

**THE PUBLIC SCHOOL EMPLOYEES'
RETIREMENT SYSTEM OF PENNSYLVANIA**

**ACTUARIAL VALUATION
JUNE 30, 2012**

January 15, 2013

The Retirement Board
Public School Employees'
Retirement System of Pennsylvania
P.O. Box 125
Harrisburg, Pennsylvania 17108

Ladies and Gentlemen:

This report presents the results of the annual actuarial valuation of the Public School Employees' Retirement System of Pennsylvania (Retirement System or PSERS) as of June 30, 2012.

The valuation takes into account all of the promised benefits to which members are entitled as of June 30, 2012, including pension and survivor benefits, and as required by the Public School Employees' Retirement Code, 24 Pa. C.S. §8101 et. seq. (Retirement Code) is the basis for the contribution rate for fiscal year 2013/2014.

As required under Section 8502(j) of the Retirement Code, experience studies are performed once in every five year period. This valuation was prepared on the basis of the demographic and economic assumptions that were determined from the July 1, 2005 to June 30, 2010 Experience Review and adopted by the Board of Trustees at their March 11, 2011 meeting, which includes a 7.50% per annum rate of investment return. As mandated by the Retirement Code, these assumptions will remain in effect for valuation purposes until such time the Board of Trustees adopts revised assumptions.

The actuarial assumptions and methods for financial reporting meet the parameters set forth in Governmental Accounting Standards Board (GASB) Statements No. 25, 43, and 50. The actuarial assumptions and methods for GASB 25 disclosure are the same as for pension funding, except that the GASB 25 amortization payment will be determined based on 30-year level-dollar funding. The Health Insurance funding provisions of the Retirement Code differ from the GASB 43 disclosure requirements. For funding purposes the actuarial liability equals the assets in the health insurance account, and a contribution is determined that will assure the solvency of the account through the third fiscal year following the valuation date. For purposes of GASB 43 disclosure the Health Insurance actuarial liability and normal cost requirements have been determined under the entry age actuarial cost method, with 30-year level dollar funding. (The entry age actuarial cost method meets the GASB 43 parameters for determining actuarial liability and normal cost, and is the cost method specified by the Retirement Code for the PSERS pension plan.)

Assets and Membership Data

The Retirement System reported the individual data for members of the Retirement System as of the valuation date to the actuaries. While we did not verify the data at their source, we did perform tests for internal consistency and reasonableness. The amount of assets in the trust fund taken into account in the valuation was based on statements prepared for us by the Retirement System.

Funding Adequacy

The valuation results determine that the employer contribution rate for fiscal year 2013/2014 is 16.93%. As of June 30, 2012, the total funded ratio of the plan (for Pensions and Health Insurance combined) is 66.4%, based on the accrued liability and actuarial value of assets calculated under the funding requirements of Section 8328 of the Retirement Code.

Financial Results and Membership Data

Detailed summaries of the financial results of the valuation and membership data used in preparing the valuation are shown in the valuation report. The actuaries prepared supporting schedules included in the Actuarial and Statistical Section of the PSERS Comprehensive Annual Financial Report (CAFR), and also prepared the trend data schedules included in the Financial Section of the CAFR.

The report does not take into account any changes due to market fluctuations of assets that have occurred after the valuation date. Taking these into account may significantly change the market and actuarial value of assets shown. The effect of these events on any funded ratios shown, and on Retirement System calculations, is not known. Retirement System funding and financial accounting rules generally prohibit reflection of changes in assets and underlying economic conditions that occur after the valuation date.

Qualified actuaries completed the valuation in accordance with accepted actuarial procedures as prescribed by the Actuarial Standards Board. The qualified actuaries are members of the American Academy of Actuaries and are experienced in performing actuarial valuations of public employee retirement systems. To the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and practice.

Respectfully submitted,



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THE PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM OF PENNSYLVANIA

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Executive Summary

This report presents the actuarial valuation as of June 30, 2012 for the Public School Employees' Retirement System of Pennsylvania.

The principal valuation results include:

- The employer contribution rate for fiscal year 2013/2014, which is 16.93%.
- The total funded ratio of the plan determined as of June 30, 2012 under the funding requirements of Section 8328 of the Retirement Code, which is 66.4% based on the accrued liability and the actuarial value of assets for Pensions and Health Insurance as of that date.
- The determination of the actuarial experience as of June 30, 2012, which is a loss of \$923 million.
- Annual disclosures as of June 30, 2012 as required by Statements No. 25, 43, and 50 of the Governmental Accounting Standards Board.

The valuation was completed based upon membership and financial data submitted by the Retirement System. Detailed summaries of the financial results of the valuation and membership data used in preparing the valuation are included in the valuation report. The actuaries prepared supporting schedules included in the Actuarial and Statistical Section of the PSERS Comprehensive Annual Financial Report (CAFR), and also prepared the trend data schedules included in the Financial Section of the CAFR.

Changes Since Last Year

Legislative and Administrative Changes

The benefit provisions and contribution provisions are summarized in Table 13. There were no legislative or administrative changes since the prior valuation.

Actuarial Assumptions and Methods

The actuarial assumptions and methods are outlined in Table 12. There were no demographic or economic assumption changes since the prior valuation.

Contribution Rates

The results of the valuation as of June 30, 2012 determine the employer contribution rate for fiscal year 2013/2014. The calculated employer contribution rate for the 2013/2014 fiscal year is 16.93%, and the Board of Trustees certified this rate at their December 6, 2012 meeting.

The average contribution rate payable by the members is 7.43%. The average member contribution rate of 7.43% is a pay-weighted average of member rates that vary based on date of hire and Class membership. Effective January 1, 2002, the employee contribution rate for members who elected to have prior school service and intervening military service converted to Class T-D service increased by 1.25% to 7.50%. Anyone who enrolled after July 1, 2001 and before July 1, 2011 was automatically a member of Class T-D. Any employee who becomes a member after June 30, 2011 will become a Class T-E member or, alternatively, elect to become a Class T-F member. The base contribution rate for Class T-E members is 7.50% of compensation. The base contribution rate for Class T-F members is 10.30% of compensation. Class T-E and Class T-F members are subject to a “shared-risk” employee contribution rate.

Reasons for Change in the Rate Calculated by the Actuary

The employer contribution rate calculated by the actuary increased from 12.36% for fiscal year 2012/2013 to 16.93% for fiscal year 2013/2014. The reconciliation of the employer contribution rates by source is as follows:

• FY 2012/2013 Act 120 final rate	12.36%
• Deferral of FY 2013 pension contribution due to Act 120 3.5% collar	<u>10.15</u>
• FY 2012/2013 actual rate	22.51%
• Decrease due to change in normal rate	(0.09)
• Net increase due to payroll growth and liability experience*	0.72
• Increase due to actuarial loss on assets	0.78
• Increase due to deferral of FY 2012 pension contribution due to Act 120 3.0% collar	0.76
• Increase due to change in health insurance contribution rate	0.07
• Deferral of FY 2014 pension contribution due to Act 120 4.5% collar	<u>(7.82)</u>
• FY 2013/2014 employer contribution rate	16.93%

* Reflects increase from appropriation payroll less than expected partially offset by liability gains.

Summary of Principal Results

Summarized below are the principal financial results for the Public School Employees' Retirement System based upon the actuarial valuation as of June 30, 2012. Comparable results from the June 30, 2011 valuation are also shown.

Item	June 30, 2012	June 30, 2011
Demographics		
Active Members		
• Number	273,504	279,152
• Average Annual Pay	\$ 46,487	\$ 46,247
Annuitants		
• Number	202,015	194,622
• Average Annual Benefit Payment	\$ 24,122	\$ 23,897
Contribution Rates (as a Percentage of Payroll)		
	(Fiscal Year 2013/2014)	(Fiscal Year 2012/2013)
Employer Contribution Rate:		
• Total Pension Rate Calculated by Actuaries	23.82%	21.65%
• Act 120 Employer Pension Rate After Application of Collar	16.00	11.50
• Health Insurance Contribution Rate	<u>0.93</u>	<u>0.86</u>
• Total Contribution Rate	16.93%	12.36%
• Total Contribution Rate Certified by Board	16.93%	12.36%
Member Average Contribution Rate		
• Total Rate	<u>7.43</u> 24.36%	<u>7.40</u> 19.76%
Actuarial Funded Status*		
• Accrued Liability	\$ 87,854.4 Mil	\$ 85,751.6 Mil
• Actuarial Value of Assets	<u>58,321.4</u>	<u>59,252.4</u>
• Unfunded Accrued Liability	\$ 29,533.0	\$ 26,499.2
• Funded Ratio	66.4%	69.1%
*Pensions and Health Insurance combined		

Five-Year History of Principal Financial Results

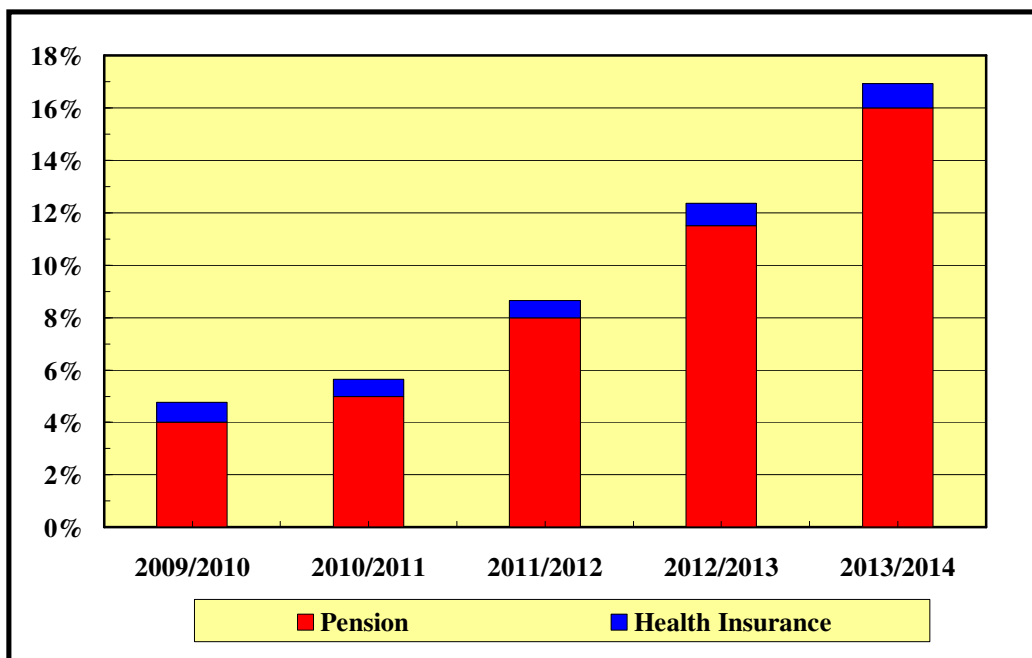
Five-Year History of Contribution Rates (As a % of Payroll)

Fiscal Year	Member Contributions	Employer Contributions				
		Normal Cost	Unfunded Accrued Liability	Health Insurance	Preliminary Employer Contribution	Final Employer Contribution*
2013/2014	7.43%	8.57%	15.25%	0.93%	24.75%	16.93%**
2012/2013	7.40	8.66	12.99	0.86	22.51	12.36**
2011/2012	7.37	8.12	10.15	0.65	18.92	8.65**
2010/2011	7.34	8.08	(0.50)	0.64	8.22	5.64 [∅]
2009/2010	7.32	7.35	(3.72)	0.78	4.41	4.78 ^{∅∅}

- * Certified by the Board.
- ** Reflects Act 120 Pension Collar.
- [∅] Reflects Act 46 Rate Cap.
- ^{∅∅} Reflects Act 40 Pension Floor.

The following chart shows a five-year history of employer contribution rates:

Five-Year History of Employer Contribution Rates



Funded Ratio

The financing objective of the Retirement System is to:

- Fully fund all current costs based on the normal contribution rate determined under the funding method; and
- Liquidate the unfunded accrued liability based on level percentage of pay amortization schedules required by the Retirement Code as amended by Act 2010-120, i.e., a schedule of 24 years for the unfunded accrued liability as of June 30, 2010 and each change in the unfunded accrued liability due to actuarial experience after the June 30, 2010 valuation. Any legislation after June 30, 2010 that increases the liability will be funded over 10 years.
- As directed by Act 2010-120, use pension rate collars to moderate the rise of annual employer pension contribution rates to reach the full actuarially determined contribution funding level in a budgetary sound manner and within a financially responsible period of time.

The total contribution rate of 24.75% of payroll payable by employers, when taken together with the contributions payable by the members, current assets, and expected future asset returns, is sufficient to achieve the financing objective. However, Act 2010-120 limits the contribution for FY 2013/2014 to 16.93% of payroll. This has the effect of deferring part of the FY 2013/2014 contribution to future years.

The Retirement System's total funded ratio on this funding basis is measured by comparing the actuarial value of assets (based on a phased-in 10-year moving average market value) with the accrued liability. The accrued liability for pensions is the present value of benefits accumulated to date under the Retirement System's funding method and reflects future pay increases for active employees. The accrued liability for Health Insurance equals the assets in the Health Insurance account.

On this basis, the Retirement System's total funded ratio (for Pensions and Health Insurance combined) is 66.4% as of June 30, 2012. This funded ratio is based on an actuarial value of assets of \$58.3 billion and an accrued liability of \$87.9 billion. The funded ratio for Pensions alone is 66.3% as of June 30, 2012, based on an actuarial value of assets of \$58.2 billion, and an accrued liability of \$87.8 billion.

