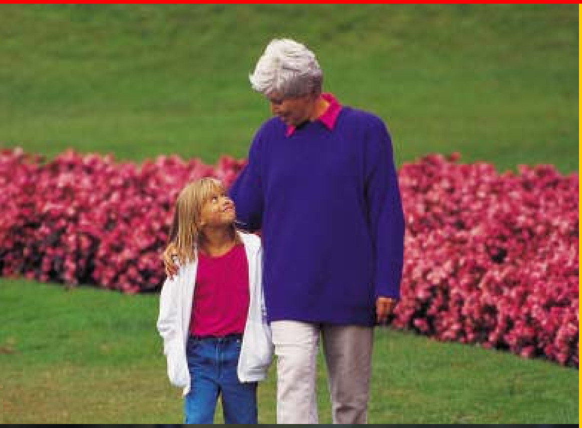

Commonwealth of Pennsylvania State Employees' Retirement System

2004 Actuarial Report

HayGroup®

COMMONWEALTH OF PENNSYLVANIA

STATE EMPLOYEES' RETIREMENT SYSTEM

2004 ACTUARIAL REPORT

HAY GROUP
APRIL 27, 2005

Hay Group, Inc.

Suite 500
4301 North Fairfax Drive
Arlington, VA 22203
USA

April 27, 2005

HayGroup

Mr. Eric Henry
Executive Director
State Employees' Retirement System
30 North Third Street
Harrisburg, PA 17108-1147

Dear Mr. Henry:

The purpose of this letter is to certify the actuarial adequacy of the contributions being made by the State of Pennsylvania and other participating agencies to the Pennsylvania State Employees' Retirement System (SERS), and to discuss the approach currently being taken toward meeting the financing objectives of the plan. The results provided herein are based upon the December 31, 2004 annual actuarial valuation.

The funding objective of the plan is set forth in the SERS code. The annual employer contribution is equal to the sum of the following, but not less than 3.00 percent of payroll, for the fiscal year beginning July 1, 2005:

(1) The employer share of the normal cost.
(2) The amortization of the December 31, 2001 liability for Act 2001-9 benefits over a 30-year period beginning July 1, 2002 and ending on June 30, 2032.
(3) The amortization of the remaining unfunded liabilities as of December 31, 2001 over a ten-year period beginning July 1, 2002 and ending on June 30, 2012.
(4) The amortization of all unfunded liabilities due to supplemental annuities (COLAs) after 2001, or other legislated benefit improvements after June 30, 2003, over ten-year periods beginning with the July first following the effective date of the change.
(5) The amortization of changes in liability due to actual experience differing from assumed experience after December 31, 2001 over 30-year periods beginning with the July first following the actuarial valuation determining such changes.

The amortization payments are level amounts over the applicable amortization periods. The employer cost is determined as a percent of payroll. The total employer cost is the average contribution amount that needs to be received by the employer groups participating in the system. Some employer groups contribute a higher percent of pay, and some employer groups contribute a lower percent of pay depending on the benefits payable to their employees.

All costs and liabilities have been determined in conformance with generally accepted actuarial principles and procedures in accordance with the principles of practice prescribed by the American Academy of Actuaries. The calculations were performed on the basis of actuarial assumptions and methods, which are internally consistent, and reasonable (taking into account past experience under the SERS and reasonable expectations) and which in combination represent the best estimate of anticipated experience under the plan.

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The actuarial valuation is based on financial and participant data, which is prepared by SERS staff. The data are reviewed for internal and year-to-year consistency as well as general reasonableness prior to their use in the actuarial valuation.

The actuarial valuation uses assumptions regarding future rates of investment return and rates of retirement, withdrawal, death, and disability among SERS members and their beneficiaries. The current set of assumptions used in the December 31, 2004 actuarial valuation was adopted by the Board and was based on actual experience of SERS during the years 1996 through 2000. The actuarial value of assets is developed by recognizing the difference between the expected actuarial value of assets and the market value of assets over a five-year period.

Governmental Accounting Standards Board (GASB) Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans* establishes a range of actuarial cost and amortization methods for the Unfunded Actuarial Accrued Liability. The scheduled payments for the year beginning July 1, 2005 are below the minimum amount required to meet the GASB #25 minimum. This is a temporary result of financing changes implemented by Act 2003-40 in December 2003. After 2011, we expect the SERS contribution to exceed the GASB #25 minimum.

Based upon the valuation results, it is our opinion that the Pennsylvania State Employees' Retirement System is in sound condition in accordance with generally accepted actuarial principles and procedures. The employer contribution is below the GASB #25 minimum for the year beginning July 1, 2005 and will likely remain below the minimum through June 30, 2012. However, the employer payments scheduled after that time are substantially above the GASB minimum and the plan is in sound condition over the long run.

Respectfully submitted,
Hay Group

By ______________________	By ______________________
Edwin C. Hustead, F.S.A.	Brent M. Mowery, F.S.A.
Member American Academy of Actuaries	Member American Academy of Actuaries
Enrolled Actuary No. 05-1499	Enrolled Actuary No. 05-3885

State Employees' Retirement System

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State Employees' Retirement System
Valuation Highlights

	December 31, 2004 Valuation	December 31, 2003 Valuation

Summary of Contributions as a Percent of Total Compensation

	December 31, 2004 Valuation	December 31, 2003 Valuation
SERS Plan Contribution		
Normal Cost	8.25%	8.32%
Amortization of Liabilities	-7.29%	-11.12%
Contribution Before Act 2003-40 Minimum	0.96%	-2.80%
Total SERS Plan Contribution *	3.00%	2.00%
Benefits Completion Plan Contribution	0.02%	0.03%
Total Contribution	3.02%	2.03%

* Reflects the Act 2003-40 Minimum

Demographic Characteristics of the Population

		December 31, 2004 Valuation		December 31, 2003 Valuation
Active Participants:				
Number		108,405		109,018
Average age		46.1		46.2
Average service		13.0		13.4
Average annualized compensation	$	45,382	$	44,519
Total annualized compensation	$	4,919,636,000	$	4,853,372,000
Funding payroll	$	5,093,573,000	$	4,965,360,000
Annuitants and Beneficiaries:				
Number		98,727		94,412
Average age		68.4		68.6
Total annual pension	$	1,496,476,405	$	1,337,439,856
Inactive Participants:				
Number		5,608		5,741

Assets

		December 31, 2004 Valuation		December 31, 2003 Valuation
Market Value Assets	$	26,639,557,158	$	24,535,226,382
Actuarial Value of Assets	$	26,900,026,818	$	27,465,614,945
Funded Status		96.1%		104.9%

State Employees' Retirement System

Employer Contribution Rate by Group
Fiscal Year 2005 - 2006

	SERS Plan	Benefits Completion Plan	Total
Class AA Members:			
Age 60 Retirement	2.35%	0.02%	2.37%
Age 50 Retirement	3.55%	0.02%	3.57%
Park Rangers	4.21%	0.02%	4.23%
Capitol Police	4.21%	0.02%	4.23%
Enforcement Officers	3.55%	0.02%	3.57%
Class A Members:			
Age 60 Retirement	1.88%	0.02%	1.90%
Age 50 Retirement	2.84%	0.02%	2.86%
Park Rangers	3.53%	0.02%	3.55%
Capitol Police	3.53%	0.02%	3.55%
State Police	10.26%	0.02%	10.28%
Enforcement Officers	2.84%	0.02%	2.86%
Class C Members:			
State Police	10.26%	0.02%	10.28%
Enforcement Officers	2.84%	0.02%	2.86%
Class D Members:			
D-3 Legislators	10.65%	0.02%	10.67%
D-4 Legislators	0.00%	0.02%	0.02%
Class E Members	2.98%	0.02%	3.00%

General Discussion

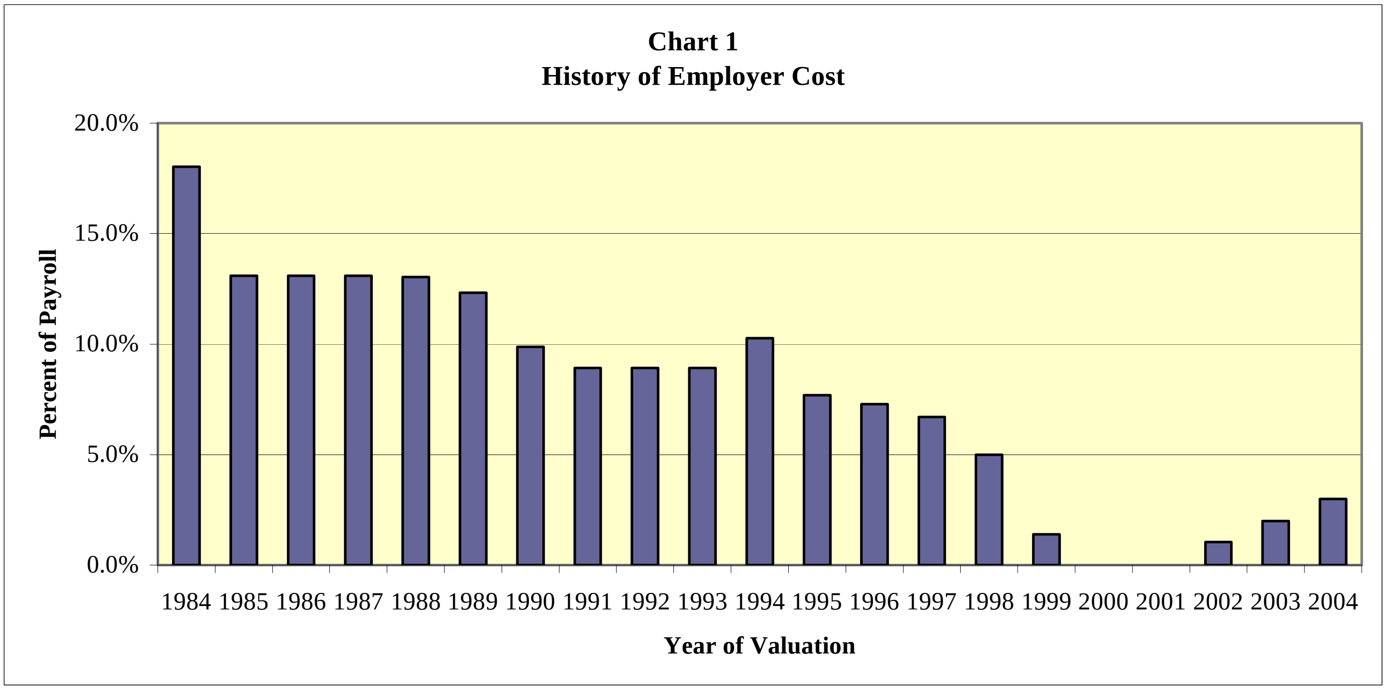
The liabilities and costs in this report were based on actuarial assumptions adopted by the State Employees' Retirement Board in 2001 and funding procedures specified in the State Employees' Retirement System (SERS) code. The most important actuarial assumptions are the investment return and salary growth. The investment return assumption is 8.5 percent per year. Salary growth is the total of assumed increases in salary rates and career salary growth. It is generally assumed that the salary rates will increase at 3.3 percent a year due to general salary schedule increases and that career salary growth (promotion and longevity growth) will average an additional 3.5 percent a year. Thus, the total average salary increase for an individual will generally be 6.8 percent a year. These assumed salary increases were modified, however, in this valuation to reflect negotiated increases through June 30, 2007. The investment return and the salary rate increase assumptions are based on an underlying inflation rate of 3.0 percent a year.

The SERS plan employer contribution is determined as a percent of payroll that is the total of (1) the employer normal cost percent and (2) the net amortization of the unfunded liability, but not less than any applicable minimum contribution prescribed by the SERS code. As of December 31, 2004, the net amortization credit is less than the normal cost. This would have resulted in an employer contribution requirement of about 0.96 percent of payroll for fiscal year 2004-2005; however, under Act 2003-40 requires the employer contribution for the fiscal year beginning July 1, 2005 to be at least 3.00 percent of payroll.

A separate and distinct Benefits Completion Plan (BCP) provides benefits to members whose post-July 1, 2001 SERS benefits are limited by IRC Section 415(b) maximum benefit limitations. The BCP employer contribution requirements for fiscal year 2005-2006, which were determined by a separate December 31, 2004 actuarial valuation, are presented in the Valuation Highlights herein. Otherwise, BCP costs and liabilities are not included in the schedules of this report.

