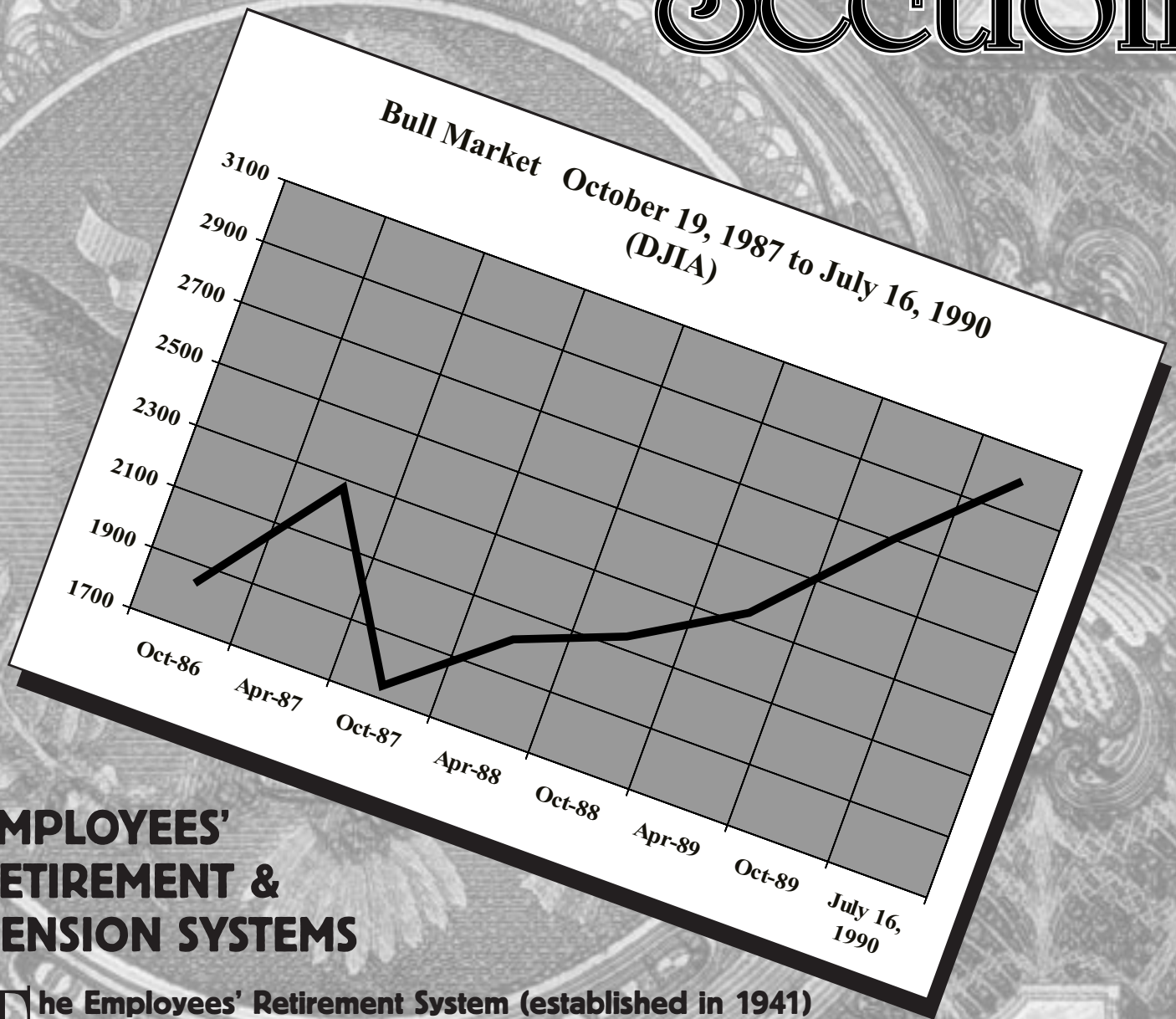


Actuarial Section



EMPLOYEES' RETIREMENT & PENSION SYSTEMS

The Employees' Retirement System (established in 1941) and the Employees' Pension System (established in 1980) combined account for more than half of all State Retirement and Pension System members. Active membership in the combined employees' systems at the end of 2001 exceeded 87,000 participants. Membership includes all regular employees of the State of Maryland. Over 120 local governmental units have voluntarily joined the system to provide survivor, disability and retirement benefits for their employees. The governor, members of the General Assembly, and state correctional officers are also included as members of the combined employees' systems.



A MILLIMAN GLOBAL FIRM

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

Dear Members of the Board:

At your request, we conducted our annual actuarial valuation of the State Retirement & Pension System of Maryland as of June 30, 2001. The results of the valuation are contained in the following report.

Funding Objective

The funding objective of the System is to establish contribution rates which, over time, will remain level as a percent of payroll. In order to achieve this, a contribution rate has been determined which will provide for current cost (i.e., normal cost expressed as a level percent of payroll) plus a level percent of payroll amortization of the pre-2001 unfunded liability to the year 2020, and of each subsequent layer of unfunded liability over a 25 year period from the last year it first arises.