Reasons for Change in the Total Funded Ratio

The total funded ratio decreased from 69.1% as of June 30, 2011 to 66.4% as of June 30, 2012. This decrease is primarily due to the actuarial value of assets loss that occurred during the year and the actual fiscal year 2012 employer contribution which was less than what was recommended due to the enactment of Act 120. There was also a net actuarial experience gain.

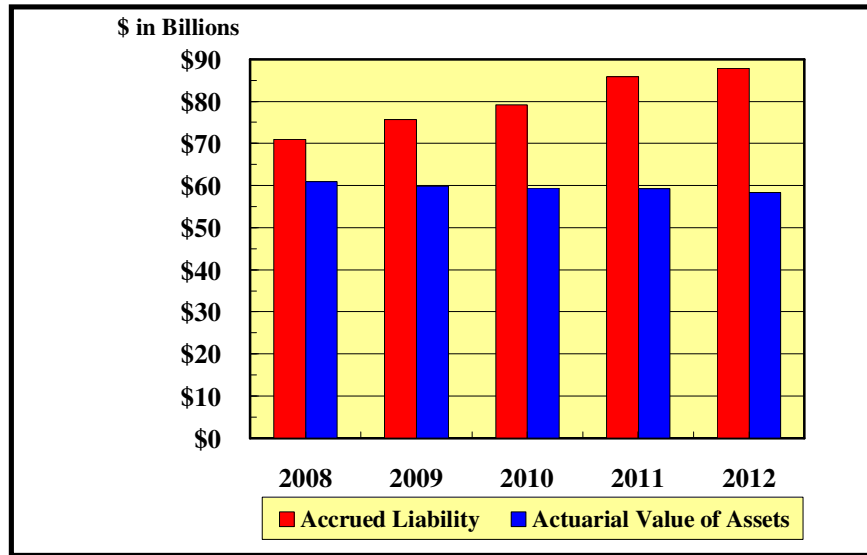
Five-Year History of Total Funded Ratio* (\$ Amounts in Millions)

Valuation as of June 30	Accrued Liability	Actuarial Value of Assets	Unfunded Accrued Liability	Funded Ratio
2012	\$ 87,854.4	\$ 58,321.4	\$ 29,533.0	66.4%
2011	85,751.6	59,252.4	26,499.2	69.1
2010	79,122.3	59,423.7	19,698.6	75.1
2009	75,625.9	59,886.7	15,739.2	79.2
2008	70,941.4	61,017.9	9,923.5	86.0

* For Pensions and Health Insurance (under the funding provisions of the Retirement Code)

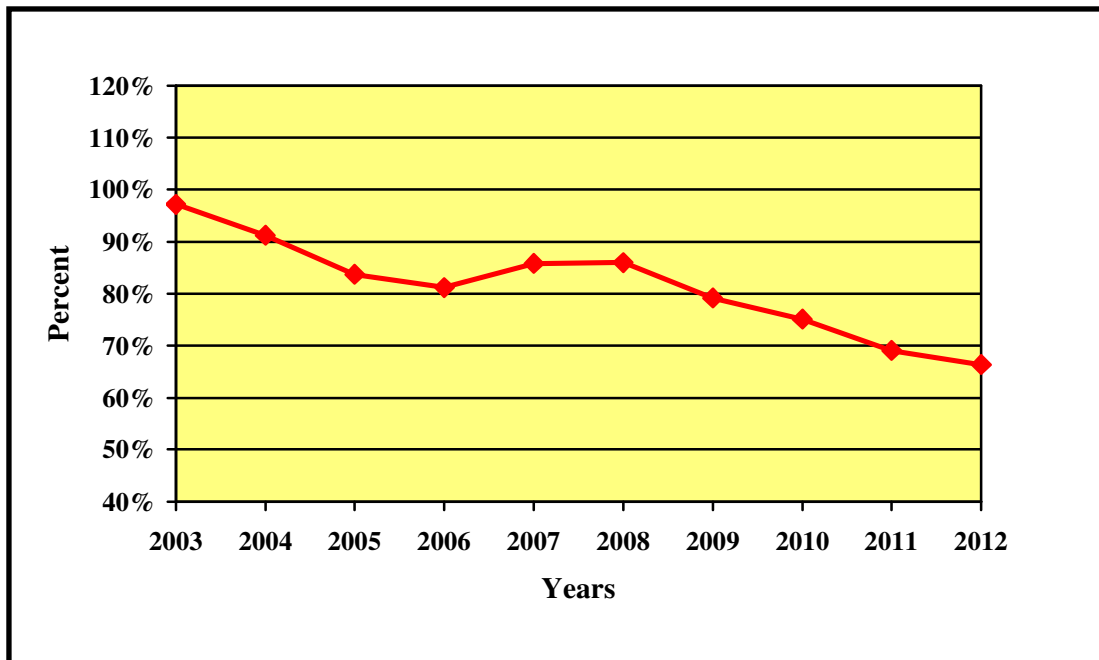
The following chart shows a five-year history of the accrued liability and the actuarial value of assets:

Five-Year History of Accrued Liability and Actuarial Value of Assets



The following chart shows a ten-year history of the total funded ratio for Pensions and Health Insurance:

**Ten-Year History of Total Funded Ratio
(2003 – 2012)**



GASB No. 25 Disclosure

Statement No. 25 of the Governmental Accounting Standards Board (GASB) established reporting standards for the annual financial reports of defined benefit pension plans. The Retirement System complied with Statement No. 25 beginning with the June 30, 1996 valuation. The statement requires disclosure of the "schedule of funding progress" and the "schedule of employer contributions" in the Retirement System's financial statements.

The "schedule of funding progress" shows historical trend information about the Retirement System's actuarial value of pension assets, the actuarial accrued liability for pensions and the unfunded actuarial accrued liability for pensions. The actuarial funded ratio for pensions is measured by comparing the actuarial value of pension assets based on a 10-year moving average market value (a 5-year moving average market value prior to June 30, 2010) with the accrued liability for pensions. The accrued liability is the present value of pension benefits accumulated to date under the Retirement System's funding method and reflects future pay increases for active employees. On this basis, the Retirement System's funded ratio for pensions is 66.3% as of June 30, 2012. This funded ratio is based on an actuarial value of pension assets of \$58.2 billion and an accrued liability for pensions of \$87.8 billion. See Table 7 for more detail.

The schedule of employer contributions shows historical trend information about the GASB Annual Required Contribution (ARC) for pensions, and the percentage of the ARC contributed to the Retirement System. The pension contribution requirements of the Retirement Code differ from the GASB disclosure requirements. As a result, there may be different determinations of contribution requirements for GASB accounting purposes and for State funding purposes. For GASB accounting purposes, the ARC equals the employer normal cost for pensions plus an amount that will amortize the unfunded actuarial accrued liability for pensions over 30 years. Although the employer normal cost for GASB accounting equals the PSERS normal cost for funding, Section 8328 of the Retirement Code specifies different amortization periods for different portions of the unfunded accrued liability, as well as a collar on the employer pension rate. Therefore, the resulting single amortization period may be any number of years. Table 8a presents the GASB 25 schedule of employer contributions.

GASB No. 43 Disclosure

GASB Statement No. 43 established reporting standards for the annual financial reports of postemployment benefit plans other than pension plans, and these reporting requirements apply to the PSERS health insurance premium assistance plan. The Retirement System complied with Statement No. 43 beginning with the June 30, 2006 valuation. The statement requires disclosure of the "schedule of funding progress" and the "schedule of employer contributions" in the Retirement System's financial statements.

The health insurance liability and funding provisions of the Retirement Code differ from the GASB disclosure requirements. As a result, there are different determinations of actuarial liability and contribution requirements for GASB accounting purposes and for State funding purposes. For purposes of funding, the actuarial liability equals the assets in the health insurance account, and the contribution required is the amount necessary to establish reserves sufficient to provide premium assistance payments to all participating eligible annuitants during the fiscal year that immediately follows the year the employer contribution is made. For GASB accounting purposes, the actuarial liability has been determined under the entry age actuarial cost method, and the Annual Required Contribution (ARC) is equal to the entry age normal cost for health insurance plus an amount that will amortize the entry age unfunded actuarial liability for health insurance over a period of 30 years. (The entry age actuarial cost method was selected for this calculation because it meets the GASB parameters for determining actuarial liability and normal cost, and is the cost method specified by the Retirement Code for the PSERS pension plan.)

The GASB 43 schedule of funding progress, presented in Table 7, shows that as of June 30, 2012, the health insurance assets were \$93,753,000, measured on a market value basis, while the GASB 43 health insurance liabilities were \$1,364,667,000, resulting in a funded ratio of 6.9%.

The GASB 43 schedule of employer contributions first applies to fiscal year 2006/2007, and is presented in Table 8b.

Rate of Return

The investment return of the trust fund (i.e. total return including both realized and unrealized gains and losses) for fiscal years 2005/2006 through 2011/2012 is shown in the table below. The return based on the actuarial value of assets used for determining annual contribution rates is also shown.

The rate of return on market value reflects the investment earnings on the market value of assets from the beginning of the fiscal year to the end of the fiscal year. The actuarial value of assets is the asset recognized for valuation purposes. The actuarial value of assets is based on a smoothed market value that spreads the difference between the actual and expected return over a period of ten years. The rate of return on the actuarial value of assets is a measure of the increase in the actuarial value of assets from the beginning of the fiscal year to the end of the fiscal year.

Fiscal Year	Rate of Return Based on	
	Market Value*	Actuarial Value**
2011/2012	3.4%	4.9%
2010/2011	20.4	6.0
2009/2010	14.6	3.1
2008/2009	-26.5	3.5
2007/2008	-2.8	12.4
2006/2007	22.9	13.9
2005/2006	15.3	7.9

* Market Value Rate of return provided by Wilshire Associates Incorporated, PSERS investment consultant.

** Prior to fiscal year 2010/2011, the actuarial value of assets are based on a smoothed market value that spreads the difference between the actual and expected return over a period of five years.

TABLE 1

**SUMMARY OF RESULTS OF ACTUARIAL VALUATION
AS OF JUNE 30, 2012
(\$ Amounts in Thousands)**

Item	June 30, 2012	June 30, 2011
Member Data		
1. Number of Members		
a) Active Members	273,504	279,152
b) Inactive Members and Vesteas	122,286	115,102
c) Annuitants, Beneficiaries and Survivor Annuitants	202,015	194,622
d) Total	<u>597,805</u>	<u>588,876</u>
2. Annualized Salaries (\$ Amounts in Thousands)	\$ 12,714,371	\$ 12,910,043
3. Annual Annuities (\$ Amounts in Thousands)	\$ 4,872,918	\$ 4,650,798
Valuation Results		
4. Present Value of Future Pension Benefits		
a) Active Members	\$ 59,970,002	\$ 60,127,465
b) Inactive Members and Vesteas	1,232,277	1,095,894
c) Annuitants, Beneficiaries and Survivor Annuitants	47,511,912	45,648,780
d) Total	<u>\$ 108,714,191</u>	<u>\$ 106,872,139</u>
5. Present Value of Future Pension Normal Cost		
a) Active Members	\$ 9,836,166	\$ 9,923,829
b) Employer	11,117,365	11,307,927
c) Total	<u>\$ 20,953,531</u>	<u>\$ 21,231,756</u>
6. Pension Accrued Liability		
a) Active Members (4a) - (5c)	\$ 39,016,471	\$ 38,895,709
b) Inactive Members and Vesteas	1,232,277	1,095,894
c) Annuitants, Beneficiaries and Survivor Annuitants	47,511,912	45,648,780
d) Total	<u>\$ 87,760,660</u>	<u>\$ 85,640,383</u>
7. Health Insurance Assets for Premium Assistance	\$ 93,753	\$ 111,258
8. Total Accrued Liability for Funding (6) + (7)	\$ 87,854,413	\$ 85,751,641
9. Actuarial Value of Assets	\$ 58,321,375	\$ 59,252,389
10. Funded Status (9) / (8)	66.4 %	69.1 %
11. Unfunded Accrued Liability (8) - (9)	\$ 29,533,038	\$ 26,499,252
12. Total Normal Cost Rate	16.00 %	16.06 %
13. Member Contribution Rate	7.43 %	7.40 %
14. Employer Normal Cost Rate (12) - (13)	8.57 %	8.66 %
Employer Annual Funding Requirement		
15. Employer Contribution Rate Calculated by Actuaries	Fiscal 2013/2014	Fiscal 2012/2013
a) Normal	8.57 %	8.66 %
b) Unfunded Accrued Liability	<u>15.25</u>	<u>12.99</u>
c) Preliminary Pension Rate	23.82 %	21.65 %
d) Act 120 Employer Pension Rate Collar	16.00 %	11.50 %
e) Health Insurance	<u>0.93</u>	<u>0.86</u>
f) Total Rate	16.93 %	12.36 %

TABLE 2

**SUMMARY OF SOURCES OF EMPLOYER CONTRIBUTION RATE
AS OF JUNE 30, 2012
(\$ Amounts in Thousands)**

	Funding Period (Years)	Beginning July 1	Initial Liability	7/1/2012 Outstanding Balance	Annual Payment Amount	Percent *
1. Amortization of:						
a) Act 120 Fresh Start Unfunded Accrued Liability and Asset Method Change	24	2011	\$ 16,279,283	\$ 17,876,341	\$ 1,271,736	9.27 %
b) 2010 Experience	24	2011	3,419,297	3,740,330	266,090	1.94 %
c) 2011 Experience	24	2012	564,642	606,990	42,057	0.31 %
d) 2011 Assumption Changes	24	2012	4,592,397	4,936,827	342,066	2.49 %
e) 2012 Experience	24	2013	2,372,550	<u>2,372,550</u>	<u>170,744</u>	<u>1.24 %</u>
Total Amortization Payments				\$ 29,533,038	\$ 2,092,693	15.25 %
2. Employer Normal Cost Rate						<u>8.57 %</u>
3. Preliminary Pension Rate (1) + (2)						23.82 %
4. Act 120 Fiscal Year 2014 Employer Pension Rate Collar						16.00 %
5. Health Insurance Rate						<u>0.93 %</u>
6. Final Total Employer Contribution Rate Calculated by Actuary: Minimum of [(3) and (4)] + (5)						16.93 %

* Based on Estimated Employer Payroll for Fiscal Year Ending 2014 of \$ 13,720,000.