History of the Employer Contribution Rate

Chart 1 shows the history of the employer contribution rate from 1984 through 2004. The contribution was zero in 2000 and 2001 since the amortization of the surplus (negative unfunded liability) exceeded the normal cost. The contribution has gradually increased since 2001 as a result of reductions in the surplus and minimum required contributions. With some fluctuations, the general trend from 1984 through 2001 had been downward, with the rate declining from 18.03 percent in 1984 to zero in 2000 and 2001. The primary reasons for the 1984-2001 downward trend were (i) the excess of the actual investment return over the assumed valuation investment return over most of those years, and (ii) the reduction in cost reflected in the changes in assumptions adopted every five years.



The total employer cost is the actual contribution rate during the succeeding fiscal year. For instance, the rate of 3.00 percent will be the employer contribution for fiscal year beginning July 1, 2005.

History of Inflation, Investment Return and Salary Growth

Table 1 below shows the rate of inflation, the nominal and real investment return based on the market value of assets, and the nominal and real salary growth for the past twenty years. The nominal rates are the actual investment rate and salary growth. The real rates are the nominal rates adjusted by removing inflation. The inflation rates shown are based on the Consumer Price Index for All Urban Consumers (CPI-U) data.

Table 1

Comparison of Annual Rates of Growth

		Investment Return		Salary Growth	
Year	**Inflation**	**Nominal**	**Real**	**Nominal**	**Real**
1985	3.8	23.1	18.6	3.6	(0.2)
1986	1.1	15.2	13.9	3.5	2.4
1987	4.4	3.3	(1.1)	3.4	(1.0)
1988	4.4	12.8	8.0	5.0	0.6
1989	4.6	17.8	12.6	6.0	1.3
1990	6.1	1.0	(4.8)	5.0	(1.0)
1991	3.1	22.6	19.0	1.0	(2.0)
1992	2.9	7.4	4.4	2.1	(0.8)
1993	2.7	13.2	10.2	5.1	2.3
1994	2.7	(1.1)	(3.7)	3.9	1.2
1995	2.5	25.5	22.4	3.8	1.2
1996	3.3	15.9	12.2	2.0	(1.3)
1997	1.7	18.0	16.0	3.0	1.3
1998	1.6	16.3	14.5	3.0	1.4
1999	2.7	19.9	16.8	3.0	0.3
2000	3.4	2.2	(1.1)	3.0	(0.4)
2001	1.6	(7.9)	(9.3)	3.3	1.7
2002	2.4	(10.9)	(13.0)	3.5	1.1
2003	1.9	24.3	22.0	2.0	0.1
2004	3.3	15.1	11.4	1.9	(1.4)
Average 1985-2004	**3.0%**	**11.2%**	**7.9%**	**3.3%**	**0.3%**

Comments on Schedules

Employer Contribution Rate

Schedules A and B summarize the development of the employer contribution rate before allocation by group. The employer contribution is equal to the sum of (1) the employer share of the normal cost and (2) amortization of the unfunded liability.

The normal cost is the level percentage of compensation needed to fund the liability for any prospective benefits earned by new active members over the period of their actual service. The normal cost calculation uses data for all active members in Class AA (60) who had not yet completed one year of credited service. The employer share of the normal cost decreased from 8.32 percent in 2003 to 8.25 percent in 2004.

Portions of the unfunded liability are amortized over either 10 years or 30 years as required by the SERS law. The cost of the Act 2001-9 benefits and actuarial gains and losses since 2001 are being amortized over 30 years. The cost of supplemental annuities (COLAs) are being funded over 10 years. The surplus that existed as of December 31, 2001 is being amortized over ten years. The total unfunded liability as of December 31, 2004 was $1.10 billion. As of December 31, 2003, there was a surplus (negative unfunded liability) of $1.29 billion. The change from a surplus to an unfunded liability was primarially the result of investment losses in 2000, 2001 and 2002.

Schedule B shows the allocation of the total unfunded liability by year into those liabilities being amortized over 10 years and those being amortized over 30 years. All amortization payments are level amounts over the applicable amortization period.

Although there is an unfunded liability as of December 31, 2004 of $1.10 billion, the bottom-line annual amortization payment to fund this liability in the 2005-2006 fiscal year is a net credit, which serves to offset the employer normal cost. Although this net result may seem contradictory, it is appropriate and occurs because the large negative unfunded liability that existed on December 31, 2001 is being amortized over 10 years, whereas most of the remaining (positive) unfunded liability as of December 31, 2004 is being amortized over 30 years. The total credit for amortization of the surplus decreased from 11.12 percent of payroll in 2003 to 7.29 percent of payroll in 2004, primarily because of investment losses in 2000, 2001 and 2002.

The employer contribution rate is equal to the total of the normal cost and the amortization of the unfunded liabilities, but, for 2004, not less than 3.00 percent of payroll. The employer contribution rate calculated as a result, 3.00 percent of payroll in 2004, will be applied in the year beginning July 1, 2005.

Employer Contribution Rates by Group

Schedule C summarizes the development of the employer contribution rate for each group of members with different benefits. The Class AA(60) rate is used to determine the basic contribution rate because the majority of new members enter that class. The basic employer contribution rate for Class AA benefits is 2.35 percent of salary.

The employer contribution rate for each class is a function of the Class AA(60) rate. Three adjustments are made for the Class rates. The first is to add the cost of earlier full retirement conditions if applicable. The second is to multiply by the ratio of (1) the annual accrual rate applicable to the Class to (2) the annual accrual rate of 2.5 percent for Class AA(60). Third, the Park Rangers, Capitol Police and State Police Officers are also charged the amount necessary to fund the past service cost of benefit improvements that were effective in prior years. These charges are explained in Schedule O. The complete schedule of contributions by group is shown in Table 2.

Table 2
Employer Contribution Rate by Group
Fiscal Year 2005/2006
(excluding Benefits Completion Plan contribution)

Class AA	
Age 60 benefit	2.35%
Age 50 benefit	3.55
Park Rangers	4.21
Capitol Police	4.21
Enforcement Officers	3.55
Class A	
Age 60 benefit	1.88
Age 50 benefit	2.84
Park Rangers	3.53
Capitol Police	3.53
State Police	10.26
Enforcement Officers	2.84
Class C	
State Police	10.26
Enforcement Officers	2.84
Class D	
D-3 Legislators	10.65
D-4 Legislators	0.00
Class E	2.98

The contribution rate for Class D-4 Legislators is 0.0 percent of payroll. In conjunction with the passage of Act 2001-9, the D-4 employer contributed a lump sum amount which was more than sufficient to fund the additional cost of the higher accrual rate and the retirement at age 50. Therefore, the past service liability for Class D-4 Legislators is $0, and the past liability adjustment has been set to produce a contribution rate of zero. The excess contribution made by the D-4 employer will continue to be used to offset future D-4 employer contribution requirements until the balance is expended.

Schedule D shows the development of the contribution rates for additional annuities for certain State Police and Enforcement Officers. These members receive an additional annuity that is equal to the accumulated member contributions and interest at retirement determined as if the members were at least age 60 at retirement. These benefits have been fully funded by past contributions so no future contribution is required. It was necessary to transfer some of the reserves from the State Accumulation Account as of December 31, 2004 to bring the State Police Benefit Account into balance. This transfer is necessary because funds had been previously transferred from the State Police Benefit Account to the State Accumulation Account.

Change in Employer Contribution Rate

Schedule E contains an analysis of the change in the employer contribution rate and unfunded liability from the 2003 to 2004 valuation. The significant losses as a result of actual annual investment returns lower than the expected 8.5 percent in 2000, 2001 and 2002 were partially offset by recognition of investment gains from 2003 and 2004. The result was a net loss which amounted to a 2.51 percent of payroll increase in employer cost.

There were two sources of change that, in combination, increased the employer cost by 0.57 percent of salary. One was a result of the actual 2004 payroll increase being above expectations. The second increase resulted from the change in unfunded liability amortization due to the higher payroll (whereby the level dollar annual amortization payments for past liabilities expressed as a percent of payroll change each year as the payroll changes).

As part of the December 31, 2004 valuation, one change in actuarial method and assumptions was made. This change involved a refinement in the projection of the amount of employee contributions made during the year. Previously, the assumption had been that the employee contribution would be made during the year, whether by the employee or by a replacement employee. The method has been refined to only reflect the current employee’s expected contribution during the year, discounted to the beginning of the year. This change increased the contribution rate by 0.36 percent of salary. Differences between actual experience and actuarial assumptions during 2004 resulted in a net increase in contribution of 0.32 percent of salary.

The analysis of changes in the unfunded liability generally parallels the effect of changes in the unfunded liability component of the employer contribution rate. The largest change in the unfunded liability was the increase of $1.37 billion attributable to net investment losses in 2000, 2001, and 2002.

The change in actuarial methods and pay increases greater than expected increased the unfunded liability. The change in demographics of new entrants decreased the unfunded liability. Other differences resulted in a net increase in the unfunded liability.

Actuarial Balance Sheet and Account Balance Transfers

Schedule F contains the actuarial balance sheet that compares the total assets and liabilities of $35.4 billion. The assets include current assets and the present value of future contributions. The liabilities include the present value of all benefits to current active and retired members.

Each year the account balances in the three benefit payment accounts are compared to the actuarial liabilities developed in the valuation. If needed, transfers are made to bring the accounts into balance with the liabilities. The accounts go out of balance during the year as a result of differences between actual experience and the reserves set for retirees. In 2004, a transfer of $267.6 million was made from the Annuity Reserve Account to the State Accumulation Account to keep the former account in balance. A transfer of $27.3 million was made from the State Accumulation Account to the State Police Benefit Account to keep the latter account in balance.

The details of these transfers are shown in Schedule G.

Accounting Disclosure Statements

Schedule H is a statement of disclosure to report the information required by the Governmental Accounting Standards Board (GASB) Statement No. 25. Page 1 of Schedule H shows the funding progress from December 31, 1992 through December 31, 2004. The actuarial value of the assets is less than the actuarial accrued liability for the first time since before the December 31, 1992 actuarial valuation. As a result, the unfunded actuarial accrued liability (UAAL) is now positive.

Page 2 of Schedule H shows a comparison of the actual contributions to the system over recent years to the Annual Required Contribution (ARC) as defined by GASB Statement No. 25.

Valuations are performed on December 31 of each year and the results are presented to the Board as a basis for determining the employer contribution rate for the year beginning July 1 after the valuation date. The Board has adopted the rate from the valuation unless information available after the valuation supported an adjustment to the valuation rate.

During 2001, 2002 and 2003, actual contributions exceeded the ARC. For the period July 1, 2001 through June 30, 2003, the ARC was set at zero. However, the Board required payment from special classes for past liabilities due to retroactive benefit enhancements. Collection of those amounts resulted in the actual contributions exceeding the ARC for all or part of calendar years 2001, 2002 and 2003. In 2004, the actual contribution equaled the ARC.

GASB Statement No. 25 defines the ARC to be equal to the employer normal cost plus an amount to amortize the unfunded actuarial accrued liability over an acceptable amortization period. The 2005-2006 employer contribution requirement is less than the ARC. This is a temporary result of financing changes implemented by Act 2003-40 in December 2003. After 2011, we expect the SERS contribution to exceed the GASB minimum. The amortization schedules are reasonable and will assure the long-term financial soundness of SERS.

Schedule I shows the results of the solvency test. A short-term solvency test is one means of checking a pension system's progress under its funding program. In this solvency test, the SERS assets are compared with the actuarial accrued liabilities. The liabilities are classified into the following categories:

- Liability for active member contributions in the Fund,
- Liability for future benefits to present retired members, and
- Liability for service already rendered by the active members.

The schedule shows that, until this year, the total actuarial accrued liability was fully covered by the assets as it has been since December 31, 1992. As of December 31, 2004, the funded ratio has dropped to 96.1 percent overall. Absent unusual circumstances, retirement funds will gradually approach 100 percent funding as liabilities become fully amortized. The SERS retirement fund had exceeded 100 percent of liabilities as a result of the high level of investment returns between 1985 and 2000. The fund is on a sound actuarial basis even though the liabilities are temporarily greater than the assets.