Assumptions

The assumptions and methods used in performing this valuation meet the parameters set for disclosure presented in the financial section of the System's Comprehensive Annual Financial Report (CAFR) by Government Accounting Standards Board Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*.

Reliance on Others

In preparing our report, we have relied, without audit, on employee census data and financial information provided by the State Retirement Agency. Census data provided to us by the Agency has been reviewed for reasonableness, and for consistency with the data certified by the System's auditors.

Supporting Schedules

Certain information presented in the System's June 30, 2001 CAFR was derived from our June 30, 2001 actuarial valuation report. In this regard, we were responsible for producing all supporting schedules to be found in the Actuarial Section.

Additionally, we were responsible for producing all data presented in the Schedule of Funding Progress, Schedule of Employer Contributions and Notes to the Required Supplementary Information shown in the Financial Section of the 2001 CAFR.

Certification

I, Gene Kalwarski, am a consulting actuary for Milliman USA. I am also a member of the American Academy of Actuaries and meet their qualification standards to render the actuarial opinion contained herein. On the basis of the foregoing, I certify that, to the best of my knowledge, this report is complete and accurate and has been prepared in accordance with Maryland's Annotated Code and generally recognized and accepted actuarial principles and practices which are consistent with the applicable Guides to Professional Conduct, Amplifying Opinions, and supporting Recommendations and Interpretations of the American Academy of Actuaries.

Sincerely,
Milliman USA

Gene M. Kalwarski, F.S.A.
Principal

Offices In Principal Cities Worldwide

BOARD SUMMARY

Valuation Comments

This report presents the results of the June 30, 2001 actuarial valuation of the State Retirement and Pension System of Maryland (SRPS). The primary purposes of performing the annual actuarial valuation are to:

- determine the contributions to be paid by the State in Fiscal Year 2003;
- measure and disclose, as of the valuation date, the financial condition of the fund;
- indicate trends in the financial progress of the fund;
- provide specific information and documentation required by the Government Accounting Standards Board (GASB).

Actuary's Comments

As a result of Systems assets earning a negative 9.36%, considerably below the 8% assumption, the System has a total unfunded actuarial liability of \$555 million as of June 30, 2001. This compares to a \$369 million surplus measured at the June 30, 2000 valuation. However, in relative terms, the overall System funding ratio of assets to liabilities only fell from 101.2% in 2000, to 98.3% this year. This funded status is substantially better than would have been expected when the State first established the goal to extinguish unfunded liabilities by the year 2020.

Thanks to asset smoothing method changes instituted by the Board last year, which discounted much of the prior decade's asset run-up, 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 6.0%, or 2% less than our assumption. This investment loss produced an increase in the unfunded liability of \$608 million

more than expected. Combined with a liability loss of \$463 million, due largely to pay increases above assumed levels, results in a total System plan experience net loss of \$1,071 million.

Finally, while the results are not on the favorable side this year, we emphasize again, as we have so often in the past, that financing of any retirement system is a long term proposition, 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 healthy, and that there are procedures, assumptions and methods in place, which in our opinion adequately and appropriately finance the emerging long-term liabilities of the System.

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

Prior Year Experience

Assets

Plan assets for this Fund are measured on both a market value and an actuarial or smoothed value basis. The actuarial smoothing method, described in detail in Appendix C, essentially reflects only 20% of a current year's actual market performance. In periods of high returns, this method significantly discounts the amount of asset gains above the assumed return of 8%. Conversely, in periods of returns below assumed, the losses are discounted. The primary advantage of this smoothing technique is contribution stability.

For the plan year ending June 30, 2001, while the Fund earned a negative 9.36% on a market value basis, on a smoothed basis, the return was a positive 6.0%. While on a market basis, the Fund experienced an investment loss of \$5,700 million, the actuarial or smoothed basis produced a loss of \$608 million. The specific changes between the prior year amounts and this year's are presented below.

Item (In Millions)	Market Value	Actuarial Value
June 30, 2000 value	\$33,111	\$30,649
Employer Contributions	634	634
Member Contributions	190	190
Benefit Payments	(1,380)	(1,380)
Expected Investment Earnings (8%)	2,627	2,430
Expected Value June 30, 2001	\$35,182	\$32,523
INVESTMENT GAIN (LOSS)	(5,700)	(608)
June 30, 2001 value	\$29,482	\$31,915

Liabilities

Three different measures of liabilities are calculated for this fund: a total value of future obligations (PVB), an actuarial liability (EAN), and an accounting liability (PVAB). 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 2001, the actuarial liabilities experienced an overall loss of \$463 million, which is 1.4% of the total actuarial liability being measured. The primary cause for liability experience being worse than anticipated this past year, were pay increases. We will continue to monitor gains and losses to ensure there is no significant pattern.

