TEACHERS' PENSION AND ANNUITY FUND OF NEW JERSEY

June 30, 2010 Actuarial Valuation Report
Prepared as of July 1, 2010
(REVISED)

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Board of Trustees
Teachers' Pension and Annuity Fund of New Jersey
State of New Jersey
Department of the Treasury
Division of Pensions and Benefits, CN 295
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Ladies and Gentlemen:

This report presents the revised results of the actuarial valuation of Teachers' Pension and Annuity Fund of New Jersey as of June 30, 2010. The report has been revised to reflect the pension reforms included in Chapter 78, P.L. 2011. Section I contains highlights of the valuation including a general discussion and comments on the various schedules included in the report. The subsequent Sections contain schedules summarizing the underlying calculations, asset information, participant data, plan benefits and actuarial assumptions.

Purpose

The main purposes of this report are:

- to provide the annual state contribution in accordance with N.J. Statutes to be made in the Fiscal Year ending June 30, 2012 which represents the contribution for the valuation year beginning July 1, 2010;
- to determine the Annual Required Contribution in accordance with Governmental Accounting Standards Board Statements 25 and 27 for the Fiscal Year ending June 30, 2012;
- to review the experience under the plan for the valuation year ending June 30, 2010; and,
- to present the impact of Chapter 78, P.L. 2011 on the financial situation of TPAF.

Actuarial computations presented in this report are for purposes of determining the statutory contribution amounts for TPAF. Actuarial computations under GASB Statements No. 25 and 27 are for purposes of fulfilling financial accounting requirements. The calculations in the enclosed report have been made on a basis consistent with our understanding of the N.J. statutes and GASB Statements No. 25 and 27. Determinations for purposes other than these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

Data Reliance

In performing this analysis, we relied, without audit, on census data, plan provisions, asset statements and other information (both written and oral) provided by the State of New Jersey Division of Pensions and Benefits. We have not audited or verified the census data, asset statements or other information. To the extent any of these are inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Future Measurements

Future actuarial measurements may differ significantly from the current measurements presented in this analysis due to actual plan experience deviating from the actuarial assumptions, and changes in plan provisions, actuarial assumptions, and applicable law. An assessment of the potential range and cost effect of such differences is beyond the scope of this analysis.

Certification

We hereby certify that, to the best of our knowledge, this report, including all costs and liabilities based on actuarial assumptions and methods adopted by the Board or mandated by statute, is complete and accurate and determined in conformance with generally recognized and accepted actuarial principles and practices, which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying Opinions and supporting Recommendations of the American Academy of Actuaries.

In compliance with New Jersey statute, this actuarial valuation is based on an investment return assumption of 8.25%. The investment return assumption is specified by the State Treasurer. Based on our most recent analysis, this assumption is outside our reasonable range. If the investment return assumption was lowered, the actuarial accrued liability and statutory contributions would increase and the funded ratio would decrease. Determining results at an alternative investment return assumption is outside the scope of our assignment.

We are members of the American Academy of Actuaries and meet its Qualification Standard to render this actuarial opinion.

Respectfully submitted,

MILLIMAN, INC.
By:

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TEACHERS' PENSION AND ANNUITY FUND OF NEW JERSEY

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SECTION I - SUMMARY

A. Summary of Principal Results

PARTICIPANT DATA

	Revised June 30, 2010 Valuation	Original June 30, 2010 Valuation	June 30, 2009 Valuation	Percentage Change Orig to Rev	Percentage Change 2009 to 2010
Active Contributing Members					
Number	144,492	144,492	144,579	0.0 %	(0.1) %
Number of Veteran Members	832	832	922	0.0	(9.8)
Average Pay	$ 69,402	$ 69,402	$ 67,423	0.0	2.9
Total Payroll	10,028,081,042	10,028,081,042	9,747,926,624	0.0	2.9
Total Appropriation Payroll	10,025,401,658	10,025,401,658	9,747,020,060	0.0	2.9
Avg. Member Accumulated Contributions	60,230	60,230	56,172	0.0	7.2
Total Member Accumulated Contributions	8,702,691,849	8,702,691,849	8,121,238,550	0.0	7.2
Active Non-Contributing Members					
Number	12,531	12,531	12,530	0.0 %	0.0 %
Number of Veteran Members	57	57	66	0.0	(13.6)
Average Pay	$ 50,368	$ 50,368	$ 48,311	0.0	4.3
Total Payroll	631,160,554	631,160,554	605,335,737	0.0	4.3
Avg. Member Accumulated Contributions	29,900	29,900	26,240	0.0	13.9
Total Member Accumulated Contributions	374,678,724	374,678,724	328,788,416	0.0	14.0

SECTION I - SUMMARY
(continued)

A. Summary of Principal Results (continued)

PARTICIPANT DATA

	Revised June 30, 2010 Valuation	Original June 30, 2010 Valuation	June 30, 2009 Valuation	Percentage Change Orig to Rev	Percentage Change 2009 to 2010
Service Retirees, Including Domestic Relations Beneficiaries					
Number	72,797	72,797	71,000	0.0 %	2.5 %
Average Annual Pension	$ 38,142	$ 38,142	$ 37,613	0.0	1.4
Total Annual Pensions	$ 2,776,654,267	$ 2,776,654,267	$ 2,670,513,732	0.0	4.0
Average Retirement Age of New Retirees	61.3	61.3	61.0	0.0	0.5
Average Annual Pension of New Retirees	$ 47,975	$ 47,975	$ 46,486	0.0	3.2
Disabled Retirees					
Number	2,741	2,741	2,674	0.0 %	2.5 %
Average Annual Pension	$ 26,278	$ 26,278	$ 25,846	0.0	1.7
Total Annual Pensions	$ 72,028,971	$ 72,028,971	$ 69,112,238	0.0	4.2
Beneficiaries and Dependents					
Number	4,699	4,699	4,540	0.0 %	3.5 %
Average Annual Pension	$ 23,161	$ 23,161	$ 22,696	0.0	2.0
Total Annual Pensions	$ 108,834,906	$ 108,834,906	$ 103,041,702	0.0	5.6
Terminated Vested Participants					
Number	477	477	568	0.0 %	(16.0) %
Average Annual Pension	$ 12,960	$ 12,960	$ 12,568	0.0	3.1
Total Annual Pensions	$ 6,181,944	$ 6,181,944	$ 7,138,800	0.0	(13.4)

SECTION I - SUMMARY
(continued)

A. Summary of Principal Results (continued)

STATUTORY PENSION CONTRIBUTIONS WITH BUDGET ADJUSTMENTS

	Revised June 30, 2010 Valuation (State's Fiscal Year 2012 Contributions)	Original June 30, 2010 Valuation (State's Fiscal Year 2012 Contributions)	June 30, 2009 Valuation (State's Fiscal Year 2011 Contributions)	Percentage Change Orig to Rev	Percentage Change 2009 to 2010
Normal Contribution (1/60th formula) **	$ 525,052,954	$ 644,080,671	$ 582,957,683	(18.5) %	10.5 %
Additional Formula Normal Cost	95,200,632	116,626,187	106,610,084	(18.4) %	9.4 %
Benefit Enhancement Fund (BEF) Balance	0	0	0	0.0	0.0
Additional Formula Contribution	95,200,632 *	116,626,187 *	106,610,084 *	(18.4)	9.4
Accrued Liability Contribution	1,389,556,743 *	1,425,514,334 *	1,137,154,603 *	(2.5) %	25.4 %
Total Pension Contribution by Statute	**$ 2,009,810,329 ***	**$ 2,186,221,192 ***	**$ 1,826,722,370 ***	**(8.1) %**	**19.7 %**
State Appropriation for Pension ***	(287,115,761)	(312,317,313)	0	(8.1)	N/A
Pension Contribution Not Appropriated	**$ 1,722,694,568 ***	**$ 1,873,903,879 ***	**$ 1,826,722,370 ***	**(8.1) %**	**2.6 %**
Percentage of Statutory Pension Contribution Appropriated	**14.3%**	**14.3%**	**0.0%**	**0.0 %**	**14.3 %**

* These amounts should be increased for assumed interest at the rate of 8.25% per annum if payment is delayed beyond June 30, 2011 and June 30, 2010, respectively.

** Excludes the non-contributory group life insurance term cost.

*** Chapter 1, P.L. 2010 requires payment of the statutory pension contribution to be phased-in over a 7-year period from the fiscal year ending June 30, 2012 to the fiscal year ending June 30, 2018.