Plan Assets

Schedule J summarizes the development of the actuarial value of assets as of December 31, 2004. The assets are based on the financial statements prepared by SERS. The asset valuation method smoothes out year-to-year fluctuations in the market value. The approach gradually recognizes, over a 5-year period, the differences between total investment return and the actuarial assumed rate of return (8.5 percent in 2004). This smoothing method recognizes 20 percent of the 2004 asset gain of $1.3 billion this year, with the remainder to be recognized over the next four years.

Projection

Schedule K shows the number of members, contributions, and benefits from 1990 through 2004 with a projection through 2015. The first half of Schedule K shows new retirements, deaths from former employees, new survivors, and deaths from survivors during the year. The second half of Schedule K shows the projection of employer and employee contributions and a projection of the benefits and expenses.

The retirement projections in Schedule K are based upon the current retirement assumptions used for the valuation plus an assumption that there will be future supplemental annuity increases similar to past increases. The projections do not reflect the greater numbers of retirements anticipated as a result of medical program changes that will occur under the current collectively bargained agreement.

Participant Data

Section I of Schedule L provides a distribution of the active and inactive participants as of December 31, 2004 by benefit class, sex, age, and length of service. It also shows the average annualized salary in 2004 by age group and sex. Section II of the schedule shows the retired participants and beneficiaries by age, sex, and benefit amounts.

Although we have made tests to check for reasonableness and consistency, we have not independently audited the data, which were submitted by SERS.

Plan Provisions

Schedule M contains a summary of the principal provisions of the plan. There have been no significant changes in plan provisions since December 31, 2003.

Actuarial Assumptions

Schedule N summarizes the actuarial assumptions used for the valuation. The two types of assumptions are the economic assumptions, such as the investment return and salary growth assumptions, and demographic assumptions, such as the assumed rate of mortality and retirement. These assumptions are the same as those used in the 2003 valuation including the change made to reflect negotiated salary increases through June 30, 2007.

Actuarial Methods

Schedule O explains the asset valuation and funding method used in the valuation, and the determination of the annual contribution. The asset valuation method amortizes investment gains and losses over five years. The funding method provides for reasonable levels of contribution that will fund the cost of future benefits with a credit for amortization of the excess of assets over liabilities. Schedule O also explains how the individual class rates are determined. The final section of Schedule O discusses the plan provisions that are not valued.

Definitions

Schedule P defines certain technical terms used in the valuation.

State Employees' Retirement System
Unfunded Liability and Normal Cost as of December 31, 2004

I.	Present Value of Benefits:		
	A) Active and Inactive Participants		
	1) Superannuation and Withdrawal	$	20,392,699,449
	2) Disability		999,106,997
	3) Death		1,217,183,498
	4) Refunds		36,362,603
	5) Special Police and Enforcement Officer Benefits		5,841,441
	6) Subtotal	$	22,651,193,988
	B) Annuitants and Beneficiaries		12,779,570,150
	C) Total	$	35,430,764,138
II.	Present Value of Member and Employer Contributions:		
	A) Employer Portion of Normal Cost	$	4,273,202,732
	B) Member Contributions		3,158,535,078
	C) Total	$	7,431,737,810
III.	Actuarial Accrued Liability: (I) - (II)	$	27,999,026,328
IV.	Actuarial Value of Assets	$	26,900,026,818
V.	Unfunded Liability (III) - (IV)	$	1,098,999,510
VI.	Employer Normal Cost Rate		
	A) Normal Cost Rate for new active members to fund:		
	1) Superannuation and Withdrawal		12.40%
	2) Disability		0.97%
	3) Death		0.74%
	4) Refunds		0.39%
	5) Total		14.50%
	B) Member Deductions		6.25%
	C) Employer Normal Cost (A) - (B)		8.25%

SCHEDULE A

State Employees' Retirement System
Employer Contribution Rate in Fiscal Year 2005 - 2006

	Funding Period: Initial Years	Funding Period: From July 1	Initial Amount of Liability	Outstanding Balance as of 12/31/04	Annual Payment Amount	Payment as a Percent of Payroll *
I. Amortization of Liability (Asset) For:						
A) Supplemental Annuities as of 12/31/01	10	2002	$1,143,657,729	$ 892,164,256	$ 174,303,527	3.42%
B) Act 2001-9 Benefits	30	2002	2,735,791,064	2,328,617,312	222,524,490	4.37%
C) Other Benefits as of 12/31/01	10	2002	(7,726,186,132)	(6,027,176,617)	(1,177,538,922)	-23.12%
D) Supplemental Annuities (2002 COLA)	10	2003	256,500,000	220,449,593	39,092,863	0.77%
E) Changes in 2002	30	2003	1,119,058,089	1,034,433,562	97,898,155	1.92%
F) Supplemental Annuities (2003 COLA)	10	2004	395,800,000	369,119,588	60,323,412	1.18%
G) Changes in 2003	30	2004	341,601,015	338,850,800	31,786,301	0.62%
H) Changes in 2004	30	2005	1,942,541,016	1,942,541,016	180,755,296	3.55%
Total				**$ 1,098,999,510**	**$ (370,854,878)**	**-7.29%**
II. Employer Normal Cost						**8.25%**
III. Total Employer Cost before Act 2003-40 minimum = (I) + (II)						**0.96%**
IV. Total Employer Cost (III), but not less than 3.00 percent as required by Act 2003-40						**3.00%**

* The payment is expressed as a percentage of the total projected payroll for active members in fiscal year 2004-2005 of $5,093,573,000. Percentages may not add due to rounding.

State Employees' Retirement System
Employer Contribution Rate by Group
(excluding Benefits Completion Plan rate)

Employer Group (1)	Basic Contribution Rate (2)	Age 50 Retirement Adjustment (3)	Multiplier Adjustment* (4)	Past Liability Adjustment (5)	Adjusted Contribution Rate** (6)	Projected 2004-2005 Payroll (7)	Employer Contribution Amount (8)
Class AA - Age 60 Retirement	2.35%		1.0000		2.35%	$ 3,879,828,000	$ 91,175,958
Class A - Age 60 Retirement	2.35%		0.8000		1.88%	38,639,000	726,413
Class AA - Age 50 Retirement (Including Enforcement Officers)	2.35%	1.20%	1.0000		3.55%	725,812,000	25,766,326
Class A - Age 50 Retirement (Including Enforcement Officers)	2.35%	1.20%	0.8000		2.84%	14,628,000	415,435
Class AA - Park Rangers & Capitol Police	2.35%	1.07%	1.0000	0.79%	4.21%	11,832,000	498,127
Class A - Park Rangers & Capitol Police	2.35%	1.07%	0.8000	0.79%	3.53%	80,000	2,824
State Police (Class A & Class C)	2.35%	1.20%	1.1395	6.21%	10.26%	306,240,000	31,420,224
Class D3	2.35%	1.20%	3.0000		10.65%	418,000	44,517
Class D4	2.35%	1.20%	1.2000	-4.26%	0.00%	16,161,000	-
Class E	2.35%		1.2677		2.98%	99,935,000	2,978,063
					Total***	$ 5,093,573,000	$ 153,027,888

* The multiplier adjustment at column 4 is the adjustment for the employer group contribution rate. Because the majority of SERS members are covered under Class AA(60), the 2.5 percent accrual rate for that Class is used to determine the basic contribution rate. Column (4) is the ratio of the class contribution rate to 2.5 percent.

** The adjusted contribution rate is [(2) + (3)] times (4) + (5).

*** The total employer contribution ($153,027,888) is approximately equal to the average employer contribution rate from Schedule B (3.00 percent) times the total projected payroll of $5,093,573,000. The Basic Contribution Rate of 2.35 percent was determined as the percentage needed to produce employer contribution amounts by employer group that sum to $153,027,888.

State Employees' Retirement System
State Police and Enforcement Officers Additional Annuity Rate
(Fiscal Year 2005 - 2006)

		State Police	Enforcement Officers
1)	Balance in Benefit Account as of December 31, 2004	$1,220,111,875	$42,549,164
2)	Present Value of Benefits for Annuitants and Beneficiaries	1,214,861,472	39,216,191
3)	Assets available for additional annuities for Active Members: (1) - (2)	5,250,403	3,332,973
4)	Present Value of additional annuities for Active Members	5,250,403	591,038
5)	Present Value of Future Contribution to fund additional annuities: (4) - (3); not less than zero	-	-
6)	Present Value of Future Compensation for eligible Active Members	*	*
7)	Contribution Rate as a percentage of payroll payable January 1: (5) / (6)	0.00%	0.00%

* Not calculated because additional annuity is fully funded.

State Employees' Retirement System
Analysis of the Change in Employer Contribution Rate

		Normal Cost	Unfunded Liability	Total
I.	December 31, 2003 Valuation	8.32%	-11.12%	-2.80%
II.	Changes in the December 31, 2004 Valuation:			
	A) Loss from investment earnings		2.51%	2.51%
	B) Change in actuarial methods and assumptions	-0.10%	0.46%	0.36%
	C) Pay increase different than assumptions		0.29%	0.29%
	D) Change in amortization due to change in payroll		0.28%	0.28%
	E) Other differences between actual experience and actuarial assumptions		0.32%	0.32%
	F) Change in demographics of new entrants	0.03%	-0.03%	0.00%
	G) Total Change	-0.07%	3.83%	3.76%
III.	December 31, 2004 Valuation: (I) + (II.G)	8.25%	-7.29%	0.96%

Analysis of the Change in the Unfunded Liability

I.	December 31, 2003 Unfunded Liability	$	(1,285,854,082)
II.	Expected Amortization Payment		(551,610,174)
III.	Expected Liability as of December 31, 2004 [((I) x 1.085) - (II)]	$	(843,541,505)
IV.	Change in Liability Due to:		
	A) Loss from investment earnings	$	1,372,929,794
	B) Change in actuarial methods and assumptions		249,607,457
	C) Pay increase different than assumptions		156,132,530
	D) Other differences between actual experience and actuarial assumptions		179,410,154
	E) Change in demographics of new entrants		(15,538,919)
	F) Total change	$	1,942,541,016
V.	December 31, 2004 Unfunded Liability: (III) + (IV. F)	$	1,098,999,510

State Employees' Retirement System
Actuarial Balance Sheet as of December 31, 2004

ASSETS

Present Assets:

Members Savings Account	$ 3,593,576,402
Annuity Reserve Account	11,525,492,487
State Police Benefit Account	1,220,111,875
Enforcement Officers Benefit Account	42,549,164
State Accumulation Account *	11,739,560,667
Supplemental Annuity Account	(1,481,733,437)
Total Present Assets (Market Value)	$ 26,639,557,158
Adjustment to Smooth Market Fluctuations	260,469,660
Total Present Assets (Actuarial Value)	$ 26,900,026,818

Present Value of Future Contributions

Members' Contributions (Employee)	$ 3,158,535,078
Normal Cost Contributions (Employer)	4,273,202,732
Accrued Liability Amortization (Employer)	(382,733,927)
Supplemental Annuity Amortizatioı (Employer)	1,481,733,437
Special State Police Contributions (Employer)	0
Special Enforcement Officer Contributions (Employer)	0
Total Future Contributions	$ 8,530,737,320
TOTAL ASSETS	$ 35,430,764,138

* Includes $2,196,906 in directed commissions.

LIABILITIES

Present Value of Benefits Payable to Annuitants and Beneficiaries from:

Annuity Reserve Account	$ 11,525,492,487
State Police Benefit Account	1,214,861,472
Enforcement Officers Benefit Account	39,216,191
Total for Annuitants and Beneficiaries	$ 12,779,570,150

Present Value of Benefits to Active and Inactive Members from:

Members Savings Account and State Accumulation Account	
Superannuation and withdrawal	$ 20,392,699,449
Disability	999,106,997
Death	1,217,183,498
Refunds	36,362,603
Subtotal	$ 22,645,352,547
State Police Benefit Account	5,250,403
Enforcement Officers Benefit Account	591,038
Total Present Value of Benefits to Active and Inactive Members	$ 22,651,193,988
TOTAL LIABILITIES	$ 35,430,764,138

State Employees' Retirement System
Required Transfers Within SERS Accounts

I. Annuity Reserve Account

Balance as reported by SERS	$ 11,793,079,141
Transfer to State Accumulation Account	(267,586,654)
Transfer to Supplemental Annuity Account	-
December 31, 2004 balance after transfers	$ 11,525,492,487

II. State Accumulation Account *

Balance as reported by SERS	$ 11,499,300,701
Transfer to State Police Benefit Account	(27,326,688)
Transfer from Annuity Reserve Account	267,586,654
December 31, 2004 balance after transfers	$ 11,739,560,667

III. Enforcement Officers' Benefit Account

Balance as reported by SERS	$ 42,549,164
Transfer from Supplemental Annuity Account	-
December 31, 2004 balance after transfers	$ 42,549,164

IV. State Police Benefit Account

Balance as reported by SERS	$ 1,192,785,187
Transfer from State Accumulation Account	27,326,688
Transfer from Supplemental Annuity Account	-
December 31, 2004 balance after transfers	$ 1,220,111,875

V. Supplemental Annuity Account

Balance as reported by SERS	$ (1,481,733,437)
Transfer from Annuity Reserve Account	-
Transfer to State Police Benefit Account	-
Transfer to Enforcement Officers' Benefit Account	-
December 31, 2004 balance after transfers	$ (1,481,733,437)

* Balance includes $2,196,906 in directed commissions.