TABLE 3
DETERMINATION OF HEALTH INSURANCE CONTRIBUTION RATE
FOR FISCAL YEAR 2013/2014
(\$ Amounts in Thousands)

Item			
1. June 30, 2012 Balance in Health Insurance Account		\$	93,753
2. Estimated Fiscal 2012/2013 Contribution			
(a) Contribution Rate Certified in 2011 Valuation			0.86%
(b) Estimated Fiscal 2012/2013 payroll		\$	<u>13,317,000</u>
(c) Estimated Contribution = (a) x (b)		\$	114,526
3. Estimated Number of Annuitants who:			
	Are Eligible	Elect Coverage	
(a) Fiscal 2012/2013	135,700		89,562
(b) Fiscal 2013/2014	137,800		90,948
(c) Fiscal 2014/2015	139,800		92,268
4. Estimated Disbursements:			
	Administration	Assistance	Total
(a) Fiscal 2012/2013	\$ 2,336	\$ 107,474	\$ 109,810
(b) Fiscal 2013/2014	2,410	109,138	111,548
(c) Fiscal 2014/2015	<u>2,494</u>	<u>110,722</u>	<u>113,216</u>
(d) Total	\$ 7,240	\$ 327,334	\$ 334,574
5. Required Fiscal 2013/2014 Contribution			
(4d) - (1) - (2c)		\$	126,295
6. Required Health Insurance Contribution Rate			
(a) Estimated 2013/2014 Payroll		\$	13,720,000
(b) Required Health Insurance Contribution Rate (5) / (6a)			0.93%
(rounded up)			

Notes:

1. Current estimates of fiscal 2012/2013 membership payroll and administrative expenses, and of fiscal 2013/2014 administrative expenses, were provided by PSERS staff.
2. 66% of eligible annuitants are assumed to elect coverage.
3. Premium Assistance payments equal \$100 per month per eligible annuitant.
4. The estimated fiscal 2013 payroll in 2.(b) has been revised from \$14.297 billion to \$13.317 billion.

TABLE 4

SUMMARY OF MARKET VALUE OF PLAN ASSETS

AS OF JUNE 30, 2012
(\$ Amounts in Thousands)

Market Value	
1. Market Value of Assets as of June 30, 2011	\$ 51,311,252
2. Contributions During Fiscal 2011/2012	2,038,814
3. Disbursements During Fiscal 2011/2012	5,779,952
4. Investment Return During Fiscal 2011/2012	
a) Investment Return (Net of Investment Expenses)	\$ 1,093,742
b) Administrative Expenses	<u>36,307</u>
c) Investment Return After Expenses (a) - (b)	\$ 1,057,435
5. Market Value of Assets as of June 30, 2012 (1) + (2) - (3) + (4c)	\$ 48,627,549
6. Rate of Return (per Wilshire)	3.43 %
Asset Allocation by Account	
1. Members' Savings Account	\$ 12,535,442
2. Annuity Reserve Account	47,511,912
3. State Accumulation Account	(11,513,558)
4. Health Insurance Account	<u>93,753</u>
5. Total (1) + (2) + (3) + (4)	\$ 48,627,549

TABLE 5

DERIVATION OF ACTUARIAL VALUE OF ASSETS

AS OF JUNE 30, 2012*

(\$ Amounts in Thousands)

1. Market Value of Assets as of June 30, 2012						\$ 48,627,549
2. Determination of Deferred Gain (Loss)						
	Return on Assets					Deferred
<u>Fiscal</u>	<u>Actual</u>	<u>Expected</u>	<u>Difference</u>	<u>% Deferred</u> #	<u>Amount</u>	
<u>Year</u>						
2011/2012	\$ 1,057,435	\$ 4,303,637	\$ (3,246,202)	90.00%	\$ (2,921,581)	
2010/2011	9,207,766	4,609,422	4,598,344	80.00%	3,678,676	
2009/2010	6,100,499	4,651,504	1,448,995	70.00%	1,014,297	
2008/2009	(16,237,298)	4,900,688	(21,137,986)	53.33%	(11,273,593)	
2007/2008	(1,816,980)	4,728,472	(6,545,452)	37.50%	(2,454,545)	
2006/2007	12,658,871	4,359,054	8,299,817	22.86%	1,897,101	
2005/2006	7,901,068	4,242,878	3,658,190	10.00%	365,819	
					<u>\$ (9,693,826)</u>	
3. Actuarial Value of Assets (1) - (2)						\$ 58,321,375
4. Actuarial Rate of Return **						4.90%

* The amounts reported include assets for both Pension and Health Insurance.

** The actuarial rate of return is the investment return based on the change in the actuarial value of assets from the June 30, 2011 valuation to the June 30, 2012 valuation.

The percentage amounts shown are rounded. The corresponding Deferred Amounts reflect the use of unrounded percentage amounts.

TABLE 6**ANALYSIS OF CHANGE IN UNFUNDED ACCRUED LIABILITY****AS OF JUNE 30, 2012**

(\$ Amounts in Thousands)*

Item	Amount
1. Unfunded Accrued Liability at June 30, 2011	\$ 26,499,252
2. Interest Credit to June 30, 2012	2,094,156
3. Contributions Toward Unfunded Accrued Liability	<u>1,432,920</u>
4. Expected Unfunded Accrued Liability at June 30, 2012 (1) + (2) - (3)	\$ 27,160,488
5. Actual Unfunded Accrued Liability at June 30, 2012	<u>\$ 29,533,038</u>
6. Increase (Decrease) from Expected (5) - (4)	\$ 2,372,550
7. Reasons for Increase (Decrease)	
(a) Experience Losses (Gains)	
(i) Loss from Investment Return on Actuarial Value of Assets	\$ 1,493,512
(ii) Loss from New Entrants and Pickups	211,159
(iii) Gain from Salary Increases Less than Expected	(491,780)
(iv) Loss from Mortality Experience	137,368
(v) Gain from Vested Termination Experience (Retirement/Disability/Termination)	(306,792)
(vi) Gain from Non-vested Termination Experience	(89,100)
(vii) Gain from Data/Miscellaneous	<u>(31,119)</u>
Subtotal	\$ 923,248
(b) Change due to Act 120 3.0% Collar on FY 2012 Pension Contribution	<u>1,449,302</u>
(d) Grand Total	\$ 2,372,550

*The amounts reported include assets and liabilities for Pensions only.

TABLE 7

SCHEDULE OF FUNDING PROGRESS FOR PENSIONS*
GASB STATEMENT NO. 25 DISCLOSURE
(\$ Amounts in Thousands)

Valuation as of June 30	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	Unfunded Accrued Liability as a Percentage of Covered Payroll
2012	\$ 58,227,622	\$ 87,760,660	\$ 29,533,038	66.3 %	\$ 12,714,371	232.3 %
2011	59,141,131	85,640,383	26,499,252	69.1	12,910,043	205.3
2010	59,306,848	79,005,428	19,698,580	75.1	12,788,847	154.0
2009	59,781,575	75,520,736	15,739,161	79.2	12,524,593	125.7
2008	60,922,157	70,845,637	9,923,480	86.0	11,921,469	83.2
2007	57,057,838	66,495,870	9,438,032	85.8	11,410,257	82.7

* The amounts reported above include assets and liabilities for Pensions.

**SCHEDULE OF FUNDING PROGRESS FOR
POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS***
GASB STATEMENT NO. 43 DISCLOSURE
(\$ Amounts in Thousands)

Valuation as of June 30	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	Unfunded Accrued Liability as a Percentage of Covered Payroll
2012	\$ 93,753	\$ 1,364,667	\$ 1,270,914	6.9 %	\$ 12,714,371	10.0 %
2011	111,258	1,339,444	1,228,186	8.3	12,910,043	9.5
2010	116,831	1,162,219	1,045,388	10.1	12,788,847	8.2
2009	105,114	1,159,055	1,053,941	9.1	12,524,593	8.4
2008	95,785	1,133,011	1,037,226	8.5	11,921,469	8.7
2007	97,292	1,058,092	960,800	9.2	11,410,257	8.4

* The amounts reported above include assets and liabilities for Health Insurance Premium Assistance. The health insurance liabilities for GASB 43 disclosure have been calculated under the entry age normal cost method, which provides liabilities that differ from those determined under the funding requirements of the Retirement Code.

TABLE 8a

**SCHEDULE OF EMPLOYER CONTRIBUTIONS FOR PENSIONS
GASB STATEMENT NO. 25 DISCLOSURE**

(\$ Amounts in Thousands)

Fiscal Year Ended June 30	Annual Required Contribution	Actual Employer Contribution	Percentage Contributed
2012	\$ 2,629,244	\$ 1,001,140	38 %
2011	2,436,602	647,000	27
2010	1,928,278	527,212	27
2009	1,761,295	503,227	29
2008	1,852,238	753,532	41
2007	1,708,821	659,545	39

The Annual Required Contribution (ARC) presented above was determined as part of the actuarial valuation as of two years prior to the dates indicated (i.e., the ARC for the fiscal year ended June 30, 2012 was determined by the valuation completed as of June 30, 2010 which was based on an 8.00% interest rate).

Additional information as of the latest actuarial valuation follows:

Valuation Date: 6/30/2012
Actuarial Cost Method: Entry Age
Amortization Method: Level Dollar, Open
Remaining Amortization Period: 30 Years
Asset Valuation Method: 10 Year Smoothed Market

Actuarial Assumptions:

- Investment Rate of Return * 7.50%
- Projected Salaried Increases * 5.50%

* Includes Inflation at: 3.00%

TABLE 8b

**SCHEDULE OF EMPLOYER CONTRIBUTIONS FOR
POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS
GASB STATEMENT NO. 43 DISCLOSURE**

(\$ Amounts in Thousands)

Fiscal Year Ended June 30	Annual Required Contribution	Actual Employer Contribution	Percentage Contributed
2012	\$ 102,104	\$ 80,936	79 %
2011	119,320	88,796	74
2010	117,187	102,703	88
2009	109,531	92,493	84
2008	101,352	81,317	80
2007	94,970	86,763	91

The Annual Required Contribution (ARC) beginning with the fiscal year ended June 30, 2009 was determined as part of the actuarial valuation as of two years prior to the date indicated (i.e., the ARC for the fiscal year ended June 30, 2012 was determined by the valuation completed as of June 30, 2010, which was based on an 8.00% interest rate). Prior to the fiscal year which ended June 30, 2009, the ARC was determined as part of the actuarial valuation as of one year prior to the dates indicated.

Additional information as of the latest actuarial valuation follows:

Valuation Date: 6/30/2012
Actuarial Cost Method: Entry Age
Amortization Method: Level Dollar, Open
Remaining Amortization Period: 30 Years
Asset Valuation Method: Market

Actuarial Assumptions:
- Investment Rate of Return * 7.50%
- Projected Salaried Increases * 5.50%

* Includes Inflation at: 3.00%

TABLE 9

**SOLVENCY TEST
COMPARATIVE SUMMARY OF ACCRUED LIABILITY AND
ACTUARIAL VALUE OF ASSETS**
(\$ Amounts in Thousands)

Valuation as of June 30	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Member Employer Financed	Actuarial Value of Assets	Portion of Accrued Liability Covered by Valuation Assets		
					(1)	(2)	(3)
2012	\$ 12,535,442	\$ 47,511,912	\$ 27,713,306	\$ 58,227,622	100 %	96 %	0 %
2011	12,242,308	45,648,780	27,749,295	59,141,131	100	100	5
2010	11,850,031	40,284,383	26,871,014	59,306,848	100	100	27
2009	11,087,345	37,112,318	27,321,073	59,781,575	100	100	42
2008	10,532,683	34,617,953	25,695,001	60,922,157	100	100	61
2007	10,183,433	31,603,788	24,708,649	57,057,838	100	100	62

POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS

Valuation as of June 30	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Member Employer Financed	Actuarial Value of Assets	Portion of Accrued Liability Covered by Valuation Assets		
					(1)	(2)	(3)
2012	\$ 0	\$ 934,506	\$ 430,161	\$ 93,753	N/A	10 %	0 %
2011	0	909,076	430,368	111,258	N/A	12	0
2010	0	767,587	394,632	116,831	N/A	15	0
2009	0	759,891	399,164	105,114	N/A	14	0
2008	0	749,070	383,941	95,785	N/A	13	0
2007	0	684,677	373,415	97,292	N/A	14	0