SECTION I - SUMMARY
(continued)

A. Summary of Principal Results (continued)

ANNUAL REQUIRED CONTRIBUTION PER GASB 25 AND 27

	Revised June 30, 2010 Valuation (State's Fiscal Year 2012)	Original June 30, 2010 Valuation (State's Fiscal Year 2012)	June 30, 2009 Valuation (State's Fiscal Year 2011)	Percentage Change Orig to Rev	Percentage Change 2009 to 2010
Normal Cost *	$ 616,659,815	$ 827,504,317	$ 761,759,287	(25.5) %	8.6 %
Amortization Payment **	1,480,175,260	1,486,082,476	1,199,604,178	(0.4) %	23.9 %
Subtotal	2,096,835,075	2,313,586,793	1,961,363,465	(9.4) %	18.0 %
Interest Adjustment ***	172,988,893	190,870,943	161,812,485	(9.4) %	18.0 %
Annual Required Contribution	**$ 2,269,823,968**	**$ 2,504,457,736**	**$ 2,123,175,950**	**(9.4) %**	**18.0 %**

* Reflects additional formula normal cost, full cost of pension adjustment benefits, and an actuarial determination of the cost of the non-contributory and contributory group life insurance benefits.

** Benefit Enhancement Fund is excluded from the actuarial accrued liabilities.

*** Additional one year of interest is included to reflect payment of contributions at end of fiscal year.

SECTION I - SUMMARY
(continued)

A. Summary of Principal Results (continued)

TOTAL STATUTORY CONTRIBUTIONS (INCLUDING NCGI AND ERI)

	Revised June 30, 2010 Valuation (State's Fiscal Year 2012 Contributions)		Original June 30, 2010 Valuation (State's Fiscal Year 2012 Contributions)		June 30, 2009 Valuation (State's Fiscal Year 2011 Contributions)		Percentage Change Orig to Rev	Percentage Change 2009 to 2010
Total Pension Contribution by Statute	$ 2,009,810,329	*	$ 2,186,221,192	*	$ 1,826,722,370	*	(8.1) %	19.7 %
Est. Non-contributory Group Life Insurance (NCGI)	35,730,000		35,730,000	***	30,655,332	**	0.0 %	16.6 %
Early Retirement Incentive (ERI-3 and ERI-5) ^	2,751,595	*	1,839,123	*	1,698,963	*	49.6 %	8.2 %
Total State Contribution for Pension, NCGI and ERI	**$ 2,048,291,924**		**$ 2,223,790,315**		**$ 1,859,076,665**		**(7.9) %**	**19.6 %**
Total Certain State College Contribution (Included Above)	**$ 665,477**		**$ 722,869**		**$ 728,266**	******	**(7.9) %**	**(0.7) %**

* These amounts should be increased for assumed interest at the rate of 8.25% per annum if payment is delayed beyond June 30, 2011 and 2010, respectively.

** Actual NCGI claims paid and actual allocation of costs for certain State colleges for fiscal year 2011.

*** Amount shown reflects estimate of NCGI claims. Actual claim amount will be appropriated.

^ Appropriation for ERI contributions is or is expected to be $393,085 and $0 for fiscal year ending June 30, 2012 and 2011, respectively.

SECTION I - SUMMARY
(continued)

A. Summary of Principal Results (continued)

LOCAL EMPLOYER CONTRIBUTIONS

	Revised June 30, 2010 Valuation	Original June 30, 2010 Valuation	June 30, 2009 Valuation	Percentage Change Orig to Rev	Percentage Change 2009 to 2010
Early Retirement Incentive Contributions payable April 1, 2012 and April 1, 2011, respectively					
ERI 1 - Local Employers	$ 936,034	$ 950,006	$ 1,212,778	(1.5) %	(21.7) %
ERI 2 - Local Employers	1,020,139	1,009,825	1,565,030	1.0 %	(35.5) %
ERI 4 - Local Employers	2,874,148	2,874,148	2,874,148	0.0 %	0.0 %
Total	$ 4,830,321	$ 4,833,979	$ 5,651,956	(0.1) %	(14.5) %
Terminal Funding Contribution payable April 1, 2012 and April 1, 2011, respectively					
No Locations	$ 0	$ 0	$ 0	N/A	N/A

SECTION I - SUMMARY
(continued)

A. Summary of Principal Results (continued)

ASSETS AND LIABILITIES

	Revised June 30, 2010 Valuation	Original June 30, 2010 Valuation	June 30, 2009 Valuation	Percentage Change Orig to Rev	Percentage Change 2009 to 2010
Market Value of Pension Assets	$ 25,763,644,836	$ 25,763,644,836	$ 24,973,886,910	0.0 %	3.2 %
Actuarial Value of Pension Assets	$ 33,136,475,630	$ 33,136,475,630	$ 34,708,001,341	0.0 %	(4.5) %
Ratio of Actuarial Value to Market Value	128.6 %	128.6 %	139.0 %	0.0 %	(10.4) %
Actuarial Accrued Pension Liability	$ 48,417,932,345	$ 56,591,368,744	$ 53,418,328,576	(14.4) %	5.9 %
Unfunded Pension Liability					
Based on Market Value	$ 22,654,287,509	$ 30,827,723,908	$ 28,444,441,666	(26.5) %	8.4 %
Based on Actuarial Value	$ 15,281,456,715	$ 23,454,893,114	$ 18,710,327,235	(34.8) %	25.4 %
Funded Ratio					
Based on Market Value	**53.2 %**	**45.5 %**	**46.8 %**	**7.7 %**	**(1.3) %**
Based on Actuarial Value	**68.4 %**	**58.6 %**	**65.0 %**	**9.8 %**	**(6.4) %**
Change in Funded Ratio since June 30, 2001 and 2000, respectively					
Based on Market Value	**(41.1) %**	**(48.8) %**	**(81.7) %**	**7.7 %**	**32.9 %**
Based on Actuarial Value	**(39.4) %**	**(49.2) %**	**(45.1) %**	**9.8 %**	**(4.1) %**

SECTION I - SUMMARY
(continued)

A. Summary of Principal Results (continued)

RISK MEASURES

	Revised June 30, 2010 Valuation	Original June 30, 2010 Valuation	June 30, 2009 Valuation	Percentage Change Orig to Rev	Percentage Change 2009 to 2010
Market Value of Pension Assets	$ 25,763,644,836	$ 25,763,644,836	$ 24,973,886,910	0.0 %	3.2 %
Annuity Savings Fund **	9,151,924,963	9,151,924,963	8,516,171,922	0.0 %	7.5 %
Net Market Value of Pension Assets	16,611,719,873	16,611,719,873	16,457,714,988	0.0 %	0.9 %
Actuarial Accrued Liability (AAL) for Retirees	27,385,028,540	31,919,345,374	30,209,589,102	(14.2) %	5.7 %
% of AAL for Retirees Covered by Assets *	94.1%	80.7%	82.7%	13.4 %	(2.0) %
% of AAL for Retirees Covered by Net Assets *	60.7%	52.0%	54.5%	8.7 %	(2.5) %
Prior Year's Benefit Payments for Retirees	2,951,495,528	2,951,495,528	2,805,740,059	0.0 %	5.2 %
Ratio of Assets to Benefit Payments for Retirees ^	8.7	8.7	8.9	0.0 %	(2.2) %
Ratio of Net Assets to Benefit Payments for Retirees ^	5.6	5.6	5.9	0.0 %	(5.1) %
Ratio of AAL to Benefit Payments for Retirees ^	9.3	10.8	10.8	(13.9) %	0.0 %

* Percentage is limited to 100%.
** Accumulated active and inactive member contributions.
^ Does not include impact of future investment income, member and State contributions, and increases in benefit payments.

B. General Comments

This report summarizes the revised results of the actuarial valuation of the Teacher's Pension and Annuity Fund (TPAF) as of June 30, 2010. This revised valuation reflects the adoption of Chapter 78, P.L. 2011. There are many provisions in this legislation impacting the benefits received from and contributions made to TPAF. Some provisions will have an immediate impact on the revised June 30, 2010 actuarial valuation results while other provisions will first impact actuarial valuation results in future years. The exhibits shown on pages 1 - 8 compare the results of revised June 30, 2010 actuarial valuation with the original valuation.

Provisions with Immediate Impact on Actuarial Valuation Results

- Effective July 1, 2011, additional pension adjustment benefits (COLAs) for all current and future retirees will cease
- Effective October 1, 2011, the employee contribution rate will increase from 5.5% to 6.5% of compensation, and then increase by 1/7 of 1% each July 1 thereafter, until an ultimate rate of 7.5% is attained on July 1, 2018
- The amortization method is changed to a level dollar method from level percent of pay

These changes resulted in a significant reduction in the actuarial accrued liability of $8,173.4 million or 14.4%. The funded ratios of the system increased from 45.5% to 53.2% on a market value basis and from 58.6% to 68.4% on an actuarial value basis. These revised results are primarily due to the elimination of the COLAs. Previous actuarial valuations included the present value of expected pension adjustments to active, retired and deferred vested member's retirement benefits. Chapter 78 eliminated any increases in pension adjustments after July 1, 2011. Please note that Chapter 78 does provide for the possibility of re-establishing pension adjustments in future years once the Target Funded Ratio is attained. This feature is discussed further below.