State Employees' Retirement System
Accounting Disclosure Statements

I. Schedule of Funding Progress as of December 31, 2004

(Dollars in Thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Actuarial Accrued Liability (UAAL) (b-a)	Funded Ratio (a) / (b)	Covered Payroll (c)	Unfunded Actuarial Accrued Liability as a Percentage of Covered Payroll ((b-a)/c)
12/31/1992	11,769,388	11,488,414	(280,974)	102.4%	3,533,428	-8.0%
12/31/1993	13,060,613	12,213,736	(846,877)	106.9%	3,731,515	-22.7%
12/31/1994	13,991,485	13,742,056	(249,429)	101.8%	3,990,440	-6.3%
12/31/1995 *	15,510,309	15,067,205	(443,104)	102.9%	4,021,605	-11.0%
12/31/1996	16,841,069	15,936,616	(904,453)	105.7%	4,163,683	-21.7%
12/31/1997	18,565,136	17,288,413	(1,276,723)	107.4%	4,219,034	-30.3%
12/31/1998	20,670,711	18,357,899	(2,312,812)	112.6%	4,446,147	-52.0%
12/31/1999	23,624,267	19,091,840	(4,532,427)	123.7%	4,519,112	-100.3%
12/31/2000 *	26,094,306	19,702,278	(6,392,028)	132.4%	4,769,180	-134.0%
12/31/2001	27,505,494	23,658,757	(3,846,737)	116.3%	4,872,375	-78.9%
12/31/2002	27,497,464	25,650,389	(1,847,075)	107.2%	5,093,454	-36.3%
12/31/2003	27,465,615	26,179,761	(1,285,854)	104.9%	4,965,360	-25.9%
12/31/2004	26,900,027	27,999,026	1,099,000	96.1%	5,093,573	21.6%

* Revised economic and demographic assumptions due to experience review.

II. Schedule of Employer Contributions as of December 31, 2004

(Dollars in Thousands)

Calendar Year	Annual Required Contribution (ARC)	Actual Contribution	Percentage Contributed
1992	319,093	319,093	100.0%
1993	310,089	304,122	98.1%
1994	342,158	342,927	100.2%
1995	376,692	384,506	102.1%
1996	373,903	373,903	100.0%
1997	324,093	324,093	100.0%
1998	310,501	310,501	100.0%
1999	269,869	269,869	100.0%
2000	168,002	168,002	100.0%
2001	52,104	76,709	147.2%
2002	22,906	50,831	221.9%
2003	55,079	67,947	123.4%
2004	105,229	105,229	100.0%

Notes Pertaining to Governmental Accounting Standards Board Statement No. 25

The actual contribution amounts in the above table include the employer share of regular contributions, the employer share of purchased service and contributions for employee service under the Public School Employees' Retirement System.

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows.

Accounting Disclosure Statements (continued)

Valuation Date	December 31, 2004
Actuarial cost method	Variation of Entry-age Actuarial Cost Method
Amortization method	10-year or 30-year schedule with level payments
Remaining amortization period	7 to 30 years
Asset valuation method	5-year smooth market
Actuarial Assumptions	
Investment rate of return	8.5 percent
Projected salary increases	Average increase of 6.8 percent (range: 5.16 to 8.98 percent)
Inflation	3.0 percent
Cost-of-living adjustments	None

The annual employer contribution is equal to the sum of the following:

(1) The employer share of the normal cost.

(2) The amortization of the December 31, 2001 liability for Act 2001-9 benefits over a 30-year period beginning July 1, 2002 and ending on June 30, 2032.

(3) The amortization of the remaining unfunded liabilities as of December 31, 2001 over a ten-year period beginning July 1, 2002 and ending on June 30, 2012.

(4) The amortization of all unfunded liabilities due to supplemental annuities (COLAs) after 2001, or other legislated benefit improvements after June 30, 2003, over ten-year periods beginning with the July first following the effective date of the change.

(5) The amortization of changes in liability due to actual experience differing from assumed experience after December 31, 2001 over 30-year periods beginning with the July first following the actuarial valuation determining such changes.

Valuations are performed on December 31 of each year and the results are presented to the Board as a basis for determining the employer contribution rate for the year beginning July 1 after the valuation date. The Board has adopted the rate from the valuation unless information available after the valuation supports an adjustment to the valuation rate.

As long as the annual employer contribution, as defined above, is at least equal to the minimum contribution required under GASB Statement No. 25, the annual employer contribution will be deemed to be the Annual Required Contribution (ARC). Should the annual employer contribution be less than the minimum contribution required under GASB, the GASB minimum will be the ARC.

Accounting Disclosure Statements (continued)

The Board adopted the valuation rate as the contribution rate since 1995. The Board adopted slightly different rates in 1993 and 1994 based on information available after the valuation was performed. In 1993, the valuation rate of 9.27 percent was lowered to 8.92 percent because it was determined that the payroll reported for the valuation was unusually high and that future payrolls were expected to be relatively lower. In 1994, the valuation rate of 8.53 percent was increased to 8.92 percent to allow for the extension of the early retirement window and acceleration of the longevity pay scales.

The actuary agreed with the actions taken by the Board that resulted in some difference between the ARC and the actual contribution. The table presented on page 20 shows the ARC based on the actuarial valuation. The effect of the adjustments in 1993 and 1994 extended over three calendar years so the 1993 through 1995 actual contributions are different from the ARCs in those years.

During 2001, 2002, and 2003, actual contributions exceeded the ARC. For the period July 1, 2001 through June 30, 2003, the ARC was set at zero. However, contributions were made by employers of some special class employees for the cost of additional benefits including payment of past liabilities for retroactive benefit enhancements. Collection of those amounts resulted in the actual contributions exceeding the ARC for all or part of calendar years 2001, 2002 and 2003.

All amortization payments are currently based upon a 10-year or 30-year schedule of contributions which remain level during the amortization period. The employer cost is determined as a percent of payroll, and the employer contributes that percent of the payroll of all covered members during each fiscal year.

GASB Statement No. 25 defines the ARC to be equal to the employer normal cost plus an amount to amortize the unfunded actuarial accrued liability. The Statement prescribes the maximum acceptable period over which the total unfunded actuarial liability should be amortized. When portions of the unfunded actuarial liability are amortized over different periods, as they now are under Act 40, GASB requires that the "equivalent single amortization period" for all portions combined should not exceed the maximum acceptable period. The 2005-2006 employer contribution requirement will be less than the ARC. Under the Act 40 amortization rules, it is likely that future annual employer costs through June 30, 2012 will result in an "equivalent single amortization period" in excess of the maximum acceptable period and thus actual contributions less than the ARC. However, the employer payments scheduled after June 30, 2012 are expected to be substantially above the GASB minimum.

State Employees' Retirement System
Solvency Test

	Actuarial Accrued Liabilities For								
	(1)	(2)	(3)						
Valuation Date	Active Member Contributions	Retirees & Beneficiaries	Active Members (Employer Financed Portion)	Total Actuarial Accrued Liability (AAL)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)	Funded Ratio
(Amounts in Thousands)									
December 31, 1992	$ 1,994,567	$ 4,621,318	$ 4,872,529	$ 11,488,414	$ 11,769,388	100.0%	100.0%	100.0%	102.4%
December 31, 1993	2,170,593	4,806,907	5,236,236	12,213,736	13,060,613	100.0	100.0	100.0	106.9
December 31, 1994	2,352,731	5,039,221	6,350,104	13,742,056	13,991,485	100.0	100.0	100.0	101.8
December 31, 1995	2,499,485	5,649,454	6,918,265	15,067,205	15,510,309	100.0	100.0	100.0	102.9
December 31, 1996	2,646,630	6,027,333	7,262,653	15,936,616	16,841,069	100.0	100.0	100.0	105.7
December 31, 1997	2,748,177	6,951,411	7,588,825	17,288,413	18,565,136	100.0	100.0	100.0	107.4
December 31, 1998	2,904,232	7,200,000	8,253,666	18,357,899	20,670,711	100.0	100.0	100.0	112.6
December 31, 1999	2,989,489	7,779,993	8,322,358	19,091,840	23,624,267	100.0	100.0	100.0	123.7
December 31, 2000	3,182,776	8,148,876	8,370,626	19,702,278	26,094,306	100.0	100.0	100.0	132.4
December 31, 2001	3,344,107	8,684,734	11,629,915	23,658,757	27,505,494	100.0	100.0	100.0	116.3
December 31, 2002	3,498,672	10,129,669	12,022,048	25,650,389	27,497,464	100.0	100.0	100.0	107.2
December 31, 2003	3,588,664	11,296,520	11,294,578	26,179,761	27,465,615	100.0	100.0	100.0	104.9
December 31, 2004	3,593,576	12,779,570	11,625,880	27,999,026	26,900,027	100.0	100.0	90.5	96.1

State Employees' Retirement System
Actuarial Value of Assets

I.	Development of 12/31/04 Expected Actuarial Value:		
	A)	Actuarial Value as of 12/31/03	$ 27,465,614,945
	B)	Contributions in 2004	415,151,887
	C)	Benefits and Expenses in 2004	(1,880,126,086)
	D)	Investment return at 8.5% to 12/31/04 on (A)	2,334,577,269
	E)	Investment return at 8.5% to 12/31/04 on (B) and (C) .5 x ((B) + (C))	(62,261,403)
	F)	Expected Actuarial Value as of 12/31/04: (A) + (B) + (C) + (D) + (E)	$ 28,272,956,612
II.	Previous Differences Not Yet Amortized:		
	A)	Unrecognized amount of 12/31/00 Difference: .2 x ($1,388,417,592)	$ (277,683,518)
	B)	Unrecognized amount of 12/31/01 Difference: .4 x ($4,403,319,681)	(1,761,327,872)
	C)	Unrecognized amount of 12/31/02 Difference: .6 x ($5,022,717,365)	(3,013,630,419)
	D)	Unrecognized amount of 12/31/03 Difference: .8 x $2,652,816,560	2,122,253,248
	E)	Total	$ (2,930,388,561)
III.	Gain or Loss from 2004		
	A)	Market Value of Assets on 12/31/04	$ 26,639,557,158
	B)	Expected Market Value II(E) + I(F)	25,342,568,051
	C)	Gain (loss) from 2004 Investments (A) - (B)	$ 1,296,989,107
IV.	Development of Actuarial Value of Assets as of 12/31/04:		
	A)	20% of ($1,388,417,592) (12/31/00 Difference):	$ (277,683,518)
	B)	20% of ($4,403,319,681) (12/31/01 Difference):	(880,663,936)
	C)	20% of ($5,022,717,365) (12/31/02 Difference):	(1,004,543,473)
	D)	20% of $2,652,816,560 (12/31/03 Difference):	530,563,312
	E)	20% of $1,296,989,107 (12/31/04 Difference):	259,397,821
	F)	Total Difference: (A) + (B) + (C) + (D) + (E)	$ (1,372,929,794)
	G)	Actuarial Value at 12/31/04: I(F) + IV(F)	$ 26,900,026,818

State Employees' Retirement System
Projection of Population, Benefits, and Contributions

Projection of Annuitants and Employees
Actual Data Through 2004

Calendar Year	New Retirements During the Year	Deaths During the Year	Former Employees (EOY)	New Survivors During the Year	Deaths During the Year	Survivors (EOY)	Total Retired and Survivor Lives	Active Employees
1990			68,156			6,066	74,222	111,248
1991			69,908			6,332	76,240	105,731
1992			73,897			6,595	80,492	109,609
1993			73,894			6,796	80,690	111,962
1994			73,780			7,055	80,835	114,120
1995			74,110			7,094	81,204	112,637
1996			75,609			7,477	83,086	110,922
1997			77,667			7,790	85,457	108,684
1998			78,017			7,817	85,834	108,893
1999			80,095			7,948	88,043	108,035
2000			80,289			8,103	88,392	109,469
2001			80,911			8,306	89,217	109,716
2002			82,805			8,423	91,228	111,059
2003			85,808			8,604	94,412	109,018
2004			89,869			8,858	98,727	108,405
2005	4,497	3,294	91,072	659	492	9,025	100,097	108,405
2006	4,584	3,262	92,394	652	505	9,172	101,566	108,405
2007	4,863	3,277	93,980	655	546	9,281	103,261	108,405
2008	4,986	3,293	95,673	659	582	9,358	105,031	108,405
2009	5,090	3,304	97,459	661	613	9,406	106,865	108,405
2010	5,035	3,321	99,173	664	638	9,432	108,605	108,405
2011	4,897	3,330	100,740	666	658	9,440	110,180	108,405
2012	4,738	3,346	102,132	669	675	9,434	111,566	108,405
2013	4,561	3,363	103,330	673	689	9,418	112,748	108,405
2014	4,345	3,382	104,293	676	698	9,396	113,689	108,405
2015	4,144	3,403	105,034	681	704	9,373	114,407	108,405

The retirement projections in Schedule K are based upon the current retirement assumptions used for the valuation and do not reflect the greater numbers of retirements anticipated as a result of medical program changes that will occur under the current collectively bargained agreement.

