial Liability	\$	372,009,740	\$	61,044,945	\$	4,358,191	\$	437,412,876
Funded Percent		88.6%		55.3%		52.7%		87.2%
Present Value of Accrued Benefits								
Active Members	\$	1,233,816,489	\$	73,725,353	\$	3,860,830	\$	1,311,402,672
Inactive Members		1,918,058		78,793		0		1,996,851
Terminated Vested Members		101,824,701		1,668,073		63,976		103,556,750
Retirees, Beneficiaries & Disableds		1,458,705,545		48,339,034		4,395,639	_	1,511,440,218
Total	\$	2,796,264,793	\$	123,811,253	\$	8,320,445	\$	2,928,396,491



SECTION III LIABILITIES

Table III-1 STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND Plan Liabilities Total SRPS

			Gr. t. D. H		r nong	Local	T / LCDDC
	Teachers	Employees	State Police	Judges	LEOPS	Fire & Police	Total SRPS
Present Value of Benefits for:							
Active Members	\$ 20,447,769,006	\$ 11,816,510,066	\$ 553,299,192	\$ 230,433,259	\$ 516,765,595	\$ 7,266,926	\$ 33,572,044,044
Inactive Members	14,649,903	8,543,959	162,735	0	289,932	0	23,646,529
Terminated Vested Members	542,246,873	612,004,184	6,651,097	2,090,167	13,285,554	63,976	1,176,341,851
Retirees, Beneficiaries & Disableds	15,607,093,599	8,499,683,566	1,234,993,433	252,792,048	425,656,763	4,395,639	26,024,615,047
Total	\$ 36,611,759,381	\$ 20,936,741,775	\$ 1,795,106,457	\$ 485,315,474	\$ 955,997,844	\$ 11,726,541	\$ 60,796,647,472
Entry Age Actuarial Accrued Liability							
for:							
Active Members	\$ 13,704,714,179	\$ 8,489,537,456	\$ 359,768,588	\$ 151,899,528	\$ 308,773,049	\$ 4,750,979	\$ 23,019,443,779
Inactive Members	14,649,903	8,543,959	162,735	0	289,932	0	23,646,529
Terminated Vested Members	542,246,873	612,004,184	6,651,097	2,090,167	13,285,554	63,976	1,176,341,851
Retirees, Beneficiaries & Disableds	15,607,093,599	8,499,683,566	1,234,993,433	252,792,048	425,656,763	4,395,639	26,024,615,048
Total	\$ 29,868,704,554	\$ 17,609,769,165	\$ 1,601,575,853	\$ 406,781,743	\$ 748,005,298	\$ 9,210,594	\$ 50,244,047,207
Actuarial Value of Assets	\$ 23,784,403,753	\$ 13,599,717,089	\$ 1,343,208,496	\$ 306,716,176	\$ 465,386,285	\$ 4,852,403	\$ 39,504,284,202
Unfunded Actuarial Liability	\$ 6,084,300,801	\$ 4,010,052,076	\$ 258,367,357	\$ 100,065,567	\$ 282,619,013	\$ 4,358,191	\$ 10,739,763,005
Funded Percent	79.6%	77.2%	83.9%	75.4%	62.2%	52.7%	78.6%
Present Value of Accrued Benefits							
Active Members	\$ 9,290,375,344	\$ 6,251,037,199	\$ 329,835,040	\$ 137,510,505	\$ 258,192,748	\$ 3,860,830	\$ 16,270,811,666
Inactive Members	14,649,903	8,543,959	162,735	0	289,932	0	23,646,529
Terminated Vested Members	542,246,873	612,004,184	6,651,097	2,090,167	13,285,554	63,976	1,176,341,851
Retirees, Beneficiaries & Disableds	15,607,093,599	8,499,683,566	1,234,993,433	252,792,048	425,656,763	4,395,639	26,024,615,048
Total	\$ 25,454,365,719	\$ 15,371,268,908	\$ 1,571,642,305	\$ 392,392,720	\$ 697,424,997	\$ 8,320,445	\$ 43,495,415,094



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.

For this Fund, the funding scheme employed is the **Individual Entry Age Normal 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

State Contribution Rate	FY 10	FY 09
Entry Age Normal Cost	6.91%	7.22%
Amortization Payment	<u>7.51%</u>	<u>6.68%</u>
Actuarially Determined Contribution	14.42%	13.90%
Corridor Contribution Rate	12.62%	12.09%

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



SECTION IV CONTRIBUTIONS

TABLE IV-1 STATE CONTRIBUTION RATES FISCAL YEAR 2010 – 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	6.91%	6.85%	6.02%	24.02%	28.54%	17.10%
Unfunded Actuarial Liability Contribution as Percent of Payroll	<u>7.51</u>	7.20	7.59	6.77	<u>20.35</u>	<u>21.53</u>
Total Contributions as Percent of Payroll	14.42%	14.05%	13.61%	30.79%	48.89%	38.63%
Total Corridor Contribution Rate	<u>12.62%</u>	<u>13.15%</u>	<u>9.93%</u>	N/A	N/A	N/A



SECTION IV CONTRIBUTIONS

TABLE IV-2 TOTAL STATE CONTRIBUTION RATES BY SYSTEM JUNE 30, 1989 – JUNE 30, 2008

Valuation Date June 30,	Fiscal Year	Total Systems	Teachers' Combined	Employees' Combined	State Police	Judges	LEOPS	Local Fire and Police
2008	2010	12.62%	13.15%	9.93%	30.79%	48.89%	38.63%	N/A%
2007	2009	12.09	12.92	9.01	25.27	44.09	39.90	20.03
2006	2008	11.10	11.60	8.86	15.44	44.12	41.74	21.58
2005	2007	9.18	9.71	6.83	13.83	42.43	40.60	19.40
2004	2006	8.46	9.35	5.76	8.22	41.12	38.47	20.44
2003	2005	7.97	9.35	4.73	0.00	36.72	31.73	20.44
2002	2004	7.98	9.35	4.73	7.58	43.74	35.13	14.31
2001	2003	7.98	9.35	4.73	5.78	43.92	36.10	14.78
2000	2002	7.98	9.35	4.73	5.83	42.66	32.41	14.85
1999	2001	9.31	10.95	5.71	8.44	46.75	23.38	15.00
1998	2000	10.70	12.54	7.15	1.26	48.18	22.96	14.99
1997	1999	11.67	13.99	7.13	10.91	52.12	25.60	16.42
1996	1998	12.90	15.48	8.21	13.08	52.49	26.27	16.29
1995	1997	13.50	16.09	8.54	17.65	52.56	35.15	16.19
1994	1996	13.61	16.22	8.61	19.13	52.51	35.68	16.31
1993	1995	13.43	15.92	8.70	19.36	52.84	34.07	16.17
1992	1994	13.40	15.76	8.70	25.74	54.25	32.56	15.85
1991	1993	13.89	16.31	9.15	28.72	54.98	33.58	15.43
1990	1992	13.83	16.44	8.94	26.79	56.87	N/A	N/A
1989	1991	14.00	16.58	9.19	28.64	56.26	N/A	N/A

Rates from 2001 forward reflect the Corridor Method funding for Teacher, Employees and Total System.



SECTION IV CONTRIBUTIONS

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND (State Portion) Development of Contribution					
			Actuarial Valuation Performed June 30, 2008 June 30, 2007 (for FY 2010) (for FY 2009)		
1.	Present Value of Projected Benefits Attributable to: a. Retired and Disabled Members and Beneficiaries b. Terminated Vested Members c. Active Members d. Total Present Value	_	24,513,174,830 1,094,434,779 30,910,927,857 56,518,537,466	_	23,129,599,798 1,132,271,476 29,425,497,599 53,687,368,873
2.	Less Present Value Total Future Normal Cost		9,692,648,075		9,719,056,397
3.	Actuarial Accrued Liability (1d – 2)	\$	46,825,889,391	\$	43,968,312,476
4.	Less Actuarial Value of Assets		36,523,539,262	_	35,128,814,297
5.	Unfunded Actuarial Accrued Liability (UAL) (3 - 4)	\$	10,302,350,129	\$	8,839,498,179
6.	Less Special Liability Payments		52,482,987		54,942,131
7.	Less UAL Layers Already Recognized	_	8,845,539,783	_	6,755,966,30 <u>6</u>
8.	New UAL Layer for 25 Year Amortization (5 - 6 -7)	\$	1,404,327,359	\$	2,028,589,722
9.	Amortization Payment for New Layer		90,641,306		130,933,875
10.	Amortization of Earlier UAL Layers	_	618,011,866	_	466,179,042
11.	Amortization Payments at Mid-Year (9+10)	\$	708,653,173	\$	597,112,917
12.	Employer Normal Cost as of Beginning of Year	\$	628,493,849	\$	621,472,039
13.	Employer Normal Cost at Mid-Year	\$	652,393,569	\$	645,104,741
14.	Total covered Payroll	\$	9,438,452,173	\$	8,935,149,085
15.	Employer Normal Cost Rate (13/14)		6.91%		7.22%
16.	UAL Amortization Rate (11/14)		7.51%		6.68%
17.	Total Employer Rate (before Corridor) (15+16)		14.42%		13.90%
18.	Total Employer Rate after Corridor		12.62%		12.09%

Move 20% of the way between last year's corridor rate and this year's calculated rate.



SECTION IV CONTRIBUTIONS

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND (Teachers' Combined System)					
	Development of Contribution	on	Actuarial Valuation Performed June 30, 2008 June 30, 2007 (for FY 2010) (for FY 2009)		
1.	Present Value of Projected Benefits Attributable to: a. Retired and Disabled Members and Beneficiaries b. Terminated Vested Members c. Active Members d. Total Present Value		15,607,093,599 556,896,776 20,447,769,006 36,611,759,381	_	14,947,040,791 589,556,857 19,353,278,814 34,889,876,461
2.	Less Present Value Total Future Normal Cost	_	6,743,054,827	_	6,767,301,606
3.	Actuarial Accrued Liability (1d – 2)	\$	29,868,704,554	\$	28,122,574,855
4.	Less Actuarial Value of Assets	_	23,784,403,753	_	22,814,759,559
5.	Unfunded Actuarial Accrued Liability (UAL) (3 - 4)	\$	6,084,300,801	\$	5,307,815,296
6.	Less Special Liability Payments		0		0
7.	Less UAL Layers Already Recognized	_	5,326,325,534	_	4,064,589,028
8.	New UAL Layer for 25 Year Amortization (5 - 6 -7)	\$	757,975,267	\$	1,243,226,268
9.	Amortization Payment for New Layer		48,922,972		80,243,152
10.	Amortization of Earlier UAL Layers		391,699,873		298,210,831
11.	Amortization Payments at Mid-Year (9+10)	\$	440,622,845	\$	378,453,983
12.	Employer Normal Cost as of Beginning of Year	\$	403,520,359	\$	402,644,935
13.	Employer Normal Cost at Mid-Year	\$	418,865,017	\$	417,956,304
14.	Total covered Payroll	\$	6,117,590,424	\$	5,709,765,331
15.	Employer Normal Cost Rate (13/14)		6.85%		7.32%
16.	UAL Amortization Rate (11/14)		7.20%		6.63%
17.	Total Employer Rate (before Corridor) (15+16)		14.05%		13.95%
18.	Total Employer Rate after Corridor		13.15%		12.92%

Move 20% of the way between last year's corridor rate and this year's calculated rate.



SECTION IV CONTRIBUTIONS

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND (Employees' Combined System – State Portion) **Development of Contribution Actuarial Valuation Performed** June 30, 2008 June 30, 2007 (for FY 2010) (for FY 2009) Present Value of Projected Benefits Attributable to: a. Retired and Disabled Members and Beneficiaries 7,040,978,021 6,461,110,464 b. Terminated Vested Members 516,805,384 522,987,306 c. Active Members 9,328,304,111 8,951,081,891 d. Total Present Value \$ 16,886,087,516 \$ 15,935,179,661 Less Present Value Total Future Normal Cost 2. 2,548,626,846 2,571,672,500 3. Actuarial Accrued Liability (1d – 2) \$ 14,337,460,670 \$ 13,363,507,161 10,332,264,062 Less Actuarial Value of Assets 10,699,418,334 4. 5. Unfunded Actuarial Accrued Liability (UAL) (3 - 4) 3,638,042,336 3,031,243,099 6. Less Special Liability Payments 52,482,987 54,942,131 7. Less UAL Layers Already Recognized 3,007,698,861 2,391,504,274 8. New UAL Layer for 25 Year Amortization (5 - 6 - 7) \$ 584,796,674 577,860,488 9. Amortization Payment for New Layer 37,297,593 37,745,284 10. Amortization of Earlier UAL Layers 198,684,351 154,220,273 11. Amortization Payments at Mid-Year (9+10) \$ 235,981,944 \$ 191,965,557 \$ \$ 176,752,932 12. Employer Normal Cost as of Beginning of Year 180,396,385 13. Employer Normal Cost at Mid-Year \$ 183,474,311 187,256,314 \$ 14. Total covered Payroll 3,110,639,760 3,022,475,485 15. Employer Normal Cost Rate (13/14) 6.02% 6.07% 16. UAL Amortization Rate (11/14) 7.59% 6.35% 17. Total Employer Rate (before Corridor) (15+16) 13.61% 12.42%

Move 20% of the way between last year's corridor rate and this year's calculated rate.