LIABILITIES (In Millions)	Total Value (PVB)	Actuarial (EAN)	Accounting (PVAB)
June 30, 2000	\$36,575	\$30,280	\$24,283
June 30, 2001	\$39,203	\$32,470	\$26,323

Unfunded Liabilities and Funding Ratios

The difference between assets and liabilities is the unfunded liability. This is measured in two ways: unfunded actuarial liabilities, which compare the actuarial liabilities to the actuarial asset value, and unfunded accrued benefits, which compare the present value of benefits accrued as of the valuation date to the market value of assets. These amounts are shown for June 30, 2000 and June 30, 2001, as well as the corresponding funding ratios for each (assets divided by liabilities).

(In Millions)	Actuarial	PVAB
June 30, 2000 Net (Surplus) Unfunded	(\$369)	(\$8,827)
Funding Ratio	101.2%	136.4%
June 30, 2001 Net (Surplus) Unfunded	\$555	(\$3,159)
Funding Ratio	98.3%	112.0%

Contributions

In this summary, we present the overall State contribution rate, and compare it to the rate developed in the June 30, 2000 actuarial valuation. In summary, due to both investment losses and liability losses, the overall System contribution requirement, payable in FY 2003, has increased by 0.72% of payroll. It is important to note that last year the Board implemented two changes to the funding procedures, an increase in the asset smoothing factor from three to five, and an increase in the amortization period for funding future (including this year's) gains and losses, from the year 2020 to 25 year periods for each year's gain or loss. Had those changes not been implemented the overall System contribution rate increase would have been about doubled, from 0.72% to 1.42%.

Rate as Percent of Covered Payroll	
June 30, 2000 State Rate	7.98%
Increase due to Plan Changes	0.05%
Increase due to Investment Loss (prior to factor change)	0.95%
Increase due to Liability Loss	0.42%
Decrease due to Change in Methods	(0.70%)
June 30, 2001 State Rate	8.70%

Membership

There are four types of plan participants, current active workers, previous terminations who retain a right to a deferred vested benefit, previous terminations who are not vested but have member contributions in the System (inactives), and participants in pay status. Below, we compare totals in each group between June 30, 2000 and 2001.

As shown below, there was an overall increase in participation during the year of 3%.

	6/30/2001	6/30/2000	Change
Active Participants	184,600	179,586	2.8%
Terminated Vested Participants	29,365	28,307	3.7%
Inactive Participants	13,834	14,207	(2.6)%
Participants In Pay Status	84,185	80,773	4.2%
TOTAL PARTICIPANTS	311,984	302,873	3.0%

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 2001, 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