State Employees' Retirement System

Projection of Population, Benefits, and Contributions

Projection of Expected Contributions and Benefits
Actual Data Through 2004
(Dollars in Millions)

	Contributions		Contributions as a Percent of Pay		Benefits and
Calendar Year	Employee	Employer	Employee	Employer	Expenses
1990	$ 175	$ 418			$ 607
1991	183	381			664
1992	187	319			851
1993	190	304			781
1994	193	343			812
1995	202	385			894
1996	210	374			943
1997	213	324			1,037
1998	222	311			1,080
1999	224	270			1,248
2000	232	168			1,198
2001	240	77			1,266
2002	304	51			1,450
2003	308	68			1,656
2004	302	106			1,880
2005	302	126	6.0%	2.5%	1,912
2006	310	181	6.0%	3.5%	2,103
2007	320	265	6.0%	5.0%	2,329
2008	331	291	6.0%	5.3%	2,508
2009	342	252	6.0%	4.4%	2,701
2010	354	252	6.0%	4.3%	2,974
2011	365	370	6.0%	6.1%	3,266
2012	377	986	6.0%	15.7%	3,490
2013	390	1,492	6.0%	23.0%	3,723
2014	403	1,459	6.0%	21.8%	4,068
2015	416	1,596	6.0%	23.0%	4,440

The projection is based upon the following assumptions: a projected investment return of 8.5 percent in 2004 and after; general pay increases of 3.3 percent adjusted for negotiated increases; and supplemental annuity increases in 2006 and 2010.

SCHEDULE K
(Page 2 of 2)

State Employees' Retirement System

I. Age, Service and Salary Profile of Active Participants as of December 31, 2004

Active Employees*

Males - Full Years of Service to December 31, 2004

Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total	Average Salary
Less than 20	21	0	0	0	0	0	0	21	$ 20,984
20-24	790	7	0	0	0	0	0	797	25,325
25-29	1,766	299	5	0	0	0	0	2,070	31,913
30-34	1,568	1,053	370	14	0	0	0	3,005	36,891
35-39	1,441	1,042	1,213	484	12	0	0	4,192	40,883
40-44	1,525	961	1,164	1,433	671	64	0	5,818	43,567
45-49	1,528	1,013	1,193	1,490	1,497	875	85	7,681	45,860
50-54	1,505	942	1,151	1,281	1,363	1,736	1,343	9,321	49,516
55-59	1,169	771	991	997	904	1,128	2,354	8,314	52,438
60-64	549	378	473	352	261	210	607	2,830	52,634
65+	234	160	260	131	81	51	236	1,153	54,529
Total	12,096	6,626	6,820	6,182	4,789	4,064	4,625	45,202	$ 46,104

Average Age 47.45
Average Service 13.69

Females - Full Years of Service to December 31, 2004

Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total	Average Salary
Less than 20	31	0	0	0	0	0	0	31	$ 21,660
20-24	967	26	0	0	0	0	0	993	25,199
25-29	1,935	464	30	0	0	0	0	2,429	30,674
30-34	1,585	994	544	52	0	0	0	3,175	34,084
35-39	1,571	869	1,004	741	48	0	0	4,233	36,443
40-44	1,626	970	1,043	1,157	969	105	0	5,870	38,674
45-49	1,726	1,017	1,219	1,179	1,294	1,193	182	7,810	41,215
50-54	1,378	947	1,161	1,284	1,216	1,430	1,705	9,121	43,796
55-59	899	633	876	1,031	893	856	1,191	6,379	43,948
60-64	303	286	429	367	295	216	243	2,139	42,680
65+	103	108	179	126	65	54	94	729	40,496
Total	12,124	6,314	6,485	5,937	4,780	3,854	3,415	42,909	$ 39,903

Average Age 46.16
Average Service 13.10

* The following three pages contain information on members in special categories. These include selected hazardous duty members, legislators, judges and district justices. The above information is for all other active members. Page five of Schedule L is the total of all active categories. Page six is the total of all active and inactive employees.

State Employees' Retirement System

I. Age, Service and Salary Profile of Active Participants as of December 31, 2004

Selected Hazardous Duty*

Males - Full Years of Service to December 31, 2004

Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total	Average Salary
Less than 20	2	0	0	0	0	0	0	2	$ 32,521
20-24	117	0	0	0	0	0	0	117	32,076
25-29	786	133	2	0	0	0	0	921	38,098
30-34	963	1,105	390	8	0	0	0	2,466	47,091
35-39	694	951	1,800	440	5	0	0	3,890	54,856
40-44	457	425	912	946	315	1	0	3,056	56,848
45-49	277	295	384	542	605	153	2	2,258	58,302
50-54	219	234	367	280	306	259	48	1,713	56,946
55-59	171	184	344	314	216	116	160	1,505	56,020
60-64	37	61	120	84	35	14	32	383	55,492
65+	6	9	34	20	5	4	3	81	57,267
Total	3,729	3,397	4,353	2,634	1,487	547	245	16,392	$ 53,779

Average Age 42.02
Average Service 11.17

Females - Full Years of Service to December 31, 2004

Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total	Average Salary
Less than 20	0	0	0	0	0	0	0	0	$ -
20-24	28	0	0	0	0	0	0	28	31,013
25-29	170	22	1	0	0	0	0	193	35,762
30-34	212	135	32	0	0	0	0	379	42,027
35-39	123	155	120	15	0	0	0	413	45,907
40-44	105	115	106	73	36	1	0	436	48,696
45-49	89	108	99	89	84	28	3	500	52,270
50-54	68	80	101	47	43	45	11	395	53,559
55-59	31	31	56	44	30	17	9	218	55,235
60-64	5	8	26	12	6	5	2	64	55,886
65+	1	1	9	1	0	2	1	15	61,305
Total	832	655	550	281	199	98	26	2,641	$ 48,360

Average Age 42.79
Average Service 9.48

* Enforcement officers, correction officers, psychiatric security aides, and officers of the Pennsylvania State Police and the Delaware River Port Authority

State Employees' Retirement System
I. Age, Service and Salary Profile of Active Participants as of December 31, 2004

Legislators

Males - Full Years of Service to December 31, 2004

Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total	Average Salary
Less than 20	0	0	0	0	0	0	0	0	$ -
20-24	0	0	0	0	0	0	0	0	-
25-29	1	1	0	0	0	0	0	2	69,648
30-34	5	2	0	0	0	0	0	7	69,648
35-39	5	3	1	0	0	0	0	9	69,648
40-44	9	10	8	1	0	0	0	28	69,648
45-49	10	6	8	2	11	1	0	38	72,108
50-54	10	4	11	2	8	5	1	41	71,282
55-59	1	2	5	8	5	8	2	31	73,946
60-64	3	0	4	4	4	4	6	25	74,101
65+	1	1	4	4	7	4	11	32	73,425
Total	45	29	41	21	35	22	20	213	$ 72,117

Average Age 52.99
Average Service 15.12

Females - Full Years of Service to December 31, 2004

Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total	Average Salary
Less than 20	0	0	0	0	0	0	0	0	$ -
20-24	0	0	0	0	0	0	0	0	-
25-29	0	0	0	0	0	0	0	0	-
30-34	1	0	0	0	0	0	0	1	69,648
35-39	1	1	0	0	0	0	0	2	69,648
40-44	0	0	3	0	0	0	0	3	69,648
45-49	1	2	1	0	0	0	0	4	69,648
50-54	1	0	0	1	2	0	0	4	69,648
55-59	1	0	7	0	0	0	0	8	69,648
60-64	2	2	1	0	1	0	0	6	72,904
65+	0	0	1	3	0	0	1	5	72,606
Total	7	5	13	4	3	0	1	33	$ 70,688

Average Age 55.85
Average Service 11.97

State Employees' Retirement System
I. Age, Service and Salary Profile of Active Participants as of December 31, 2004

Judges And Magisterial District Judges

Males - Full Years of Service to December 31, 2004

Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total	Average Salary
Less than 20	0	0	0	0	0	0	0	0	$ -
20-24	0	0	0	0	0	0	0	0	-
25-29	1	0	0	0	0	0	0	1	64,669
30-34	3	0	0	0	0	0	0	3	64,669
35-39	7	10	3	0	0	0	0	20	71,261
40-44	16	12	7	4	0	0	0	39	74,898
45-49	24	31	18	12	3	0	0	88	91,562
50-54	24	38	51	32	19	7	2	173	91,119
55-59	22	43	42	50	28	15	10	210	98,801
60-64	10	10	38	23	28	11	10	130	100,243
65+	3	14	18	19	21	11	11	97	105,865
Total	110	158	177	140	99	44	33	761	$ 95,236

Average Age 55.41
Average Service 13.55

Females - Full Years of Service to December 31, 2004

Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total	Average Salary
Less than 20	0	0	0	0	0	0	0	0	$ -
20-24	0	0	0	0	0	0	0	0	-
25-29	0	0	0	0	0	0	0	0	-
30-34	5	1	0	0	0	0	0	6	64,669
35-39	7	6	3	0	0	0	0	16	76,814
40-44	7	7	5	1	0	0	0	20	77,853
45-49	14	20	8	5	1	0	0	48	98,577
50-54	11	16	18	18	3	4	0	70	103,585
55-59	3	9	12	15	7	0	1	47	99,894
60-64	1	5	5	7	4	2	0	24	92,293
65+	1	2	8	4	4	3	1	23	86,166
Total	49	66	59	50	19	9	2	254	$ 94,680

Average Age 52.09
Average Service 11.12

State Employees' Retirement System
I. Age, Service and Salary Profile of Active Participants as of December 31, 2004

All Active Employees

Males - Full Years of Service to December 31, 2004

Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total	Average Salary
Less than 20	23	0	0	0	0	0	0	23	$ 21,987
20-24	907	7	0	0	0	0	0	914	26,189
25-29	2,554	433	7	0	0	0	0	2,994	33,852
30-34	2,539	2,160	760	22	0	0	0	5,481	41,537
35-39	2,147	2,006	3,017	924	17	0	0	8,111	47,691
40-44	2,007	1,408	2,091	2,384	986	65	0	8,941	48,325
45-49	1,839	1,345	1,603	2,046	2,116	1,029	87	10,065	49,150
50-54	1,758	1,218	1,580	1,595	1,696	2,007	1,394	11,248	51,367
55-59	1,363	1,000	1,382	1,369	1,153	1,267	2,526	10,060	54,008
60-64	599	449	635	463	328	239	655	3,368	54,956
65+	244	184	316	174	114	70	261	1,363	58,789
Total	15,980	10,210	11,391	8,977	6,410	4,677	4,923	62,568	$ 48,801