These changes also resulted in a decrease in the full statutory contribution for the fiscal year ending June 30, 2012 of $176.4 million or 8.1%. The statutory contribution continues to be phased-in over a 7-year period according to Chapter 1, P.L. 2010 beginning with the fiscal year ending June 30, 2012. The reduction in the phased-in contribution is $25.2 million. This is primarily due to the elimination of the

B. General Comments (continued)

COLAs offset by the change in the amortization method from level percent of pay to level dollar.

A 30-year level percent of pay amortization method results in an amortization payment that is less than the interest on the unfunded liability. This results in an increase in the unfunded liability. Therefore if the amortization period continues to be reset to 30 years each year, the unfunded liability will continue to increase even if full accrued liability contributions are made. A level dollar amortization results in an amortization payment greater than interest on the unfunded liability. If the full amortization payment is made, the unfunded liability would be expected to decrease assuming no other gains or losses. This change in the amortization method increased the amortization payment by 67%.

Provisions Impacting future Actuarial Valuation Results

- The unreduced retirement age would be increased to age 65 for members hired on or after June 28, 2011
- For members hired on or after June 28, 2011, the eligibility for early retirement would be increased to 30 years of service. The early retirement reduction factors will be 3% per year from age 65
- The maximum amortization period will be reduced by 1 each year beginning with the June 30, 2019 valuation (2021 fiscal year), but not less than 20 years attained with the June 30, 2028 valuation (2030 fiscal year)
- Additional employee contributions in excess of 5.5% of compensation would not be used to offset the State's contribution. Although this provision is not included in Chapter 78, it is our understanding that the State's intention is to utilize this provision in the State's contribution determination. This provision would first be reflected in the 2011 actuarial valuation.

The changes affecting new members hired after July 1, 2011 would first be reflected in the 2012 actuarial valuation as that will be the first valuation that includes data for members hired after July 1, 2011.

The reduction in the amortization period and excluding any employee contributions in excess of 5.5% will increase the statutory contributions in future years, thus improving the funded status of the system over time.

SECTION I - SUMMARY
(continued)

B. General Comments (continued)

Miscellaneous Provisions

- Each member of TPAF will have a contractual right to the annual required contribution made by the employer requiring the contribution to be made timely to help ensure the retirement system is securely funded
- Upon attainment of the target funded ratio, a new pension committee will be formed to review possible changes to member contributions, retirement benefits including eligibility conditions, and with priority consideration, reactivation of pension adjustment benefits

The Target Funded Ratio (TFR) is defined as the ratio of the Actuarial Value of Assets to the Actuarially Accrued Liability and equals 75% for fiscal year 2012 (June 30, 2010 actuarial valuation) increasing to 80% in equal increments over the following 7 years. Once the TFR is attained, a special pension committee will be formed and have the authority to modify member contribution rates, calculation of final compensation, benefit formula, eligibility conditions and benefits provided for disability retirement. Also, the committee shall give priority consideration to reactivating pension adjustment benefits. The committee may modify the basis for the calculation of the adjustment and set the duration and extent of the reactivation. No decision of the committee will be implemented if the system's funded ratio falls below the TFR in any projected valuation period during the 30 years following implementation.

Provisions Not Included in Chapter 78, P.L. 2011

The Administration's original proposal released in the fall of 2010 regarding pension reform included a reduction in the investment return assumption from 8.25% to 7.5%. This assumption is set by the State Treasurer and the reduction was not included in Chapter 78, P.L. 2011. Based on our most recent analysis, the current assumption of 8.25% is outside our reasonable range. We recommend a reduction in the assumption. A reduction in the assumption would increase the actuarial accrued liability and the statutory contributions and would decrease the funded ratio.

SECTION I - SUMMARY
(continued)

B. General Comments (continued)

GASB Annual Required Contribution
Chapter 92, P.L. 2007 states that the System shall use consistent and generally accepted actuarial standards as established by GASB for the purpose of determining asset values, obligations and employer contributions. However, the System's contribution requirements, which are defined in NJ State statute, differ from the GASB compliant figures that are shown in this report. Also, current budgetary practices do not assess interest on contributions to reflect payment after the start of the fiscal year to the date paid. Page 4 contains a Summary Exhibit on the Annual Required Contribution (ARC) per GASB 25 and 27. GASB 25 and 27 do not allow the use of a term cost funding method for the non-contributory group life insurance (NCGI). Furthermore, since the contributory group life insurance is provided through TPAF, an actuarial cost for these benefits is included in the ARC. Expected employee contributions of 0.4% of pay offset the normal cost portion of the contributory group life insurance. For the 2007 and later fiscal years, the ARC includes an actuarial determination of the cost of the non-contributory and contributory group life insurance. The ARC in prior years included the term cost for the non-contributory group life insurance.

The revised ARC for the 2012 fiscal year is $2,269.8 million, which is $224.3 million or 11.0% higher than the sum of the required statutory pension contribution of $2,009.8 million and the estimated non-contributory group life insurance term cost of $35.7 million for a total of $2,045.5 million. Due to Chapter 78, the ARC for the 2012 year has decreased $234.6 million or 9.4%.

Statutory Contributions
The statutory contribution requirements are highlighted on Summary Exhibits shown on pages 3 (pension only) and 5 (pension, NCGI and ERI). Included on these exhibits is our understanding of the effect of the fiscal year 2011 State budget resolution on contributions to the system for the 2011 and 2012 fiscal years. These exhibits are discussed in detail in the paragraphs below.

The required statutory pension contribution is $2,009.8 million for the State's 2012 fiscal year. This contribution consists of the Normal Contribution ($525.0 million), the Additional Formula Contribution ($95.2 million) and the Accrued Liability Contribution ($1,389.6 million). Chapter 92 P.L. 2007 eliminated the use of any Excess Assets to offset the pension normal cost in determining the Normal

B. General Comments (continued)

Contribution. Chapter 133 P.L. 2001 established the Benefit Enhancement Fund (BEF) to reduce the State's Additional Formula Normal Contribution. As of June 30, 2010, there are no assets in the BEF so no offset occurred and there are no Excess Assets as of July 1, 2010, so no assets will be transferred to the BEF as of that date.

In addition to the pension contribution, the estimated non-contributory group life payment is $35.7 million and the ERI-3 contribution is $2.75 million for the State's 2012 fiscal year.

The summary exhibit on Page 3 reflects our understanding of the effect of the fiscal year 2011 State budget resolution on these contributions to the system for the 2011 and 2012 fiscal years as outlined below:

- For the 2011 fiscal year, the State did not appropriate any portion of the $1,826.7 million pension contribution or the $1.7 million ERI-3 contribution. The actual amount of the non-contributory group life insurance claims of $30.7 million was appropriated.

- Since an appropriation to cover the 2011 fiscal year pension contribution ($1,826.7 million) was not made, this increases the Unfunded Actuarial Accrued Liability as of July 1, 2010 by $1,826.7 million resulting in an increase in the 2011 fiscal year Accrued Liability Contribution of $111.0 million. The accumulated value of statutory pension contributions, excluding ERI-3 contributions, not appropriated by the State in fiscal years 2004 through 2011 equals $7,539.2 million. The Unfunded Actuarial Accrued Liability as of July 1, 2010 is $15,281.5 million.

- For the 2012 fiscal year, Chapter 1, P.L. 2010 requires 1/7th or approximately 14.3% of the statutory pension contribution of $2,009.8 million and the combined ERI-3 and ERI-5 contributions of $2.8 million to be appropriated. This amounts to $287.1 million for the pension contribution plus $0.4 million for the ERI contribution. In addition, it is anticipated that the State will appropriate an amount to cover the non-contributory group life insurance claims (NCGI est. $35.7 million). In displaying the results of this actuarial valuation, we have not reduced the contribution otherwise due under statute to reflect the expectation that funds will not be appropriated.

B. General Comments (continued)

Actuarial Value of Assets

As mandated by statute, only 20% of the difference between the expected actuarial value of assets and the market value is recognized in calculating the actuarial value of assets each year. Due to the significant drop in the financial markets since 2007, the actuarial value of assets as of June 30, 2010 is 129% of market value, which is a decrease from the prior year's ratio of 139%. Section III(G) shows the impact of using the market value of assets to determine the statutory pension contribution instead of the actuarial value.

Actuarial Accrued Liability

Due to Chapter 78, the actuarial accrued liability excludes any additional actuarial liability due to pension adjustment benefits for actives, retirees, terminated vested members and beneficiaries that would have been provided after July 1, 2011. It excludes the actuarial liability associated with the group life insurance benefits and post retirement medical benefits. The State will appropriate funds to cover the actual amount of the non-contributory group life insurance claims. The post retirement medical benefits are no longer financed through TPAF. The liabilities are based on the assumptions adopted in the 2009 Experience Study.