18. Total Employer Rate after Corridor



9.01%

9.93%

SECTION IV CONTRIBUTIONS

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND (State Police) Development of Contribution					
			Actuarial Valuation Performed June 30, 2008 June 30, 2007 (for FY 2010) (for FY 2009)		
1.	Present Value of Projected Benefits Attributable to: a. Retired and Disabled Members and Beneficiaries b. Terminated Vested Members c. Active Members d. Total Present Value	\$ 	1,234,993,433 6,813,832 553,299,192 1,795,106,457	\$	1,156,968,293 6,177,898 532,312,519 1,695,458,710
2.	Less Present Value Total Future Normal Cost		193,530,604		178,523,949
3.	Actuarial Accrued Liability (1d – 2)	\$	1,601,575,853	\$	1,516,934,761
4.	Less Actuarial Value of Assets		1,343,208,496		1,334,374,954
5.	Unfunded Actuarial Accrued Liability (UAL) (3 - 4)	\$	258,367,357	\$	182,559,807
6.	Less Special Liability Payments		0		0
7.	Less UAL Layers Already Recognized		194,945,439		33,898,987
8.	New UAL Layer for 25 Year Amortization (5 - 6 -7)	\$	63,421,918	\$	148,660,820
9.	Amortization Payment for New Layer		4,093,522		9,595,206
10.	Amortization of Earlier UAL Layers		1,757,617		(7,897,024)
11.	Amortization Payments at Mid-Year (9+10)	\$	5,851,139	\$	1,698,182
12.	Employer Normal Cost as of Beginning of Year	\$	20,005,311	\$	18,617,990
13.	Employer Normal Cost at Mid-Year	\$	20,766,052	\$	19,325,976
14.	Total covered Payroll	\$	86,464,247	\$	83,190,937
15.	Employer Normal Cost Rate (13/14)		24.02%		23.23%
16.	UAL Amortization Rate (11/14)		6.77%		2.04%
17.	Total Employer Rate (15+16)		30.79%		25.27%



SECTION IV CONTRIBUTIONS

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND (Judges)						
	Development of Contribution					
	Actuarial Valuation Performed					
			June 30, 2008 June 30, 2007 (for FY 2010) (for FY 2009)			
-	D WI CD : D C AVI 11		(10f F 1 2010)	(.	10f f 1 2009)	
1.	Present Value of Projected Benefits Attributable to: a. Retired and Disabled Members and Beneficiaries	\$	252,792,048	\$	225,128,658	
	b. Terminated Vested Members	Ф	2,090,167	φ	4,553,421	
	c. Active Members		230,433,259		220,992,526	
	d. Total Present Value	\$	485,315,474	\$	450,674,605	
2.	Less Present Value Total Future Normal Cost		78,533,731		78,687,231	
3.	Actuarial Accrued Liability (1d – 2)	\$	406,781,743	\$	371,987,374	
4.	Less Actuarial Value of Assets		306,716,176		293,051,654	
5.	Unfunded Actuarial Accrued Liability (UAL) (3 - 4)	\$	100,065,567	\$	78,935,720	
6.	Less Special Liability Payments		0		0	
7.	Less UAL Layers Already Recognized		78,692,815		79,012,836	
8.	New UAL Layer for 25 Year Amortization (5 - 6 -7)	\$	21,372,752	\$	(77,116)	
9.	Amortization Payment for New Layer		1,379,489		(4,977)	
10.	Amortization of Earlier UAL Layers		6,341,865		6,132,383	
11.	Amortization Payments at Mid-Year (9+10)	\$	7,721,354	\$	6,127,406	
12.	Employer Normal Cost as of Beginning of Year	\$	10,433,278	\$	10,082,626	
13.	Employer Normal Cost at Mid-Year	\$	10,830,024	\$	10,466,038	
14.	Total covered Payroll	\$	37,943,327	\$	37,638,491	
15.	Employer Normal Cost Rate (13/14)		28.54%		27.81%	
16.	UAL Amortization Rate (11/14)		20.35%		16.28%	
17.	Total Employer Rate (15+16)		48.89%		44.09%	



SECTION IV CONTRIBUTIONS

	STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND (LEOPS State Only) Development of Contribution									
	Actuarial Valuation Performed June 30, 2008 June 30, 2007 (for FY 2010) (for FY 2009)									
1.	Present Value of Projected Benefits Attributable to: a. Retired and Disabled Members and Beneficiaries b. Terminated Vested Members c. Active Members d. Total Present Value	\$ 	377,317,729 11,828,620 351,122,289 740,268,638	\$	339,351,593 8,995,994 367,831,848 716,179,435					
2.	Less Present Value Total Future Normal Cost		128,902,067		122,871,111					
3.	Actuarial Accrued Liability (1d – 2)	\$	611,366,571	\$	593,308,325					
4.	Less Actuarial Value of Assets		389,792,503		354,364,068					
5.	Unfunded Actuarial Accrued Liability (UAL) (3 - 4)	\$	221,574,068	\$	238,944,257					
6.	Less Special Liability Payments		0		0					
7.	Less UAL Layers Already Recognized		237,877,134		186,961,181					
8.	New UAL Layer for 25 Year Amortization (5 - 6 -7)	\$	(16,303,066)	\$	51,983,075					
9.	Amortization Payment for New Layer		(1,052,270)		3,355,210					
10.	Amortization of Earlier UAL Layers		19,528,160		15,512,579					
11.	Amortization Payments at Mid-Year (9+10)	\$	18,475,890	\$	18,867,789					
12.	Employer Normal Cost as of Beginning of Year	\$	14,138,516	\$	13,373,556					
13.	Employer Normal Cost at Mid-Year	\$	14,676,161	\$	13,882,112					
14.	Total covered Payroll	\$	85,814,415	\$	82,078,841					
15.	Employer Normal Cost Rate (13/14)		17.10%		16.91%					
16.	UAL Amortization Rate (11/14)		21.53%		22.99%					
17.	Total Employer Rate (15+16)		38.63%		39.90%					



SECTION V ACCOUNTING STATEMENT INFORMATION

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

The FASB No. 35 Basis disclosure provides a "snap shot" view of how system assets at market value compare to liabilities if contributions stopped and accrued benefit claims had to be satisfied.

The GASB No. 25 Basis disclosure presents the actuarial liability computed for funding purposes to the actuarial value of assets to determine a funded ratio (i.e. the EAN liability).

Both the present value of accrued benefits (FASB No. 35 Basis) and the actuarial liability (GASB No. 25 Basis) are determined assuming that 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 Statement No. 35 specifies that a comparison of the present value of accrued (accumulated) benefits to the market value of the assets as of the valuation date must be provided. GASB Statement No. 25 requires the actuarial liability be compared with the actuarial value of assets for funding purposes. The relevant amounts as of June 30, 2007 and June 30, 2008 are presented in Table V-1 and Table V-2.



SECTION V ACCOUNTING STATEMENT INFORMATION

Table V-1 Accounting Statement Information The Total Systems of the State of Maryland (State and Municipal)

	(State and Municipal)									
				%						
	Item	June 30, 2008	June 30, 2007	Change						
A.	A. FASB No. 35 Basis									
	1. Present Value of Benefits Accrued and Vested to Date									
	a. Members Currently Receiving Payments	\$ 26,024,615,048	\$ 24,546,694,704	6.0%						
	b. Former Vested Members	1,199,988,380	1,244,151,941	(3.5%)						
	c. Active Members	<u>16,270,811,666</u>	15,219,344,588	6.9%						
	d. Total PVAB $(1(a)+1(b)+1(c))$	43,495,415,094	41,010,191,233	6.1%						
	2. Assets at Market Value	36,613,710,023	39,444,781,232	7.2%						
	3. Unfunded Present Value of Accrued Benefits (2-3)	\$ 6,881,705,071	\$ 1,565,410,001	339.6%						
	4. Ratio of Assets to Value of Benefits (3/2)	84.18%	96.18%							
B.	GASB No. 25 Basis									
	 Actuarial Accrued Liabilities for Retirees and 									
	Beneficiaries Currently Receiving Benefits and									
	Terminated Vested Employees	\$ 27,224,603,428	\$ 25,790,846,645	5.6%						
	2. Actuarial Accrued Liabilities for Current Employees	23,019,443,779	21,353,507,213	7.8%						
	3. Total Actuarial Accrued Liability (1+2)	50,244,047,207	47,144,353,858	6.6%						
	4. Net Actuarial Assets Available for Benefits	39,504,284,202	37,886,935,596	4.3%						
	5. Unfunded Actuarial Accrued Liability	\$ 10,739,763,005	\$ 9,257,418,262	16.0%						



SECTION V ACCOUNTING STATEMENT INFORMATION

Table V-2 Accounting Statement Information – FASB 35 as of June 30, 2008

	Total Systems	Teachers' Retirement & Pension	Employees' Retirement & Pension	State Police	Judges	LEOPS	Local Fire and Police
Present Value of Benefits Accrued to Date:							
a. Members Currently Receiving Payments	\$ 26,024,615,048	\$ 15,607,093,599	\$ 8,499,683,566	\$ 1,234,993,433	\$ 252,792,048	\$ 425,656,763	\$ 4,395,639
b Former Vested Members	1,199,988,380	556,896,776	620,548,143	6,813,832	2,090,167	13,575,486	63,976
c. Active Members	16,270,811,666	9,290,375,344	6,251,037,199	329,835,040	137,510,505	258,192,748	3,860,830
2. Total Present Value of Accrued Benefits (1(a) + 1(b) + 1(c))	\$ 43,495,415,094	\$ 25,454,365,719	\$ 15,371,268,908	\$ 880,447,034	\$ 392,392,720	\$ 697,424,997	\$ 8,320,445
3. Assets at Market Value	36,613,710,023	22,058,961,997	12,617,280,261	1,029,851,036	283,759,913	426,877,468	4,666,245
4. Unfunded Value of Accrued Benefits (2 – 3)	<u>\$ 6,881,705,071</u>	\$ 3,395,403,722	\$ 2,753,988,647	<u>\$ 349,478,166</u>	<u>\$ 108,632,807</u>	<u>\$ 270,547,529</u>	\$ 3,654,200
5. Ratio of Assets to Value of Accrued Benefits (3 / 2)	84.18%	86.66%	82.08%	77.76%	72.32%	61.21%	56.08%



SECTION V ACCOUNTING STATEMENT INFORMATION

Table V-3 Statement of Changes in Total Actuarial Present Value of All Accrued Benefits (State and Municipal) (\$ in millions)						
Actuarial Present Value of Accrued Benefits at June 30, 2007	\$ 41,010					
Increase (Decrease) During Year Attributable to:						
Passage of Time	3,091					
Benefits Paid – FY 2008	(2,253)					
Benefits Accrued, Other Gains/Losses	1,647					
Plan Amendment or Changes in Actuarial Assumptions	0					
Net Increase	2,485					
Actuarial Present Value of Accrued Benefits at June 30, 2008	\$ 43,495					



SECTION V ACCOUNTING STATEMENT INFORMATION

Table V-4 Accounting Statement Information – GASB #25 as of June 30, 2008

		Total Systems	Teachers' Retirement & Pension	Employees' Retirement & Pension	State Police	Judges	LEOPS	Local Fire and Police
1.	Actuarial Accrued Liability:							
	a. Active Member Contributions	\$ 2,787,163,875	\$ 1,598,647,392	\$ 1,056,614,368	\$ 72,062,732	\$ 23,415,368	\$ 36,423,160	\$ 855
	b. Retirees, Term Vesteds & Inactives	27,224,603,428	16,163,990,375	9,120,231,709	1,241,807,265	254,882,215	439,232,249	4,459,615
	c. Active Members	20,232,279,904	12,106,066,787	7,432,923,088	287,705,856	128,484,160	272,349,889	4,750,124
2.	Total Actuarial Accrued Liability $(1(a) + 1(b) + 1(c))$	\$ 50,244,047,207	\$ 29,868,704,554	\$ 17,609,769,165	\$ 1,601,575,853	\$ 406,781,743	\$ 748,005,298	\$ 9,210,594
3.	Actuarial Value of Assets	39,504,284,202	23,784,403,753	13,599,717,089	1,343,208,496	306,716,176	465,386,285	4,852,403
4.	Unfunded Actuarial Accrued Liability (2 – 3)	<u>\$ 10,739,763,005</u>	<u>\$ 6,084,300,801</u>	<u>\$ 4,010,052,076</u>	<u>\$ 258,367,357</u>	<u>\$ 100,065,567</u>	<u>\$ 282,619,013</u>	<u>\$ 4,358,191</u>
5.	Funded Ratio	78.62%	79.63%	77.23%	83.87%	75.40%	62.22%	52.68%
6.	Annual Payroll	\$ 10,542,806,018	\$ 6,117,590,424	\$ 4,165,012,635	\$ 86,464,247	\$ 37,943,327	\$ 133,445,391	\$ 2,349,994
7.	UAAL as % of Payroll	102%	99%	96%	299%	264%	212%	185%