Average Age 46.14
Average Service 13.03

Females - Full Years of Service to December 31, 2004

Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total	Average Salary
Less than 20	31	0	0	0	0	0	0	31	$ 21,660
20-24	995	26	0	0	0	0	0	1,021	25,358
25-29	2,105	486	31	0	0	0	0	2,622	31,049
30-34	1,803	1,130	576	52	0	0	0	3,561	34,991
35-39	1,702	1,031	1,127	756	48	0	0	4,664	37,433
40-44	1,738	1,092	1,157	1,231	1,005	106	0	6,329	39,503
45-49	1,830	1,147	1,327	1,273	1,379	1,221	185	8,362	42,219
50-54	1,458	1,043	1,280	1,350	1,264	1,479	1,716	9,590	44,645
55-59	934	673	951	1,090	930	873	1,201	6,652	44,744
60-64	311	301	461	386	306	223	245	2,233	43,673
65+	105	111	197	134	69	59	97	772	42,469
Total	13,012	7,040	7,107	6,272	5,001	3,961	3,444	45,837	$ 40,716

Average Age 46.01
Average Service 12.88

Active And Inactive Employees

Males - Full Years of Service to December 31, 2004

Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total
Less than 20	23	0	0	0	0	0	0	23
20-24	907	7	0	0	0	0	0	914
25-29	2,562	442	7	0	0	0	0	3,011
30-34	2,555	2,227	768	22	0	0	0	5,572
35-39	2,181	2,086	3,070	927	17	0	0	8,281
40-44	2,043	1,470	2,158	2,413	993	65	0	9,142
45-49	1,892	1,419	1,684	2,094	2,126	1,039	88	10,342
50-54	1,891	1,304	1,685	1,655	1,735	2,033	1,411	11,714
55-59	1,557	1,072	1,469	1,447	1,185	1,293	2,576	10,599
60-64	675	478	669	497	353	256	699	3,627
65+	276	211	336	194	126	75	269	1,487
Total	16,562	10,716	11,846	9,249	6,535	4,761	5,043	64,712

Average Age 46.32
Average Service 12.95

Females - Full Years of Service to December 31, 2004

Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total
Less than 20	31	0	0	0	0	0	0	31
20-24	996	27	0	0	0	0	0	1,023
25-29	2,120	508	31	0	0	0	0	2,659
30-34	1,838	1,222	591	52	0	0	0	3,703
35-39	1,758	1,132	1,201	770	49	0	0	4,910
40-44	1,825	1,203	1,255	1,261	1,008	106	0	6,658
45-49	1,957	1,285	1,485	1,336	1,396	1,236	185	8,880
50-54	1,790	1,229	1,441	1,431	1,298	1,500	1,743	10,432
55-59	1,351	825	1,084	1,171	966	894	1,225	7,516
60-64	487	357	518	418	328	240	256	2,604
65+	156	137	208	147	77	60	100	885
Total	14,309	7,925	7,814	6,586	5,122	4,036	3,509	49,301

Average Age 46.36
Average Service 12.54

State Employees' Retirement System

II. Age and Benefit Profile of Annuitants and Beneficiaries as of December 31, 2004

Superannuation Annuitants

	Male		Female		Total	
Age	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension
Under 25	-	$ -	-	$ -	-	$ -
25-29	-	-	-	-	-	-
30-34	-	-	-	-	-	-
35-39	-	-	-	-	-	-
40-44	-	-	-	-	-	-
45-49	-	-	-	-		
50-54	363	10,879,201	155	4,428,703	518	15,307,904
55-59	1,910	69,994,172	692	23,225,996	2,602	93,220,168
60-64	4,240	138,016,716	2,498	58,463,661	6,738	196,480,377
65-69	5,145	127,938,571	3,381	57,919,332	8,526	185,857,903
70-74	4,903	100,735,012	3,528	45,738,869	8,431	146,473,880
75-79	4,874	83,327,562	3,807	41,472,586	8,681	124,800,149
80-84	3,846	55,500,014	3,673	32,839,979	7,519	88,339,992
85-89	2,025	23,755,860	2,418	19,134,425	4,443	42,890,284
90 & over	901	10,829,004	1,398	12,037,942	2,299	22,866,946
Total	28,207	$ 620,976,112	21,550	$ 295,261,493	49,757	$ 916,237,604

Average Age	73.5
Average Annual Pension	$18,414

State Employees' Retirement System

II. Age and Benefit Profile of Annuitants and Beneficiaries as of December 31, 2004

Early Retirement Annuitants

Age	Male		Female		Total	
	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension
Under 25	-	$ -	2	$ 864	2	$ 864
25-29	14	13,446	21	11,970	35	25,417
30-34	92	112,676	100	108,897	192	221,573
35-39	224	424,766	247	360,173	471	784,939
40-44	456	1,716,266	583	1,330,723	1,039	3,046,989
45-49	805	5,793,126	1,233	5,356,098	2,038	11,149,224
50-54	1,868	23,266,248	2,952	26,777,662	4,820	50,043,911
55-59	4,645	91,874,190	3,437	44,184,054	8,082	136,058,244
60-64	3,784	75,984,564	2,347	31,540,286	6,131	107,524,850
65-69	2,164	32,298,970	1,714	17,474,472	3,878	49,773,441
70-74	1,822	25,304,712	1,462	13,496,007	3,284	38,800,719
75-79	980	13,057,765	964	7,896,974	1,944	20,954,739
80-84	389	4,717,150	538	4,071,467	927	8,788,617
85-89	110	1,206,563	203	1,764,462	313	2,971,024
90 & over	45	502,369	58	562,630	103	1,064,999
Total	17,398	$ 276,272,811	15,861	$ 154,936,739	33,259	$ 431,209,549

Average Age	60.6
Average Annual Pension	$12,965

State Employees' Retirement System

II. Age and Benefit Profile of Annuitants and Beneficiaries as of December 31, 2004

Disabled Annuitants

Age	Male Number	Male Annual Pension	Female Number	Female Annual Pension	Total Number	Total Annual Pension
Under 25	-	$ -	-	$ -	-	$ -
25-29	-	-	-	-	-	-
30-34	14	137,675	13	121,228	27	258,903
35-39	48	561,555	55	533,320	103	1,094,875
40-44	126	1,530,982	164	1,881,701	290	3,412,683
45-49	255	3,619,632	342	4,610,334	597	8,229,967
50-54	527	7,633,721	646	9,007,338	1,173	16,641,060
55-59	721	10,877,413	714	10,406,010	1,435	21,283,423
60-64	603	7,268,098	537	5,817,731	1,140	13,085,829
65-69	378	3,698,265	401	3,685,178	779	7,383,442
70-74	268	2,532,423	305	2,394,445	573	4,926,868
75-79	190	1,848,417	205	1,512,260	395	3,360,676
80-84	89	752,548	138	925,626	227	1,678,174
85-89	34	300,605	57	369,160	91	669,765
90 & over	6	39,560	17	96,352	23	135,911
Total	3,259	$ 40,800,893	3,594	$ 41,360,683	6,853	$ 82,161,576

Average Age	60
Average Annual Pension	$11,989

State Employees' Retirement System
II. Age and Benefit Profile of Annuitants and Beneficiaries as of December 31, 2004

Beneficiaries and Survivor Annuitants

	Male		Female		Total	
Age	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension
Under 25	17	$ 237,845	12	$ 86,545	29	$ 324,390
25-29	15	230,089	7	41,397	22	271,486
30-34	17	365,990	12	117,048	29	483,037
35-39	17	196,021	23	273,081	40	469,102
40-44	17	126,053	54	475,815	71	601,868
45-49	43	291,018	110	996,205	153	1,287,223
50-54	66	371,055	232	1,993,361	298	2,364,416
55-59	81	603,530	403	4,083,134	484	4,686,664
60-64	76	614,313	544	6,234,811	620	6,849,124
65-69	84	595,645	665	6,605,744	749	7,201,389
70-74	127	1,010,708	925	8,612,343	1,052	9,623,050
75-79	110	685,544	1,418	10,520,548	1,528	11,206,092
80-84	92	548,795	1,524	9,479,925	1,616	10,028,720
85-89	66	403,309	1,229	6,796,646	1,295	7,199,955
90 & over	24	57,264	848	4,213,896	872	4,271,159
Total	852	$ 6,337,178	8,006	$ 60,530,498	8,858	$ 66,867,676

Average Age	75.1
Average Annual Pension	$7,549

Benefit and Contribution Provisions as of December 31, 2004
(as embodied in Act 31 of 1974, and amended through Act 40 in December 2003)

The State Employees' Retirement System makes provision for retirement, disability, and death benefits for all State employees, except those specifically excluded under Section 5301 of the State Code, and certain other eligible groups. The major provisions are summarized as follows:

Eligible Employees

Class AA -	All eligible employees hired after June 30, 2001, except State Police Officers, members of the judiciary and legislators, and employees hired before July 1, 2001 who elected Class AA by December 31, 2001.
Class A -	State Police Officers hired on or after March 1, 1974, members of the judiciary who have not elected Class E-1 or E-2, legislators elected before July 1, 2001 who have not elected Class AA or Class D-4 and Class A employees hired before July 1, 2001 who remained in Class A.
Class C -	Liquor Law enforcement officers and other officers and certain employees of the State Police who have been members and employees continuously since prior to March 1, 1974.
Class D-3 -	Legislators who have been members and employees continuously since prior to March 1, 1974.
Class D-4 -	Legislators coming into service after June 30, 2001 who elect to be SERS members, and legislators who elected Class D-4 before July 1, 2001.
Class E-1 -	Judges who elect Class E-1.
Class E-2 -	Magisterial District Judges who elect Class E-2.

Benefit and Contribution Provisions as of December 31, 2004 (continued)
(as embodied in Act 31 of 1974, and amended through Act 40 in December 2003)

Age and Service Requirements for Superannuation (full formula benefits)

Class AA & Class A

General Conditions	Age 60 with three years of service; or 35 or more years of credited service, regardless of age.
Legislators and certain enforcement officers	Age 50 with three years of service.
Park Rangers & Capitol Police	Age 50 with 20 years of Park Ranger or Capitol Police service.
State Police	Age 50. State Police are eligible for unreduced benefits after 20 years of service, regardless of age; however, age 50 remains their superannuation age.

Class C

State Police	Age 50. State Police are eligible for unreduced benefits after 20 years of service, regardless of age; however, age 50 remains their superannuation age.
Other Hazardous Duty	Age 50 with three years of service.
Class D-3 & Class D-4	Age 50 with three years of service.
Class E-1 & Class E-2	Age 60 with three years of service; or 35 or more years of credited service, regardless of age.

Formula for Superannuation Annuity

The standard single-life annuity applicable to members of Class AA is equal to 2.5 percent of the high 3-year final average salary ("F.A.S.") of the member multiplied by the years and fractions of credited service.

The standard single-life annuity applicable to members of Class A and Class C is equal to 2 percent of the high 3-year final average salary ("F.A.S.") of the member multiplied by the years and fractions of credited service.

The applicable single-life annuity for Class C State Police and Class A State Police is 50 percent of the highest annual salary if the member has over 20 but less than 25 years of service. With more than 25 years of service the benefit is 75 percent of the highest annual salary.

Benefit and Contribution Provisions as of December 31, 2004 (continued)
(as embodied in Act 31 of 1974, and amended through Act 40 in December 2003)

The benefit accrual rates for other classes of members are as follows:

Class	Benefit Accrual Rate
D-3	7.5 percent
D-4	3.0 percent
E-1	4.0 percent for each of the first 10 years of judicial service, dropping to 3.0 percent for each subsequent year of judicial service.
E-2	3.0 percent for each year of judicial service.

There are two conditions under which long-service members or members retiring at advanced ages may receive larger benefits than those described above. First, members who have 41 or more years of combined Class A and AA service are entitled to a supplemental benefit. Second, there is a late retirement increase (or actuarial increase) provision whereby benefits for eligible members who work beyond their 70^{th} birthday are guaranteed to be at least actuarially equivalent to the preceding year's benefits.

In addition to the standard single-life annuity as determined above, a member of Class C receives a "member's annuity" actuarially equivalent to the regular accumulated member contributions and interest at retirement but not less than such annuity determined as if the member was age 60 at retirement.