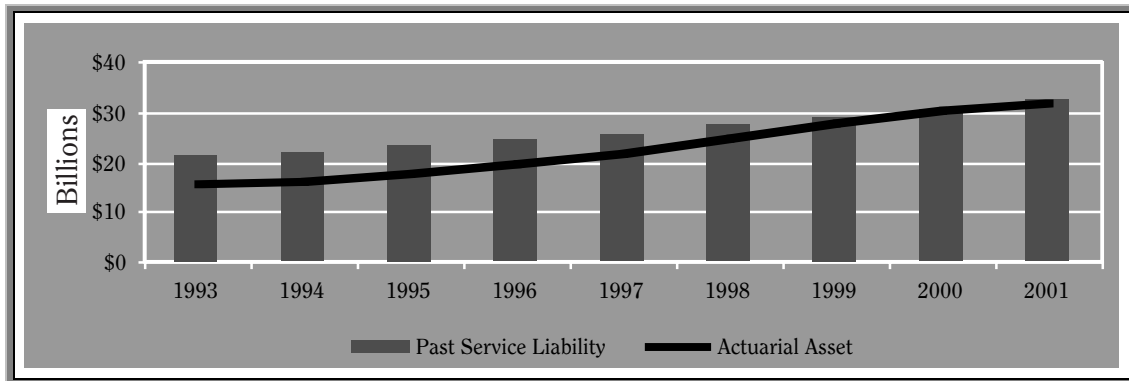


Chart B: CASH FLOWS

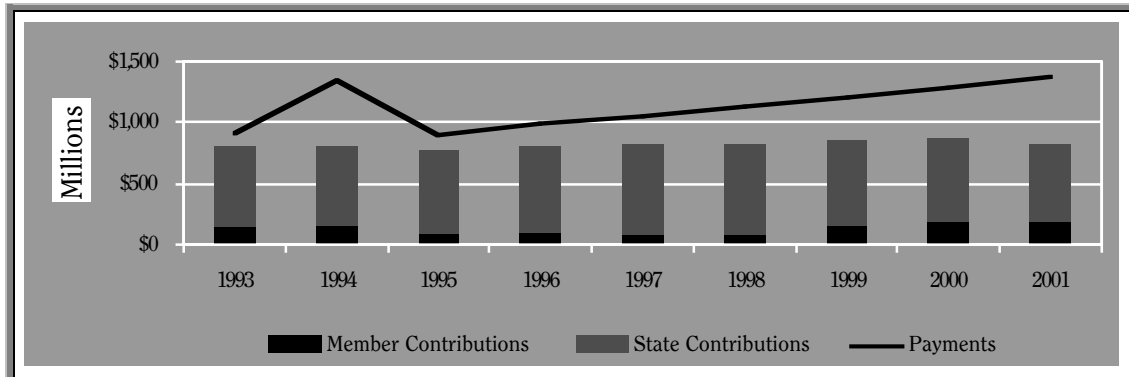
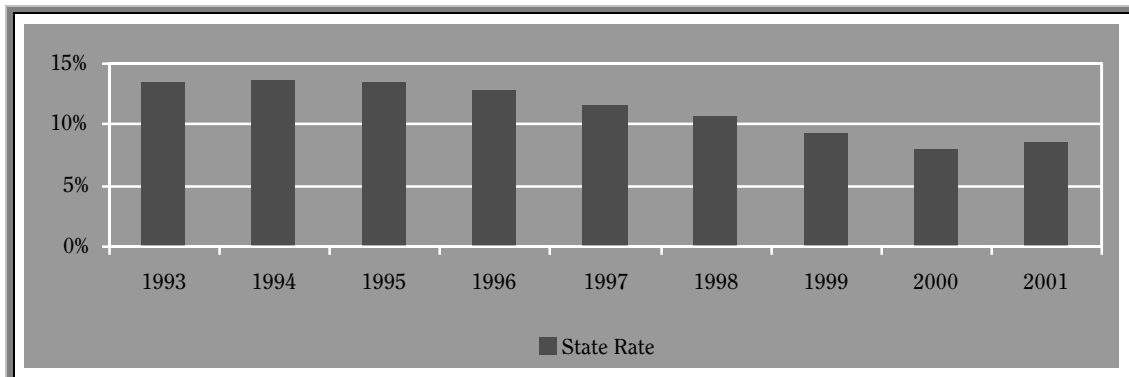


Chart C: STATE CONTRIBUTION RATE



Comments

Chart A places into perspective the aforementioned investment and liability performance losses of this past year. Despite those losses, the ratio of assets to liabilities, which have continuously grown, not just over the period in the chart but since early 1980's, are as of this year, the second best ever for the State.

Chart B presents an emerging trend that will have investment implications. It is a trend being faced by many state-wide retirement systems, with the aging of our baby boomer

generations. Payments to retirees are on the increase. While cash into the fund, from employer and employee contributions are stable or declining. This is not unanticipated, and essentially explains the past need for total fund buildup.

Finally, Chart C, looks only at the State contribution rate which is used each year to determine the upcoming fiscal year State appropriation. It shows the impact of the past decade's sustained investment gains, a continuous lowering of the rate, until this year. Yet even this year's rate is the second lowest over the entire period.

Actuarial Methods and Assumptions

Funding Method

The System uses the entry age normal cost method with projection to determine the actuarial accrued liability on which future employer contribution rates will be based. Under this funding method, a total contribution rate is determined which consists of two elements, the normal cost rate and the unfunded actuarial liability rate.

The unfunded actuarial accrued liability (UAAL) is being amortized, as a level percentage of payroll, in two distinct pieces. The UAAL which existed as of the June 30, 2000 actuarial valuation is being amortized over the remaining 19-year period to June 30, 2020. The new layer of UAAL which arose during the year ended June 30, 2001 is being amortized over a 25 year period from June 30, 2001.

Asset Valuation Method

Assets are valued for funding purposes using a five-year moving average. Under this method, the year end actuarial asset value equals 1/5 of the current fiscal year end fair value, as reported in the financial statements, plus 4/5 of the "expected market value". For purposes of this calculation, the "expected market value" is the preceding fiscal year's actuarial asset value, adjusted for the current fiscal year's cash flows with interest accumulated at the actuarial assumed rate of return on investments. This asset valuation method was effective beginning in fiscal year 2001.

Actuarial Assumptions

The assumptions used for the actuarial valuation were recommended by the System's independent actuary, based upon periodic analyses of the System's experience, and adopted by the Board of Trustees. Differences between assumed and actuarial experience (i.e., actuarial gains and losses) are part of the unfunded actuarial liability. The following significant assumptions were used in the actuarial valuation as of June 30, 2001:

- a rate of return on investments of 8 percent compounded annually (adopted June 30, 1998);
- projected salary increases of 5 percent compounded annually, attributable to inflation (adopted June 30, 1988);
- additional projected salary increases ranging from 0.94 percent to 6.82 percent per year attributable to seniority and merit (adopted June 30, 1988);
- post-retirement benefit increases ranging from 3 percent to 6 percent per year depending on the system (adopted June 30, 1982);
- rates of mortality, termination of service, disablement and retirement based on actual experience during the period from 1981 through 1996 (adopted June 30, 1998); and
- an increase in the aggregate active member payroll of 5 percent annually (adopted June 30, 1988).