SECTION V ACCOUNTING STATEMENT INFORMATION

Valuation as of June 30,	Actuarial Value of Assets (a)	Sched Actuarial Accrued Liability (b)	Table V-5 lule of Funding Pro (\$ in thousands) Unfunded/ (Overfunded) AAL (UAAL) (b) – (a)	ogress Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) – (a)] / (c)
1998	\$ 24,850,355	\$ 27,416,935	\$ 2,566,580	90.64%	\$ 5,900,456	43%
1999	27,646,579	28,475,380	828,801	97.09%	6,312,417	13%
2000	30,649,380	30,279,866	(369,514)	101.22%	6,725,870	(5%)
2001	31,914,778	32,469,942	555,164	98.29%	7,255,036	8%
2002	32,323,263	34,131,284	1,808,021	94.70%	7,867,794	23%
2003	32,631,465	34,974,601	2,343,136	93.30%	8,134,419	29%
2004	33,484,657	36,325,704	2,841,047	92.18%	8,069,481	35%
2005	34,519,500	39,133,450	4,613,950	88.21%	8,603,761	54%
2006	35,795,025	43,243,492	7,448,467	82.78%	9,287,576	80%
2007	37,886,936	47,144,354	9,257,418	80.36%	9,971,012	93%
2008	39,504,284	50,244,047	10,739,763	78.62%	10,542,806	102%



SECTION V ACCOUNTING STATEMENT INFORMATION

Table V-6 Schedule of Contributions from Employers and Other Contributing Entities (\$ in thousands)								
Fiscal Year Ended June 30,	Annual Required Contribution	Percentage Contributed						
1997	\$ 740,258	100%						
1998	735,788	100%						
1999	693,353	100%						
2000	682,422	100%						
2001	634,309	100%						
2002	574,019	100%						
2003	654,578	92%						
2004	710,632	89%						
2005	805,564	83%						
2006	874,079	82%						
2007	1,025,972	81%						
2008	1,183,765	89%						



APPENDIX A MEMBERSHIP INFORMATION

State Retirement and Pension System Summary of Membership Data as of June 30, 2008 Total System

		Active	Members	Retirees	Retirees and Beneficiaries Vested Former		Retirees and Beneficiaries		Vested Former	
		Count	Salary	Count	Benefit	Avg. Age	Count	Total Counts		
Teachers'	Non Vested	0	\$0							
Retirement	Vested	4,125	\$352,954,397							
	Total	4,125	\$352,954,397	30,955	\$918,718,760	73.9	1,092	36,172		
	Non Vested	36,178	\$1,568,010,050							
Teachers' Pension	Vested	65,658	\$4,196,625,977							
	Total	101,836	\$5,764,636,027	23,080	\$383,737,988	66.9	21,726	146,642		
Employees'	Non Vested	0	\$0							
Retirement	Vested	9,740	\$472,800,066							
	Total	9,740	\$472,800,066	24,197	\$421,254,883	73.4	1,166	35,103		
	Non Vested	29,955	\$1,166,344,412							
Employees' Pension	Vested	49,507	\$2,525,868,157							
	Total	79,462	\$3,692,212,569	30,723	\$313,088,551	67.1	27,559	137,744		
State Police	Non Vested	437	\$19,700,507							
	Vested	989	\$66,763,740							
	Total	1,426	\$86,464,247	2,149	\$87,639,631	59.6	61	3,636		
Judges	Non Vested	0	\$0							
	Vested	286	\$37,943,327							
	Total	286	\$37,943,327	342	\$23,135,728	77.3	8	636		
LEOPS	Non Vested	750	\$34,861,671							
	Vested	1,577	\$98,583,720							
	Total	2,327	\$133,445,391	958	\$28,250,389	57.2	174	3,459		
Local F&P	Non Vested	10	\$375,966							
	Vested	43	\$1,974,029							
	Total	53	\$2,349,994	18	\$331,775	58.4	9	80		
Total Systems	Non Vested	67,330	\$2,789,292,606							
	Vested	131,925	\$7,753,513,412							
	Total	199,255	\$10,542,806,018	112,422	\$2,176,157,705	70.1	51,795	363,472		



APPENDIX A MEMBERSHIP INFORMATION

State Retirement and Pension System Summary of Membership Data as of June 30, 2008 Municipal Only

		Active Members		Retirees	Retirees and Beneficiaries		Vested Former	Total
		Count	Salary	Count	Benefit	Avg. Age	Count	Counts
Employees'	Non Vested	0	\$0					
Retirement	Vested	372	\$21,578,717					
	Total	372	\$21,578,717	4,524	\$63,729,541	76.8	95	4,991
	Non Vested	10,303	\$328,724,111					
Employees' Pension	Vested	15,038	\$704,070,047					
	Total	25,341	\$1,032,794,158	7,988	\$67,394,114	67.7	6,357	39,686
LEOPS	Non Vested	294	\$13,630,062					
	Vested	523	\$34,000,913					
	Total	817	\$47,630,975	96	\$3,003,107	53.4	38	951
Local F&P	Non Vested	10	\$375,966					
	Vested	43	\$1,974,029					
	Total	53	\$2,349,994	18	\$331,775	58.4	9	80
Total Systems	Non Vested	10,607	\$342,730,139					
	Vested	15,976	\$761,623,706					
	Total	26,583	\$1,104,353,845	12,626	\$134,458,537	70.8	6,499	45,708



APPENDIX A MEMBERSHIP INFORMATION

Teachers'

Retirement

Employees'

Retirement

State Police

Judges

LEOPS

Total Systems

Teachers' Pension

Employees' Pension Vested

Non Vested

989

286

286

456

1,054

1,510

56,723

115,949

172,672

0

1,426

Vested

Total

Vested

Vested

Total

Total

Vested

Total

Vested

Total

Vested

Vested

Total

Total

Total

State Retirement and Pension System Summary of Membership Data as of June 30, 2008 **State Only Vested Former Active Members Retirees and Beneficiaries Total** Count **Salary** Count Benefit Avg. Age Count Counts \$352,954,397 4,125 4.125 \$352,954,397 30,955 \$918,718,760 73.9 1,092 36,172 \$1,568,010,050 36,178 \$4,196,625,977 65,658 101,836 \$5,764,636,027 23,080 66.9 21,726 146,642 \$383,737,988 0 9,368 \$451,221,349 9.368 \$451,221,349 19,673 \$357,525,342 72.6 1.071 30.112 \$837,620,301 19,652 34,469 \$1,821,798,110 54,121 \$2,659,418,411 22,735 \$245,694,437 21,202 98,058 66.9 437 \$19,700,507

\$87,639,631

\$23,135,728

\$25,247,282

\$2,041,699,167

59.6

77.3

57.6

70.0

2,149

342

862

99,796



\$66,763,740

\$86,464,247

\$37,943,327

\$37,943,327

\$21,231,609 \$64,582,807

\$85,814,415

\$2,446,562,467

\$6,991,889,706

\$9,438,452,173

\$0

61

136

45,296

3,636

636

2,508

317,764

APPENDIX A MEMBERSHIP INFORMATION

State Retirement and Pension System of Maryland Membership Statistics June 30, 2008									
System	Count	Average Age	Average Service	Average Salary					
Teachers' Retirement Teachers' Pension	4,125 101,836	58.9 43.9	33.2 10.9	\$85,565 \$56,607					
Employees' Retirement - State Employees' Retirement - Municipal Employees' Retirement - Legislators	1,774 372 178	57.4 57.9 54.1	32.5 32.5 9.7	\$63,409 \$58,007 \$43,646					
Employees' Retirement - Correctional Officers Employees' Retirement - Total	7,416 9,740	<u>40.0</u> 44.1	9.3 14.2	\$44,629 \$48,542					
Employees' Pension - State Employees' Pension - Municipal Employees' Pension - Total	54,121 25,341 79,462	47.3 47.6 47.4	12.9 10.2 12.1	\$49,138 \$40,756 \$46,465					
State Police	1,426	35.3	10.5	\$60,634					
Judges	286	57.2	10.9	\$132,669					
LEOPS - State LEOPS - Municipal LEOPS - Total	1,510 817 2,327	41.0 38.0 39.9	9.5 6.5 8.4	\$56,831 \$58,300 \$57,347					
Local F&P	53	39.6	12.7	\$44,340					
Total Systems	199,255	45.5	12.0	\$52,911					



APPENDIX A MEMBERSHIP INFORMATION

Active Membership - Age Distributions

Total Systems

2008							
Age	Count	Total	Average				
Under 20	109	\$2,735,651	\$25,098				
20 to 24	5,489	\$200,058,662	\$36,447				
25 to 29	17,910	\$773,012,493	\$43,161				
30 to 34	21,373	\$1,010,601,723	\$47,284				
35 to 39	21,558	\$1,126,533,416	\$52,256				
40 to 44	23,333	\$1,219,412,374	\$52,261				
45 to 49	26,544	\$1,380,810,899	\$52,020				
50 to 54	29,342	\$1,633,398,548	\$55,668				
55 to 59	28,516	\$1,727,390,495	\$60,576				
60 to 64	17,919	\$1,082,744,581	\$60,424				
65 & Up	7,162	\$386,107,178	\$53,911				
Totals	199,255	\$10,542,806,018	\$52,911				

Employees' Retirement State

Employees' Retirement Municipal

Age	Count	Salary	Age	Count	Salary
Under 20	0	\$0	Under 20	0	\$0
20 to 24	0	\$0	20 to 24	0	\$0
25 to 29	3	\$104,686	25 to 29	0	\$0
30 to 34	10	\$371,032	30 to 34	0	\$0
35 to 39	8	\$297,156	35 to 39	0	\$0
40 to 44	3	\$122,400	40 to 44	0	\$0
45 to 49	80	\$4,194,907	45 to 49	28	\$1,645,503
50 to 54	433	\$25,763,462	50 to 54	109	\$6,820,739
55 to 59	615	\$39,837,053	55 to 59	98	\$6,166,205
60 to 64	440	\$29,570,082	60 to 64	80	\$4,553,323
65 & Up	182	\$12,227,149	65 & Up	57	\$2,392,946
Totals	1,774	\$112,487,926	Totals	372	\$21,578,717



APPENDIX A MEMBERSHIP INFORMATION

	Employees' Retirement Legislative			Employees' Retirement Correctional Officers	
Age	Count	Salary	Age	Count	Salary
Under 20	0	\$0	Under 20	19	\$674,690
20 to 24	0	\$0	20 to 24	654	\$25,372,381
25 to 29	3	\$130,500	25 to 29	656	\$25,862,061
30 to 34	12	\$522,000	30 to 34	1,098	\$44,138,631
35 to 39	10	\$435,000	35 to 39	1,200	\$52,884,884
40 to 44	15	\$652,500	40 to 44	1,257	\$58,801,879
45 to 49	22	\$957,000	45 to 49	1,039	\$49,794,106
50 to 54	25	\$1,087,500	50 to 54	759	\$37,408,062
55 to 59	27	\$1,174,500	55 to 59	476	\$23,209,551
60 to 64	24	\$1,057,000	60 to 64	224	\$11,093,301
65 & Up	40	\$1,753,000	65 & Up	34	\$1,724,876
Totals	178	\$7,769,000	Totals	7,416	\$330,964,423
	Employee Pension State			Employee Pension Municipal	
Age	Count	Salary	Age	Count	Salary
Under 20	22	\$492,269	Under 20	41	\$905,615
20 to 24	927	\$28,363,048	20 to 24	690	\$19,551,071
25 to 29	3,033	\$115,856,851	25 to 29	1,316	\$45,618,655
30 to 34	4,543	\$191,793,132	30 to 34	1,799	\$64,703,945
35 to 39	5,099	\$238,330,183	35 to 39	2,278	\$92,622,965
40 to 44	6,678	\$320,410,952	40 to 44	3,290	\$136,280,544
45 to 49	8,631	\$433,837,214	45 to 49	4,333	\$186,833,239
50 to 54	9,436	\$494,077,302	50 to 54	4,239	\$187,859,509
55 to 59	8,433	\$448,858,488	55 to 59	3,443	\$151,587,691
60 to 64	5,282	\$283,099,186	60 to 64	2,408	\$97,837,500
65 & Up	2,037	\$104,299,786	65 & Up	1,504	\$48,993,423
Totals	54,121	\$2,659,418,411	Totals	25,341	\$1,032,794,158
	Teachers' Retirement			Teachers' Pension	
Age	Count	Salary	Age	Count	Salary
Under 20	0	\$0	Under 20	14	\$352,083
20 to 24	0	\$0	20 to 24	2,999	\$117,495,113
25 to 29	0	\$0	25 to 29	12,356	\$559,422,846
	0	\$0	30 to 34	13,328	\$678,695,008
30 to 34	0	\$0	35 to 39	12,185	\$696,322,944
30 to 34 35 to 39			40 +- 44	11,306	\$651,571,287
	0	\$0	40 to 44	11,500	4001,011,201
35 to 39	0 15	\$0 \$844,857	40 to 44 45 to 49	11,909	
35 to 39 40 to 44	0 15 789				\$667,463,948
35 to 39 40 to 44 45 to 49 50 to 54	0 15	\$844,857	45 to 49	11,909	
35 to 39 40 to 44 45 to 49	0 15 789	\$844,857 \$64,849,746	45 to 49 50 to 54	11,909 13,238	\$667,463,948 \$790,939,065