TABLE 10**HISTORY AND PROJECTION OF CONTRIBUTION RATES AND FUNDED RATIOS¹**

Fiscal Year Ending June	Budgeted Appropriation Payroll ¹¹ (thousands)	Contribution Rates ²							Total Employer	Funded Ratio
		Employee	Employer Normal Cost	Employer Unfunded Liability	Preliminary Employer Pension	Final Employer Pension ⁹	Employer Health Insurance	Total Employer		
2000	\$ 8,939,598	5.72 %	6.40 %	(2.04) %	4.36 %	4.36 %	0.25 %	4.61 %	123.8 %	
2001	9,414,884	5.77	6.29	(4.65)	1.64	1.64	0.30	1.94	114.4	
2002 ³	9,378,944	6.43	5.63	(6.05)	(0.42)	0.00	1.09	1.09	104.8	
2003 ⁴	9,652,881	7.10	7.20	(10.03)	1.00	0.18	0.97	1.15	97.2	
2004	10,030,705	7.08	7.25	(4.27)	2.98	2.98	0.79	3.77	91.2	
2005 ⁵	11,062,589	7.12	7.48	(7.10)	0.38	4.00	0.23	4.23	83.7	
2006	11,505,093	7.16	7.61	(4.28)	3.33	4.00	0.69	4.69	81.2	
2007 ⁶	11,821,951	7.21	6.62	(0.95)	5.67	5.72	0.74	6.46	85.8	
2008	12,881,244	7.25	6.68	(0.24)	6.44	6.44	0.69	7.13	86.0	
2009	12,500,000	7.29	6.68	(3.37)	3.31	4.00	0.76	4.76	79.2	
2010 ⁷	12,899,000	7.32	7.35	(3.72)	3.63	4.00	0.78	4.78	75.1	
2011 ^{7,8}	13,510,000	7.34	8.08	(0.50)	7.58	5.00	0.64	5.64	69.1	
2012	14,112,000	7.37	8.12	10.15	18.27	8.00	0.65	8.65	66.4	
2013 ¹⁰	14,297,000	7.40	8.66	12.99	21.65	11.50	0.86	12.36	63.7	
2014	13,720,000	7.43	8.57	15.25	23.82	16.00	0.93	16.93	61.5	
2015	14,081,432	7.44	8.27	16.95	25.22	20.50	0.81	21.31	59.7	
2016	14,451,877	7.45	8.01	18.40	26.41	25.00	0.80	25.80	58.5	
2017	14,856,092	7.46	7.77	19.74	27.51	27.51	0.79	28.30	57.2	
2018	15,277,378	7.47	7.54	20.84	28.38	28.38	0.77	29.15	56.6	
2019	15,727,920	7.47	7.34	22.04	29.38	29.38	0.76	30.14	57.8	
2020	16,199,868	7.48	7.14	22.99	30.13	30.13	0.74	30.87	59.1	
2021	16,688,649	7.48	6.95	23.11	30.06	30.06	0.72	30.78	60.0	
2022	17,199,637	7.49	6.76	23.29	30.05	30.05	0.71	30.76	61.4	
2023	17,725,437	7.49	6.58	23.66	30.24	30.24	0.69	30.93	62.9	
2024	18,263,477	7.49	6.40	23.90	30.30	30.30	0.67	30.97	64.5	

- The projection of contribution rates is based on the assumption that there are no changes in demographic assumptions, no changes in benefit provisions, and no actuarial gains or losses other than gains or losses on the actuarial value of assets that result from recognizing currently deferred gains or losses on the market value of assets.
- In general, the Preliminary Employer Pension Rate equals the sum of the rates for the Employer Normal Cost and the Unfunded Liability; and the Final Employer Pension Rate is the greater of the Preliminary Pension Rate and any Pension Rate Floor or Collar stated in the Retirement Code. The Total Employer Rate is the sum of the Final Employer Pension Rate and the Employer Health Insurance Rate.
- For fiscal years ending on or before June 30, 2002, there was no floor specified in the Retirement Code, but the Final Employer Pension Rate could not be less than 0%, since money can only be removed from the trust for purposes allowed by the Retirement Code.
- Act 2002-38 amended the Retirement Code to place a permanent 1% floor on the Employer Pension Rate, but also provided that the Total Employer Rate for the year ending June 30, 2003 could not exceed 1.15%, resulting in a 0.18% Final Employer Pension Rate (the Total Employer Rate of 1.15% minus the 0.97% Employer Health Insurance Rate).
- Act 2003-40 amended the Retirement Code to increase the Employer Pension Rate Floor from 1% to 4%.
- Revised actuarial assumptions based on a five-year experience review ending June 30, 2005 were used to determine the contributions for the fiscal year ending June 30, 2007. Since the benefit changes under Act 2001-9 had not been in effect throughout the entire period covered by the study the Board decided, at its December 2005 meeting, to delay making any changes to the retirement rate assumptions until further data became available. The 5.72% Final Employer Pension Rate equals the 6.46% Total Employer Rate certified by the Board at that meeting, minus the 0.74% Employer Health Insurance Rate. The 5.67% Preliminary Employer Pension Rate equals the sum of the Employer Normal Cost and Unfunded Liability rates. The Normal Cost and Unfunded Liability rates were calculated by the actuary in January 2006, based on the package of assumptions adopted at the December 2005 meeting.
- The Board at its January 2009 meeting adopted to reduce the interest rate from 8.50% to 8.25% for the June 30, 2008 valuation and to 8.00% thereafter.
- Act 2010-46 recertified the fiscal year ending June 30, 2011 pension rate from 7.58% to 5.00%.
- The Final Employer Pension rate is limited by the Act 2010-120 pension rate collars for fiscal years 2012 through 2016.
- Revised actuarial assumptions based on a five-year experience review ending June 30, 2010 were used to determine the contributions for the fiscal year ending June 30, 2013 and thereafter, which includes an interest rate of 7.50%.
- Beginning fiscal year ending June 30, 2005, the appropriation payroll shown is estimated payroll used for valuation purposes, not actual appropriation payroll. Prior to fiscal year ending June 30, 2005, the appropriation payroll shown is the annualized salary.

TABLE 11

**HISTORY AND PROJECTION OF
ANNUITANTS, BENEFICIARIES, SURVIVOR ANNUITANTS AND
ACTIVE MEMBERS**

Valuation as of June 30	New Annuitants During the Year*	Annuitant Deaths During the Year	Annuitants at End of Year	Beneficiaries and Survivor Annuitants at End of Year	Total Annuitants, Beneficiaries and Survivor Annuitants	Active Members
2003			138,383	7,310	145,693	246,700
2004			143,997	7,555	151,552	247,901
2005			148,727	7,792	156,519	255,465
2006			153,757	8,056	161,813	263,350
2007			159,760	8,266	168,026	264,023
2008			165,091	8,449	173,540	272,690
2009			169,919	8,044	177,963	279,701
2010			176,210	8,724	184,934	282,041
2011			183,665	10,957	194,622	279,152
2012			190,560	11,455	202,015	273,504
2013	15,552	4,610	201,502	10,111	211,613	273,504
2014	12,763	4,822	209,443	10,626	220,069	273,504
2015	12,591	5,034	217,000	11,094	228,094	273,504
2016	12,157	5,265	223,892	11,529	235,421	273,504
2017	11,578	5,508	229,962	11,934	241,896	273,504
2018	10,849	5,714	235,097	12,312	247,409	273,504
2019	10,351	5,937	239,511	12,680	252,191	273,504
2020	9,862	6,152	243,221	13,044	256,265	273,504
2021	9,458	6,356	246,323	13,390	259,713	273,504
2022	9,175	6,576	248,922	13,732	262,654	273,504

* The number for the first year of the projection reflects the assumption that all Active members age 74 and above, and that all vested inactive members who have reached superannuation age retire immediately.

TABLE 12**DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS****ASSUMPTIONS**

Interest Rate: 7.50% per annum, compounded annually (adopted as of June 30, 2011). The components are 3.00% for inflation and 4.50% for the real rate of return. Actuarial equivalent benefits are determined based on 4% (since 1960).

Separation from Service: Illustrative rates of assumed separation from service are shown in the following table (adopted as of June 30, 2011).

Age	Annual Rate of:						
	Non-Vested Withdrawal	Vested Withdrawal*		Death	Disability	Early Retirement**	Superannuation Retirement
		Less Than 10 Years of Service	10 or More Years of Service				
MALES							
25	12.50%	5.50%	2.00%	.037%	.024%		
30	10.50	3.20	2.00	.038	.024		
35	11.00	3.00	1.50	.056	.100		
40	13.00	3.50	1.25	.090	.180		
45	13.00	3.50	1.25	.121	.180		25.00%
50	13.00	3.50	1.70	.173	.280		25.00
55	11.00	3.50	3.00	.245	.430	15.00%	30.00
60	10.50	3.50	4.50	.363	.580	12.00	28.00
65				.592	.100		20.00
69				.810	.100		18.00
FEMALES							
25	13.00%	8.50%	5.00%	.018%	.030%		
30	13.00	6.50	4.00	.019	.040		
35	13.00	5.50	3.00	.022	.060		
40	10.90	4.50	1.50	.035	.100		
45	10.90	4.00	1.50	.055	.150		30.00%
50	10.90	3.75	1.75	.085	.200		30.00
55	10.90	3.75	3.00	.133	.380	15.00%	30.00
60	10.90	4.50	5.50	.197	.380	15.00	30.00
65				.301	.130		25.00
69				.428	.130		20.00

* Vested Withdrawal – At least 5 years of service for Class T-C and Class T-D members and 10 years of service for Class T-E and Class T-F members but not eligible for Early or Superannuation retirement.

** Early Retirement – Age 55 with 25 years of service, but not eligible for Superannuation retirement.

Death after Retirement: The RP-2000 Combined Healthy Annuitant Tables (Male and Female) with age set back 3 years for both genders for healthy annuitants and for dependent beneficiaries. The RP-2000 Combined Disabled Tables (Male and Female) with age set back 7 years for males and set back 3 years for females for disabled annuitants. (A unisex table based on the RP-2000 Combined Healthy Annuitant Tables (Male and Female) with age set back 3 years for both genders assuming the population consists of 25% males and 75% females is used to determine actuarial equivalent benefits.) No provision has been made for future improvements in mortality.

TABLE 12

(Continued)

DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS

Salary Increase: Effective average of 5.50% per annum, compounded annually (adopted as of June 30, 2011). The components are 3.00% for inflation, 1% for real wage growth and 1.5% for merit or seniority increases. Representative values are as follows:

Age	Annual Rate of Salary Increase
20	10.75%
30	8.25
40	6.25
50	4.25
55	3.75
60	3.75
65	3.75
70	3.75

Payroll Growth: 3.50% per annum.

MISCELLANEOUS

Option 4 Elections: 100% of Class T-C and Class T-D members are assumed to elect a refund of contributions and a reduced annuity.

Withdrawal Annuity: 90% of members are assumed to commence payment immediately and 10% are assumed to defer payment to superannuation age.

Health Insurance

Elections: 66% of eligible retirees are assumed to elect premium assistance.

Administrative Expenses: Assumed equal to 2% of contributions made during the year.

METHODS

Calculations: The actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system, and on actuarial assumptions that are internally consistent and reasonable based on the actual experience of the System.

Asset Valuation Method: A ten-year moving market average (five-year moving market average prior to June 30, 2010) value of assets that recognizes the 7.50% (8.00% prior to June 30, 2011, 8.25% prior to June 30, 2009, and 8.50% prior to June 30, 2008) actuarial expected investment return immediately and spreads the difference between the actual return on the market value of assets and the expected return on the actuarial value of assets over a period of ten years. The averaging period is being phased-in from fiscal year 2006.

TABLE 12

(Continued)

DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Cost Method for Pension Funding: Entry Age Normal Cost Method (modified slightly as of June 30, 2005 to use a pay-weighted average normal contribution rate). The results of each June 30 valuation normally determine the employer contribution rate for the second succeeding fiscal year. Act 120 revised the funding method effective with the June 30, 2010 valuation. Act 120 mandated that the outstanding balance of the unfunded accrued liability as of June 30, 2010, including changes in the unfunded accrued liability due to the funding reforms of Act 120, be amortized over a 24-year period, as a level percent of pay, beginning July 1, 2011. Future valuation gains and losses, and changes in the unfunded accrued liability resulting from changes in actuarial assumptions and methods, are amortized over a 24-year period, as a level percent of pay. Future increases in the unfunded accrued liability due to legislation will be amortized over a 10-year period, as a level percent of pay. Act 120 also modified the employer pension contribution requirements by imposing collars on the rate at which employer contributions may rise from year to year. For the fiscal years ending June 30, 2012, June 30, 2013, and on or after June 30, 2014 the pension contribution rate can be no more than 3%, 3.5% and 4.5%, respectively, of total compensation of all active members, greater than the prior year's final contribution rate. Beginning with the fiscal year in which the actuarially required contribution rate is less than the collared rate, the final contribution rate is the actuarially determined contribution rate, provided that the final contribution rate is not less than the employer normal contribution rate.

Actuarial Cost Method for GASB 25 Accounting for Pensions: Same as for pension funding, except that the GASB 25 amortization payment will be set equal to the level dollar amount that will amortize the unfunded accrued liability over a period of 30 years.

Actuarial Cost Method for Health Insurance Funding: The actuarial liability equals the assets in the health insurance account, and the results of the June 30 valuation determine the contribution rate for the second succeeding fiscal year. The rate so determined is the rate necessary to establish reserves sufficient to cover administrative expenses and provide premium assistance payments for all participating eligible annuitants during the third fiscal year that follows the valuation date.

Actuarial Cost Method for GASB 43 Accounting for Health Insurance: The actuarial liability is determined under the entry age actuarial cost method, and the Annual Required Contribution for the second fiscal year that follows the valuation date is equal to the entry age normal cost for health insurance plus an amount that will amortize the entry age unfunded actuarial liability for health insurance over a period of 30 years.