Accounting Statement Information

The Total Systems of the State of Maryland

	2001	2000
A. FASB #35 basis		
1. Present value of benefits accrued to date:		
a. Members currently receiving payments	\$ 15,373,574,031	\$ 14,077,502,697
b. Former vested members	566,159,109	559,162,255
c. Active members	<u>10,383,223,591</u>	<u>9,646,684,674</u>
2. Total present value of accrued benefits (1 (a) + 1 (b) + 1 (c))	26,322,956,731	24,283,349,626
3. Assets at market value	<u>29,481,509,782</u>	<u>33,110,690,456</u>
4. Unfunded value of accrued benefits (2-3)	<u>\$ (3,158,553,061)</u>	<u>\$ (8,827,340,830)</u>
5. Ratio of assets to value of benefits (3/2)	112.00%	136.35%
B. GASB #25 basis		
1. Actuarial accrued liabilities for retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$ 15,939,733,140	\$ 14,636,664,952
2. Actuarial accrued liabilities for current employees	<u>16,530,208,653</u>	<u>15,643,201,778</u>
3. Total actuarial accrued liability (1+2)	32,469,941,793	30,279,866,730
4. Net actuarial assets available for benefits	<u>31,914,778,425</u>	<u>30,649,380,445</u>
5. Unfunded actuarial accrued liability (3-4)	<u>\$ 555,163,368</u>	<u>\$ (369,513,715)</u>

Summary of Unfunded Actuarial

Valuation Date June 30,	Actuarial Liabilities For				Actuarial Value of Assets
	Active Member Contributions	Retirees, Term Vested and Inactives	Active Members Employer Fin. Portion	Total Liabilities	
1992	\$ 1,521,360,035	\$ 8,367,721,533	\$ 10,113,691,911	\$ 20,002,773,479	\$ 14,381,367,328
1993	1,522,095,569	9,214,710,929	10,438,449,084	21,175,255,582	15,684,924,051
1994	1,466,974,205	9,994,023,038	10,414,465,996	21,875,463,239	16,272,576,616
1995	1,503,414,664	10,622,091,333	10,967,030,922	23,092,536,919	17,666,581,953
1996	1,538,891,321	11,552,405,340	11,149,586,097	24,240,882,758	19,455,279,738
1997	1,502,991,713	12,714,514,210	11,165,702,737	25,383,208,660	21,920,695,723
1998	1,505,629,954	12,866,065,299	13,045,239,668	27,416,934,921	24,850,355,227
1999	1,580,530,209	13,583,779,499	13,311,070,338	28,475,380,046	27,646,578,997
2000	1,662,397,147	14,636,664,952	13,980,804,631	30,279,866,730	30,649,380,445
2001	1,752,989,299	15,939,733,140	14,777,219,354	32,469,941,793	31,914,778,425

Summary of Retirees and Beneficiaries Added to and Removed from Rolls

Fiscal Year Ended	Added to Rolls		Removed from Rolls		Rolls-End of Year		% Increase in Annual Allowances	Average Annual Allowance
	Number	Annual Allowance	Number	Annual Allowances	Number	Annual Allowances		
1992	3,956	\$49,394,903	1,727	\$18,523,007	55,843	\$645,581,071	9.36%	\$11,561
1993	5,207	58,378,258	1,732	8,440,324	59,318	711,531,666	10.22	11,995
1994	4,505	44,993,432	1,933	9,358,981	61,890	772,412,629	8.56	12,480
1995	4,839	43,915,820	2,143	10,702,372	64,594	827,273,808	7.10	12,807
1996	4,784	47,649,016	2,316	11,930,488	67,062	901,855,498	9.02	13,448
1997	7,157	119,374,380	2,731	33,641,211	71,488	987,588,667	9.51	13,815
1998	5,217	90,497,436	2,366	30,768,198	74,339	1,047,317,905	6.05	14,088
1999	5,514	93,034,053	2,375	30,628,858	77,478	1,109,723,100	5.96	14,323
2000	5,758	115,003,079	2,463	31,450,868	80,773	1,211,400,269	7.41	14,998
2001	6,071	145,073,765	2,659	34,172,397	84,185	1,322,301,637	9.15	14,998

Liabilities / Solvency Test

Ratio of Assets to Actuarial Liabilities				Unfunded Actuarial Liability (UAL)	Annualized Payroll (Active Members)	UAL as % of Payroll
Active Member Contributions	Retirees Term Vested and Inactives	Active Members Employer Fin. Portion	Funded Ratio (Assets/Liab. Coverage)			
100 %	100 %	44.42 %	71.90 %	\$ 5,621,406,151	\$ 5,023,780,800	112 %
100	100	47.40	74.07	5,490,331,531	5,064,529,252	108
100	100	46.20	74.39	5,602,886,623	5,246,249,283	107
100	100	50.52	76.50	5,425,954,966	5,532,149,777	98
100	100	57.08	80.26	4,785,603,020	5,640,833,581	85
100	100	68.99	86.36	3,462,512,937	5,657,384,942	61
100	100	80.33	90.64	2,566,579,694	6,148,300,166	42
100	100	93.77	97.09	828,801,049	6,388,973,031	13
100	100	102.64	101.22	(369,513,715)	6,796,240,322	(5)
100	100	96.24	98.29	555,163,368	7,418,720,421	7

Statement of Changes in Total Actuarial Present Value of All Accrued Benefits

(Expressed in Millions)