In addition to the above benefits, a member who has elected Social Security Integration Coverage is entitled to a single-life annuity of 2 percent of the members' "Average Non-Covered Salary" for each year of Social Security Integration (SSI) coverage. All Class E members can elect SSI coverage. Other members must have elected SSI coverage before March, 1974. "Average Non-Covered Salary" is the average annual salary received while covered by the Retirement System since January 1, 1956 in excess of the maximum covered wages under Social Security.

Limitations on Annuity

The annuity paid to a member shall not exceed the member's highest salary during any period of twelve consecutive months of creditable service; however, late retirement increase benefits, if any, are not subject to this limitation. The amount of annual retirement benefit a member may receive shall not exceed the dollar limit specified under Section 415 (b) of the Internal Revenue Code. However, members will not receive a lower benefit than they would have been entitled to receive had Act 2001-9 not been enacted.

Benefit and Contribution Provisions as of December 31, 2004 (continued)
(as embodied in Act 31 of 1974, and amended through Act 40 in December 2003)

Age and Service Requirements for Disability Retirement

A member is eligible for disability retirement if the member is unable to perform his or her current job and has at least 5 years of service. An officer of the State Police or enforcement officer does not have a service requirement.

Formula for Disability Benefit

The disability benefit is equal to the benefit calculated as for full retirement, based on years of credited service at disability, if the result is greater than or equal to 33-1/3 percent of F.A.S. at time of disability. If the benefit so calculated is less than 33-1/3 percent of F.A.S., the disability benefit is equal to the smaller of:

(a) the benefit calculated as for full retirement based on service projected to retirement date, or

(b) 33-1/3 percent of F.A.S. at time of disability.

For service connected disabilities, the disability benefit payable will be increased, as needed, so that the sum of the plan benefit and the benefits paid or payable under the Workers' Compensation Act, The Pennsylvania Occupational Disease Act, and the Social Security Act equals 70 percent of F.A.S.

Eligibility for Vested Benefit

A member is eligible for a vested benefit after 5 years of service.

Vested Benefit

The vested benefit is equal to the benefit calculated as for retirement, based on years of credited service at the time of leaving the plan. The former member can receive the full benefit beginning at retirement age, or an actuarially reduced early retirement benefit beginning at any date after separation but before retirement. The early retirement benefit is reduced from the earlier of age 60, or the age at which the member would have 35 years of credited service.

Eligibility for Death Benefit Prior to Retirement

A member is eligible if the member (1) is under superannuation age with 5 years of credited service or (2) has attained superannuation age with 3 years of credited service.

Benefit and Contribution Provisions as of December 31, 2004 (continued)
(as embodied in Act 31 of 1974, and amended through Act 40 in December 2003)

Amount of Death Benefit Prior to Retirement

An eligible beneficiary receives the full present value of the benefits to which the member would have been entitled had the member retired the day before he or she died, assuming the member had elected Option 1 if no other option had been elected. This death benefit includes the present value associated with benefits, if any, to which the member may not have been entitled because they exceeded the member's highest consecutive twelve months of salary.

Death Benefits After Retirement

A member who elects the single-life annuity is entitled to a refund of the unpaid balance of the member accumulated contributions and interest at the time of retirement. A member may elect one of several optional reduced pensions in lieu of the single-life annuity to provide additional death benefit protection. The optional forms of benefit are actuarially equivalent to the single life benefit using 4.0 percent interest per annum, and the actuarial equivalence factors described below.

The beneficiary of a member whose benefit was limited to the member's highest salary will be paid a death benefit equal to the present value of the benefit in excess of the highest salary. This payment is in addition to any death benefit that may be paid as a result of the optional election.

The "Extra Piece"

The retirement code provides for an "extra piece" to be added to the annual benefit if the member's accumulated deductions, excluding any Class C deductions, exceed one-half of the actuarially equivalent value of the annual benefit. The extra piece is equal to the difference between the total accumulated deductions and one-half of the actuarially equivalent value of the annual benefit.

Cost-of-Living Allowances (COLAs)

Supplemental annuities applying cost-of-living increases to the benefits of annuitants have been instituted from time to time. The last cost-of-living increase was a two-stage increase under Act 2002-38. The first stage was applicable to annuitants who retired on or before July 1, 1990, and it became effective in July of 2002. The second stage provided cost-of-living increases to annuitants who retired after July 1, 1990 but prior to July 2, 2002, and it became effective in July of 2003.

Benefit and Contribution Provisions as of December 31, 2004 (continued)
(as embodied in Act 31 of 1974, and amended through Act 40 in December 2003)

Rate of Member Contribution

(i) Regular member contributions, excluding Social Security Integration contributions

Class AA -	6.25 percent of total salary
Class A -	5.00 percent
Class C -	5.00 percent
Class D-3 -	18.75 percent
Class D-4 -	7.50 percent
Class E-1 -	10.00 percent during the first 10 years of judicial service and 7.50 percent thereafter.
Class E-2 -	7.50 percent

(ii) Additional contribution for Social Security Integration Credit

Any member who elects the Social Security Integration Credit pays 5.00 percent of any salary in excess of the amount of salary covered by Social Security during the year for which contributions are being made. A member electing to end additional contributions is ineligible to make future contributions or accrue future benefits.

(iii) Waiver of contributions

Members may elect to waive future contributions if their maximum single life annuity exceeds 110 percent of their highest calendar year compensation.

Interest Credited on Member Contributions

A rate of 4 percent, stipulated as the statutory rate of interest, has been credited on the member contributions since the inception of the system.

Benefit and Contribution Provisions as of December 31, 2004 (continued)
(as embodied in Act 31 of 1974, and amended through Act 40 in December 2003)

Refund of Accumulated Member Contributions

On the death of a member not qualifying for death benefits, the accumulated member contributions and interest will be paid to the beneficiary. Any member terminating service when not eligible for another form of benefit is paid a refund of the accumulated contributions and interest. Other terminating members may elect to receive a lump sum payment of a portion of the present value of their benefit, not to exceed their accumulated contributions and interest. Their lump sum payment results in a decrease to the annuity benefit otherwise payable.

Employer Contributions

The employer pays the balance of the cost in excess of the members' contributions with payment schedules determined by law. Act 2003-40 made changes to the SERS funding rules which significantly affect the required employer contributions. See Section III of Schedule O for the details.

Actuarial Equivalence

The actuarial table used to determine optional and early retirement benefits for members who entered service after August 1983 is the 1983 Group Annuity Mortality (1983GAM) Unisex table.

Members who entered service before August 1983 receive the better of benefits based on the 1983 GAM table or a variation of the 1971 Group Annuity Mortality (1971GAM) male table. The 1971 GAM table that applies in determining the benefits for members who entered service before August 1983 is:

For service before August, 1983:

Males (members or survivors) – 1971 GAM for males
Females (members or survivors) – 1971 GAM for males, set back 6 years

For service after August, 1983:

Members (male or female) – 1971 GAM for males, set back 6 years
Survivors (male or female) – 1971 GAM for males

Actuarial Assumptions

Schedule N shows the actuarial assumptions used for the valuation. The assumptions were based on a review of experience under SERS from 1996 through 2000. Schedule N contains an extract of the full set of rates used in the valuation. The full set of rates is in the Fifteenth Investigation of Actuarial Experience of the State Employees' Retirement System of the Commonwealth of Pennsylvania, which can be obtained from SERS. The rates are the probabilities that an event will occur in the year after the valuation and are all assumed to occur at the beginning of the year. For instance, the male retirement rate of 22.0 percent at age 60 means that 220 of every 1,000 employees age 60 and eligible for full benefits are expected to retire at the date of the valuation.

Interest Rate: 8.5 percent compounded annually. The assumed interest rate of 8.5 percent is the investment return less investment and administrative expenses.

Mortality After Retirement:

Non-disabled Retirees, Beneficiaries and Survivors: The 1983 Group Annuity Mortality table for males and females.

Disability Retirees: The Federal Civil Service Retirement System disabled annuitant mortality table adjusted to equal the overall SERS disabled annuitant mortality with a margin for future improvement in mortality.

Assumptions for General Employees while Active Members

Rates of Separation for Eligibility for Full Unreduced Benefits:
(35 years of service under age 60; 3 years of service over age 60)

Rates of Separation for Eligibility for Full Unreduced Benefits			
	Age	Male	Female
AGE	51 – 61	22.0%	22.0%
	62	33.0	33.0
	63 – 64	22.0	22.0
	65	34.0	34.0
	66	27.0	27.0
	67 – 79	20.0	20.0
	80	100.0%	100.0%

Actuarial Assumptions (continued)

Rates of Separation for Eligibility for Reduced Benefits
(only apply to members not eligible for full unreduced benefits)

Rates of Separation for Eligibility for Reduced Benefits					
		5 – 14 Years of Service		15 or More Years of Service	
		Male	Female	Male	Female
AGE	20-24	4.0%	4.0%	NA	NA
	25-29	4.0	4.0	NA	NA
	30-34	3.0	4.0	3.0%	4.0%
	35-39	2.0	3.0	2.0	2.0
	40-44	2.0	1.0	2.0	2.0
	45-49	1.0	1.0	2.0	2.0
	50-54	1.0	1.0	2.0	2.0
	55-59	3.0	3.0	3.0	3.0

Rates of Separation Due to Withdrawal
(only apply to members not eligible for full retirement)

Rates of Separation Due to Withdrawal									
		Years of Service				Years of Service			
		Male				Female			
		0	5	9	14+	0	5	9	14+
AGE	20-24	9.6%	0.5%	0.0%	0.0%	9.5%	2.2%	0.5%	0.0%
	25-29	9.4	0.0	0.0	0.0	8.7	1.7	0.5	0.0
	30-34	9.0	1.0	0.0	0.0	8.7	1.7	0.0	0.0
	35-39	8.8	1.7	0.0	0.0	8.7	1.7	0.0	0.0
	40-44	8.8	0.6	0.0	0.0	8.5	3.7	0.8	0.0
	45-49	8.5	1.6	0.0	0.0	8.3	3.2	0.8	0.0
	50-54	8.3	1.3	0.0	0.0	8.3	3.2	0.0	0.0
	55-59	8.3	0.0	0.0	0.0	8.3	0.5	0.0	0.0

Actuarial Assumptions (continued)

Rates of Separation Due to Death and Disability
(Disability rates only apply to members not eligible for full retirement)

Rates of Separation Due to Death and Disability					
		Death		Disability	
		Male	Female	Male	Female
AGE	20-24	0.03%	0.02%	0.03%	0.06%
	25-29	0.03	0.02	0.03	0.06
	30-34	0.04	0.03	0.08	0.15
	35-39	0.06	0.04	0.15	0.25
	40-44	0.08	0.06	0.23	0.33
	45-49	0.15	0.09	0.41	0.52
	50-54	0.27	0.14	0.57	0.78
	55-59	0.42	0.22	0.75	0.99
	60-64	0.62	0.36	N/A	N/A

For Special Benefit Classes if Different from General Employee Rates:

Rates of Separation Due to Withdrawal:

Rates of Separation Due to Withdrawal				
		State Police/ Hazardous Duty	Legislators	Judicial Officers
Years Of Service	0	6.0%	0.0%	0.0%
	1	5.5	3.0	0.8
	2	4.0	3.0	0.8
	3-4	3.0	3.0	0.8
	5	2.0	3.0	0.8
	6	2.0	3.0	0.8
	7-9	1.0	3.0	0.8
	10+	1.0	3.0	1.1

Actuarial Assumptions (continued)

Rates of Separation Due to Early Retirement:

Rates of Separation Due to Early Retirement			
	State Police/ Hazardous Duty	Legislators	Judicial Officers
ANY AGE	1.0%	3.0%	1.0%

Rates of Separation Due to Retirement Other Than State Police with 19 or More Years of Service:

Rates of Separation Due to Retirement other than State Police with 19 or more years of Service				
		State Police/ Hazardous Duty	Legislators	Judicial Officers
AGE	50-54	5.0%	2.0%	N/A
	55-59	5.0	3.0	N/A
	60-64	5.0	4.0	2.0
	65-69	50.0	6.0	2.0
	70-74	24.0	8.0	100.0
	75-79	24.0	10.0	N/A
	80-84	100.0	100.0	N/A

Actuarial Assumptions (continued)

Rates of Separation Due to Retirement for State Police with 19* or More Years of Service:

Rates of Separation due to Retirement for State Police with 19 or More Years of Service			
Years of Service	**Rate**	**Years of Service**	**Rate**
19*	4.0%	26-32	16.0%
20 – 23	1.0	33	30.0
24*	30.0	34-38	41.0
25	17.0	39+	100.0

* State Police with 19 and 24 years of service at the beginning of the year are assumed to retire at the point they reach 20 and 25 years respectively during the year and to receive the FOP award.