Normal Cost

For purposes of calculating employer contributions, the portion of the normal cost attributable to the pension adjustment benefits for active members is reflected separately. Since Chapter 78 eliminated the pension adjustment benefits, this portion of the normal cost has been eliminated.

Unfunded Actuarial Accrued Liability

The unfunded Actuarial Accrued Liability decreased by $3,428.8 million from $18,710.3 million as of July 1, 2009 to $15,281.5 million as of July 1, 2010 reflecting Chapter 78. The following table summarizes the reasons for the decrease in the unfunded liability.

B. General Comments (continued)

Unfunded Liability as of June 30, 2009	$18,710.3
Chapter 78, P.L. 2011	(8,173.4)
Impact of 2009 Experience Study	1,170.7
Pension Contribution Less than State Appropriation for Prior Year	67.6
State Appropriation Less than Statutorily Required	1,826.7
Phase-in of Pension Adjustment Benefits	69.2
Amortization Payment Less/(More) than Interest Accrual	406.4
Actuarial Loss/(Gain)	1,244.2
Member Contributions Less/(More) than anticipated	(40.2)
Total Change in Unfunded Liability	$(3,428.8)
Unfunded Liability as of June 30, 2010	$15,281.5

Funded Ratio

The funded ratio as of June 30, 2010 based on the actuarial value of assets is 68.4%. Since this is lower than the Target Funded Ratio for the 2012 fiscal year of 75%, no adjustments may be made to the benefits of the system. On a market value basis, the funded ratio is 53.2%. Since July 1, 2001, the funded ratio on a market value basis has decreased 41.1%. This decrease is primarily due to investment losses experienced over the period, State contributions less than the GASB Annual Required Contribution and the strengthening of actuarial assumptions offset slightly by Chapter 78, P.L. 2011.

As of June 30, 2010, the market value of assets is below the actuarial liability attributable to retirees due to significant investment losses during fiscal years 2008 and 2009 and State contributions significantly less than the statutorily required contribution. However, the liability attributable to retirees decreased significantly due to Chapter 78 eliminating pension adjustment benefits. Including all assets, the funded ratio is 94.1%. If the assets contained in the Annuity Savings Fund (ASF) are excluded, the funded ratio of the remaining market value of assets to the actuarial accrued liability for retirees is 60.7%.

As of June 30, 2010, the ratio of market value of assets to the prior year's benefit payments is 8.7. This is a simplistic measure of the number of years that the assets

B. General Comments (continued)

can cover benefit payments, excluding: investment income, State and member contributions, and future increases in those payments. Due to the elimination of the pension adjustment benefits under Chapter 78, this ratio is now closer to the accrued liability ratio of 9.3 for retirees. If ASF assets are excluded, since they represent accumulated contributions from active and inactive members, the ratio is 5.6.

Actuarial Gain/(Loss) Analysis

TPAF experienced an actuarial loss of $1,244.2 million during the period July 1, 2009 to June 30, 2010 based on the actuarial assumptions adopted in the 2006 Experience Study. This loss is approximately 2.2% of the Actuarial Accrued Liability as of June 30, 2010. The major factors contributing to this loss are summarized below and are compared to the experience for the prior two plan years.

		Gain/(Loss) *(Amounts in Millions)*	
	June 30, 2010	June 30, 2009	June 30, 2008
Economic Factors:			
Investment Return	$(1,843.2)	$(2,433.5)	$(1,045.7)
Salary Increases	188.3	230.0	20.1
Pension Adjustments (COLA)	587.5	(286.0)	125.2
Expenses	(12.2)	(13.2)	(14.3)
Demographic Factors:			
Active Members	(78.9)	(34.5)	(82.8)
New Entrants	(47.7)	(61.7)	(58.0)
Non-Contributing Members	(28.0)	(29.4)	(28.4)
Retirees and Beneficiaries	(10.0)	(75.0)	(47.3)
Total	(1,244.2)	(2,703.3)	(1,131.2)

Total pension assets earned investment returns of approximately 13.83% on a market value basis and 2.74% on an actuarial value basis for the period ending June 30, 2010. The determination of the approximate rate of return on the market value of assets is based on all assets of the fund including receivables and payables in addition to the investment holdings. This will result in a different rate of return reported by the Division of Investments. The resulting loss to the plan of $1,843.2

SECTION I - SUMMARY
(continued)

B. General Comments (continued)

million represents the shortfall in the actuarial value of assets relative to the 8.25% assumed investment return.

Salary increases for contributory members who were active on both July 1, 2009 and July 1, 2010 averaged 4.81% versus expected salary increases of 5.97% resulting in an actuarial gain of $188.3 million. Salaries for new entrants averaged $49,014, which is significantly below the average salary of all contributory members of $69,402. This resulted in the average salary of all contributory members increasing by 2.9% over last year, with total contributory payroll also growing by 2.9%.

For annuitants receiving benefits since 2007, the pension adjustments were based on no CPI increase for the prior year, which is lower than the 3.0% actuarial assumption for CPI increases. This resulted in an actuarial gain of $587.5 million.

SECTION I - SUMMARY
(continued)

C. Discussion of Supporting Exhibits

Assets

Section II summarizes the System assets taken into account in the preparation of the actuarial valuation. Subsection A summarizes the market value of System assets as of June 30, 2010 and includes the present value of expected contributions from State and local employers for ERI and Terminal Funding retirements as of June 30, 2010.

Subsection B reconciles the development of the market value of pension assets starting from the market values as of June 30, 2009, which reflects a reduction in the State contribution for fiscal year 2010 from the prior valuation report. Subsection C summarizes the development of the actuarial value of pension assets as of July 1, 2010. The exhibit reflects the growth in the pension assets based on the expected investment income at an assumed rate of 8.25% adjusted to reflect 20% of the difference between the market value of pension assets as of the valuation date and the expected actuarial value.

Subsection D estimates the annual rate of return for the year ending June 30, 2010 on the actuarial value and the market value of pension assets. Subsection E summarizes the estimated annual rates of return for the five previous plan years. The 5-year compounded annual return on the actuarial value of assets and the market value of assets are 4.36% and 3.56%, respectively.

Actuarial Liabilities and Contributions

Section III summarizes the actuarial liabilities and the development of the required State contribution for the plan year beginning July 1, 2010. The State is statutorily required to make three contributions, a Normal Cost Contribution, an Accrued Liability Contribution and an Additional Formula Normal Cost Contribution, which in general are determined under the Projected Unit Credit funding method. The Normal Cost and Additional Formula Normal Cost under the Projected Unit Credit funding method is defined as the present value of the benefits attributed to the current year. The Unfunded Accrued Liability (Surplus) is determined as the difference between the Actuarial Accrued Liability used to develop contributions and the Adjusted Actuarial Value of Assets (excludes the BEF). The actuarial liabilities

C. Discussion of Supporting Exhibits (continued)

used to develop contributions reflect the assumptions developed in the 2009 Experience Study and the economic assumptions prescribed by the State Treasurer.

Subsection A summarizes the development of the Actuarial Accrued Liability as of July 1, 2010 for all current members and indicates the portion of those present values attributable to active participants, retirees and beneficiaries, and terminated vested participants. These liabilities include the liability for pension adjustment benefits provided to members prior to July 1, 2011. The non-contributory lump sum death benefits payable from active service, terminated vested status and retiree status have been excluded from the Actuarial Accrued Liability since those benefits are funded on a term cost basis. Projected benefits based on compensation in excess of the 401(a)(17) compensation cap for a group of grandfathered employees for certain School Districts under Chapter 113, P.L. 1997 have been included in the determination of the Accrued Liability.

Subsection B summarizes the development of the pension Normal Cost under the 1/60 and 1/55 formulas payable July 1, 2010. The schedule shows the portion of the Normal Cost attributable to: (1) the basic allowances and (2) pension adjustment benefits for active members (which have been eliminated due to Chapter 78) and (3) expected member contributions. The Normal Cost as of July 1, 2010 was developed based on the Projected Unit Credit Method. Projected benefits based on compensation in excess of the 401(a)(17) compensation cap for a group of grandfathered employees for certain School Districts under Chapter 113, P.L. 1997 have been included in the determination of the Normal Cost.

Subsection C summarizes the Actuarial Accrued Liability and Gross Pension Normal Cost (1/55 formula) for active contributory members by employee type as of July 1, 2010.

Subsection D summarizes the development of the Excess Valuation Assets which are $0 as of July 1, 2010. The Excess Valuation Assets are determined by subtracting the Actuarial Accrued Liability for basic allowances and pension adjustment benefits, the Post Retirement Medical Premium Fund, the present value of the total projected normal cost in excess of the projected phased-in normal cost for pension adjustment benefits of active members and the BEF (prior to reduction

C. Discussion of Supporting Exhibits (continued)

for the additional formula normal contribution for fiscal year 2012) from the Valuation Assets.