	Accumulated Benefit Obligation (FASB 35)
Actuarial present value of accrued benefits at June 30, 2000	\$ 24,283
Increase (decrease) during year attributable to:	
Passage of Time	1,889
Benefits Paid - FY 2001	(1,380)
Benefits Accrued, Other Gains/Losses	1,527
Plan Amendment & Changes in Actuarial Assumptions	4
Net Increase	2,040
Actuarial present value of accrued benefits at June 30, 2001	\$ 26,323

Report of the Actuary on the Valuation of the State Retirement and Pension System of Maryland as of June 30, 2001

Summary of Principal Results

	June 30, 2001	June 30, 2000	% Change
1. Participant Data			
Number of:			
Active Members	184,600	179,586	2.8%
Retired Members and Beneficiaries	84,185	80,773	4.2
Vested Deferred Members	29,365	28,307	3.7
Inactive Status Members	13,834	14,207	(2.6)
Total Participants	<u>311,984</u>	<u>302,873</u>	3.0
Annual Salaries of Active Members*	\$ 7,418,720,421	\$ 6,796,240,322	9.2
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 1,322,301,637	\$ 1,211,400,269	9.2
2. Assets and Liabilities			
Total Actuarial Liability	\$ 32,469,941,793	\$ 30,279,866,730	7.2
Assets for Valuation Purposes	<u>31,914,778,425</u>	<u>30,649,380,445</u>	4.1
Unfunded Actuarial Liability (Surplus)	<u>\$ 555,163,368</u>	<u>(\$ 369,513,715)</u>	250.2
FASB Accrued Liability	\$ 26,322,956,731	\$ 24,283,349,626	8.4
Market Value of Assets	<u>29,481,509,792</u>	<u>33,110,690,456</u>	(11.0)
Unfunded FASB Accrued Liability (Surplus)	<u>(\$ 3,158,553,061)</u>	<u>(\$ 8,827,340,830)</u>	64.2

* Does not include members of State Police and LEOPS who have elected the DROP.

Report of the Actuary on the Twenty-second Annual Valuation of the Teachers' Combined System of the State of Maryland as of June 30, 2001

Summary of Principal Results

	June 30, 2001	June 30, 2000	% Change
1. Participant Data			
Number of:			
Active Members	93,297	90,928	2.6%
Retired Members and Beneficiaries	40,126	38,145	5.2
Vested Deferred Members	11,084	10,614	4.4
Inactive Status Members	6,253	6,103	2.5
Total Participants	<u>150,760</u>	<u>145,790</u>	3.4
Annual Salaries of Active Members	\$ 4,092,041,875	\$ 3,753,095,749	9.0
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 814,309,146	\$ 744,128,619	9.4
2. Assets and Liabilities			
Total Actuarial Liability	\$ 20,126,942,916	\$ 18,994,293,580	6.0
Assets for Valuation Purposes	<u>19,182,748,593</u>	<u>18,419,538,878</u>	4.1
Unfunded Actuarial Liability	<u>\$ 944,194,323</u>	<u>\$ 574,754,702</u>	64.3
FASB Accrued Liability	\$ 16,578,147,167	\$ 15,318,391,567	8.2
Market Value of Assets	<u>17,757,484,649</u>	<u>19,850,431,279</u>	(10.5)
Unfunded FASB Accrued Liability (Surplus)	<u>(\$ 1,179,337,482)</u>	<u>(\$ 4,532,039,712)</u>	74.0

Report of the Actuary on the Twenty-second Annual Valuation of the Employees' Combined System of the State of Maryland as of June 30, 2001

Summary of Principal Results

	June 30, 2001	June 30, 2000	% Change
1. Participant Data			
Number of:			
Active Members	87,986	85,425	3.0%
Retired Members and Beneficiaries	41,914	40,730	2.9
Vested Deferred Members	18,238	17,655	3.3
Inactive Status Members	7,508	8,051	(6.7)
Total Participants	<u>155,646</u>	<u>151,861</u>	2.5
Annual Salaries of Active Members	\$ 3,146,870,214	\$ 2,870,990,482	9.6
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 436,065,377	\$ 406,284,042	7.3
2. Assets and Liabilities			
Total Actuarial Liability	\$ 10,789,907,444	\$ 9,907,682,550	8.9
Assets for Valuation Purposes	<u>11,021,958,221</u>	<u>10,593,916,557</u>	4.0
Unfunded Actuarial Liability (Surplus)	<u>(\$ 232,050,777)</u>	<u>(\$ 686,234,007)</u>	66.2
FASB Accrued Liability	\$ 8,427,739,300	\$ 7,761,666,177	8.6
Market Value of Assets	<u>10,163,468,197</u>	<u>11,474,915,353</u>	(11.4)
Unfunded FASB Accrued Liability (Surplus)	<u>(\$ 1,735,728,897)</u>	<u>(\$ 3,713,249,176)</u>	53.3

Report of the Actuary on the Fifty-second Annual Valuation of the State Police Retirement System of the State of Maryland as of June 30, 2001