DATA

Census and Assets: The valuation was based on members of the Retirement System as of June 30, 2012 and does not take into account future members. All census data was supplied by the Retirement System and was subject to reasonable consistency checks. The actuaries adjust the data to account for service and pay earned by members on or before the valuation that is not reported by the Retirement System until after the actuarial valuation is performed. Asset data was supplied by the Retirement System.

TABLE 13

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

MEMBERSHIP

For valuation purposes, all employees are considered to be full coverage. All employees who become members on and after January 1, 1966 are members of the dual coverage group. Dual coverage members contribute to both PSERS and to Social Security.

BENEFITS

Superannuation Annuity

Eligibility Age 62, or age 60 with 30 years of service, or 35 years of service regardless of age. For Class T-E and Class T-F members, age 65 with a minimum of three years of service credit, or any combination of age and service that totals 92 with at least 35 years of credited service

Amount 2.5% of final average salary times years of school service and intervening military service. 2% of final average salary for non-school service, for members who did not elect Class T-D coverage, and for Class T-E members. Minimum of \$100 per year of service. "Final average salary" means the highest average annual salary for any 3 years of service.

Annual salary is subject to a limit of \$200,000, as adjusted under Section 401(a)(17) of the Internal Revenue Code. As of June 30, 2012, the adjusted limit is \$250,000.

For members who elect coverage under Class T-D, the maximum benefit is equal to the limit established by Section 415 of the Internal Revenue Code.

For Class T-E and Class T-F members, the maximum benefit is equal to the lesser of the limit established by Section 415 of the Internal Revenue Code or 100% of final average salary.

Early Retirement Annuity

Eligibility Age 55 with 25 years of service.

Amount Accrued benefit as of date of retirement, reduced 1/4% for each month by which commencement of payments precedes Superannuation Age.

TABLE 13

(Continued)

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

For members who elect coverage under Class T-D, the maximum benefit is equal to the limit established by Section 415 of the Internal Revenue Code.

For Class T-E and Class T-F members, the maximum benefit is equal to the lesser of the limit established by Section 415 of the Internal Revenue Code or 100% of final average salary.

Withdrawal Annuity

Eligibility 5 years of service. For Class T-E and Class T-F members, ten years of service.

Amount Accrued benefit deferred to superannuation retirement age or an actuarially reduced benefit payable immediately. Actuarially equivalent benefits are based on 4% interest and a unisex table based on the RP-2000 Combined Healthy Annuitant Tables (Male and Female) with age set back 3 years for both genders assuming the population consists of 25% males and 75% females.

Disability Annuity

Eligibility 5 years of service.

Amount The standard single life annuity if the total number of years of credited service is greater than 16.667, otherwise the standard single life annuity multiplied by the lesser of the following ratios: (Y^*/Y) or $(16.667/Y)$ where Y is the number of years of credited service and Y* is the total years of credited service if the member were to continue as a school employee until superannuation retirement age (or at current age, if later). Minimum of \$100 per year of service.

Return of Contributions

Eligibility Death or separation from service and member does not qualify for other benefits.

Amount Refund of accumulated deductions includes interest (less annuity payments received prior to death in the case of a retired member).

TABLE 13

(Continued)

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

Death Benefit

Eligibility	Death of an active member or vestee who was eligible to receive an annuity.
Amount	The present value of the annuity that would have been effective if the member retired on the day before death. Option 1 assumed payable if no other option elected.

Normal and Optional Forms of Benefits

Normal Form:	Life annuity with a guaranteed payment equal to member contributions with interest.
Option 1:	Reduced benefit with refund of balance of present value of annuity at retirement over payments received. If balance is less than \$5,000, benefit is paid in lump sum; otherwise, beneficiary may elect annuity and/or lump sum.
Option 2:	Joint and 100% survivorship annuity.
Option 3:	Joint and 50% survivorship annuity.
Option 4:	Benefit of equivalent actuarial value, including lump sum payment of member contributions. Class T-E and Class T-F members cannot elect to receive a lump sum payment of member contributions.

Health Care Premium Assistance

Eligibility	Retired members who: (a) have 24½ or more years of service, or (b) are disability annuitants, or (c) have 15 or more years of service and who both terminated school service and retired after attaining superannuation age and (d) participate in the PSERS health options program or in an employer-sponsored health insurance program.
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TABLE 13

(Continued)

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

Amount

Participating eligible annuitants receive health insurance premium assistance payments from the Health Insurance Account equal to the lesser of \$100 per month or the actual monthly premium. All administrative expenses necessary to operate the health insurance premium assistance program are to be funded by the Health Insurance Account. The Health Insurance Account is credited with contributions of the Commonwealth and the employers.

CONTRIBUTIONS

By Members

Members who elected coverage under Class T-D and who were most recently enrolled prior to July 22, 1983 contribute at a rate of 6½% of compensation, while members who elected coverage under Class T-D and who were most recently enrolled on or after July 22, 1983 contribute at a rate of 7½% of compensation. Members who did not elect coverage under Class T-D and who were most recently enrolled prior to July 22, 1983 contribute at a rate of 5¼% of compensation, while members who did not elect coverage under Class T-D and who were most recently enrolled on or after July 22, 1983 and prior to July 1, 2001 contribute at a rate of 6¼% of compensation. Anyone who enrolls or re-enrolls on or after July 1, 2001 automatically has coverage under class T-D for subsequent school service and subsequent intervening military service, and must contribute at a rate of 7½% of compensation.

The base contribution rate for Class T-E members is 7½% of compensation. The base contribution rate for Class T-F members is 10.3% of compensation. Class T-E and Class T-F members are subject to a “shared-risk” employee contribution rate. Members benefit when investments of the fund are doing well and share some of the risk when investments underperform. The member contribution rate will stay within the specified range allotted for Class T-E or Class T-F members, but could increase or decrease every three years starting July 1, 2015 depending on investment performance. The member contribution rate can never go below the base rate of 7.5% for Class T-E members and 10.3% for Class T-F members, nor above 9.5% for Class T-E members and 12.3% for class T-F members. If the investment rate of return (less investment fees) is equal to or exceeds the assumed rate of

TABLE 13

(Continued)

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

return based on the prior ten-year period, the member contribution rate will decrease by .5%. Likewise, the member contribution rate will increase by .5% if the investment rate of return (less investment fees) during the ten-year period is 1.0% or more below the assumed rate of return. If the Retirement System is fully funded at the time of the comparison, the member contribution rate reverts back to the base rate for the Class. There shall not be an increase in the member contribution rate if there has not been an equivalent increase in the employer contribution rate over the previous three-year period. Until a full ten-year look back period is available, the investment return measurement period will begin on July 1, 2011.

By Commonwealth and
School Districts

Balance of required contribution determined as normal contribution, accrued liability contribution, supplemental annuity contribution, experience adjustment factor and premium assistance contribution, is funded by the Commonwealth and the School District.

TABLE 14

**SUMMARY OF MEMBERSHIP DATA
AS OF JUNE 30, 2012
(\$ Amounts in Thousands)**

TOTAL ACTIVE MEMBERS*

Item	Male	Female	Total
Number of Members	74,604	198,900	273,504
Total Annual Salaries **	\$ 3,860,811	\$ 8,853,560	\$ 12,714,371
Average Age ***	44.3	44.9	44.7
Average Service ***	10.9	10.6	10.7

* Excludes 122,286 inactive members and vestees.

CLASS T-C MEMBERS*

Item	Male	Female	Total
Number of Members	1,200	3,810	5,010
Total Annual Salaries **	\$ 63,834	\$ 151,319	\$ 215,153
Average Age ***	48.1	50.0	49.5
Average Service ***	16.5	14.6	15.1

* Excludes 35,133 inactive members and vestees.

CLASS T-D MEMBERS*

Item	Male	Female	Total
Number of Members	69,311	186,291	255,602
Total Annual Salaries **	\$ 3,707,711	\$ 8,507,832	\$ 12,215,543
Average Age ***	44.7	45.2	45.1
Average Service ***	11.5	10.9	11.1

* Excludes 71,740 inactive members and vestees.

** The salaries shown in the table above represent an annual rate of pay for the year ended June 30, 2012 for members who were in active service on June 30, 2012.

*** Average completed years of age and service.

TABLE 14
(Continued)

**SUMMARY OF MEMBERSHIP DATA
AS OF JUNE 30, 2012**
(\$ Amounts in Thousands)

CLASS T-E MEMBERS*

Item	Male	Female	Total
Number of Members	3,635	7,726	11,361
Total Annual Salaries **	\$ 76,136	\$ 165,326	\$ 241,462
Average Age ***	36.3	35.3	35.6
Average Service ***	0.4	0.4	0.4

* Excludes 15,378 inactive members.

CLASS T-F MEMBERS*

Item	Male	Female	Total
Number of Members	458	1,073	1,531
Total Annual Salaries **	\$ 13,130	\$ 29,083	\$ 42,213
Average Age ***	35.8	34.2	34.7
Average Service ***	0.6	0.5	0.5

* Excludes 35 inactive members.

** The salaries shown in the table above represent an annual rate of pay for the year ended June 30, 2012 for members who were in active service on June 30, 2012.

*** Average completed years of age and service.

TABLE 14
(Continued)

**SUMMARY OF MEMBERSHIP DATA
AS OF JUNE 30, 2012**
(\$ Amounts in Thousands)

TOTAL ANNUITANTS AND BENEFICIARIES

Item	Number	Annual Annuities [#]	Average Annuities	Average Age
Annuitants (Normal, Early and Withdrawal)	182,254	\$ 4,615,236	\$ 25,323	69.9
Survivors and Beneficiaries	11,455	111,466	9,731	73.2
Disabled Annuitants	<u>8,306</u>	<u>146,216</u>	17,604	63.6
Total	202,015	\$ 4,872,918	24,122	69.8

**NEW ANNUITANTS AND BENEFICIARIES
WHO RETIRED BETWEEN JULY 1, 2011 AND JUNE 30, 2012***

Item	Number*	Annual Annuities [#]	Average Annuities	Average Age
Annuitants (Normal, Early and Withdrawal)	10,630	\$ 306,014	\$ 28,788	60.2
Survivors and Beneficiaries	2,345	11,980	5,109	65.0
Disabled Annuitants	<u>501</u>	<u>11,708</u>	23,369	53.7
Total	13,476	\$ 329,702	24,466	60.8

The annuities shown in the tables above represent the annual amount payable as of July 1, 2012 for participants who were in payment on June 30, 2012.

* Excludes 143 newly reported annuitants who retired prior to June 30, 2011 and 960 members who retired after June 30, 2011 but died prior to June 30, 2012.

EXHIBIT I

**ACTIVE MEMBERSHIP DATA AS OF JUNE 30, 2012
NUMBER AND AVERAGE ANNUAL SALARY**

Age	Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 25	7,434 \$24,939	84 \$29,223								7,518 \$24,987
25-29	19,282 \$35,675	8,174 \$49,971	36 \$36,484							27,492 \$39,926
30-34	8,814 \$33,963	17,355 \$53,569	4,893 \$61,574	41 \$39,759						31,103 \$49,254
35-39	6,892 \$27,015	8,005 \$50,424	12,158 \$64,651	2,790 \$72,550	28 \$53,730					29,873 \$52,883
40-44	9,045 \$22,303	7,669 \$42,194	8,033 \$60,670	9,196 \$74,986	2,116 \$75,677	53 \$48,563				36,112 \$51,644
45-49	8,949 \$20,268	8,297 \$34,740	6,484 \$47,157	4,743 \$66,362	5,328 \$75,756	1,989 \$73,162	69 \$48,304			35,859 \$45,808
50-54	7,174 \$20,066	8,084 \$32,786	8,104 \$41,270	5,211 \$53,845	3,948 \$66,964	4,514 \$75,917	2,178 \$73,489	86 \$50,134		39,299 \$45,687
55-59	5,157 \$20,109	5,621 \$32,332	6,884 \$40,937	5,991 \$50,790	4,903 \$60,301	3,417 \$70,049	4,313 \$79,617	1,245 \$79,724	30 \$46,246	37,561 \$49,269
60-64	3,016 \$18,008	3,076 \$31,207	3,249 \$39,839	3,091 \$48,034	3,050 \$55,560	2,129 \$62,817	1,007 \$70,904	997 \$83,725	262 \$83,034	19,877 \$45,683
Over 64	2,633 \$12,945	1,798 \$22,329	1,346 \$30,624	943 \$37,828	752 \$43,411	536 \$44,709	363 \$48,285	201 \$56,657	238 \$79,142	8,810 \$28,999
Total	78,396 \$26,506	68,163 \$43,117	51,187 \$52,136	32,006 \$61,782	20,125 \$65,958	12,638 \$70,252	7,930 \$75,121	2,529 \$78,462	530 \$79,204	273,504 \$46,487