Subsection E summarizes the development of the BEF as of July 1, 2010 and the Additional Formula Normal Contribution. Chapter 133, P.L. 2001 established the BEF as of June 30, 1999. The BEF is $0 as of June 30, 2010. The BEF is credited with excess assets not to exceed actual member contributions made to the system nor the present value of expected additional normal costs due to the formula change. Since there are no excess assets, there is no contribution to the BEF. Since the BEF is $0, there is no offset to the additional formula normal cost.

Subsection F summarizes the development of the State's estimated fiscal year 2012 Statutory Required Contributions to TPAF comprising three components: pension, non-contributory group life insurance, and ERI. The total pension contribution of $2,009,810,329 equals the Normal Contribution of $525,052,954 based on the 1/60 formula plus the Additional Formula Normal Contribution of $95,200,632 plus the Accrued Liability Contribution of $1,389,556,743. The non-contributory group life insurance contribution represents a one year term cost of lump sum death benefits payable during active service, terminated vested status and retiree status and is estimated to be $35,730,000. The State's combined ERI-3 and ERI-5 contributions are $2,751,595. The total Statutory Required Contribution for the State's fiscal year 2012 is estimated to be $2,048,291,924. This is an estimate because the State will contribute the actual 2012 fiscal year non-contributory group life insurance benefits, not the estimated amount shown above. For the 2012 fiscal year, Chapter 1, P.L. 2010 requires the State to contribute 1/7th of the pension and ERI portions of the contribution. Combined with the estimated contribution for the non-contributory group life insurance benefits, the expected amount to be appropriated is $323,238,846.

Subsection G shows the Statutory Required Contribution as a percentage of appropriation payroll on two bases: (1) on a statutory basis – 20.41% and (2) as if the Market Value of Assets were used to determined the Accrued Liability Contribution – 27.10%. The latter figure is an estimate of the percentage of payroll that would need to be contributed each year for the next 30 years in order to fully amortize the unfunded actuarial pension liability assuming no gains or losses and a closed (amortization period is reduced by one year each year) amortization method.

C. Discussion of Supporting Exhibits (continued)

Subsection H summarizes these contributions as a percentage of appropriation payroll for the five previous fiscal years.

Subsection I shows the fiscal year 2012 Statutory Required Contribution based on the 1/60 formula, the Additional Formula Contribution after application of the BEF, the Accrued Liability Contribution and the estimated non-contributory group life insurance contribution payable by the State and certain State Colleges. It does not reflect the phase-in under Chapter 1, P.L. 2010. The State's contribution is allocated between the Department of Higher Education, Department of Education, County Colleges, Charter Schools and other.

Subsection J shows the calculation of the total actuarial gain (loss). The general comments section outlines the areas where experience differed from that expected.

Actuarial Balance Sheet

Section IV provides the actuarial balance sheet summarizing the assets and liabilities by Fund as of June 30, 2010. The assets credited to the various funds include the portion of the investment income allocated to each fund for the year and ending June 30, 2010. The actuarial value of assets is used as the basis for the balance sheet. Note that the actuarial value of assets is 29% higher than market value. The liabilities presented are based on the actuarial accrued liabilities summarized in Section III without any phase-in adjustments.

The actuarial balance sheet indicates the following transfers should be made:

(1) Retirement Reserve Fund

When a member retires, or when he dies and an allowance is payable to his beneficiary, the allowance including cost-of-living adjustments is paid from the Retirement Reserve Fund. The member's own contributions with interest are transferred from the Annuity Savings Fund, and the balance of the reserve on the total allowance is transferred from the Contingent Reserve Fund. As of June 30, 2010, the Retirement Reserve Fund has present assets of $31,300,789,254 including accrued interest. The liabilities of the fund amount

C. Discussion of Supporting Exhibits (continued)

to $27,384,960,948 so that there is a credit of $3,915,828,306 in the fund as of the valuation date. New Jersey statute states that the fund be put in balance as of June 30, 2010 by a transfer of assets from the Contingent Reserve Fund, and this transfer is shown in the balance sheet.

(2) Pension Fund

The reserves held in the Pension Fund represent the reserves on retirement allowances payable to non-veteran members who retired prior to 1956. As of June 30, 2010, the Pension Fund has assets credited to it amounting to $136,373 including accrued interest. The liabilities of the fund amount to $67,592 so that there is a surplus of $68,781 in the fund as of the valuation date. It is recommended that the fund be put in balance as of June 30, 2010 by a transfer of assets to the Contingent Reserve Fund, and this transfer is shown in the balance sheet.

(3) Annuity Savings Fund and Contingent Reserve Fund

The Annuity Savings Fund, which is the fund to which members' contributions with interest are credited, has assets amounting to $9,151,924,963 as of June 30, 2010 after accrued interest has been added. The Contingent Reserve Fund is the fund to which contributions made by the State and local employers to provide the benefits paid from retirement fund monies are credited. The assets creditable on an actuarial value basis to the Contingent Reserve Fund amount to $(3,400,477,873) as of June 30, 2010 after adjustment is made on account of accrued interest and the amounts transferable from the Retirement Reserve Fund and the Pension Fund. If a market value basis was used, assets creditable to the Contingent Reserve Fund after transfers would amount to $(10,773,308,667).

If a member withdraws from active service before qualifying for retirement, the amount of his accumulated deductions is paid to him from the Annuity Savings Fund. If he dies before retirement and no survivorship benefit is payable, his accumulated deductions are paid to his beneficiary from the Annuity Savings Fund. If he retires, or if he dies leaving a beneficiary eligible for a survivorship benefit, his accumulated deductions are transferred from the Annuity Savings

C. Discussion of Supporting Exhibits (continued)

Fund to the Retirement Reserve Fund, and the reserve on the allowance which is not provided by his own deductions is transferred from the Contingent Reserve Fund to the Retirement Reserve Fund. Any lump sum benefit payable upon the death of a member before or after retirement is paid by The Prudential Insurance Company of America.

(4) Benefit Enhancement Fund

The reserves held in the BEF are used to fund the additional formula normal contributions. The BEF is credited with excess assets not to exceed actual member contributions made to the system nor the present value of the expected additional formula normal contributions. No additional excess assets will be credited to the BEF after the maximum amount is attained. If excess assets permit, monies are transferred from the Contingent Reserve Fund. As of June 30, 2010, the BEF has no assets.

(5) Special Reserve Fund

The Special Reserve Fund is the fund to which any excess interest earnings are transferred and against which any losses from the sale of securities are charged. The maximum limit on the accumulations in this fund is set at one percent of the market value of the investments of the retirement fund; any amounts in excess of this limit are creditable to the Contingent Reserve Fund. The Special Reserve Fund is considered as an asset of the retirement fund. This fund has assets amounting to $0 as of June 30, 2010.

Accounting Information

Section V presents the accounting information required under Governmental Accounting Standards Statement No. 25 (GASB 25). Schedule A outlines the development of the Annual Required Contribution (ARC). The ARC comprises the employer's normal cost plus a specified amortization of the unfunded actuarial accrued liability (UAAL). For 2012 and later fiscal years (2010 and subsequent valuations), the amortization method selected for this system is an open level dollar method (level percentage of projected payroll based on an assumed payroll growth rate of 4.0% was used prior to the 2012 fiscal year) for 30 years. For fiscal years

C. Discussion of Supporting Exhibits (continued)

2021 and later (2019 and subsequent valuations), the amortization period will close until the period reaches 20 years.

For 2007 and later fiscal years (the 2005 and subsequent valuations), an actuarial determination of the cost for non-contributory and contributory group life insurance benefits is included in the calculation since these benefits are paid from TPAF. Prior years included a term cost for the non-contributory group life insurance and excluded the contributory group life insurance. The portion of the ARC for the 2012 fiscal year attributable to group life insurance benefits is $94.2 million. The total ARC for the 2012 fiscal year is $2,269.8 million.

Schedule B shows the Net Pension Obligation (NPO) as of June 30, 2011 and a projected estimate as of June 30, 2012. The NPO represents the cumulative difference between the Annual Pension Costs for the system and the contributions made. After the actual contribution of $30.7 million for fiscal year 2011 and expected contribution of $322.8 million for fiscal year 2012, the NPO as of June 30, 2012 is expected to be $11,965.6 million.

Schedule C is the Schedule of Funding Progress. This schedule presents the Actuarial Accrued Liability, the Actuarial Value of Assets, the Unfunded Accrued Liability, the funded ratio (assets as a percentage of Actuarial Accrued Liability), and the Unfunded Accrued Liability as a percentage of covered payroll. Six years of historical information are shown in compliance with GASB 25.

Schedule D is the Schedule of Employer Contributions. This schedule presents the ARC for the fiscal year, the employer contributions made for that fiscal year and the percentage of the ARC those contributions represent. For the fiscal year ending June 30, 2011 the employer contributions are 1.4% of the ARC and for the fiscal year ending June 30, 2012, the expected employer contributions are 14.2% of the ARC. Six years of historical information are shown in compliance with GASB 25. Schedule E presents the funding policy for the fiscal year. This disclosure includes the valuation date, the Actuarial Cost Method, the amortization period and method, the Asset Valuation Method, and certain key actuarial assumptions.