Totals

101,836

Totals

4,125

\$352,954,397

\$5,764,636,027

APPENDIX A MEMBERSHIP INFORMATION

	Judges			State Police	
Salary	Count	Age	Salary	Count	Age
\$0	0	Under 20	\$310,993	13	Under 20
\$0	0	20 to 24	\$5,604,764	133	20 to 24
\$0	0	25 to 29	\$11,948,221	238	25 to 29
\$0	0	30 to 34	\$14,685,831	265	30 to 34
\$0	0	35 to 39	\$20,852,381	325	35 to 39
\$1,013,488	8	40 to 44	\$21,015,244	293	40 to 44
\$3,673,179	28	45 to 49	\$8,953,264	118	45 to 49
\$7,612,453	58	50 to 54	\$2,721,379	36	50 to 54
\$10,999,489	83	55 to 59	\$294,325	4	55 to 59
\$8,867,197	66	60 to 64	\$77,844	1	60 to 64
\$5,777,521	43	65 & Up	\$0	0	65 & Up
\$37,943,327	286	Totals	\$86,464,247	1,426	Totals
	Local F&P			LEOPS	
Salary	Count	Age	Salary	Count	Age
\$0	0	Under 20	\$0	0	Under 20
\$0	0	20 to 24	\$3,672,286	86	20 to 24
\$176,487	5	25 to 29	\$13,892,186	300	25 to 29
\$376,266	9	30 to 34	\$15,315,876	309	30 to 34
\$856,552	20	35 to 39	\$23,931,349	433	35 to 39
\$330,089	7	40 to 44	\$29,213,991	476	40 to 44
\$147,854	3	45 to 49	\$22,465,827	338	45 to 49
\$82,259	2	50 to 54	\$14,177,070	218	50 to 54
\$276,313	5	55 to 59	\$7,520,969	116	55 to 59
0101151	2	60 to 64	\$2,850,412	44	60 to 64
\$104,174	_				

Totals

53

\$2,349,994

\$133,445,391

Totals

2,327



APPENDIX A MEMBERSHIP INFORMATION

Retiree, Beneficiary and Disability Membership - Age Distributions

Total System 2008

Age	Count	Total Benefits	Average Benefit
Under 20	218	\$3,580,840	\$16,426
20 to 24	1	\$943	\$943
25 to 29	9	\$197,820	\$21,980
30 to 34	77	\$1,839,040	\$23,884
35 to 39	286	\$7,259,074	\$25,381
40 to 44	745	\$17,773,007	\$23,856
45 to 49	1,652	\$35,335,560	\$21,390
50 to 54	3,609	\$79,744,666	\$22,096
55 to 59	9,410	\$232,382,425	\$24,695
60 to 64	18,576	\$421,099,523	\$22,669
65 to 69	22,546	\$423,606,429	\$18,789
70 to 74	18,348	\$320,230,273	\$17,453
75 to 79	15,074	\$265,222,760	\$17,595
80 & Up	21,871	\$367,885,344	\$16,821
Totals	112,422	\$2,176,157,705	\$19,357

Teachers' Retirement

Teachers' Pension

Age	Count	Benefit	Age	Count	Benefit
Under 20	111	\$2,408,846	Under 20	0	\$0
20 to 24	0	\$0	20 to 24	0	\$0
25 to 29	0	\$0	25 to 29	1	\$34,663
30 to 34	0	\$0	30 to 34	8	\$198,382
35 to 39	0	\$0	35 to 39	43	\$1,063,059
40 to 44	1	\$9,813	40 to 44	74	\$1,744,383
45 to 49	4	\$58,527	45 to 49	147	\$2,825,062
50 to 54	168	\$5,160,652	50 to 54	419	\$9,122,791
55 to 59	1,849	\$72,542,195	55 to 59	2,272	\$52,001,272
60 to 64	4,404	\$161,287,484	60 to 64	5,628	\$109,960,991
65 to 69	4,925	\$165,901,746	65 to 69	6,877	\$108,351,642
70 to 74	4,811	\$145,832,688	70 to 74	4,212	\$56,564,617
75 to 79	5,215	\$144,213,410	75 to 79	2,324	\$30,314,421
80 & Up	9,467	\$221,303,400	80 & Up	1,075	\$11,556,702
Totals	30,955	\$918,718,762	Totals	23,080	\$383,737,986



APPENDIX A MEMBERSHIP INFORMATION

State Police Judges

Age	Count	Benefit	Age	Count	Benefit
Under 20	2	\$208,425	Under 20	4	\$88,709
20 to 24	0	\$0	20 to 24	0	\$0
25 to 29	0	\$0	25 to 29	0	\$0
30 to 34	20	\$682,446	30 to 34	0	\$0
35 to 39	66	\$2,464,086	35 to 39	0	\$0
40 to 44	149	\$5,995,827	40 to 44	0	\$0
45 to 49	204	\$8,780,848	45 to 49	0	\$0
50 to 54	297	\$12,667,317	50 to 54	0	\$0
55 to 59	321	\$13,758,849	55 to 59	2	\$63,626
60 to 64	387	\$15,179,009	60 to 64	29	\$2,084,893
65 to 69	288	\$10,845,551	65 to 69	43	\$3,126,542
70 to 74	186	\$6,394,911	70 to 74	70	\$5,289,155
75 to 79	117	\$4,393,442	75 to 79	63	\$4,353,385
80 & Up	112	\$6,268,919	80 & Up	131	\$8,129,418
Totals	2,149	\$87,639,630	Totals	342	\$23,135,729

Employees' Retirement State

Employees' Retirement Municipal

Age	Count	Benefit	Age	Count	Benefit
Under 20	82	\$762,176	Under 20	13	\$83,046
20 to 24	0	\$0	20 to 24	1	\$943
25 to 29	2	\$29,534	25 to 29	0	\$0
30 to 34	19	\$311,842	30 to 34	1	\$22,348
35 to 39	72	\$1,471,954	35 to 39	1	\$19,348
40 to 44	245	\$4,458,446	40 to 44	1	\$30,350
45 to 49	576	\$9,936,492	45 to 49	7	\$248,069
50 to 54	949	\$17,616,680	50 to 54	61	\$2,786,550
55 to 59	1,376	\$30,320,720	55 to 59	157	\$6,320,241
60 to 64	2,166	\$50,453,449	60 to 64	341	\$8,742,175
65 to 69	2,205	\$49,647,124	65 to 69	545	\$10,726,899
70 to 74	2,363	\$47,798,611	70 to 74	699	\$10,198,051
75 to 79	2,728	\$48,426,687	75 to 79	760	\$9,043,382
80 & Up	6,646	\$92,735,525	80 & Up	1,937	\$15,505,806
Totals	19,429	\$353,969,241	Totals	4,524	\$63,727,208



APPENDIX A MEMBERSHIP INFORMATION

Employees' Retirement Legislative

Age	Count	Benefit
Under 20	1	\$7,776
20 to 24	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	2	\$8,352
55 to 59	5	\$78,823
60 to 64	21	\$345,574
65 to 69	43	\$705,166
70 to 74	48	\$691,794
75 to 79	49	\$766,540
80 & Up	75	\$945,980
Totals	244	\$3,550,006

Employees' Pension State

Employees' Pension Municipal

Age	Count	Benefit	Age	Count	Benefit
Under 20	1	\$4,062	Under 20	2	\$8,103
20 to 24	0	\$0	20 to 24	0	\$0
25 to 29	5	\$105,911	25 to 29	0	\$0
30 to 34	11	\$212,393	30 to 34	10	\$182,203
35 to 39	57	\$1,099,802	35 to 39	25	\$439,629
40 to 44	158	\$2,908,413	40 to 44	86	\$1,605,426
45 to 49	438	\$7,558,811	45 to 49	194	\$3,311,067
50 to 54	1,101	\$18,633,973	50 to 54	399	\$7,128,126
55 to 59	2,533	\$39,889,475	55 to 59	644	\$9,742,757
60 to 64	4,235	\$55,147,709	60 to 64	1,169	\$12,517,309
65 to 69	5,596	\$56,919,325	65 to 69	1,935	\$14,947,051
70 to 74	4,184	\$35,841,501	70 to 74	1,723	\$10,368,110
75 to 79	2,684	\$18,269,817	75 to 79	1,111	\$4,943,508
80 & Up	1,732	\$9,109,289	80 & Up	690	\$2,200,824
Totals	22,735	\$245,700,482	Totals	7,988	\$67,394,113

LEOPS Local F&P

Age	Count	Benefit	Age	Count	Benefit
Under 20	2	\$9,697	Under 20	0	\$0
20 to 24	0	\$0	20 to 24	0	\$0
25 to 29	1	\$27,713	25 to 29	0	\$0
30 to 34	8	\$229,425	30 to 34	0	\$0
35 to 39	21	\$679,635	35 to 39	1	\$21,561
40 to 44	31	\$1,020,350	40 to 44	0	\$0
45 to 49	81	\$2,600,214	45 to 49	1	\$16,471
50 to 54	212	\$6,596,940	50 to 54	1	\$23,284
55 to 59	246	\$7,586,205	55 to 59	5	\$78,260
60 to 64	189	\$5,235,916	60 to 64	7	\$145,013
65 to 69	86	\$2,388,199	65 to 69	3	\$47,186
70 to 74	52	\$1,250,834	70 to 74	0	\$0
75 to 79	23	\$498,166	75 to 79	0	\$0
80 & Up	6	\$129,480	80 & Up	0	\$0
Totals	958	\$28,252,773	Totals	18	\$331,775



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

Table of Contents

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A. Actuarial Assumptions	B-1
B. Actuarial Methods	B-13



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

	1. Valuation	2. Rate of Increase in Cost			,	3. Rates o	•				
	Interest Rate	of Living		ected years o	· 1			ed ages wi	-		
			0	3	9	25	30	35	40	45	50
Teachers' Retirement	7.75%	3.0%	7.25	7.25	7.25	7.50	7.25	6.75	5.50	4.75	4.25
Teachers' Pension	7.75%	3.0%	7.25	7.25	7.25	7.50	7.25	6.75	5.50	4.75	4.25
Employees' Retirement											
Regular	7.75%	3.0%	5.50	5.50	4.50	5.00	5.00	4.50	4.25	4.00	3.75
Correctional	7.75%	3.0%	8.25	5.75	4.50	5.75	5.75	4.75	4.75	4.75	4.75
Legislative	7.75%	3.5%	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Employees' Pension	7.75%	3.0%*	5.50	5.50	4.50	5.00	5.00	4.50	4.25	4.00	3.75
State Police Retirement	7.75%	3.0%	12.00	7.50	4.00	4.50	4.00	3.75	3.50	3.50	3.50
Judges Pension	7.75%	3.5%	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
LEOPS	7.75%	3.0%**	8.00	6.50	4.50	5.00	5.00	4.75	4.75	4.25	3.50
Local Fire & Police											
Retirement	7.75%	3.0%**	8.00	6.50	4.50	5.00	5.00	4.75	4.75	4.25	3.50
Pension	7.75%	3.0%**	8.00	6.50	4.50	5.00	5.00	4.75	4.75	4.25	3.50

^{*} 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 B ACTUARIAL ASSUMPTIONS AND METHODS

		4 Anni	ıal Rates of	Withdray	val (numbe	er of withdi	awals ner	1.000 men	nhers)	
	(at select	4. Annual Rates of Withdrawal (number of withdrawals per 1,000 members) (at selected years of service) (at selected ages for those with 9+ years)								
	0	3	9	25	30	35	40	45	50	55
Teachers' Retirement										
Male	150	110	40	40	40	40	20	10	10	10
Female	140	100	50	50	50	50	30	25	10	10
Teachers' Pension										
Male	150	110	40	40	40	40	20	10	10	10
Female	140	100	50	50	50	50	30	25	10	10
Employees' Retirement Regular										
Male	200	90	50	50	40	40	30	25	25	20
Female	200	80	45	45	30	30	25	25	20	15
Correctional										
Male	180	120	40	40	40	40	40	30	30	25
Female	170	110	100	50	50	50	50	50	50	25
Legislative	*	*	*	*	*	*	*	*	*	*
Employees' Pension										
Male	200	90	50	50	40	40	30	25	25	20
Female	200	80	45	45	30	30	25	25	20	15
State Police Retirement										
Male	95	40	25	10	10	10	10	10	10	10
Female	110	70	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Judges Pension	0	0	0	0	0	0	0	0	0	0
LEOPS										
Male	120	80	20	15	15	15	15	15	15	15
Female	160	110	30	30	30	30	30	30	30	30
Local Fire & Police										
Male	120	80	20	15	15	15	15	15	15	15
Female	160	110	30	30	30	30	30	30	30	30

 $[\]ast$ 200 withdrawals per 1,000 members are assumed after 8 years of service and each fourth year thereafter.