EXHIBIT II

**THE NUMBER AND AVERAGE ANNUAL ANNUITY
AS OF JUNE 30, 2012**

**RETIRED ON ACCOUNT OF SUPERANNUATION, EARLY RETIREMENT AND
THOSE IN RECEIPT OF WITHDRAWAL ANNUITIES**

Age	Years of Service									Total	
	0-4*	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+		
Under 50		3,401	1,229	358	100	17	3				5,108
		\$850	\$2,263	\$5,626	\$10,611	\$13,167	\$24,040				\$1,769
50-54		1,126	988	424	241	121	84	26			3,010
		\$1,203	\$2,192	\$5,055	\$11,250	\$22,398	\$35,066	\$40,170			\$5,008
55-59		1,040	1,554	919	682	1,028	3,439	1,995	6		10,663
		\$1,827	\$2,834	\$6,928	\$13,968	\$30,625	\$47,685	\$57,706	\$52,109		\$31,239
60-64	203	1,383	3,530	2,617	2,506	3,836	11,480	10,939	498		36,992
	\$2,955	\$3,499	\$4,216	\$10,555	\$20,383	\$31,657	\$45,349	\$57,623	\$65,431		\$37,953
65-69	759	1,934	4,398	3,767	3,814	4,673	12,508	8,929	988		41,770
	\$1,691	\$3,681	\$4,627	\$10,271	\$18,385	\$28,284	\$38,216	\$52,812	\$64,957		\$30,727
70-74	938	1,426	3,054	3,125	3,181	3,705	7,194	5,331	907		28,861
	\$1,276	\$2,978	\$4,431	\$8,799	\$14,558	\$22,597	\$32,518	\$41,891	\$56,717		\$23,740
75-79	698	1,095	2,598	2,486	2,895	3,149	4,214	2,939	1,030		21,104
	\$941	\$2,251	\$3,746	\$6,972	\$11,495	\$18,663	\$28,053	\$36,608	\$43,891		\$18,634
80-84	563	928	2,259	2,307	2,640	2,753	2,846	2,045	933		17,274
	\$790	\$1,885	\$3,428	\$6,284	\$11,032	\$17,152	\$24,911	\$33,843	\$41,656		\$16,195
85-89	439	657	1,629	1,826	1,830	1,674	1,270	1,144	507		10,976
	\$1,029	\$1,586	\$3,327	\$6,258	\$10,646	\$16,036	\$21,004	\$27,502	\$37,560		\$12,923
Over 89	281	469	1,074	1,142	1,030	899	624	676	301		6,496
	\$1,908	\$1,783	\$3,552	\$6,260	\$9,893	\$13,916	\$18,475	\$22,700	\$28,759		\$10,863
Total	3,881	13,459	22,313	18,971	18,919	21,855	43,662	34,024	5,170		182,254
	\$1,332	\$2,113	\$3,801	\$8,156	\$14,424	\$23,660	\$37,260	\$48,936	\$50,346		\$25,323

*Includes 77 annuitant records with no service information provided.

EXHIBIT III

**THE NUMBER AND AVERAGE ANNUAL ANNUITY
AS OF JUNE 30, 2012**

BENEFICIARIES AND SURVIVOR ANNUITANTS

Age	Years of Service								Total
	0-9*	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 50	197 \$11,449	33 \$2,482	34 \$3,759	35 \$6,089	28 \$8,176	19 \$12,835	12 \$18,580	8 \$13,741	366 \$5,874
50-54	195 \$16,038	20 \$3,175	20 \$5,731	17 \$5,706	15 \$9,435	18 \$13,931	9 \$11,738	9 \$11,817	303 \$6,806
55-59	1,193 \$33,088	31 \$3,254	48 \$6,212	55 \$8,499	39 \$13,930	44 \$16,960	33 \$18,131	12 \$13,835	1,455 \$4,711
60-64	571 \$35,581	50 \$4,019	39 \$5,547	46 \$9,007	60 \$13,650	106 \$17,147	84 \$22,212	12 \$12,257	968 \$13,654
65-69	592 \$23,010	53 \$3,412	61 \$5,221	65 \$10,166	70 \$12,768	196 \$18,018	143 \$22,080	30 \$14,201	1,210 \$14,173
70-74	601 \$16,805	78 \$3,559	89 \$6,125	75 \$7,945	88 \$13,196	176 \$17,580	186 \$20,416	53 \$19,623	1,346 \$12,790
75-79	544 \$12,821	112 \$2,930	99 \$4,481	106 \$7,701	103 \$10,415	206 \$13,360	170 \$18,088	101 \$22,301	1,441 \$10,958
80-84	563 \$12,458	130 \$3,079	163 \$4,289	151 \$6,880	149 \$8,867	202 \$12,829	200 \$14,202	112 \$17,895	1,670 \$9,578
85-89	509 \$10,264	149 \$2,676	137 \$4,349	140 \$6,546	146 \$8,814	169 \$10,634	235 \$11,861	86 \$17,323	1,571 \$8,166
Over 89	269 \$8,675	116 \$2,211	94 \$3,603	90 \$5,269	99 \$7,194	125 \$8,445	209 \$10,439	123 \$12,406	1,125 \$7,293
Total	5,234 \$8,429	772 \$2,938	784 \$4,675	780 \$7,239	797 \$10,195	1,261 \$14,101	1,281 \$16,092	546 \$16,938	11,455 \$9,731

*Includes 5,106 beneficiary or survivor annuitant records with no service information provided.

EXHIBIT IV

**THE NUMBER AND AVERAGE ANNUAL ANNUITY
AS OF JUNE 30, 2012**

RETIRED ON ACCOUNT OF DISABILITY

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 50		235	180	93	40	11				559
		\$12,641	\$16,258	\$21,102	\$31,857	\$34,037				\$17,009
50-54		225	177	149	111	75	21	1		759
		\$10,185	\$12,685	\$17,973	\$25,662	\$38,902	\$37,905	\$26,555		\$18,186
55-59		302	332	267	247	233	105	1		1,487
		\$9,976	\$12,573	\$16,511	\$24,758	\$36,132	\$44,772	\$29,573		\$20,753
60-64		333	367	320	359	407	224	3	4	2,017
		\$7,995	\$11,006	\$15,799	\$23,287	\$33,958	\$46,167	\$35,399	\$22,504	\$22,050
65-69		229	292	257	278	271	124	6	1	1,458
		\$6,462	\$9,140	\$12,412	\$19,924	\$29,033	\$38,400	\$34,795	\$49,884	\$17,672
70-74		154	219	192	162	119	28		1	875
		\$5,266	\$8,185	\$9,986	\$15,564	\$24,608	\$30,539		\$10,189	\$12,384
75-79		97	141	124	91	69	12	3	2	539
		\$4,996	\$6,543	\$8,489	\$14,359	\$19,849	\$23,494	\$43,058	\$13,579	\$10,341
80-84		63	116	77	67	32	2		1	358
		\$3,538	\$5,441	\$8,254	\$12,845	\$18,850	\$26,110		\$54,601	\$8,548
85-89		41	42	24	28	31	6	1		173
		\$3,634	\$6,656	\$8,706	\$11,547	\$16,232	\$17,530	\$24,751		\$9,213
Over 89		19	16	14	14	9	9			81
		\$3,377	\$4,760	\$8,447	\$10,423	\$16,831	\$20,329			\$9,123
Total		1,698	1,882	1,517	1,397	1,257	531	15	9	8,306
		\$8,333	\$10,497	\$13,993	\$20,970	\$30,991	\$41,577	\$35,001	\$25,761	\$17,604

EXHIBIT V

**ANNUITANT AND BENEFICIARY MEMBERSHIP DATA
AS OF JUNE 30, 2012**

**NUMBER AND AVERAGE ANNUAL BENEFIT
EXCLUDES PARTIAL LUMP SUM PAYMENTS**

Age Last Birthday	Number	Annual Benefit (Thousands)	Average Annual Benefit
Annuitants (Normal, Early and Withdrawal)			
Under 60	18,781	\$ 357,215	\$ 19,020
60 - 64	36,992	1,403,968	37,953
65 - 69	41,770	1,283,475	30,727
70 - 74	28,861	685,167	23,740
75 - 79	21,104	393,247	18,634
Over 79	34,746	492,164	14,165
Total	182,254	\$ 4,615,236	\$ 25,323
Survivors and Beneficiaries			
Under 60	2,124	\$ 11,066	\$ 5,210
60 - 64	968	13,217	13,654
65 - 69	1,210	17,149	14,173
70 - 74	1,346	17,215	12,790
75 - 79	1,441	15,791	10,958
Over 79	4,366	37,028	8,481
Total	11,455	\$ 111,466	\$ 9,731
Disabled Annuitants			
Under 60	2,805	\$ 54,172	\$ 19,313
60 - 64	2,017	44,475	22,050
65 - 69	1,458	25,766	17,672
70 - 74	875	10,836	12,384
75 - 79	539	5,574	10,341
Over 79	612	5,393	8,812
Total	8,306	\$ 146,216	\$ 17,604
Grand Total Average Annual Benefit	202,015	\$ 4,872,918	\$ 24,122

EXHIBIT VI

10 YEAR HISTORY OF MEMBERSHIP DATA

Valuation as of June 30	Number of Active Members	Percentage Change in Membership	Total Annualized Payroll (Thousands)	Percentage Change in Payroll
2012	273,504	(2.02%)	\$ 12,714,371	(1.52%)
2011	279,152	(1.02%)	12,910,043	0.95%
2010	282,041	0.84%	12,788,847	2.11%
2009	279,701	2.57%	12,524,593	5.06%
2008	272,690	3.28%	11,921,469	4.48%
2007	264,023	0.26%	11,410,257	(0.08%)
2006	263,350	3.09%	11,419,049	8.47%
2005	255,465	3.05%	10,527,668	4.95%
2004	247,901	0.49%	10,030,705	3.91%
2003	246,700	1.68%	9,652,881	2.92%

EXHIBIT VI
(Continued)

10 YEAR HISTORY OF MEMBERSHIP DATA

**THE NUMBER AND ANNUAL ANNUITIES OF
ANNUITANT AND SURVIVOR ANNUITANT MEMBERS**

Year Ended June 30	Number	Annual Annuities* (Millions)	Average Annual Annuities	Additions	Annual Annuities (Millions)	Deletions	Annual Annuities (Millions)	Percentage Change in Membership	Percentage Change in Annuities
2012	202,015	\$ 4,872.9	\$ 24,122	14,579	\$ 332.7	7,186	\$ 66.6	3.80%	4.78%
2011	194,622	4,650.8	23,897	16,228	453.7	6,540	76.4	5.24%	7.17%
2010	184,934	4,339.6	23,466	12,649	372.8	5,678	77.6	3.92%	8.59%
2009	177,963	3,996.3	22,456	9,651	314.9	5,228	74.4	2.55%	4.85%
2008	173,540	3,811.5	21,963	10,911	345.3	5,397	73.9	3.28%	8.18%
2007	168,026	3,523.4	20,970	10,612	307.5	4,399	56.0	3.84%	7.60%
2006	161,813	3,274.5	20,236	10,637		5,343		3.38%	8.16%
2005	156,519	3,027.6	19,343	10,050		5,083		3.28%	8.20%
2004	151,552	2,798.2	18,464	10,526		4,667		4.02%	9.94%
2003	145,693	2,545.1	17,469	9,079		4,800		3.03%	13.20%

* Reflects changes in annuities for continuing payees due to finalization of benefit calculations and due to the commencement of supplemental annuity payments.

EXHIBIT VII

DETAILED TABULATIONS OF THE DATA

TABLE 1

**THE NUMBER AND ANNUAL SALARIED
OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY
AGE AS OF JUNE 30, 2012**

Age	Male		Female		Total	
	Number	Salaries	Number	Salaries	Number	Salaries
17	8	\$ 119,116	4	\$ 37,409	12	\$ 156,525
18	27	413,196	12	59,833	39	473,029
19	74	771,606	54	638,433	128	1,410,039
20	158	1,905,991	102	1,133,234	260	3,039,225
21	216	2,689,079	198	2,339,194	414	5,028,273
22	316	4,833,548	468	9,252,171	784	14,085,719
23	657	14,834,534	1,599	41,333,489	2,256	56,168,023
24	971	26,481,857	2,654	81,008,335	3,625	107,490,192
25	1,255	38,517,189	3,344	115,064,257	4,599	153,581,446
26	1,413	48,798,250	3,807	143,888,027	5,220	192,686,277
27	1,631	61,711,736	4,064	166,125,161	5,695	227,836,897
28	1,549	64,401,774	4,315	186,558,108	5,864	250,959,882
29	1,649	70,705,040	4,465	201,880,550	6,114	272,585,590
30	1,833	83,913,580	4,452	210,147,129	6,285	294,060,709
31	1,845	89,571,770	4,437	214,423,572	6,282	303,995,342
32	1,944	97,948,883	4,444	217,634,196	6,388	315,583,079
33	1,865	97,258,656	4,382	216,722,603	6,247	313,981,259
34	1,832	98,420,969	4,069	205,908,449	5,901	304,329,418
35	1,881	103,684,731	4,117	209,693,652	5,998	313,378,383
36	1,866	106,575,056	3,996	201,661,402	5,862	308,236,458
37	1,815	104,912,534	4,080	207,406,526	5,895	312,319,060
38	1,781	108,211,836	4,051	204,431,769	5,832	312,643,605
39	1,927	117,407,047	4,359	215,797,872	6,286	333,204,919
40	2,023	124,549,172	4,892	239,507,335	6,915	364,056,507
41	2,167	132,158,562	5,513	269,715,479	7,680	401,874,041
42	1,957	123,037,675	5,486	269,492,160	7,443	392,529,835
43	1,943	119,058,269	5,236	245,380,883	7,179	364,439,152
44	1,755	109,797,962	5,140	232,252,817	6,895	342,050,779
45	1,759	105,275,800	5,147	226,952,891	6,906	332,228,691
46	1,803	107,602,031	5,074	216,463,258	6,877	324,065,289
47	1,755	99,727,836	5,485	225,760,205	7,240	325,488,041
48	1,855	106,120,441	5,676	228,453,886	7,531	334,574,327
49	1,759	97,965,090	5,546	228,291,750	7,305	326,256,840
50	1,806	99,365,885	5,732	237,951,628	7,538	337,317,513
51	1,916	105,499,266	6,041	249,357,735	7,957	354,857,001
52	1,855	102,804,193	5,806	241,712,500	7,661	344,516,693
53	1,953	107,111,037	5,987	259,743,853	7,940	366,854,890
54	2,003	112,403,014	6,200	279,510,447	8,203	391,913,461
55	1,997	113,759,937	6,235	282,549,677	8,232	396,309,614
56	1,868	104,423,305	5,872	273,785,065	7,740	378,208,370