SECTION I - SUMMARY
(continued)

C. Discussion of Supporting Exhibits (continued)

Census Data

Section VI summarizes the census data provided by the Division of Pensions and Benefits and utilized in the preparation of the actuarial valuation. Subsection A provides a reconciliation of the current year participant counts from the prior valuation. Subsection B shows the appropriation count and salary information by group. Subsection C shows the number and annual retirement allowances with pension adjustments by beneficiary type. Subsection D shows information on members who retired since the last valuation split between those who retired with less than and more than 25 years of service. Subsection E shows the average age and average pension at retirement for retired members, disabled members, and beneficiaries. Subsections F and G present a profile of Contributory and Non-contributory members split by gender, summarized by 5-year age and service groupings. Subsection H provides a profile of terminated vested members, retired members, disabled members, and beneficiaries broken down into 5-year age categories. The census data represents the status of plan participants as of June 30, 2010.

In performing this analysis, we relied, without audit, on census data, plan provisions, asset statements and other information (both written and oral) provided by the State of New Jersey Division of Pensions and Benefits. We have not audited or verified the census data, asset statements or other information. To the extent any of these are inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Actuarial Assumptions and Methods

Section VII summarizes the actuarial assumptions and methods utilized in the preparation of this actuarial valuation. Subsection A identifies the various

C. Discussion of Supporting Exhibits (continued)

assumptions. These assumptions are based on the assumptions developed in the Experience Study from July 1, 2006 to June 30, 2009 and the economic assumptions prescribed by the Treasurer. Subsection B summarizes the actuarial valuation methodology set forth in Chapter 62, P.L. 1994 as modified by Chapters 115, P.L. 1997, 133, P.L. 2001, 92 P.L. 2007 and 78 P.L. 2011.

Future actuarial measurements may differ significantly from the current measurements presented in this analysis due to actual plan experience deviating from the actuarial assumptions, and changes in plan provisions, actuarial assumptions, and applicable law. An assessment of the potential range and cost effect of such differences is beyond the scope of this analysis.

<u>Summary of Principal Plan Provisions</u>

Section VIII summarizes the principal plan provisions as of the valuation date and denotes any changes from the previous valuation.

<u>Early Retirement Incentive Contribution Schedule</u>

Appendix I presents the contribution schedule for the early retirement incentive programs (ERI-1, ERI-2, ERI-3, ERI-4 and ERI-5) by location for the 2012 fiscal year. It also provides the present value of the future contributions as of June 30, 2010. This list reflects locations who paid off their ERI liabilities through June 2010 as a result of Chapter 42, P.L. 2002.

SECTION II - ASSETS

A. Market Value of Assets as of June 30, 2010

1. Assets		
Cash	$	5,951,038
Investment Holdings		25,523,359,755
Employers' Contributions Receivable - NCGI		3,492,134
Employers' Contributions Receivable - State		27,954,073
Employers' Contributions Receivable - Local		37,887,500
Employers' Contributions Receivable - Delayed Enrollments		307,773
Employers' Contributions Receivable - Delayed Appropriations		4,853,395
Members' Contributions Receivable		78,257,903
Accrued Interest on Investments		122,527,513
Accounts Receivable		4,159,840
Loans Receivable		217,644,202
Dividends Receivable		27,062,423
Total	$	26,053,457,549
2. Liabilities		
Pension Payroll Payable	$	186,006,996
Pension Adjustment Payroll Payable		31,363,384
Withholdings Payable		32,634,007
Death Benefits Payable		3,492,134
Net Securities Lending Collateral		(57,163)
Accounts Payable - Other		36,373,355
Total	$	289,812,713
3. Market Value of Assets as of June 30, 2010: (1) - (2)	$	25,763,644,836
4. FY 2011 Receivable Contributions from State		0
5. Adjusted Market Value of Assets as of June 30, 2010: (3) + (4)	$	25,763,644,836

SECTION II - ASSETS
(continued)

B. Reconciliation of Market Value of Assets from June 30, 2009 to June 30, 2010

		Pension
1. Market Value of Assets as of June 30, 2009	$	24,973,886,910
2. Increases		
Member Contributions excluding transfers from Other Systems	$	568,982,774
Member Transfer Contributions		5,587,855
Other Employer Contributions including Transfers From Other Systems, Delayed Appropriations and Delayed Enrollments		4,939,478
State and Local Appropriations *		(29,199,999)
Investment Income		3,278,245,048
Total	$	3,828,555,156
3. Decreases		
Withdrawal of Member Contributions and Transfer Contributions	$	41,945,222
Retirement Allowances		2,573,053,408
Pension Adjustment Benefits		378,442,120
Death Benefit Claims		33,199,655
Administrative Expense		12,156,825
Medical Benefits and Expenses		0
Total	$	3,038,797,230
4. Market Value of Assets as of June 30, 2010: (1) + (2) - (3)	$	25,763,644,836
5. FY 2011 Receivable Contributions from State		0
6. Adjusted Market Value of Assets as of June 30, 2010: (4) + (5)	$	25,763,644,836

* Includes reduction in State Contribution for fiscal year 2010

SECTION II - ASSETS
(continued)

C. Development of Actuarial Value of Assets as of July 1, 2010

1. Actuarial Value of Pension Assets as of July 1, 2009	$ 34,708,001,341
2. Net Cash Flow without Investment Income	(2,488,487,122)
3. Investment Income at Actuarially Assumed Rate @ 8.25%	2,760,169,110
4. Receivable Contributions from State and Local Employers	0
5. Expected Actuarial Value of Pension Assets: (1) + (2) + (3) + (4)	34,979,683,329
6. Adjusted Market Value of Pension Assets as of June 30, 2010	25,763,644,836
7. Excess Market Value over Expected Actuarial Value Assets: (6) - (5)	(9,216,038,493)
8. 20% mark-up to reflect growth in Market Value: 20% x (7)	(1,843,207,699)
9. Actuarial Value of Pension Assets as of July 1, 2010: (5) + (8)	$ 33,136,475,630
10. Pension Actuarial/Market Value Ratio: (9) / (6)	128.6%

SECTION II - ASSETS
(continued)

D. Estimated Annual Rate of Return for year ending June 30, 2010

	Pension Actuarial Value	Pension Market Value
1. Value of Assets as of July 1, 2009	$ 34,708,001,341	$ 24,973,886,910
2. Employee Contributions	579,510,107	579,510,107
3. State and Local Appropriations	(29,199,999)	(29,199,999)
4. Receivable Contributions - State and Local Employers	0	0
5. Benefit Payments and Expenses	3,038,797,230	3,038,797,230
6. Value of Assets as of June 30, 2010	33,136,475,630	25,763,644,836
7. Non-Investment Increment: (2) + (3) - (5)	(2,488,487,122)	(2,488,487,122)
8. Investment Increment: (6) - (1) - (4) - (7)	916,961,411	3,278,245,048
9. Time Weighted Value: (1) +.5 x (7) *	33,432,557,953	23,698,443,522
10. Estimated Annual Rate of Return: (8) / (9)	2.74%	13.83%

* Reflects timing adjustment on State contribution reduction for fiscal year 2010

E. Estimated Historical Rates of Return

Plan Year Ending	Actuarial Value	Market Value
June 30, 2010	2.74%	13.83%
June 30, 2009	1.36%	-16.29%
June 30, 2008	5.31%	-2.27%
June 30, 2007	7.15%	15.95%
June 30, 2006	5.35%	10.30%
5-Year Compounded Annual Rate of Return	4.36%	3.56%

SECTION III - LIABILITIES AND CONTRIBUTIONS

A. Actuarial Accrued Liability as of July 1, 2010 - 1/55th Formula

1. Projected Benefits Payable to Beneficiaries and Retirees	
Service Retirees (Including ERI Benefits)	$ 25,935,138,628
Disability Retirees	595,578,431
Beneficiaries	854,311,481
Total	$ 27,385,028,540
2. Projected Benefits for Vested Terminated Members	50,627,559
3. Projected Benefits for Non-Contributory Members	$ 569,656,651
4. Projected Benefits for Active Members	
Service Retirement	$ 19,392,480,898
Ordinary Disability Retirement	405,964,576
Accidental Disability Retirement	23,686,025
Return of Members' Contributions - Death	74,910,480
Return of Members' Contributions - Withdrawal	129,474,457
Deferred Retirement	386,103,159
Pension Adjustment Benefits	0
Total	$ 20,412,619,595
5. Total Pension Accrued Liability: (1) + (2) + (3) + (4)	$ 48,417,932,345

SECTION III - LIABILITIES AND CONTRIBUTIONS
(continued)