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

	5. Annual Rates of Mortality at Selected Ages								
	(number of deaths per 10,000 members)								
	45	50	55	60	65	70	75	80	
Teachers' Retirement & Pension									
Healthy Members (RP-2000 Combined Healthy Table with									
age set back 4 years)									
Male	11	16	24	42	77	144	245	422	
Female	8	12	19	31	58	110	186	307	
Disabled Members									
Male (50% of RP-2000 Disabled Retiree Table plus 50%	119	141	139	223	283	374	518	749	
of RP-2000 Combined Healthy Table set back 2 years)								_	
Female (RP-2000 Disabled Retiree Table)	75	98	145	197	253	332	458	635	
Employees' Retirement & Pension Regular									
Healthy Members (RP-2000 Combined Healthy Table									
with ages set back 2 years for females)									
Male	15	21	36	67	127	222	378	644	
Female	9	14	22	39	76	134	230	376	
Disabled Members	_	_		_		_			
Male (RP-2000 Disabled Retiree Table set back 4 years)	226	238	303	367	435	522	658	870	
Female (RP-2000 Disabled Retiree Table)	75	115	165	218	280	376	522	723	
Employees' Retirement Correctional & Legislative									
Healthy Members (RP-2000 Combined Healthy Table									
with ages set back 2 years for females)									
Male	15	21	36	67	127	222	378	644	
Female	9	14	22	39	76	134	230	376	
Disabled Members								0=0	
Male (RP-2000 Disabled Retiree Table set back 4 years)	226	238	303	367	435	522	658	870	
Female (RP-2000 Disabled Retiree Table)	75	115	165	218	280	376	522	723	



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

	5. Annual Rates of Mortality at Selected Ages (number of deaths per 10,000 members, cont.)							
	45	50	55	60	65	70	75	80
State Police Retirement Healthy Members (RP-2000 Combined Healthy Table set back two years for males)								
Male Female Disabled Members (RP-2000 Disabled Retiree Table)	17 15	25 23	31 29	54 52	101 98	180 168	305 282	522 460
Male Female	226 75	290 115	354 165	420 218	502 280	626 376	821 522	1,094 723
Judges' Pension Healthy Members (RP-2000 Combined Healthy Table with ages set back 4 years)		4.5	•	40			2.45	422
Male Female	11 8	16 12	24 19	42 31	77 58	144 110	245 186	422 301
Disabled Members Male (50% of RP-2000 Disabled Retiree Table plus 50% of RP-2000 Combined Healthy Table set back 2 years)	119	141	179	223	283	374	518	749
Female (RP-2000 Disabled Retiree Table)	75	98	145	197	253	332	458	635
LEOPS Healthy Members (RP-2000 Combined Healthy Table set back two years for males) Male Female	17 15	25 23	31 29	54 52	101 98	180 168	305 282	522 460
Disabled Members (RP-2000 Disabled Retiree Table) Male Female	226 75	290 115	354 165	420 218	502 280	626 376	821 522	1,094 723
Local Fire & Police Systems Healthy Members (RP-2000 Combined Healthy Table set back two years for males)								
Male Female	17 15	25 23	31 29	54 52	101 98	180 168	305 282	522 460
Disabled Members (RP-2000 Disabled Retiree Table) Male Female	226 75	290 115	354 165	420 218	502 280	626 376	821 522	1,094 723



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

	6. Annual Rates of Disablement at Selected Ages (number becoming disabled per 10,000 members)								
	25	(number 30	becoming 35	40	er 10,000 n 45	nembers) 50	55		
Teachers' Retirement*									
Male Female	1 1	1 1	1 3	2 7	4 12	7 17	9 30		
Teachers' Pension*	1	1	<u> </u>	/	12	17	30		
Male	3	3	3	10	20	31	41		
Female	3	3	6	13	22	32	54		
Employees' Retirement Ordinary Disability Regular									
Male	4	4	7	13	17	20	27		
Female Correctional	4	4	7	12	18	25	35		
Male	30	36	45	57	71	101	131		
Female	46	46	46	51	59	77	117		
Legislative Accidental Disability Regular	0	0	0	0	0	0	0		
Male	1	1	1	2	2	1	1		
Female Correctional	1	1	1	2	2	2	2		
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	81		
Female	9	9	15	27	41	58	81		
Accidental Disability							_		
Male Female	3 2	3 2	4 3	6 4	5 4	4 4	4 4		
State Police Retirement Ordinary Disability	2		3	4	4	4	4		
Male Female	78 243	100 260	126 263	166 306	223 372	319 489	410 746		
Accidental Disability Male Female	52 162	55 145	68 142	79 144	87 145	122 187	159 289		

^{*} It is assumed that 1% of disability retirement is due to accidents in the performance of duty.



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

	6. Annual Rates of Disablement at Selected Ages (number becoming disabled per 10,000 members, cont.)								
	25	(number beco	oming disa 35	40	45	50	55		
Judges' Pension									
Male	3	3	3	10	21	31	41		
Female	3	3	6	13	22	32	55		
LEOPS									
Ordinary Disability							_		
Male	29	37	46	61	81	116	149		
Female	47	50	51	59	72	95	145		
Accidental Disability									
Male	19	20	25	29	32	44	58		
Female	31	28	27	28	28	36	56		
Local Fire & Police Systems									
Ordinary Disability									
Male	29	37	46	61	81	116	149		
Female	47	50	51	59	72	95	145		
Accidental Disability									
Male	19	20	25	29	32	44	58		
Female	31	28	27	28	28	36	56		



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

	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	30	40	N/A	N/A	N/A	
Female	10	20	65	N/A	N/A N/A	N/A N/A	
Subsequent Years	10	20	0.5	11/21	14/11	1 1/2 1	
Male	10	15	30	N/A	N/A	N/A	
Female	10	15	25	N/A	N/A	N/A	
Normal First Year Eligible							
Male	250	250	250	250	250	250	
Female	250	250	250	250	250	1,000	
Subsequent Years							
Male	150	150	150	180	200	200	
Female	150	150	150	200	300	200	
Teachers' Pension							
Early First Year Eligible							
Male	0	0	20	60	N/A	N/A	
Female	0	0	45	80	N/A	N/A	
Subsequent Years							
Male	0	0	0	45 50	N/A	N/A	
Female Normal	0	0	0	50	N/A	N/A	
First Year Eligible						_	
Male	150	150	150	200	200	200	
Female	130	130	130	240	70	70	
Subsequent Years Male	100	100	100	170	220	160	
Female	100	100	100	170 130	200	160 150	
Employees' Retirement	100	100	100	130	200	150	
Early							
First Year Eligible							
Male	25	25	80	N/A	N/A	N/A	
Female	20	20	90	N/A	N/A	N/A	
Subsequent Years Male	20	20	60	N/A	N/A	N/A	
Female	20	20	20	N/A	N/A	N/A	
Normal							
First Year Eligible	150	170	150	150	170	170	
Male Female	170 210	170 210	170 210	170 210	170 210	170 210	
Subsequent Years	210	210	210	210	210	210	
Male	50	110	110	110	200	200	
Female	120	120	150	150	300	220	



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

		7. Annual Rates of Retirement at Selected Ages (number retiring per 1,000 members, cont.)						
	45	50	55	60	65	70		
Employees' Retirement, cont. Correctional		27/1	27/1		27/1	27/1		
Early Normal	N/A	N/A	N/A	N/A	N/A	N/A		
First Year Eligible Subsequent Years	240 120	240 120	240 120	300 120	990 210	1,000 1,000		
Legislative Early Normal	N/A 0	N/A 0	N/A 0	N/A 1,000	N/A 1,000	N/A 1,000		
Employees' Pension Early First Year Eligible Male Female	0	0	30 35	80 80	N/A N/A	N/A N/A		
Subsequent Years Male Female	0	0 0	70 100	45 55	N/A N/A	N/A N/A		
Normal First Year Eligible Male Female Subsequent Years Male Female	140 160 70 100	140 160 70 100	140 170 70 100	140 260 110 160	50 60 200 230	50 60 150 160		
State Police Retirement* Normal First Year Eligible Subsequent Years	300 300	300 300	300 600	1,000 1,000	1,000 1,000	1,000 1,000		
Judges' Pension Normal First Year Eligible Male Female Subsequent Years	0	0 0	0 0	100 300	100 300	100 1,000		
Male Female	0	0	0	100 200	100 200	300 1,000		
LEOPS* Normal First Year Eligible	530	230	230	230	1,000	1,000		
Subsequent Years Local Fire & Police Retirement	150	150	200	300	1,000	1,000		
Normal First Year Eligible Subsequent Years	530 150	230 150	230 200	230 300	1,000 1,000	1,000 1,000		

^{* 50%} of members eligible to do so are expected to elect DROP.



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions, cont.

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 3.5% per annum compounded increase in the 2008 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 3.5% per annum compounded increase in the 2008 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 3.5% per annum compounded increase in the 2008 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 3.5% per annum compounded increase in the 2008 Social

Security Maximum Wage Base.



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions, cont.

9. Retirement Age for Inactive Vested Participants

Teachers' Retirement Age 60

Teachers' Pension Age 62

Employees' Retirement Age 60

Correctional Officers' Age 55

Employees' Pension Age 62

State Police Retirement Age 50

Judges' Pension Age 60

LEOPS Age 50

Local F&P Retirement Age 60

Local F&P Pension Age 62



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

	10. Probability of Leaving Contributions in the Plan Upon Withdrawal (number leaving their contributions per 1,000 members)								
	20	25	30	35	40				
Teachers' Retirement and Pension Male Female	750 667	915 913	903 930	884 935	1,000 1,000				
Employees' Retirement and Pension Male Female	875 944	768 869	706 872	682 846	1,000 1,000				
Corrections and Legislative	1,000	1,000	1,000	1,000	1,000				
State Police Retirement	1,000	1,000	1,000	1,000	1,000				
Judges' Pension	500	500	1,000	1,000	1,000				
LEOPS	1,000	1,000	1,000	1,000	1,000				
Local Fire & Police	1,000	1,000	1,000	1,000	1,000				



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions, cont.

11. Miscellaneous Assumptions Which are Common to All Plans

a. Unknown Data for Participants: Same as those exhibited by Members with

similar known characteristics. If not

specified, Members are assumed to be male.

b. Percent Married: 75%

c. Age of Spouse: Females are 4 years younger than males.

d. Unused Sick Leave: Each member is assumed to have an

additional 5 months of service at retirement

attributable to unused sick leave.

e. Aggregate Payroll Growth: 3.50% per annum



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

1. Asset Valuation Method

Teachers' Retirement & Pension

Employees' Retirement & Pension

State Police

Judges

LEOPS

Local F&P Retirement & Pension

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 reflects annually one-fifth of the market value gains for the five prior years. The resulting value is restricted to be not less than 80% of market value nor greater than 120% of market value. As of June 30, 2007, the calculation of market gains included the difference between market and actuarial assets as of June 30, 2006.

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.

2. Funding Method

Teachers' Retirement & Pension

Employees' Retirement & Pension

State Police

Judges

LEOPS

Local F&P Retirement & Pension

All six Systems use the individual entry age normal method 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.

The Individual Entry Age Normal cost rate is determined as the value, as of age at entry into the plan, of the member's projected future benefits, and divided by the value, also as of the member's entry age, of his expected future salary.



APPENDIX B ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

2. Funding Method, cont.

Teachers' Retirement & Pension

Employees' Retirement & Pension

State Police

Judges

LEOPS

Local F&P 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.

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.

Actuarial contributions for the Teachers and Employees Systems are based on a corridor method as described elsewhere.



APPENDIX C SUMMARY OF PLAN PROVISIONS

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APPENDIX C SUMMARY OF PLAN PROVISIONS

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

1. Membership

Membership ended for teachers employed on or after January 1, 1980. Members on December 31, 1979 continue to be members unless they elected to transfer into the Teachers' Pension System (established January 1, 1980) prior to January 1, 2005.

Membership includes employees of public school systems, public libraries, community colleges and institutions of higher education.

2. Member Contributions

Retirement System members participate under one of three elections (effective July 1, 1984):

- Plan A: Generally 7% of earnable compensation to maintain all benefits, including unlimited cost of living adjustments.
- Plan B: Generally 5% of earnable compensation to maintain all benefits, except the cost of living adjustments which are capped at 5%.
- Plan C: 5% of earnable compensation as determined under the employee contribution for the Teachers' Pension System (Plan C provides a two-part benefit based on benefits of the Teachers' Retirement System and the Teachers' Pension System).

Interest earned on all employee contributions is 4% per year.

3. Service Retirement Allowance

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

Allowance: 1/55th of average final compensation for the three highest years as a member for each year of creditable service. Creditable service is based on a full normal working time for teachers – ten months equals one year.

Plan C: For creditable service before election date, the amount determined by the service retirement formula for Teachers' Retirement System; for creditable service after election date, the amount determined by the service retirement formula for the Teachers' Pension System.

4. Early Retirement Allowance

Eligibility: 25 years of eligibility service.

Allowance: Service Retirement allowance reduced by .005 for each month that date of retirement precedes the earlier of age 60 or the date the member would have completed 30 years of eligibility service. The maximum reduction is 30%.

-CHEIRON

APPENDIX C SUMMARY OF PLAN PROVISIONS

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

Plan C: For creditable service before election date, the amount determined by the service retirement formula for Teachers' Retirement System with a maximum reduction of 30%; for creditable service after election date, the amount determined by the service retirement formula for the Teachers' Pension System with a .005 reduction for each month retirement occurs prior to age 62 (maximum reduction of 42%).

5. Disability Retirement Allowance

Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is permanent.

Allowance: The benefit is $1/55^{th}$ of average final compensation for the three highest years as a member for each year of creditable service. The minimum benefit is 25% of average final compensation; the maximum benefit can be no greater than $1/55^{th}$ of average final compensation for each year of creditable service the member would have accrued if employment continued to age 60.

Plan C: The benefit is the greater of the Teachers' Retirement System allowance noted above, or the ordinary disability benefit of the Teachers' Pension System.

Accidental

Eligibility: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty.

Allowance: The benefit is 66 2/3% of average final compensation for the three highest years as a member, plus the annuity provided by accumulated contributions. The maximum benefit cannot be greater than the average final compensation.

7. Death Benefits

Ordinary

Eligibility: one year of eligibility service.

Benefit: one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions. If member dies prior to accruing one year of service, payment is only the return of accumulated contributions.

HEIRON

APPENDIX C SUMMARY OF PLAN PROVISIONS

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

Spouse Law

Eligibility: surviving spouse designated as the sole primary beneficiary and the deceased member was eligible to retire or was age 55 with at least 15 years of eligibility service.