TABLE 1
(Continued)

**THE NUMBER AND ANNUAL SALARIED
OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY
AGE AS OF JUNE 30, 2012**

Age	Male		Female		Total	
	Number	Salaries	Number	Salaries	Number	Salaries
57	1,872	\$ 104,074,702	5,781	\$ 275,275,739	7,653	\$ 379,350,441
58	1,680	89,749,738	5,510	268,429,832	7,190	358,179,570
59	1,669	90,346,928	5,077	248,195,414	6,746	338,542,342
60	1,517	77,627,090	4,511	216,292,942	6,028	293,920,032
61	1,288	66,217,608	3,675	171,369,788	4,963	237,587,396
62	963	46,254,481	2,602	112,412,346	3,565	158,666,827
63	850	39,088,687	2,078	84,396,369	2,928	123,485,056
64	733	30,974,007	1,660	63,406,088	2,393	94,380,095
65	714	27,859,661	1,393	51,731,407	2,107	79,591,068
66	359	13,035,879	711	23,198,040	1,070	36,233,919
67	359	10,883,072	645	19,099,332	1,004	29,982,404
68	329	9,180,768	521	13,345,909	850	22,526,677
69	324	9,982,935	422	10,809,960	746	20,792,895
70	251	6,674,956	379	8,170,966	630	14,845,922
71	177	4,298,742	249	5,122,093	426	9,420,835
72	193	4,600,074	227	5,139,133	420	9,739,207
73	128	3,685,411	180	3,625,919	308	7,311,330
74	109	2,636,910	167	3,412,543	276	6,049,453
75	98	2,388,352	130	2,420,709	228	4,809,061
76	78	1,717,573	113	1,939,165	191	3,656,738
77	58	1,179,789	76	1,430,267	134	2,610,056
78	47	1,058,935	69	1,307,588	116	2,366,523
79	29	552,897	48	839,696	77	1,392,593
80	22	427,986	43	624,365	65	1,052,351
81	25	549,382	33	682,262	58	1,231,644
82	19	469,286	15	191,468	34	660,754
83	11	205,445	8	69,753	19	275,198
84	3	94,843	13	170,726	16	265,569
85	9	194,630	11	193,431	20	388,061
86	2	39,008	6	75,744	8	114,752
87	1	13,640	6	153,749	7	167,389
Total	74,604	\$ 3,860,810,868	198,900	\$ 8,853,559,683	273,504	\$ 12,714,370,551

TABLE 2

**THE NUMBER AND ANNUAL SALARIES
OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY
YEARS OF CREDITED SERVICE AS OF JUNE 30, 2012**

Service	Male		Female		Total	
	Number	Salaries	Number	Salaries	Number	Salaries
0	5,490	\$ 63,654,779	10,378	\$ 132,983,245	15,868	\$ 196,638,024
1	4,904	110,463,461	11,603	245,692,788	16,507	356,156,249
2	4,198	139,288,764	11,228	316,835,740	15,426	456,124,504
3	3,772	142,731,582	11,423	368,348,990	15,195	511,080,572
4	3,811	155,439,160	11,589	402,526,058	15,400	557,965,218
5	3,636	161,254,913	11,624	431,229,510	15,260	592,484,423
6	3,698	172,293,837	11,589	458,485,488	15,287	630,779,325
7	3,464	173,498,455	10,398	432,852,132	13,862	606,350,587
8	3,162	168,079,547	9,339	407,466,649	12,501	575,546,196
9	2,891	157,717,778	8,362	376,112,488	11,253	533,830,266
10	2,851	160,129,339	8,187	378,106,961	11,038	538,236,300
11	2,692	156,865,890	8,020	377,059,818	10,712	533,925,708
12	2,449	147,379,483	7,750	375,950,379	10,199	523,329,862
13	2,934	188,015,040	7,632	395,583,555	10,566	583,598,595
14	2,448	158,864,356	6,224	330,718,823	8,672	489,583,179
15	2,412	164,835,911	5,692	314,977,808	8,104	479,813,719
16	1,929	132,950,703	4,806	274,744,102	6,735	407,694,805
17	1,661	117,697,620	4,310	253,437,129	5,971	371,134,749
18	1,467	102,933,591	3,914	236,315,780	5,381	339,249,371
19	1,808	132,075,473	4,007	247,415,627	5,815	379,491,100
20	1,229	88,289,522	3,242	204,078,660	4,471	292,368,182
21	1,020	71,862,890	2,968	185,602,641	3,988	257,465,531
22	1,070	75,994,768	2,950	191,481,972	4,020	267,476,740
23	1,105	78,293,145	2,847	182,889,856	3,952	261,183,001
24	1,038	74,158,518	2,656	174,747,198	3,694	248,905,716
25	936	67,929,423	2,277	153,178,097	3,213	221,107,520
26	821	60,742,643	2,068	141,388,858	2,889	202,131,501
27	716	52,704,007	1,781	124,287,510	2,497	176,991,517
28	682	50,242,117	1,438	99,566,010	2,120	149,808,127
29	644	45,536,526	1,275	92,265,826	1,919	137,802,352
30	516	36,895,379	1,082	77,953,905	1,598	114,849,284
31	538	39,356,320	1,123	83,582,154	1,661	122,938,474
32	533	41,662,471	1,195	89,332,157	1,728	130,994,628
33	567	44,306,229	1,094	81,955,012	1,661	126,261,241
34	434	35,194,741	848	65,471,534	1,282	100,666,275
35	247	20,600,474	538	40,101,097	785	60,701,571
36	221	17,892,200	397	30,975,008	618	48,867,208
37	163	13,520,650	306	22,500,924	469	36,021,574
38	146	12,114,872	252	19,382,448	398	31,497,320
39	97	8,788,813	162	12,553,046	259	21,341,859

TABLE 2
(Continued)

**THE NUMBER AND ANNUAL SALARIES
OF MEMBERS IN ACTIVE SERVICE DISTRIBUTED BY
YEARS OF CREDITED SERVICE AS OF JUNE 30, 2012**

Service	Male		Female		Total	
	Number	Salaries	Number	Salaries	Number	Salaries
40	65	\$ 5,433,619	107	\$ 7,989,064	172	\$ 13,422,683
41	42	3,856,012	57	4,054,978	99	7,910,990
42	37	3,699,014	51	3,528,805	88	7,227,819
43	16	1,428,090	32	2,234,941	48	3,663,031
44	14	1,291,290	20	1,392,354	34	2,683,644
45	5	356,402	14	1,087,824	19	1,444,226
46	10	878,624	14	824,500	24	1,703,124
47	3	271,904	8	521,865	11	793,769
48	3	399,584	2	113,833	5	513,417
49	5	507,484	5	414,320	10	921,804
50			4	308,912	4	308,912
51	1	108,313	5	436,402	6	544,715
52	1	92,930			1	92,930
53	2	232,212	1	90,942	3	323,154
54			2	111,473	2	111,473
56			1	89,130	1	89,130
57			1	103,832	1	103,832
59			1	45,813	1	45,813
60			1	73,712	1	73,712
Total	74,604	\$ 3,860,810,868	198,900	\$ 8,853,559,683	273,504	\$ 12,714,370,551

TABLE 3

**THE NUMBER AND ANNUAL ANNUITIES
OF ANNUITANTS ON THE RETIRED LIST
AS OF JUNE 30, 2012**

**RETIRED ON ACCOUNT OF SUPERANNUATION, EARLY RETIREMENT AND
THOSE IN RECEIPT OF WITHDRAWAL ANNUITIES**

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
23	4	\$ 2,409			4	\$ 2,409
24			1	\$ 452	1	452
25	1	353	1	235	2	588
26	2	1,250	4	2,230	6	3,480
27	5	3,684	8	2,648	13	6,332
28	5	2,159	5	3,899	10	6,058
29	4	1,637	15	6,171	19	7,808
30	25	15,219	24	13,654	49	28,873
31	13	10,513	41	24,329	54	34,842
32	35	30,031	61	39,821	96	69,852
33	32	23,613	76	51,285	108	74,898
34	57	56,580	77	53,888	134	110,468
35	54	73,594	99	77,818	153	151,412
36	64	64,745	116	116,424	180	181,169
37	58	70,237	127	109,790	185	180,027
38	66	76,823	143	129,588	209	206,411
39	73	96,892	168	181,890	241	278,782
40	85	124,525	163	203,851	248	328,376
41	101	152,117	215	289,795	316	441,912
42	106	208,717	235	325,337	341	534,054
43	107	234,037	223	332,916	330	566,953
44	83	212,236	223	399,752	306	611,988
45	122	331,314	251	491,931	373	823,245
46	128	406,463	264	505,752	392	912,215
47	122	347,998	274	563,919	396	911,917
48	131	532,585	324	724,007	455	1,256,592
49	150	570,696	337	736,624	487	1,307,320
50	151	613,085	348	1,009,818	499	1,622,903
51	158	916,956	382	1,224,079	540	2,141,035
52	180	1,188,563	413	1,541,944	593	2,730,507
53	176	1,373,966	464	1,919,910	640	3,293,876
54	235	2,203,064	503	3,082,162	738	5,285,226
55	290	4,998,835	698	7,898,953	988	12,897,788
56	422	11,708,315	955	21,073,491	1,377	32,781,806
57	572	19,583,759	1,336	36,827,645	1,908	56,411,404
58	811	29,971,175	1,845	59,111,629	2,656	89,082,804
59	1,108	47,030,691	2,626	94,898,735	3,734	141,929,426
60	1,519	66,245,966	3,651	140,629,932	5,170	206,875,898
61	1,987	88,538,750	4,586	174,687,157	6,573	263,225,907
62	2,341	101,479,545	5,214	191,736,148	7,555	293,215,693

TABLE 3
(Continued)

**THE NUMBER AND ANNUAL ANNUITIES
OF ANNUITANTS ON THE RETIRED LIST
AS OF JUNE 30, 2012**

**RETIRED ON ACCOUNT OF SUPERANNUATION, EARLY RETIREMENT AND
THOSE IN RECEIPT OF WITHDRAWAL ANNUITIES**

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
63	2,840	\$ 118,188,686	5,700	\$ 196,824,589	8,540	\$ 315,013,275
64	3,184	126,952,472	5,970	198,684,898	9,154	325,637,370
65	3,866	147,163,667	6,799	211,459,709	10,665	358,623,376
66	3,415	124,408,909	5,675	164,123,011	9,090	288,531,920
67	2,865	98,604,164	4,541	127,123,786	7,406	225,727,950
68	2,734	90,743,709	4,382	114,275,201	7,116	205,018,910
69	2,874	92,809,113	4,619	112,763,596	7,493	205,572,709
70	2,825	89,563,666	4,331	100,455,917	7,156	190,019,583
71	2,269	65,937,127	3,894	86,094,119	6,163	152,031,246
72	1,998	57,268,629	3,461	71,136,701	5,459	128,405,330
73	1,835	47,538,373	3,265	62,742,391	5,100	110,280,764
74	1,790	45,400,678	3,193	59,028,956	4,983	104,429,634
75	1,719	42,769,322	2,975	50,874,932	4,694	93,644,254
76	1,660	41,206,358	2,854	47,404,907	4,514	88,611,265
77	1,515	34,981,053	2,725	41,083,947	4,240	76,065,000
78	1,431	32,553,196	2,492	37,354,364	3,923	69,907,560
79	1,358	30,680,189	2,375	34,338,667	3,733	65,018,856
80	1,398	31,345,634	2,468	34,957,043	3,866	66,302,677
81	1,278	29,814,598	2,478	36,342,050	3,756	66,156,648
82	1,197	24,985,003	2,269	31,495,663	3,466	56,480,666
83	1,015	19,811,165	2,119	26,810,211	3,134	46,621,376
84	902	17,690,499	2,150	26,497,863	3,052	44,188,362
85	866	15,491,904	1,956	23,522,496	2,822	39,014,400
86	732	13,496,935	1,763	20,428,791	2,495	33,925,726
87	659	11,844,116	1,512	15,760,922	2,171	27,605,038
88	529	9,158,972	1,407	14,678,926	1,936	23,837,898
89	417	6,418,805	1,135	11,045,603	1,552	17,464,408
90	317	4,662,769	1,028	9,845,060	1,345	14,507,829
91	242	3,665,748	935	9,115,970	1,177	12,781,718
92	184	2,625,343	823	7,951,063	1,007	10,576,406
93	109	1,582,863	576	5,489,906	685	7,072,769
94	107	1,213,979	545	5,577,030	652	6,791,009
95	69	932,108	419	4,211,118	488	5,143,226
96	59	672,637	292	2,957,435	351	3,630,072
97	28	391,856	213	2,404,683	241	2,796,539
98	25	403,440	165	1,907,258	190	2,310,698
99	9	121,902	122	1,582,248	131	1,704,150
100	12	155,404	76	1,111,221	88	1,266,625
101	5	46,907	46	603,210	51	650,117
102	5	102,059	33	446,841	38	548,900

TABLE 3
(Continued)