B. Development of Normal Cost payable July 1, 2010

	1/60th Formula	1/55th Formula
1. Basic Allowances	$ 1,019,891,302	$ 1,107,836,459
2. Pension Adjustment Benefits for active members		
a. Full Amount of Pension Adjustment Benefits	0	0
b. Phase-in Percentage	62.94%	N/A
c. Phased-in Amount of Pension Adjustment Benefits	0	N/A
3. Gross Pension Normal Cost		
a. Full Amount of Pension Normal Cost: (1) + (2a)	$ 1,019,891,302	$ 1,107,836,459
b. Phased-in Amount of Pension Normal Cost for Contribution Purposes: (1) + (2c)	1,019,891,302	N/A
4. Expected Member Contributions	534,853,931	534,853,931
5. Net Pension Normal Cost		
a. Full Amount of Net Pension Normal Cost: (3a) - (4)	485,037,371	572,982,528
b. Net Phased-in Amount of Pension Normal Cost for Contribution Purposes: (3b) - (4)	485,037,371	N/A

C. Summary of Active Member Actuarial Accrued Liability & Normal Cost payable July 1, 2010

Employee Type	Number of Members	Total Appropriation Salary	Actuarial Accrued Liability	Gross Pension Normal Cost (1/55th Formula)
Class A & B	124,507	$9,020,427,452	$20,213,023,465	$1,024,309,429
Class D	13,277	676,286,358	165,846,084	56,977,572
Class E	6,708	328,687,848	33,750,046	26,549,458
Total	144,492	$10,025,401,658	$20,412,619,595	$1,107,836,459

SECTION III - LIABILITIES AND CONTRIBUTIONS
(continued)

D. Development of Excess Valuation Assets as of July 1, 2010

1. Valuation Assets	$ 33,136,475,630
2. Actuarial Accrued Liability for Basic Allowances & Pension Adjustment Benefits	48,417,932,345
3. Post Retirement Medical Premium Fund	0
4. Present Value of Total Projected Normal Cost in Excess of the Projected Phased-in Normal Cost for Pension Adjustment Benefits	0
5. Benefit Enhancement Fund (prior to reduction for additional formula normal cost)	0
6. Excess Valuation Assets as of July 1, 2010: (1)-(2)-(3)-(4)-(5), not less than $0	$ 0

SECTION III - LIABILITIES AND CONTRIBUTIONS
(continued)

E. Development of Benefit Enhancement Fund and Additional Formula Contribution As of July 1, 2010

1. Benefit Enhancement Fund as of July 1, 2009	$	0
2. Accrued Interest		0
3. Benefit Enhancement Fund as of July 1, 2010		0
4. Additional Formula Normal Cost to be paid by Benefit Enhancement Fund		
a. Gross Normal Cost payable July 1, 2010 - 1/55th Formula (B)(3)(a)		1,107,836,459
b. Gross Normal Cost payable July 1, 2010 - 1/60th Formula (B)(3)(a)		1,019,891,302
c. Additional Formula Normal Cost: (a) - (b)		87,945,157
5. Net Benefit Enhancement Fund Balance as of July 1, 2010 before Fiscal Year 2012 Contribution: (3) - (4c), not less than $0		0
6. State Additional Formula Contribution as of July 1, 2010: (4c) - (3), not less than $0		87,945,157
7. Estimated Fiscal Year 2012 Employee Contributions as of July 1, 2010		513,855,047
8. Limit on Fiscal Year 2012 Contribution to Benefit Enhancement Fund		
a. Present Value of Future Normal Costs as of June 30, 2010 - 1/55th Formula		11,562,848,492
b. Present Value of Future Normal Costs as of June 30, 2010 - 1/60th Formula		10,649,389,281
c. Limit: (a) - (b) - (5)		913,459,211
9. Excess Assets Available (D6)		0
10. Fiscal Year 2012 Allowable Contribution to Benefit Enhancement Fund: Lesser of (7), (8c), (9)	$	0

SECTION III - LIABILITIES AND CONTRIBUTIONS
(continued)

F. Development of State's Fiscal Year 2012 Statutory Required Contributions

1. Net Pension Normal Contribution as of July 1, 2010: B(5)(b)		$ 485,037,371
2. Net Pension Normal Contribution as of June 30, 2011		525,052,954
3. Additional Formula Contribution as of July 1, 2010: E(6)		87,945,157
4. Additional Formula Contribution as of June 30, 2011		95,200,632
5. Accrued Liability Contribution		
a. Actuarial Accrued Liability for Basic Allowances & Pension Adjustment Benefits	$ 48,417,932,345	
b. Adjusted Actuarial Value of Assets (excluding BEF)	33,136,475,630	
c. Reserve for previously earned reductions in Member Contributions	0	
d. Unfunded Pension Accrued Liability: (a) - (b) + (c)	$ 15,281,456,715	
e. 30 - Year Level Dollar Amortization with payments of Unfunded Pension Accrued Liability payable June 30, 2011		1,389,556,743
6. Total Pension Contribution for State's Fiscal Year 2012: (2) + (4) + (5e)		$ 2,009,810,329
7. State's FY 2012 Est. Non-contributory Group Life Insurance Contribution (NCGI)		35,730,000
8. State's Fiscal Year 2012 ERI-3 and ERI-5 Contributions		2,751,595
9. Total State's Fiscal Year 2012 Contribution for Pension, NCGI and ERI: (6) + (7) + (8)		$ 2,048,291,924

SECTION III - LIABILITIES AND CONTRIBUTIONS
(continued)

G. Statutory Required Contribution as a Percentage of Appropriation Payroll

	Percent of Payroll
Basic Allowances Net of Member Contributions - 1/60th Formula	5.24%
Active COLA (Phase-in percentage of 62.94%)-1/60th Formula	0.00%
Additional Formula Normal Cost (after any BEF reductions)	0.95%
Accrued Liability Contribution	13.86%
Total Pension Contribution for State's Fiscal Year 2012	20.05%
Estimated Non-contributory Group Life Insurance Benefits (NCGI)	0.36%
Total State's Fiscal Year 2012 Contribution for Pension and NCGI	**20.41%**
Increases in contribution if:	
COLA fully phased-in	0.00%
No BEF reductions existed	0.00%
Market Value of Assets used to determine the Accrued Liability Contribution	6.69%
Total Increases as a percent of payroll	6.69%
Total Contribution with these increases as a percent of payroll	**27.10%**

H. Historical Statutory Required Contributions as a Percentage of Appropriation Payroll

Fiscal Year Ending	Statutory Pension and NCGI	With Increases Above Included
6/30/2012 (revised valuation)	20.41%	27.10%
6/30/2012 (original valuation)	22.16%	27.33%
June 30, 2011	19.10%	25.88%
June 30, 2010	16.56%	20.02%
June 30, 2009	15.21%	17.03%

SECTION III - LIABILITIES AND CONTRIBUTIONS
(continued)

I. Fiscal Year 2012 Statutory Required Contributions Payable by the State and Certain State Colleges

Group	Normal Contribution (1/60 Formula)	Additional Formula Contribution (After BEF reductions)	Accrued Liability Contribution	Estimated Non-Contributory Group Life Insurance	Total
Certain State Colleges					
NJ Institute of Technology	$7,380	$1,338	$19,530	$502	$28,750
Rowan University	13,749	2,493	36,386	936	$53,564
New Jersey University	29,412	5,333	77,838	2,001	$114,584
Kean University	28,331	5,137	74,978	1,928	$110,374
William Patterson University	37,845	6,862	100,156	2,575	$147,438
Montclair State U. (Group 4)	23,675	4,293	62,656	1,611	$92,235
The College of NJ	12,031	2,181	31,839	819	$46,870
Stockton State College	18,394	3,335	48,681	1,252	$71,662
Total for Certain State Colleges	**$170,817**	**$30,972**	**$452,064**	**$11,624**	**$665,477**
State					
Dept of Higher Education	0	0	0	0	$0
Dept of Education	898,910	162,987	2,378,972	61,171	$3,502,040
County Colleges	125,360	22,730	331,767	8,531	$488,388
Charter Schools	5,970,327	1,082,517	15,800,518	406,282	$23,259,644
Other	517,887,540	93,901,426	1,370,593,422	35,242,392	$2,017,624,780
Total for State	**$524,882,137**	**$95,169,660**	**$1,389,104,679**	**$35,718,376**	**$2,044,874,852**
Total for System	**$525,052,954**	**$95,200,632**	**$1,389,556,743**	**$35,730,000**	**$2,045,540,329**

SECTION III - LIABILITIES AND CONTRIBUTION
(continued)