Benefit: surviving spouse may elect a one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions, or a monthly allowance under Option 2 (100% survivor benefit).

Special Death Benefit

Eligibility: killed in line of duty.

Benefit: 66 2/3% of average final compensation for the three highest years as a member payable to a surviving spouse, dependent children or dependent parents. Accumulated contributions are paid to the designated beneficiary(ies).

Note: Death benefits outlined above are payable upon death of an active member. If member is not active, only member accumulated contributions and interest are payable at time of death.

8. Vested Retirement Allowance

Eligibility: five years of eligibility service

Allowance: accrued retirement allowance payable at age 60, provided member does not withdraw accumulated contributions.

9. Cost-of-Living Adjustments (COLA)

All retirement allowances are adjusted based on the Consumer Price Index. The adjustments are effective July 1 for all benefits which have been in payment for one year.

- Plan A: Unlimited and compounded
- Plan B: Capped at 5% and compounded
- Plan C: Combination of COLA for Plan A or Plan B depending on member election prior to electing Plan C - for benefit calculated under the Teachers' Retirement System, plus capped 3% compounded COLA on benefit calculated under the Teachers' Pension System.

10. Optional Forms of Payment

Normal service allowance is a single life annuity.

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.

APPENDIX C SUMMARY OF PLAN PROVISIONS

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

- 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 remaining at date of death.
- Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.
- Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

Retirees who are to receive a service retirement, early service retirement, disability benefit, or vested allowance of less than \$50 a month may elect to receive a lump-sum payment equal to the present value in lieu of a monthly benefit.

11. Reduction for Benefits Payable Under Workers' Compensation

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

12. Change in Benefits

Effective June 1, 2008, the Special Death Benefit was added.



APPENDIX C SUMMARY OF PLAN PROVISIONS

TEACHERS' PENSION SYSTEM OF THE STATE OF MARYLAND

1. Membership

Membership is a condition of employment for all teachers hired on or after January 1, 1980. Certain eligible higher education employees may elect to join an optional defined contribution 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.

All members of the Teacher's Pension System participate in the Alternate Contributory Pension Selection (ACPS) except for the few members who transferred from the Teachers' Retirement System after April 1, 1998 or former vested members who terminated employment prior to January 1, 1998.

2. Member Contributions

Effective for the period July 1, 2007 – June 30, 2008, members were required to make contributions of 4% of earnable compensation.

Effective July 1, 2008, members are required to make contributions of 5% of earnable compensation.

Contributions earn interest at 5% per year.

3. Service Retirement Allowance

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

Age 62 with 5 years of eligibility service.

Age 63 with 4 years of eligibility service.

Age 64 with 3 years of eligibility service.

Age 65 and older with 2 years of eligibility service.



APPENDIX C SUMMARY OF PLAN PROVISIONS

TEACHERS' PENSION SYSTEM OF THE STATE OF MARYLAND

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

- (i) 1.2% of average final compensation for the three highest consecutive years as an employee for each year of creditable service on or before June 30, 1998;
- (ii) 0.8% of average final compensation for the three highest consecutive years as an employee up to the Social Security integration level plus 1.5% of average final compensation over the integration level for each year of creditable service on or before June 30, 1998;
- (iii) 1.8% of average final compensation for the three highest consecutive years as an employee for each year of creditable service after June 30, 1998.

The Social Security integration level (SSIL) 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.

Note: Members who transferred into the Teachers' Pension System, on or after April, 1, 1998, receive benefits based on the provisions of the NCPS (refer to page C-17) as in effect of January 1, 1980 except for COLA benefits. The COLAs are capped at a maximum of 3% compounded annually.

4. Early Retirement Allowance

Eligibility: Attainment of age 55 with at least 15 years of eligibility service.

Allowance: Service retirement allowance computed as of early retirement date, reduced by .005 for each month that early retirement date precedes age 62 (maximum reduction is 42%).

5. Disability Retirement Allowance

Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is permanent.

Allowance: The benefit is the service retirement allowance computed on the basis that service continues until age 62 without any change in rate of earnable compensation. If disability occurs after age 62, the benefit is based on creditable service at time of retirement.

APPENDIX C SUMMARY OF PLAN PROVISIONS

TEACHERS' PENSION SYSTEM OF THE STATE OF MARYLAND

Accidental

Eligibility: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty.

Allowance: The benefit is 66 2/3% of average final compensation for the three highest consecutive years as a member plus the annuity provided by accumulated contributions. The maximum benefit cannot be greater than the average final compensation.

6. Death Benefits

Ordinary

Eligibility: one year of eligibility service.

Benefit: one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions. If member dies prior to accruing one year of service, payment is only the return of accumulated contributions.

Spouse Law

Eligibility: surviving spouse designated as the sole primary beneficiary and the deceased member was eligible to retire or had at least 25 years of eligibility service, or was at least 55 years old with at least 15 years of eligibility service.

Benefit: surviving spouse may elect one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions or a monthly allowance under Option 2 (100% survivor benefit).

Special Death Benefit

Eligibility: killed in line of duty.

Benefit: 66 2/3% of average final compensation for the three highest consecutive years as a member payable to a surviving spouse, dependent children or dependent parents. Accumulated contributions are paid to the designated beneficiary(ies).

Note: Death benefits outlined above are payable upon death of an active member. If member is not active, only member accumulated contributions and interest are payable at time of death.



APPENDIX C SUMMARY OF PLAN PROVISIONS

TEACHERS' PENSION SYSTEM OF THE STATE OF MARYLAND

7. Vested Retirement Allowance

Eligibility: Five years of eligibility service.

Allowance: Accrued retirement allowance payable at age 62 provided member does not withdraw accumulated contributions. A member who has completed 15 years of eligibility service may begin to receive benefit payments at any time on or after attainment of age 55, reduced by .005 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, only accumulated contributions are returned.

8. Cost-of-Living Adjustments (COLA)

All retirement allowances are adjusted each year based on the Consumer Price Index. Effective July 1, 1998, the annual adjustment is capped at a maximum 3% compounded and is applied to all benefits which have been in payment for one year.

However, former members of the Retirement System who elected to transfer to the Pension System on or after April 1, 1998 receive annual adjustments capped at a maximum 3% compounded annually.

All increases are effective July 1.

9. Optional Forms of Payment

Normal service allowance is a single life annuity.

- 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 remaining at date of death.
- Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.
- Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

APPENDIX C SUMMARY OF PLAN PROVISIONS

TEACHERS' PENSION SYSTEM OF THE STATE OF MARYLAND

Retirees who are to receive a service retirement, early service retirement, disability benefit, or vested allowance of less than \$50 a month may elect to receive a lump-sum payment equal to the present value in lieu of a monthly benefit.

10. Reduction for Benefits Payable Under Workers' Compensation

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

11. Change in Benefits

Effective June 1, 2008, the Special Death Benefit was added.



APPENDIX C SUMMARY OF PLAN PROVISIONS

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

1. Membership

Membership ended for employees employed on or after January 1, 1980. Members on December 31, 1979 continue to be members unless they elected to transfer into the Employees' Pension System (established January 1, 1980) prior to January 1, 2005.

Membership includes employees of the State and approximately 115 participating employers.

2. Member Contributions

- Plan A: Generally 7% of earnable compensation to maintain all benefits, including unlimited cost of living adjustments.
- Plan B: Generally 5% of earnable compensation to maintain all benefits, except the cost of living adjustments which are capped at 5%.
- Plan C: (Plan C provides a two-part benefit based on benefits of the Employees' Retirement System and the Employees' Pension System). Employee contributions, if any are based on participation of the employer in one of the three plans under the Employees' Pension System (refer to summary of Employees' Pension System).

Interest earned on all employee contributions is 4% per year.

3. Service Retirement Allowance

Eligibility: 30 years of eligibility service or attainment of age 60

Allowance: 1/55th of average final compensation for the three highest years as a member for each year of creditable service.

Plan C: For creditable service before election date, the amount determined by the service retirement formula for Employees' Retirement System; for creditable service after election date, the amount determined by the service retirement formula for the Employees' Pension System under which the employer participates.

4. Early Retirement Allowance

Eligibility: 25 years of eligibility service.

Allowance: Service retirement allowance reduced by .005 for each month that date of retirement precedes the earlier of age 60 or the date the member would have completed 30 years of eligibility service. The maximum reduction is 30%.

APPENDIX C SUMMARY OF PLAN PROVISIONS

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

Plan C: For creditable service before election date, the amount determined by the service retirement formula for Employees' Retirement System with a maximum reduction of 30%; for creditable service after election date, the amount determined by the service retirement formula for the Employees' Pension System under which the employer participates with a .005 reduction for each month retirement occurs prior to age 62 (maximum reduction of 42%).

5. Disability Retirement Allowance

Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is permanent.

Allowance: The benefit is 1/55th of average final compensation for the three highest years as a member for each year of creditable service. The minimum benefit is 25% of average final compensation; the maximum benefit can be no greater than 1/55th of average final compensation for each year of creditable service the member would have accrued if employment continued to age 60.

Plan C: The benefit is the greater of the Employees' Retirement System allowance noted above, or the ordinary disability benefit of the Employees' Pension System.

Accidental

Eligibility: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty.

Allowance: The benefit is 66 2/3% of average final compensation for the three highest years as a member, plus the annuity provided by accumulated contributions. The maximum benefit cannot be greater than the average final compensation.

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APPENDIX C SUMMARY OF PLAN PROVISIONS

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

7. Death Benefits

Ordinary

Eligibility: one year of eligibility service.

Benefit: one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions. If member dies prior to accruing one year of service, payment is only the return of accumulated contributions.

Spouse Law

Eligibility: surviving spouse designated as the sole primary beneficiary and the deceased member was eligible to retire or was at least age 55 with at least 15 years of eligibility service.

Benefit: surviving spouse may elect a one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions, or a monthly allowance under Option 2 (100% survivor benefit).

Special Death Benefit

Eligibility: killed in line of duty.

Benefit: 66 2/3% of average final compensation for the three highest years as a member payable to a surviving spouse, dependent children or dependent parents. Accumulated contributions are paid to the designated beneficiary(ies).

Note: Death benefits outlined above are payable upon death of an active member. If member is not active, only member accumulated contributions and interest are payable at time of death.

8. Vested Retirement Allowance

Eligibility: five years of eligibility service

Allowance: accrued retirement allowance payable at age 60, provided member does not withdraw accumulated contributions.

APPENDIX C SUMMARY OF PLAN PROVISIONS

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

9. Cost-of-Living Adjustments (COLA)

All retirement allowances are adjusted based on the Consumer Price Index. The adjustments are effective July 1 for all benefits which have been in payment for one year.

- Plan A: Unlimited and compounded
- Plan B: Capped at 5% and compounded
- Plan C: Combination of COLA for either Plan A or Plan B (depending on member election prior to electing Plan C) for benefit calculated under the Employees' Retirement System, plus capped at a maximum of 3% compounded COLA on benefit calculated under the Employees' Pension System under which the employer participates.

10. Optional Forms of Payment

Normal service allowance is a single life annuity.

- 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 remaining at date of death.
- Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.
- Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

Retirees who are to receive a service retirement, early service retirement, disability benefit, or vested allowance of less than \$50 a month may elect to receive a lump-sum payment equal to the present value in lieu of a monthly benefit.

11. Reduction for Benefits Payable Under Workers' Compensation

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

APPENDIX C SUMMARY OF PLAN PROVISIONS

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

12. Miscellaneous Provisions

For Members of the General Assembly

The retirement allowance is equal to 3.00% of current legislative salary for each year of creditable service (maximum 22 years 3 months) upon attainment of age 60 and at least 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 .005 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 contributions in the system and receive a retirement allowance at age 60, or a reduced benefit on or after age 50. If termination occurs before the completion of eight years of eligibility service, the member may make contributions equal to the member's and the State's required contributions until the member would have completed eight years of eligibility service,

A member who is certified as disabled after completing at least 8 years of eligibility service may resign from the General Assembly and immediately receive a retirement allowance based on their eligibility service.

The member's surviving spouse receives 50% of the member's retirement allowance if the member i) is retired, ii) is eligible for a deferred vested 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.

Members contribute 5% of their earnable compensation during their first 22 years 3 months of service with contributions earning interest at 4% per year.

All retirement allowances are recalculated each time the salary for current members of the General Assembly are increased.

For Correctional Officers

Correctional officers serving in the first six job classifications, maximum security attendants at Clifton T. Perkins Hospital Center, a Correctional Dietary, Maintenance or Supply Officer, Maryland Correctional Enterprise Officers and Trainees, Plant Supervisors, Plant Managers, and Regional Managers; and Laundry Officers participate under this System. In addition, effective July 1, 2006, Maryland counties may elect to participate on behalf of their detention center officers.

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APPENDIX C SUMMARY OF PLAN PROVISIONS

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

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 at least five years in one of the positions noted above immediately preceding retirement. The vested retirement allowance of a correctional officer who was in the first six job classifications for at least five years preceding retirement commences at age 55; for the security attendant it commences at age 60.

13. Change in Benefits

Effective June 1, 2008, the Special Death Benefit was added (excluding members of the General Assembly).



APPENDIX C SUMMARY OF PLAN PROVISIONS

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

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, and members of the General Assembly. Certain governmental units also have elected to participate in the System.

There are three plans under the Employees' Pension System.