**THE NUMBER AND ANNUAL ANNUITIES
OF ANNUITANTS ON THE RETIRED LIST
AS OF JUNE 30, 2012**

**RETIRED ON ACCOUNT OF SUPERANNUATION, EARLY RETIREMENT AND
THOSE IN RECEIPT OF WITHDRAWAL ANNUITIES**

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
103	1	\$ 13,960	23	\$ 348,352	24	\$ 362,312
104			9	107,706	9	107,706
105	1	27,090	7	118,863	8	145,953
106			6	93,529	6	93,529
107			2	33,018	2	33,018
108			1	18,920	1	18,920
109			1	16,204	1	16,204
110			1	9,259	1	9,259
Total	61,927	\$ 1,862,948,104	120,327	\$ 2,752,287,762	182,254	\$ 4,615,235,866

TABLE 3
(Continued)

**THE NUMBER AND ANNUAL ANNUITIES
OF ANNUITANTS ON THE RETIRED LIST
AS OF JUNE 30, 2012**

**RETIRED ON ACCOUNT OF SUPERANNUATION, EARLY RETIREMENT AND
THOSE IN RECEIPT OF WITHDRAWAL ANNUITIES**

<u>OPTION</u>	<u>MALE</u>		<u>FEMALE</u>	
Maximum	29,749	\$ 912,749,843	73,426	\$ 1,639,608,085
1	8,930	211,336,338	24,311	461,553,020
2	13,612	382,082,132	13,061	343,269,015
3	8,338	297,112,251	8,902	282,401,925
4	<u>1,298</u>	<u>59,667,540</u>	<u>627</u>	<u>25,455,717</u>
	61,927	\$ 1,862,948,104	120,327	\$ 2,752,287,762

DEFINITIONS OF OPTIONS

- Option 1 A life annuity to the member with a guaranteed payment to the beneficiary equal to the present value of the total maximum single life annuity less any amounts paid to the member prior to death.
- Option 2 A joint and one hundred percent (100%) survivor annuity payable during the lifetime of the member with the full amount of such annuity payable thereafter to the designated survivor annuitant, if living at the member's death.
- Option 3 A joint and fifty percent (50%) survivor annuity payable during the lifetime of the member with one-half of such annuity payable thereafter to the designated survivor annuitant, if living at the member's death.
- Option 4 A life annuity to the member with a special death benefit other than the normal option 1, 2, or 3 death benefit.

TABLE 4

**THE NUMBER AND ANNUAL ANNUITIES
OF BENEFICIARIES AND SURVIVOR ANNUITANTS
AS OF JUNE 30, 2012**

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
11	1	\$ 2,416			1	\$ 2,416
12	1	1,898			1	1,898
13			1	\$ 2,727	1	2,727
17			1	2,751	1	2,751
18	4	2,775			4	2,775
19			2	9,620	2	9,620
20	1		1	1,614	2	1,614
21	2	10,125	2	2,266	4	12,391
22			1	483	1	483
23	2	6,891	1	1,227	3	8,118
24			1	3,484	1	3,484
25	6	67,609	2	24,567	8	92,176
26	2	2,839	2	483	4	3,322
27	1	21,281	7	87,104	8	108,385
28	3	20,927	2	17,887	5	38,814
29			2	13,232	2	13,232
30	5	29,365	6	43,979	11	73,344
31	3	15,461	4	10,745	7	26,206
32	5	21,755	1	8,367	6	30,122
33	2	1,996	5	46,657	7	48,653
34	7	49,608	6	32,249	13	81,857
35	6	24,546	5	11,418	11	35,964
36	4	8,515	2	13,554	6	22,069
37	6	78,326	2	13,648	8	91,974
38	5	22,724	5	8,148	10	30,872
39	5	11,593	6	27,109	11	38,702
40	4	30,044	3	11,641	7	41,685
41	4	20,648	11	52,663	15	73,311
42	7	36,704	9	49,920	16	86,624
43	5	26,801	12	100,114	17	126,915
44	11	44,092	14	98,856	25	142,948
45	10	58,492	21	121,445	31	179,937
46	7	42,198	14	77,464	21	119,662
47	6	58,504	19	142,709	25	201,213
48	8	31,089	31	173,431	39	204,520
49	11	80,639	21	108,376	32	189,015
50	7	41,362	22	120,221	29	161,583
51	17	56,229	35	219,894	52	276,123
52	13	85,722	42	319,434	55	405,156
53	20	62,482	65	475,736	85	538,218
54	19	76,049	63	605,093	82	681,142

TABLE 4
(Continued)

**THE NUMBER AND ANNUAL ANNUITIES
OF BENEFICIARIES AND SURVIVOR ANNUITANTS
AS OF JUNE 30, 2012**

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
55	31	\$ 68,122	883	\$ 845,462	914	\$ 913,584
56	34	322,843	76	841,150	110	1,163,993
57	27	292,057	104	1,117,950	131	1,410,007
58	36	190,498	93	1,244,655	129	1,435,153
59	46	426,173	125	1,505,332	171	1,931,505
60	50	596,366	113	1,470,555	163	2,066,921
61	53	592,027	125	1,602,605	178	2,194,632
62	46	581,181	127	1,718,016	173	2,299,197
63	64	761,896	148	2,183,445	212	2,945,341
64	55	916,942	187	2,794,131	242	3,711,073
65	67	1,091,430	215	3,188,613	282	4,280,043
66	66	761,167	179	2,303,673	245	3,064,840
67	53	763,023	159	2,378,785	212	3,141,808
68	50	767,724	164	2,492,653	214	3,260,377
69	68	733,187	189	2,668,552	257	3,401,739
70	63	859,035	201	2,950,459	264	3,809,494
71	61	770,246	195	2,645,417	256	3,415,663
72	47	422,199	224	2,691,217	271	3,113,416
73	43	556,088	211	2,738,781	254	3,294,869
74	47	619,209	254	2,962,412	301	3,581,621
75	59	523,297	228	2,591,392	287	3,114,689
76	53	504,980	245	2,846,073	298	3,351,053
77	52	393,325	237	2,711,165	289	3,104,490
78	49	490,658	237	2,658,250	286	3,148,908
79	45	383,959	236	2,688,033	281	3,071,992
80	49	414,932	235	2,371,027	284	2,785,959
81	56	507,802	302	2,930,865	358	3,438,667
82	64	608,102	287	2,877,246	351	3,485,348
83	57	400,935	267	2,788,043	324	3,188,978
84	53	390,341	300	2,705,338	353	3,095,679
85	59	515,818	299	2,604,407	358	3,120,225
86	67	457,650	270	2,330,353	337	2,788,003
87	58	460,308	259	2,264,368	317	2,724,676
88	51	420,310	238	1,813,207	289	2,233,517
89	53	308,997	217	1,652,738	270	1,961,735
90	38	270,215	190	1,590,482	228	1,860,697
91	38	234,080	159	1,211,965	197	1,446,045
92	31	266,338	163	1,210,092	194	1,476,430
93	24	169,819	96	631,266	120	801,085
94	17	114,288	103	748,043	120	862,331

TABLE 4
(Continued)

**THE NUMBER AND ANNUAL ANNUITIES
OF BENEFICIARIES AND SURVIVOR ANNUITANTS
AS OF JUNE 30, 2012**

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
95	9	\$ 49,237	76	\$ 528,901	85	\$ 578,138
96	8	31,210	41	261,529	49	292,739
97	7	65,036	37	267,119	44	332,155
98	2	16,436	25	131,515	27	147,951
99	1	1,680	24	173,448	25	175,128
100			7	55,365	7	55,365
101	1	12,901	9	65,305	10	78,206
102			9	45,892	9	45,892
103			3	12,115	3	12,115
104			1	14,808	1	14,808
105			1	13,685	1	13,685
106			1	2,126	1	2,126
107			1	5,104	1	5,104
108			1	2,788	1	2,788
109						
110	1	1,200			1	1,200
111			1	591	1	591
Total	2,229	\$ 21,256,972	9,226	\$ 90,208,823	11,455	\$ 111,465,795

TABLE 5

**THE NUMBER AND ANNUAL ANNUITIES
OF ANNUITANTS ON THE RETIRED LIST
AS OF JUNE 30, 2012**

RETIRED ON ACCOUNT OF DISABILITY

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
27	1	\$ 13,798			1	\$ 13,798
29			1	\$ 7,586	1	7,586
30	4	64,229	1	23,473	5	87,702
32	1	18,025			1	18,025
33			1	22,070	1	22,070
34	1	21,687	5	103,027	6	124,714
35			5	96,651	5	96,651
36	3	49,233	12	190,024	15	239,257
37	3	46,950	4	86,688	7	133,638
38	1	9,262	13	216,640	14	225,902
39	5	81,991	17	319,960	22	401,951
40	4	62,311	11	146,018	15	208,329
41	6	141,079	16	259,279	22	400,358
42	9	139,095	26	513,268	35	652,363
43	6	110,898	29	497,746	35	608,644
44	16	287,093	19	302,973	35	590,066
45	15	297,002	20	276,513	35	573,515
46	15	213,240	31	588,467	46	801,707
47	15	270,958	50	733,373	65	1,004,331
48	25	489,864	57	887,268	82	1,377,132
49	33	502,087	78	1,418,480	111	1,920,567
50	35	618,007	72	1,098,267	107	1,716,274
51	35	731,755	89	1,451,602	124	2,183,357
52	23	446,847	102	1,791,562	125	2,238,409
53	72	1,514,035	114	2,019,996	186	3,534,031
54	64	1,246,758	153	2,884,527	217	4,131,285
55	70	1,403,788	135	2,341,682	205	3,745,470
56	92	1,847,170	188	3,845,033	280	5,692,203
57	94	2,153,676	211	4,630,747	305	6,784,423
58	105	2,400,280	225	4,661,740	330	7,062,020
59	119	2,452,246	248	5,123,741	367	7,575,987
60	125	3,085,994	277	6,227,774	402	9,313,768
61	118	2,845,072	283	6,362,204	401	9,207,276
62	107	2,233,306	281	6,178,753	388	8,412,059
63	155	3,557,973	290	6,022,350	445	9,580,323
64	115	2,629,672	266	5,332,369	381	7,962,041
65	130	2,941,408	278	5,213,116	408	8,154,524

TABLE 5
(Continued)

**THE NUMBER AND ANNUAL ANNUITIES
OF ANNUITANTS ON THE RETIRED LIST
AS OF JUNE 30, 2012**

RETIRED ON ACCOUNT OF DISABILITY

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
66	111	\$ 2,096,323	223	\$ 3,879,670	334	\$ 5,975,993
67	75	1,539,922	165	2,675,824	240	4,215,746
68	72	1,308,629	145	2,406,183	217	3,714,812
69	84	1,276,944	175	2,427,653	259	3,704,597
70	65	915,579	177	2,426,631	242	3,342,210
71	42	505,170	145	1,785,664	187	2,290,834
72	47	688,884	126	1,361,362	173	2,050,246
73	42	583,132	90	1,080,995	132	1,664,127
74	51	602,968	90	885,330	141	1,488,298
75	39	466,312	88	1,083,880	127	1,550,192
76	34	383,338	72	748,403	106	1,131,741
77	28	384,854	94	762,441	122	1,147,295
78	20	212,865	78	746,890	98	959,755
79	32	369,989	54	415,444	86	785,433
80	15	121,286	72	701,234	87	822,520
81	18	180,018	52	384,494	70	564,512
82	11	124,160	58	416,554	69	540,714
83	19	254,004	46	357,199	65	611,203
84	11	120,331	56	400,939	67	521,270
85	16	239,195	25	158,806	41	398,001
86	12	110,652	39	339,816	51	450,468
87	9	100,213	27	254,086	36	354,299
88	2	11,890	20	161,515	22	173,405
89	3	27,045	20	190,694	23	217,739
90	5	51,200	15	134,077	20	185,277
91	1	2,791	6	52,065	7	54,856
92	1	4,614	12	111,876	13	116,490
93	5	51,573	7	49,217	12	100,790
94			8	113,637	8	113,637
95			6	48,135	6	48,135
96	1	7,175	5	42,329	6	49,504
97			3	21,618	3	21,618
98			1	10,511	1	10,511
99			5	38,111	5	38,111
100						
Total	2,493	\$ 47,667,845	5,813	\$ 98,548,250	8,306	\$ 146,216,095

EXHIBIT VIII

GLOSSARY

Accrued Liability	The difference between (a) the present value of future plan benefits, and (b) the present value of future normal cost. It is the portion of the present value of future plan benefits attributable to service accrued as of the valuation date. Sometimes referred to as “actuarial accrued liability.”
Accrued Service	The service credited under the plan that was rendered before the date of the actuarial valuation.
Actuarial Assumptions	Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. 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 dollar amount of the “present value of future plan benefits” between the present value of future normal cost and the accrued liability. Sometimes referred to as the “actuarial funding method.”
Actuarial Equivalent	A series of payments is called an actuarial equivalent of another series of payments if the two series have the same actuarial present value.
Actuarial Value of Assets	The value of current plan assets recognized for valuation purposes. Based on a smoothed market value that recognizes investment gains and losses over a period of ten years.
Amortization	Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.
Experience Gain (Loss)	A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.
Normal Cost	The annual cost assumed, under the actuarial funding method, for current and subsequent plan years. Sometimes referred to as “current service cost.”

EXHIBIT VIII

(Continued)

GLOSSARY

Present Value

The amount of funds presently required to provide a payment or series of payments in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Unfunded Accrued Liability

The difference between the actuarial accrued liability and valuation assets.