Note: The assumptions above do not take into account the mandatory retirement age of 60 for State Police. This has little effect on the December 31, 2004 valuation liabilities and no bottom-line 2005-2006 employer cost impact, since the Act 40 minimum employer cost is controlling.

Years of Service Purchased by Eligible Members:

Purchase of Service			
Age	**Number of Years to Purchase**	**Age**	**Number of Years to Purchase**
20 – 24	0.992	40 – 44	0.962
25 – 29	0.991	45 – 49	0.944
30 – 34	0.979	50 – 54	0.873
35 – 39	0.968	55 – 59	0.756

Career Salary Increases

The career salary scale shown on the following page includes average increases in the employee salary due to promotions and longevity growth. The average career salary growth is 3.5 percent per year. In addition, it is assumed that the salary schedules will increase by 3.3 percent a year. The scale on the following page does not include the assumed 3.3 percent general salary increase.

Actuarial Assumptions (continued)

Assumed future salary increases were modified with respect to Class AA and Class A employees (other than members of the judiciary, legislators and select others) who are subject to the age 60/35 years of service superannuation requirements, to reflect negotiated increases applicable to such employees through June 30, 2007, as summarized below:

Valuation Assumptions for Negotiated Salary Increases				
Fiscal Year Beginning July 1	General	Assumed Longevity	Average Promotion	Total
2004	0.0%	1.8%	1.7%	3.5%
2005	3.0%	0.0%	1.7%	4.7%
2006	3.5%	3.6%	1.7%	8.8%

Career Salary Scale for Members:

Career Salary Scale for Members			
Age	Annual Increase	Age	Annual Increase
20 – 29	5.5%	44	3.6%
30	5.3%	45	3.5%
31	5.2%	46	3.4%
32	5.0%	47	3.2%
33	4.9%	48	3.1%
34	4.8%	49	3.0%
35	4.6%	50	2.8%
36	4.5%	51	2.6%
37	4.4%	52	2.5%
38	4.2%	53	2.4%
39	4.1%	54	2.2%
40	4.0%	55	2.1%
41	3.9%	56	2.0%
42	3.8%	57-58	1.9%
43	3.7%	59-60	1.8%

The above scale does not apply to members in Classes D and E. It is assumed that only the general salary increase (3.3 percent each year) would apply to members in these classes.

Actuarial Methods

I. Asset Valuation

The actuarial value of assets is developed by recognizing the difference between the expected actuarial value of assets and the market value of assets over a five-year period. The expected actuarial value is last year's actuarial value brought forward to reflect actual contributions, benefit payments and expenses, and assumed investment income. Each year 20 percent of the difference between this expected value and the market value is recognized in determining the current actuarial value of assets with the remaining 80 percent to be recognized over the next four years.

II. Funding Method

The State Employees' Retirement System funding policy provides for employer contributions at actuarially determined rates that will amortize liabilities over a ten-year or 30-year period beginning with the July first following the measurement of the liability. See Section III below for details regarding the specific liabilities subject to amortization and the applicable amortization periods. This policy assures that the SERS is appropriately funded and also that the fund will accumulate sufficient assets to pay benefits when they are due. The policy is set by the State Employees' Retirement Board in conformance with specific legal requirements as to the method of funding.

A variation of the Entry-Age Actuarial Cost Method is used to determine the liabilities and costs related to all SERS benefits including retirement, withdrawal, death and disability benefits. The significant difference between the method used for SERS and the typical Entry-Age Actuarial Cost Method is that the normal cost is based on the benefits and contributions for new employees rather than for all current employees from their date of entry. The SERS variation should produce approximately the same results as the typical method over the long run.

III. Determination of the Annual Contribution

The annual employer contribution is equal to the sum of the following:

(1) The employer share of the normal cost.
(2) The amortization of the December 31, 2001 liability for Act 2001-9 benefits over a 30-year period beginning July 1, 2002 and ending on June 30, 2032.
(3) The amortization of the remaining unfunded liabilities as of December 31, 2001 over a ten-year period beginning July 1, 2002 and ending on June 30, 2012.
(4) The amortization of all unfunded liabilities due to supplemental annuities (COLAs) after 2001, or other legislated benefit improvements after June 30, 2003, over ten-year periods beginning with the July first following the effective date of the change.
(5) The amortization of changes in liability due to actual experience differing from assumed experience after December 31, 2001 over 30-year periods beginning with the July first following the actuarial valuation determining such changes.

Actuarial Methods (Continued)

The amortization payments are level amounts over the applicable amortization period. The employer cost is determined as a percent of payroll, and the employer contributes that percent of the payroll of all covered members during each fiscal year. The employer cost for fiscal year 2005/2006 is the total of (1) the employer normal cost percent and (2) the net amortization payment for fiscal year 2005/2006 divided by the projected payroll for the fiscal year. Under Act 2003-40, the total annual employer contribution rate for fiscal year 2005/2006 shall not be less than 3 percent of the active member payroll.

The assumptions used in determining the actuarial cost are stated in Schedule N, and the employer cost, as a percent of payroll, is determined in Schedules A and B. The assumptions used for the current valuation were based upon an evaluation of SERS experience from 1996 through 2000.

The investment return assumption is 8.5 percent per year. Salary growth is the total of assumed increases in salary rates and career salary growth. It is generally assumed that the total payroll will increase at 3.3 percent a year and that employee career salary growth (promotion and longevity growth) will average an additional 3.5 percent a year. Therefore, the average total salary growth for an individual will generally be 6.8 (3.3 plus 3.5) percent a year. These assumed salary increases were modified, however, in this valuation to reflect negotiated increases through June 30, 2007. The investment return and the salary rate increase assumptions are based on assumed underlying inflation of 3.0 percent a year.

All costs and liabilities have been determined in conformance with generally accepted actuarial principles and procedures in accordance with the principles of practice prescribed by the Actuarial Standards Board of the American Academy of Actuaries. The calculations were performed on the basis of actuarial assumptions and methods, which are internally consistent, and reasonable (taking into account past experience under the SERS and reasonable expectations) and which in combination represent the best estimate of anticipated experience under the plan.

IV. Allocation of the Annual Contribution Among Employer Groups

The annual contribution (total employer cost) is expressed as a percentage of the total projected payroll for active members. This amount is reflected on Schedule B, line IV. and is referred to as the total employer cost. The total employer cost is the average contribution amount that needs to be received by the employer groups participating in the system. Therefore, some employer groups contribute a higher percent of pay, and some employer groups contribute a lower percent of pay.

Actuarial Methods (Continued)

Schedule C develops the contribution rate for each of the employer groups. The allocation method used to determine the employer rate takes into consideration the cost of additional benefits for special classes of members. For example, the contribution rate for Class E members takes into consideration the additional accrual rate those members receive at retirement. The Basic Contribution Rate (column 2 on Schedule C) is determined as the percentage needed to produce employer contribution amounts by class that, when added together, equal the total employer contribution.

The following is an explanation of the elements of Schedule C.

Column (1) is the employer group.

Column (2) is the Basic Contribution Rate. The Basic Contribution Rate is the amount needed to fund the benefits for Class AA(60) members. Because the majority of SERS members are covered under Class AA(60), the 2.5 percent accrual rate for that Class is used to determine the basic contribution rate.

Column (3) is the additional cost for members who are eligible to retire before reaching age 60, (or 35 years of service if earlier). The age 50 normal cost is determined for two groups of members: members who can retire at age 50 if they have 3 years of service, and members who can retire at age 50 once they obtain 20 service credits. Park Rangers and Capitol Police fall into the latter category. The additional cost for members who can retire at age 50 if they have 3 years of service is larger than the additional cost for members who can retire at age 50 if they have 20 years of service.

Column (4) is the multiplier adjustment to the basic benefit, which is applicable to members in classes that receive a larger, or smaller, percent accrual rate than the accrual rate for Class AA members. The normal cost is determined for members who would receive the standard 2.5 percent single-life annuity set by Act 9 (Class AA). For example, members in Class D-3 receive an annuity equal to 3.75 times the standard single-life annuity. The multiplier adjustment (Column (4)) for Class D-3 is 3.0, which is the ratio of 3.75 to the 1.25 multiplier for Class AA. The multiplier adjustment for members who receive a smaller accrual rate will be less than 1.00 (members in Class A).

Actuarial Methods (Continued)

Column (5) is the past-service liability component for certain employee groups. These employee groups were granted benefit improvements that were retroactive at the date of passage, and therefore cover all credited service for the class. The stipulation of each benefit improvement was that the employers of the individual employee group, not the Commonwealth, would fund the benefit improvement.

At implementation of the new benefit provision, a liability is established for the members who are eligible for the new benefit provisions, and a schedule is determined to pay off the increase in liability. For example, Park Rangers and Capitol Police Officers where formerly covered under the age 60 retirement provisions. Effective with the valuation at December 31, 1992, Park Rangers and Capitol Police Officers became eligible to retire at age 50 if they have 20 years of service. At that valuation, a liability was established that would fund the increase in benefits.

The liability for the increase in benefits for past service is paid off in equal installments by the employers of the member group. Each year, the annual contribution as a percent of payroll is determined as the annual payment divided by the funding payroll for the group. The outstanding balance is carried forward with interest each year.

The following table shows the payment schedule for the two groups of employees who have a past service liability.

Amortization Schedule for Past Liabilities		
Employer Group	**Payment**	**Last Payment (fiscal year beginning)**
State Police	$19,004,493	July 2029
Park Rangers / Capitol Police	$93,603	July 2027

In conjunction with the passage of Act 9, the D-4 employer contributed a lump sum amount which was more than sufficient to fund the additional cost of the higher accrual rate and the retirement at age 50. Therefore, the past service liability for Class D-4 Legislators is $0, and the past liability adjustment has been set to produce a contribution rate of zero. The remaining excess contributions made by the D-4 employer, plus interest, was equal to $3,998,795 as of December 31, 2004. The amount needed to produce a zero contribution rate in 2004 was greater than the interest earned on the excess contributions so the available fund decreased in 2004. These funds will continue to be used to offset future D-4 employer contribution requirements, until the balance is expended.

Column (6) is the adjusted contribution rate, and is equal to column (2) plus column (3), multiplied by column (4). Column (5) is added.

Actuarial Methods (Continued)

Column (7) is the projected payroll for the class of employees. The projected payroll is for the fiscal year to which the contribution rate is applicable.

Column (8) is the dollar amount of the employer group contribution. Except when the basic employer contribution rate is zero, the sum of the dollar amounts for each group is (approximately) equal to the total employer contribution (as a percent of payroll) multiplied by the total projected payroll for the active members.

V. Plan Provisions Not Valued

The cost effect of two plan provisions was not included in this valuation because the effect of the provisions is minimal. These are the limit on the amount of retirement benefit imposed by Section 5702(c) (100 percent limit) and the supplemental death benefit payable when the retirement benefit is limited by Section 5702(c).

These two provisions are not valued because they only apply to very few SERS members. Since by definition the liability for the supplemental death benefit is lower than the reduction in liability for the 100 percent limit, the net effect of not including these provisions in the actuarial valuation is a minimal overstatement in the total employer cost.

State Employees' Retirement System

Definition of Technical Terms

Accrued Service. Service credited under the system, which was rendered before the date of the actuarial valuation.

Actuarial Accrued Liability. The portion of the actuarial present value of benefits which is not provided for by the actuarial present value of future normal costs. Also referred to as Past Service Liability.

Actuarial Assumptions. Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, investment income and salary growth. Decrement 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.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the actuarial present value of future benefits between future normal costs and the actuarial accrued liability.

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 projected future payments at assumed rates of interest and probabilities of payment.

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

Normal Cost. The portion of the actuarial present value of future benefits that is allocated to the current year by the actuarial cost method.

Unfunded Actuarial Accrued Liability. The difference between actuarial accrued liability and valuation assets.