- Noncontributory Pension System (**NCPS**) the original pension system established on January 1,1980 that only applies to certain participating governmental units that did not elect to participate in the Contributory Pension System or the Alternate Contributory Pension Selection
- Employees' Contributory Pension System (ECPS) The ECPS established July 1, 1998 that only applies to certain participating governmental units that elected the ECPS but did not elect to participate in the Alternate Contributory Pension Selection
- Alternate Contributory Pension Selection (ACPS) applies to all State employees and those participating governmental units that elected the ACPS effective July 1, 2006.

2. Member Contributions

NCPS: Members are only required to make contributions of 5% on earnable compensation that exceeds the Social Security Taxable Wage Base.

ECPS: Members are required to make contributions of 2% of earnable compensation.

ACPS: Effective for the period July 1, 2007 – June 30, 2008, members were required to make contributions of 4% of earnable compensation.

Effective July 1, 2008, ACPS members are required to make contributions of 5% of earnable compensation.

Contributions earn interest at 5% per year.

APPENDIX C SUMMARY OF PLAN PROVISIONS

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

3. Service Retirement Allowance

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

Age 62 with 5 years of eligibility service

Age 63 with 4 years of eligibility service

Age 64 with 3 years of eligibility service

Age 65 or older with 2 years of eligibility service

NCPS Allowance:

0.8% of average final compensation up to the SSIL for the three highest consecutive years as a member plus 1.5% of average final compensation over the SSIL for each year of creditable service;

ECPS Allowance: The greater of (i) or (ii), plus (iii), as described below:

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

ACPS Allowance: The greater of (i) or (ii), plus (iii), as described below:

- (i) 1.2% of average final compensation for the three highest consecutive years as an employee for each year of creditable service on or before June 30, 1998;
- (ii) 0.8% of average final compensation up to the SSIL for the three highest consecutive years as a member plus 1.5% of average final compensation over the SSIL for each year of creditable service on or before June 30, 1998;
- (iii) 1.8% of average final compensation for the three highest consecutive years as an employee for each year of creditable service after June 30, 1998.

The SSIL 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.

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APPENDIX C SUMMARY OF PLAN PROVISIONS

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

Note: Members who transferred into the Employees' Pension System, on or after April 1, 1998, receive benefits based on the provisions of the NCPS as in effect of January 1, 1980 except for COLA benefits. The COLAs are capped at a maximum of 3% compounded annually.

4. Early Retirement Allowance

Eligibility: Attainment of age 55 and at least 15 years of eligibility service.

Allowance: Service retirement allowance computed as of early retirement date, reduced by .005 for each month that early retirement date precedes age 62 (maximum reduction is 42%).

5. Disability Retirement Allowance

Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is permanent.

Allowance: The benefit is the service retirement allowance computed on the basis that service continues until age 62 without any change in the rate of earnable compensation. If disability occurs on or after age 62, the benefit is based on creditable service at time of retirement.

Accidental

Eligibility: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty.

Allowance: The benefit is 66 2/3% of average final compensation for the three highest consecutive years as a member, plus the annuity provided by accumulated contributions. The maximum benefit cannot be greater than the average final compensation.

6. Death Benefits

Ordinary

Eligibility: one year of eligibility service.

Benefit: one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions. If member dies prior to accruing one year of service, payment is only the return of accumulated contributions.

APPENDIX C SUMMARY OF PLAN PROVISIONS

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

Spouse Law

Eligibility: surviving spouse designated as the sole primary beneficiary and the deceased member was eligible to retire or was at least age 55 with at least 15 years of eligibility service.

Benefit: surviving spouse may elect one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions or a monthly allowance under Option 2 (100% survivor benefit).

Special Death Benefit

Eligibility: killed in line of duty.

Benefit: 66 2/3% of average final compensation for the three highest consecutive years as a member payable to a surviving spouse, dependent children or dependent parents. Accumulated contributions are paid to the designated beneficiary(ies).

Note: Death benefits outlined above are payable upon death of an active member. If member is not active, only member accumulated contributions and interest are payable at time of death.

7. Vested Retirement Allowance

Eligibility: Five 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 on or after attainment of age 55, reduced by .005 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, only accumulated contributions are returned.

8. Cost-of-Living Adjustments (COLA)

All retirement allowances are adjusted each year based on the Consumer Price Index. Effective July 1, 1998, the annual adjustment is capped at a maximum of 3% compounded COLA, and is applied to all benefits which have been in payment for one year. All increases are effective July 1.

APPENDIX C SUMMARY OF PLAN PROVISIONS

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

However, retirement allowances of NCPS retirees (retirees of participating employers who did not elect the ECPS or ACPS) have an annual COLA that is capped at a maximum of 3% of the initial benefit. The COLA is applied to all benefits which have been in payment for one year. All increases are effective July 1.

9. Optional Forms of Payment

Normal service allowance is in a single life annuity.

- 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 remaining at date of death.
- Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.
- Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

Retirees who are to receive a service retirement, early service retirement, disability benefit, or vested allowance of less than \$50 a month may elect to receive a lump-sum payment equal to the present value in lieu of a monthly benefit.

10. Reduction for Benefits Payable Under Workers' Compensation

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

11. Change in Benefits

Effective June 1, 2008, the Special Death Benefit was added.

APPENDIX C SUMMARY OF PLAN PROVISIONS

STATE POLICE RETIREMENT SYSTEM OF THE STATE OF MARYLAND

1. Membership

Membership is a condition of employment for all officers of the Maryland State Police. 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.

Contributions earn interest at 4% per year.

3. Service Retirement Allowance

Eligibility: 22 years of eligibility service or attainment of age 50 Retirement at age 60 is mandatory for all but the Superintendent.

Allowance: 2.55% of average final compensation for the three highest years as a member for each of the first 28 years of creditable service. Maximum benefit is 71.4% of average final compensation.

4. Early Retirement Allowance

Not applicable to this System.

5. Disability Retirement Allowance

Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is permanent.

Allowance: 2.55% of average final compensation for the three highest years as a member for each of the first 28 years of creditable service. Minimum payable is 35% of average final compensation.

APPENDIX C SUMMARY OF PLAN PROVISIONS

STATE POLICE RETIREMENT SYSTEM OF THE STATE OF MARYLAND

Special (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 66 2/3% of average final compensation plus the annuity provided by accumulated contributions with a maximum of average final compensation.

6. Death Benefits

Ordinary

Eligibility: 1 through 2 years of eligibility service and not eligible for special death benefit as noted below.

Benefit: Member's annual earnable compensation at time of death plus accumulated contributions.

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

Special Death Benefit

Eligibility: Two or more years of eligibility service or death in the performance of duty.

Benefit: Accumulated contributions paid to designated beneficiary plus an allowance of one-half (two-thirds if death arises out of or in the course of the actual performance of duty) of the member's average final compensation. Payment is made to the surviving spouse; however if there is no surviving spouse or spouse dies before youngest child reaches age 18, one-half of average final compensation continues until the youngest child reaches age 18. If there is no surviving spouse or children under the age of 18, payment is made to dependent parents. If none of the above conditions are met, the ordinary death benefit is paid to the designated beneficiary (ies).

Note: Death benefits outlined above are payable upon death of an active member. If member is not active, only member accumulated contributions and interest are payable at time of death, unless benefit payment has commenced.

7. Vested Retirement Allowance

Eligibility: Five years of eligibility service.

Allowance: Service retirement allowance payable at age 50.

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APPENDIX C SUMMARY OF PLAN PROVISIONS

STATE POLICE RETIREMENT SYSTEM OF THE STATE OF MARYLAND

8. Cost-of-Living Adjustments (COLA)

All retirement allowances are adjusted each year based on the Consumer Price Index. Unlimited compounded COLAs are effective July 1 and are applied to all benefits which have been in payment for one year.

Retirees and beneficiaries receiving a retirement allowance on or before June 30, 1999, receive an annual adjustment to their benefit ranging from \$1,200 to \$2,400 with separate COLAs on this adjustment commencing effective July 1, 2000.

9. Optional Forms of Payment

Normal service allowance is 80% joint and survivor annuity with spouse, if any. If there is no surviving spouse or upon the death of the surviving spouse, payment is made to any children of the deceased retiree under the age of 18 years, until each child becomes age 18. If there is 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 remaining at date of death.
- Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.
- Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

10. Reduction for Benefits Payable Under Workers' Compensation

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

APPENDIX C SUMMARY OF PLAN PROVISIONS

STATE POLICE RETIREMENT SYSTEM OF THE STATE OF MARYLAND

11. Deferred Retirement Option Program (DROP)

Members with 22 years of eligibility service but less than 28 years of eligibility service, and who are less than 60 years of age may elect to enter the DROP program for no more than four years. Members who enter DROP are retired and cease making member contributions, and cease accruing service credit and additional benefits. The service retirement allowance, with annual COLA adjustments, is credited to an account earning interest at the rate of 6% per year, compounded monthly. When the DROP period ends, members terminate employment and begin receiving their monthly allowance plus the lump sum payment from their DROP account. During the DROP period, members remain eligible for Special Disability benefits if incapacitated while in DROP.

12. Changes in Benefits

Effective July 1, 2008, the Special Supplemental Death Benefit payable to retirees was repealed and replaced by an 80% survivor benefit.

Effective July 1, 2008, members entering DROP may only be considered for Special Disability based on incapacity that occurred on or after participation in DROP.



APPENDIX C SUMMARY OF PLAN PROVISIONS

JUDGES RETIREMENT SYSTEM OF THE STATE OF MARYLAND

1. Membership

Membership is a condition of employment for a judge of the Court of Appeals, Court of Special Appeals, Circuit Court, or District Court of Maryland. Members of the State Workers' Compensation Commission also participate.

2. Member Contributions

Members are required to make contributions of 6% of salary until they have accrued 16 years of service credit.

Contributions earn interest at 4% per year.

3. Service Retirement Allowance

Eligibility: Attainment of age 60, or retired by order of the Court of Appeals.

Allowance: 66 2/3% of current judicial salary for 16 years of service. With less than 16 years, the benefit is prorated based on the ratio of years of service to 16.

4. Early Retirement Allowance

Not applicable to this System.

5. Disability Retirement Allowance

Eligibility: Certification of the medical board designated by the Board of Trustees that member is incapacitated for the performance of duty, and that incapacity is permanent.

Allowance: Same as immediate service allowance, 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 C SUMMARY OF PLAN PROVISIONS

JUDGES RETIREMENT SYSTEM OF THE STATE OF MARYLAND

6. Death Benefits

Monthly Allowance

Eligibility: Death of a judge of former judge at any age, leaving a surviving spouse or dependent children under the age of 18.

Allowance: 50% of the pension that would have been payable to the judge or former judge at the date of death as if the judge or former judge was eligible to receive a retirement allowance is payable to surviving spouse. If there is no spouse, payment is paid to children until age 18.

Lump Sum

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

Allowance: Annual salary at time of death plus return of accumulated contributions paid to designated beneficiary.

(Deferred Vested Allowance)

Eligibility: Termination of service prior to age 60.

Allowance: Same as service allowance payable at age 60.

In lieu of a deferred vested allowance pension, a former judge may elect to withdraw accumulated contributions within six months following the member's termination of service.

8. Cost-of-Living Adjustments

Allowances are recalculated each time the salary for a sitting judge from the Court from which the judge retired increases.

NOTE: Masters who retire from the Judges' Retirement System receive COLA benefits equal to the percentage increase in salary provided to judges of the Circuit Court.

APPENDIX C SUMMARY OF PLAN PROVISIONS

JUDGES RETIREMENT SYSTEM OF THE STATE OF MARYLAND

9. Optional Forms of Payment

Normal service allowance is 50% joint and survivor annuity with spouse. However, a judge or former judge, who at the time of retirement, does not have a spouse or eligible minor children, may elect one of the following 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 remaining at date of death.
- Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.
- Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

10. Change in Benefits

None.

APPENDIX C SUMMARY OF PLAN PROVISIONS

LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND (RETIREMENT PLAN

A. Retirement System Provisions

1. Membership

The retirement tier was closed to new participants effective January 1, 2005.

2. Member Contributions

Members who transferred from Employees' Retirement System (Plan A) are required to contribute 7% of earnable compensation. Members who transferred from the Employees' Retirement System (Plan B) contribute 5% of earnable compensation.

Contributions earn interest at 4% per year.

3. Service Retirement Allowance

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

Allowance: 2.3% of average final compensation for the three highest years as a member for each of the first 30 years of creditable service, plus 1.0% of average final compensation for each additional year.

4. Early Retirement Allowance

Not applicable to this System.

5. Disability Retirement Allowance

Ordinary

Eligibility: Certification of the medical board designated by the Board of Trustees that member is incapacitated for the performance of duty, and that incapacity is permanent.

Allowance: Service retirement allowance with a minimum of 25% of average final 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.

APPENDIX C SUMMARY OF PLAN PROVISIONS

LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND (RETIREMENT PLAN

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

6. Death Benefits

Ordinary

Eligibility: 1 through 2 years of eligibility service and not eligible for special death benefit.

Benefit: Member's annual earnable compensation at time of death plus accumulated contributions.

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

Special Benefit

Eligibility: Two or more years of eligibility service

Benefit: Accumulated contributions paid to designated beneficiary plus an allowance of 50% of the ordinary disability benefit. Payment is made to the surviving spouse; however if there is no surviving spouse or spouse dies before youngest child reaches age 18, one-half of average final compensation continues until the youngest child reaches age 18. If none of the above conditions are met, the ordinary death benefit is paid to the designated beneficiary(ies).