Summary of Principal Results

	June 30, 2001	June 30, 2000	% Change
1. Participant Data			
Number of:			
Active Members	1,578	1,636	(3.6)%
Retired Members and Beneficiaries	1,518	1,388	9.4
Vested Deferred Members	17	19	(10.5)
Inactive Status Members	7	3	133.3
Total Participants	<u>3,120</u>	<u>3,046</u>	2.4
Annual Salaries of Active Members*	\$ 80,829,245	\$ 82,609,627	(2.2)
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 48,112,876	\$ 41,224,900	16.7
2. Assets and Liabilities			
Total Actuarial Liability	\$ 993,846,504	\$ 911,272,684	9.1
Assets for Valuation Purposes	<u>1,305,556,360</u>	<u>1,269,417,772</u>	2.9
Unfunded Actuarial Liability (Surplus)	<u>(\$ 311,709,856)</u>	<u>(\$ 358,145,088)</u>	13.0
FASB Accrued Liability	\$ 850,355,817	\$ 801,565,680	6.1
Market Value of Assets	<u>1,191,212,970</u>	<u>1,398,194,639</u>	(14.8)
Unfunded FASB Accrued Liability (Surplus)	<u>(\$ 340,857,153)</u>	<u>(\$ 596,628,959)</u>	42.9

* Does not include members who elected DROP.

Report of the Actuary on the Twenty-second Annual Valuation of the Pension Plan of Judges and Their Surviving Spouses as of June 30, 2001

Summary of Principal Results

	June 30, 2001	June 30, 2000	% Change
1. Participant Data			
Number of:			
Active Members	281	283	(0.7)%
Retired Members and Beneficiaries	297	285	4.2
Vested Deferred Members	13	13	0.0
Inactive Status Members	0	0	0.0
Total Participants	<u>591</u>	<u>581</u>	1.7
Annual Salaries of Active Members	\$ 31,308,984	\$ 30,891,317	1.4
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 16,348,558	\$ 14,922,496	9.6
2. Assets and Liabilities			
Total Actuarial Liability	\$ 254,913,338	\$ 236,446,486	7.8
Assets for Valuation Purposes	<u>229,022,330</u>	<u>216,374,434</u>	5.9
Unfunded Actuarial Liability	<u>\$ 25,891,008</u>	<u>\$ 20,072,052</u>	29.0
FASB Accrued Liability	\$ 226,739,559	\$ 213,064,248	6.4
Market Value of Assets	<u>211,168,347</u>	<u>230,283,168</u>	(8.3)
Unfunded FASB Accrued Liability (Surplus)	<u>\$ 15,571,212</u>	<u>(\$ 17,218,920)</u>	190.4

Report of the Actuary on the Eleventh Annual Valuation of the Law Enforcement Officers' Pension System of the State of Maryland as of June 30, 2001

Summary of Principal Results

	June 30, 2001	June 30, 2000	% Change
1. Participant Data			
Number of:			
Active Members	1,318	1,130	16.6%
Retired Members and Beneficiaries	309	206	50.0
Vested Deferred Members	9	4	125.0
Inactive Status Members	40	32	25.0
Total Participants	<u>1,676</u>	<u>1,372</u>	22.2
Annual Salaries of Active Members*	\$ 61,930,821	\$ 51,544,069	20.2
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 7,042,118	\$ 4,464,110	57.8
2. Assets and Liabilities			
Total Actuarial Liability	290,503,784	\$ 214,822,353	35.2
Assets for Valuation Purposes	<u>165,478,453</u>	<u>140,033,780</u>	18.3
Unfunded Actuarial Liability (Surplus)	<u>\$ 124,825,331</u>	<u>(\$ 74,788,573)</u>	66.9
FASB Accrued Liability	\$ 230,671,777	\$ 178,735,677	29.1
Market Value of Assets	<u>149,057,875</u>	<u>146,474,430</u>	1.8
Unfunded FASB Accrued Liability	<u>\$ 81,613,902</u>	<u>\$ 32,261,247</u>	153.0

* Does not include members who elected DROP.

Report of the Actuary on the Eleventh Annual Valuation of the Local Fire and Police System of the State of Maryland as of June 30, 2001

Summary of Principal Results

	June 30, 2001	June 30, 2000	% Change
1. Participant Data			
Number of:			
Active Members	140	138	1.5%
Retired Members and Beneficiaries	21	19	10.5
Vested Deferred Members	4	2	100.0
Inactive Status Members	26	18	44.4
Total Participants	<u>191</u>	<u>177</u>	7.9
Annual Salaries of Active Members	\$ 5,739,282	\$ 5,516,642	4.0
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 423,562	\$ 376,102	12.6
2. Assets and Liabilities			
Total Actuarial Liability	\$ 13,827,807	\$ 12,920,585	7.0
Assets for Valuation Purposes	9,814,468	8,878,274	10.5
Unfunded Actuarial Liability	<u>\$ 4,013,339</u>	<u>\$ 4,042,311</u>	(0.7)
FASB Accrued Liability	\$ 9,303,111	\$ 8,412,662	10.6
Market Value of Assets	9,117,752	9,135,473	(0.2)
Unfunded FASB Accrued Liability (Surplus)	<u>\$ 185,359</u>	<u>(\$ 722,811)</u>	12.6