Eligibility: Death arises out of or in the course of the actual performance of duty

Benefit: Accumulated contributions paid to designated beneficiary plus an allowance of 66 2/3% of the member's average final compensation. Payment is made to the surviving spouse; however if there is no surviving spouse or spouse dies before youngest child reaches age 18, one-half of average final compensation continues until the youngest child reaches age 18. If none of the above conditions are met, the ordinary death benefit is paid to the designated beneficiary(ies).

Note: Death benefits outlined above are payable upon death of an active member. If member is not active, only member accumulated contributions and interest are payable at time of death, unless benefit payment has commenced.

APPENDIX C SUMMARY OF PLAN PROVISIONS

LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND (RETIREMENT PLAN)

7. Vested Retirement Allowance

Eligibility: Five years of eligibility service.

Allowance: Accrued retirement allowance payable at age 50 if the member does not withdraw the member's accumulated contributions.

8. Cost-of-Living Adjustments (COLA)

All retirement allowances are adjusted each year based on the Consumer Price Index. COLAs are effective July 1 and are applied to all benefits which have been in payment for one year. For members contributing 7% of earnable compensation, unlimited COLA is compounded annually. For members contributing 5% of earnable compensation, the cost-of-living adjustment is capped at a maximum 5% compounded annually.

9. Optional Forms of Payment

The normal service allowance 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.

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 remaining at date of death.
- Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.
- Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

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APPENDIX C SUMMARY OF PLAN PROVISIONS

LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND (RETIREMENT PLAN)

10. Reduction for Benefits Payable under Workers' Compensation

Disability retirement allowances, excluding the annuity reserves, are reduced for workers' compensation benefits payable after retirement from injury occurring during employment with the State, if the workers' compensation benefits are for the same injury for which disability 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 eligibility service, but less than 30 years of eligibility service, may elect to enter the DROP program for no more than five years. Members who enter DROP are retired and cease making member contributions, and cease accruing service credit and additional benefits. The service retirement allowance, with annual COLA adjustments, is credited to an account earning interest at the rate of 6% per year, compounded monthly. When the DROP period ends, members terminate employment and begin receiving their monthly allowance plus the lump sum payment from their DROP account. During the DROP period, members remain eligible for Accidental Disability benefits if incapacitated while in DROP.

12. Change in Benefit

Effective July 1, 2008, members entering DROP may only be considered for Accidental Disability based on incapacity that occurs on or after participation in DROP.



APPENDIX C SUMMARY OF PLAN PROVISIONS

LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND

B. Pension System Provisions

1. Membership

Membership is a condition of employment for all law enforcement officers who are employees of the State as provided in the Annotated Code of Maryland, State Personnel and Pensions Article, Title 26, Section 26-201. This includes participating governmental units who elect to have their law enforcement officers or firefighters/paramedics participate in the System.

2. Member Contributions

Members are required to contribute 4% of earnable compensation.

Contributions earn interest at 5% per year.

3. Service Retirement Allowance

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

Allowance: 2.0% of average final compensation for the three highest consecutive years as an employee for each of the first 30 years of creditable service. Maximum benefit is 60% of average final compensation

4. Early Retirement Allowance

Not applicable to this System.

5. Disability Retirement Allowance

Ordinary

Eligibility: Certification of the medical board designated by the Board of Trustees that member is incapacitated for the performance of duty, and that incapacity is permanent.

Allowance: Service retirement allowance computed on the basis that service continues until age 50 without any change in rate of earnable compensation. If disability occurs after age 50, the benefit is based on creditable service at time of retirement.

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.

APPENDIX C SUMMARY OF PLAN PROVISIONS

LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND

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

6. Death Benefits

Ordinary

Eligibility: 1 through 2 years of eligibility service and not eligible for special death benefit as noted below.

Benefit: Member's annual earnable compensation at time of death plus accumulated contributions.

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

Accidental

Eligibility: Two or more years of eligibility service

Benefit: Accumulated contributions paid to designated beneficiary plus an allowance of 50% of the ordinary disability benefit. Payment is made to the surviving spouse; however if there is no surviving spouse or spouse dies before youngest child reaches age 18, one-half of average final compensation continues until the youngest child reaches age 18. If none of the above conditions are met, the ordinary death benefit is paid to the designated beneficiary(ies).

Eligibility: Death arises out of or in the course of the actual performance of duty.

Benefit: Accumulated contributions paid to designated beneficiary plus an allowance of 66 2/3% of the member's average final compensation. Payment is made to the surviving spouse; however if there is no surviving spouse or spouse dies before youngest child reaches age 18, one-half of average final compensation continues until the youngest child reaches age 18. If none of the above conditions are met, the ordinary death benefit is paid to the designated beneficiary(ies).

Note: Death benefits outlined above are payable upon death of an active member. If member is not active, only member accumulated contributions and interest are payable at time of death, unless benefit payment has commenced.

APPENDIX C SUMMARY OF PLAN PROVISIONS

LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND

7. Vested Retirement Allowance

Eligibility: Five years of eligibility service.

Allowance: Accrued retirement allowance payable at age 50 if the member does not withdraw the member's accumulated contributions.

8. Cost-of-Living Adjustments (COLA)

All retirement allowances are adjusted each year based on the Consumer Price Index. Effective July 1, 2000, the annual adjustment is capped at a maximum 3% compounded and is applied to all benefits which have been in payment for one year. All increases are effective July 1.

9. Optional Forms of Payment

The normal service allowance 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 attains 18 years of age.

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 remaining at date of death.
- Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.
- Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

10. Reduction for Benefits Payable under Workers' Compensation

Disability retirement allowances, excluding the annuity reserves, are reduced for workers' compensation benefits payable after retirement from injury occurring during employment with the State if the workers' compensation benefits are for the same injury

APPENDIX C SUMMARY OF PLAN PROVISIONS

LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND

for which disability retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

11. Deferred Retirement Option Plan (DROP)

Members with 25 years of eligibility service, but less than 30 years of eligibility service, may elect to enter the DROP program for no more than five years. Members who enter DROP are retired and cease making member contributions, and cease accruing service credit and additional benefits. The service retirement allowance, with annual COLA adjustments, is credited to an account earning interest at the rate of 6% per year, compounded monthly. When the DROP period ends, members terminate employment and begin receiving their monthly allowance plus the lump sum payment from their DROP account. During the DROP period, members remain eligible for Accidental Disability benefits if incapacitated while in DROP.

12. Changes in Benefits

Effective July 1, 2008, members entering DROP may only be considered for Accidental Disability based on incapacity that occurs on or after participation in DROP.

Effective July 2008, police officers of the Baltimore City Community College participate in the Pension Plan portion of this System.



APPENDIX C SUMMARY OF PLAN PROVISIONS

LOCAL FIRE & POLICE SYSTEM OF THE STATE OF MARYLAND (RETIREMENT PLAN)

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 participant 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.

This plan has been closed to new members since January 1, 2005.

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.

Contributions earn interest at 4% per year.

3. Service Retirement Allowance

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

Allowance: 2.0% of average final compensation for the three highest years as a member for each of the first 30 years of creditable service, plus 1.0% of average final compensation for each additional year.

4. Early Retirement Allowance

Not applicable to this System.

5. Disability Retirement Allowance

Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that the member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that the incapacity is permanent.

Allowance: The benefit is 2.0% of average final compensation for the three highest years as a member for each year of creditable service plus 1.0% of average final compensation for each additional year, with a minimum of 25% of average final compensation.



APPENDIX C SUMMARY OF PLAN PROVISIONS

LOCAL FIRE & POLICE SYSTEM OF THE STATE OF MARYLAND (RETIREMENT PLAN)

Accidental

Eligibility: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty.

Allowance: The benefit is 66 2/3% of average final compensation for the three highest consecutive years as a member plus the annuity provided by accumulated contributions. The maximum benefit cannot be greater than the average final compensation.

6. Death Benefits

Ordinary

Eligibility: One year of eligibility service or death in the performance of duty.

Benefit: one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions. If member dies prior to accruing one year of service, payment is only the return of accumulated contributions.

Spouse Law

Eligibility: surviving spouse designated as the sole primary beneficiary and the deceased member was eligible to retire or was at least age 55 with at least 15 years of eligibility service.

Benefit: surviving spouse may elect one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions or a monthly allowance under Option 2 (100% survivor benefit).

7. Vested Retirement Allowance

Eligibility: Five years of eligibility service.

Allowance: Service 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 inuring to him on account of his previous membership.

APPENDIX C SUMMARY OF PLAN PROVISIONS

LOCAL FIRE & POLICE SYSTEM OF THE STATE OF MARYLAND (RETIREMENT PLAN)

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 five years of eligibility service at termination of employment, his accumulated contributions are returned.

8. Cost-of-Living Adjustments (COLA)

All retirement allowances are adjusted each year based on the Consumer Price Index. The COLA is an unlimited compounded COLA. 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

Basic form of payment is a single life annuity.

- 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 remaining at the date of death.
- Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.
- Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

10. Reduction for Benefits Payable under Workers' Compensation

Disability retirement allowances, excluding the annuity reserves, are reduced for workers' compensation benefits payable after retirement from injury occurring during employment by the State or participating employer, if the workers' 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. Change in Benefits

None.

APPENDIX C SUMMARY OF PLAN PROVISIONS

LOCAL FIRE & POLICE PENSION SYSTEM OF THE STATE OF MARYLAND

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.

Contributions earn interest at 5% per year.

3. Service Retirement Allowance

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

Allowance: 1.0% of average final compensation for the three highest consecutive years as an employee up to the SSIL plus 1.5% of average final compensation over the integration level for each year of creditable service.

The SSIL 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 final compensation for each year of creditable service.

4. Early Retirement Allowance

Not applicable to this System.

5. Disability Retirement Allowance

Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that the member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that the incapacity is permanent.



APPENDIX C SUMMARY OF PLAN PROVISIONS

LOCAL FIRE & POLICE PENSION SYSTEM OF THE STATE OF MARYLAND

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: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty.

Allowance: The benefit is 66 2/3% of average final compensation for the three highest consecutive years as a member plus the annuity provided by accumulated contributions. The maximum benefit cannot be greater than the average final compensation.

6. Death Benefits

Ordinary

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

Benefit: one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions. If member dies prior to accruing one year of service, payment is only the return of accumulated contributions.

Spouse Law

Eligibility: surviving spouse designated as the sole primary beneficiary and the deceased member was eligible to retire or was at least age 55 with at least 15 years of eligibility service.

Benefit: surviving spouse may elect one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions or a monthly allowance under Option 2 (100% survivor benefit.

7. Vested Retirement Allowance

Eligibility: Five years of eligibility service.

Allowance: Service 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 inuring to him on account of his previous membership.

APPENDIX C SUMMARY OF PLAN PROVISIONS

LOCAL FIRE & POLICE PENSION SYSTEM OF THE STATE OF MARYLAND

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 five years of eligibility service at termination of employment, his accumulated contributions are returned.

8. Cost-of-Living Adjustments (COLA)

All retirement allowances are adjusted each year based on the Consumer Price Index. The annual adjustment is capped at a maximum 3% on the initial benefit and is applied to all benefits which have been in payment for one year. Increases are effective July 1.

9. Optional Forms of Payment

Basic form of payment is a single life annuity.

- 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 remaining at date of death.
- Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.
- Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

10. Reduction for Benefits Payable Under Workers' Compensation

Disability retirement allowances, excluding annuity reserves, are reduced for workers' compensation benefits payable after retirement from injury occurring during employment by the State or participating employer, if the workers' 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. Change in Benefits

None.

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APPENDIX D GLOSSARY OF TERMS

1. Actuarial Accrued Liability

The Actuarial Accrued Liability is the difference between the present value of all future system benefits and the present value of total future normal costs. This is also referred to by some actuaries as the "accrued liability" or "actuarial liability".

2. Actuarial Assumptions

Estimates of future experience with respect to rates of mortality, disability, turnover, retirement rate or rates of investment income and salary increases. Actuarial assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

3. Accrued Service

Service credited under the System which was rendered before the date of the actuarial valuation.

4. Actuarial Equivalent

A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.

5. Actuarial Funding Method

A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of a retirement system benefit between future normal cost and actuarial accrued liability. Sometimes referred to as the "actuarial funding method".

6. Actuarial Gain (Loss)

The difference between actual experience and actuarial assumption anticipated experience during the period between two actuarial valuation dates.

7. Actuarial Present Value

The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment.

8. Amortization

Paying off an interest-discounted amount with periodic payments of interest and principal—as opposed to paying off with a lump sum payment.

APPENDIX D GLOSSARY OF TERMS

9. Annual Required Contribution (ARC) under GASB 25

The Governmental Accounting Standards Board (GASB) Statement No. 25 defines the Plan Sponsor's "Annual Required Contribution" (ARC) that must be disclosed annually.

10. Normal Cost

The actuarial present value of retirement system benefits allocated to the current year by the actuarial funding method.

11. Set back/Set forward

Set back is a period of years that a standard published table (i.e. mortality) is referenced backwards in age. For instance, if the set back period is 2 years and the participant's age is currently 40, then the table value for age 38 is used from the standard published table. It is the opposite for set forward. A system would use set backs or set forwards to compensate for mortality experience in their work force.

12. Unfunded Actuarial Liability (UAL)

The difference between actuarial liability and valuation assets. Sometimes referred to as "unfunded actuarial accrued liability".

Most retirement systems have unfunded actuarial liabilities. They typically arise each time new benefits are added and each time experience losses are realized.