Schedule of Active Membership Valuation Data by Plan

Teachers' Retirement

Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
1992	24,850	\$ 1,108,905,933	\$ 44,624	1.45 %
1993	22,598	1,029,724,826	45,567	2.11
1994	19,135	887,582,851	46,385	1.80
1995	18,011	877,613,890	48,727	5.05
1996	16,850	843,710,972	50,072	2.76
1997	15,619	799,096,847	51,162	2.18
1998	14,346	760,092,729	52,983	3.56
1999	13,043	717,946,647	55,045	3.89
2000	11,634	670,271,756	57,613	4.67
2001	10,396	654,641,638	62,971	9.30

Teachers' Pension

Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
1992	49,999	\$ 1,554,790,625	\$ 31,096	1.28 %
1993	53,235	1,685,895,609	31,669	1.84
1994	58,898	1,934,173,528	32,839	3.69
1995	61,749	2,108,777,126	34,151	4.00
1996	63,818	2,221,492,064	34,810	1.93
1997	66,978	2,352,121,326	35,118	0.88
1998	71,435	2,559,167,548	35,825	2.01
1999	75,578	2,858,920,323	37,827	5.59
2000	79,297	3,082,823,993	38,878	2.78
2001	82,901	3,437,400,237	41,464	6.65

Employees' Retirement

Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
1992	17,855	\$ 546,938,058	\$ 30,632	0.79 %
1993	16,775	517,025,369	30,821	0.62
1994	15,852	491,015,282	30,975	0.50
1995	15,306	491,241,364	32,095	3.62
1996	14,850	490,784,260	33,049	2.97
1997	13,469	445,726,994	33,093	0.13
1998	13,149	439,012,253	33,388	0.89
1999	12,657	442,912,527	34,993	4.81
2000	12,213	449,491,594	36,804	5.18
2001	11,962	467,982,863	39,122	6.30

Schedule of Active Membership Valuation Data by Plan

(continued)

Employees' Pension

Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
1992	67,118	\$ 1,717,196,225	\$ 25,585	0.79 %
1993	67,447	1,737,891,857	25,767	0.71
1994	69,653	1,837,305,530	26,378	2.37
1995	71,328	1,955,054,635	27,409	3.91
1996	70,215	1,984,030,014	28,257	3.09
1997	68,195	1,953,776,617	28,650	1.39
1998	68,893	2,009,168,386	29,164	1.79
1999	70,426	2,216,109,788	31,467	7.90
2000	73,212	2,421,498,888	33,075	5.11
2001	76,024	2,678,887,451	35,237	6.54

Judges' Retirement

Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
1992	260	\$ 22,213,378	\$ 85,436	0.70 %
1993	264	22,605,184	85,626	0.22
1994	266	22,831,506	85,833	0.24
1995	260	23,063,700	88,707	3.35
1996	264	23,917,131	90,595	2.13
1997	268	25,007,240	93,311	3.00
1998	273	25,552,537	93,599	0.31
1999	283	30,307,258	107,093	14.42
2000	283	30,891,317	109,157	1.93
2001	281	31,308,984	111,420	2.07

State Police Retirement

Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
1992	1,676	\$ 61,225,453	\$ 36,531	0.10 %
1993	1,583	58,001,744	36,640	0.30
1994	1,584	59,097,769	37,309	1.83
1995	1,577	60,677,175	38,476	3.13
1996	1,544	60,823,269	39,393	2.38
1997	1,588	62,936,492	39,633	0.61
1998	1,635	70,663,067	43,219	9.05
1999	1,647	78,780,262	47,833	10.68
2000	1,636	82,609,627	50,495	5.56
2001	1,578	80,829,245	51,223	1.44

Schedule of Active Membership Valuation Data by Plan

(continued)

Law Enforcement Officers' Pension

Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
1992	249	\$ 9,030,814	\$ 36,268	(0.40%)
1993	277	9,775,208	35,290	(2.70)
1994	277	10,176,944	36,740	4.11
1995	301	11,368,811	37,770	2.80
1996	294	11,645,942	39,612	4.88
1997	317	12,904,416	40,708	2.77
1998	755	30,511,663	40,413	(0.72)
1999	862	37,305,049	43,277	7.09
2000	1,130	51,544,069	45,614	5.40
2001	1,318	61,930,821	46,988	3.01

Local Fire and Police

Valuation Date As of June 30,	Number	Annual Payroll	Annual Average Pay	% Increase Avg. Pay
1992	116	\$ 3,480,314	\$ 30,003	(4.26%)
1993	117	3,609,455	30,850	2.82
1994	131	4,065,873	31,037	0.61
1995	134	4,353,076	32,486	4.67
1996	133	4,429,929	33,308	2.53
1997	168	5,815,010	34,613	3.92
1998	177	6,287,842	35,525	2.63
1999	178	6,691,177	37,591	5.82
2000	184	7,109,078	38,636	2.78
2001	140	5,739,282	40,995	6.11



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