J. Analysis of Actual Experience for the Year Ended June 30, 2010

1. Unfunded Accrued Liability as of June 30, 2009	$	18,710,327,235
2. Gross Normal Cost as of June 30, 2009		1,220,787,458
3. Interest: ((1) + (2)) * 8.25%		1,644,316,962
4. Employee and Employer Contributions Made with Interest *		535,393,583
5. Expected Unfunded Accrued Liability as of June 30, 2010: (1) + (2) + (3) - (4)	$	21,040,038,072
6. Increase/(Decrease) in liability due to assumption changes		1,170,659,104
7. Increase/(Decrease) in liability due to statutory changes		(8,173,436,399)
8. Expected Unfunded Accrued Liability after changes as of June 30, 2010: (5) + (6) + (7)	$	14,037,260,777
9. Actual Unfunded Accrued Liability as of June 30, 2010		15,281,456,715
10. Gain/(Loss): (8) - (9)	$	(1,244,195,938)

* Includes reduction in State Contribution for fiscal year 2010

TEACHERS' PENSION AND ANNUITY FUND OF NEW JERSEY

SECTION IV - ACTUARIAL BALANCE SHEET AS OF JUNE 30, 2010

Assets		Liabilities	
Retirement Reserve Fund (RRF)		Payable from Retirement Reserve Fund	
Credited to Fund w/ Distribution of Income	$31,300,789,254	Retirees, Disableds and Beneficiaries	
Add/(deduct) reserve transferable from/(to) CRF	(3,915,828,306)	currently receiving benefits	$27,384,960,948
Adjusted Total	27,384,960,948		
Pension Fund (PF)		Payable from Pension Fund	
Credited to Fund w/ Distribution of Income	136,373	Retirees, Disableds and Beneficiaries	
Add/(deduct) reserve transferable from/(to) CRF	(68,781)	currently receiving benefits	67,592
Adjusted Total	67,592		
Annuity Savings Fund (ASF) w/ Distribution of Income	9,151,924,963	Payable from Annuity Savings Fund	
		and Contingent Reserve Fund	
Contingent Reserve Fund (CRF)		Active Members	20,982,276,246
Credited to Fund w/ Distribution of Income	(7,316,374,960)	Term Vested Members	50,627,559
Add/(Deduct) from/(to) RRF, PF & SRF	3,915,897,087	Total	21,032,903,805
Adjusted Total	(3,400,477,873)		
Benefit Enhancement Fund (BEF)	0		
Special Reserve Fund (SRF)	0		
Add/(deduct) reserve transferable from/(to) CRF	0		
Adjusted Total	0		
Total Actuarial Value of Assets as of June 30, 2010	$33,136,475,630		
Present Value of Prospective Contributions to the CRF and BEF for service accrued as of July 1, 2010	15,281,456,715		
Total Assets	$48,417,932,345	Total Liabilities	$48,417,932,345

TEACHERS' PENSION AND ANNUITY FUND OF NEW JERSEY

SECTION V - GASB NO. 25 and 27 ACCOUNTING INFORMATION FOR STATE'S FISCAL YEAR 2012

A. Development of Annual Required Contribution as of June 30, 2012

1. Actuarial Value of Assets as of July 1, 2010		
a. Actuarial Value of Pension Assets	$33,136,475,630	
b. Market Value of Contributory Group Insurance Premium Fund	128,850,997	
c. Actuarial Value of Assets for GASB purposes: (a) + (b)		$33,265,326,627
2. Actuarial Accrued Liability as of July 1, 2010		
a. Actuarial Accrued Liability for pension benefits	$48,417,932,345	
b. Non-contributory and Contributory Group Insurance Benefits	1,125,415,504	
c. Accrued Liability for GASB purposes: (a) + (b)		49,543,347,849
3. Unfunded Accrued Liability as of July 1, 2010: (2c) - (1c)		$16,278,021,222
4. Amortization Payment payable July 1, 2010		1,367,367,445
5. Net Normal Cost as of July 1, 2010		
a. Basic Allowances and pension adjustments (including full cost of pension adjustment benefits)	$1,107,836,459	
b. Non-contributory and Contributory Group Insurance Benefits	34,766,669	
c. Expected Employee Contributions for pension benefits	534,853,931	
d. Expected Employee Contributions for Contributory Group Insurance Benefits	38,086,550	
e. Net Normal Cost as of July 1, 2010: (a) + (b) - (c) - (d)		569,662,647
6. Annual Required Contribution as of June 30, 2012		
a. Annual Required Contribution as of July 1, 2010: (4) + (5e)		$1,937,030,092
b. Interest to Expected Payment Date		332,793,876
c. Annual Required Contribution: (a) + (b)		$2,269,823,968

SECTION V - ACCOUNTING INFORMATION FOR STATE'S FISCAL YEAR 2012
(continued)

B. Projection of Net Pension Obligation as of June 30, 2011 and June 30, 2012

1. Net Pension Obligation as of June 30, 2010 *		$7,879,635,613
2. Annual Pension Cost for Fiscal Year 2011		
a. Annual Required Contribution	$2,123,175,950	
b. Interest on Net Pension Obligation	650,069,938	
c. Adjustment to ARC	518,408,567	
d. Annual Pension Cost: (a) + (b) - (c)		2,254,837,321
3. Fiscal Year 2011 Contributions (0.0% of pension contribution plus actual NCGI)		30,655,332
4. Net Pension Obligation as of June 30, 2011: (1) + (2d) - (3)		$10,103,817,602
5. Annual Pension Cost for Fiscal Year 2012		
a. Annual Required Contribution	$2,269,823,968	
b. Interest on Net Pension Obligation	833,564,952	
c. Adjustment to ARC	918,749,315	
d. Annual Pension Cost: (a) + (b) - (c)		2,184,639,605
6. Expected Fiscal Year 2012 Contributions (14.3% of pension contribution plus est. NCGI)		322,845,761
7. Estimated Net Pension Obligation as of June 30, 2012: (4) + (5d) - (6)		$11,965,611,446

* The NPO as of June 30, 2010 has been updated from the estimated amount shown in the prior valuation to reflect actual employer contributions for the year ending June 30, 2010

SECTION V - ACCOUNTING INFORMATION FOR STATE'S FISCAL YEAR 2012
(continued)

C. Schedule of Funding Progress

Valuation Year	(1) Actuarial Value of Assets for GASB Purposes	(2) Accrued Liability for GASB Purposes	(3) Unfunded Accrued Liability (2) - (1)	(4) Funded Ratio (1) / (2)	(5) Appropriation Payroll	(6) Unfunded Accrued Liability as a % of Payroll: (3) / (5)
2005	34,789,389,875	43,967,927,299	9,178,537,424	79.12%	8,454,072,109	108.57%
2006	35,531,294,790	46,539,868,653	11,008,573,863	76.35%	8,748,623,186	125.83%
2007	36,714,578,745	49,161,247,363	12,446,668,618	74.68%	9,077,628,813	137.11%
2008	36,664,627,629	51,754,814,521	15,090,186,892	70.84%	9,419,083,203	160.21%
2009	34,838,211,259	54,576,061,024	19,737,849,765	63.83%	9,747,020,060	202.50%
2010	33,265,326,627	49,543,347,849	16,278,021,222	67.14%	10,025,401,658	162.37%

SECTION V - ACCOUNTING INFORMATION FOR STATE'S FISCAL YEAR 2012
(continued)

D. Schedule of Employer Contributions

State's Fiscal Year	Annual Required Contribution	Employer Contributions		Percentage of ARC Contributed
2007	$1,407,249,580	$690,794,259		49.09%
2008	1,550,503,836	695,275,811		44.84%
2009	1,601,478,508	95,863,972		5.99%
2010	1,796,358,016	33,199,655	*	1.85%
2011	2,123,175,950	30,655,332	**	1.44%
2012	2,269,823,968	322,845,761	**	14.22%

* Updated from prior valuation reflecting actual contributions for fiscal year ending June 30, 2010
** Estimated based on current understanding of state budget resolutions

E. Funding Policy for State's Fiscal Year 2012

Valuation Date	July 1, 2010
Actuarial Cost Method	Projected Unit Credit
Amortization Method	Level Dollar, Open until 2018 valuation
Remaining Amortization Period	30 years
Asset Valuation Method	Actuarial Value
Actuarial Assumptions	
Investment Rate of Return	8.25%
Projected Salary Increases***	5.91%

*** Variable scale, averaging approximately 5.91% based on 2009 Experience Study

SECTION VI - CENSUS DATA

A. Reconciliation with Prior Year

	Active Contrib	Active NonContrib	Deferred Vested	Retirees	Disableds	Beneficiaries	Domestic Relation Beneficiaries	Total
Members as of June 30, 2009	144,579	12,530	568	70,483	2,674	4,540	517	235,891
Terminated Vested	(32)	(22)	54	-	-	-	-	0
Terminated with Refund	(398)	(2,716)	(2)	-	-	-	-	(3,116)
Retired	(3,190)	(210)	(141)	3,541	-	-	-	0
Disabled	(102)	(44)	-	-	146	-	-	0
Died with Beneficiary	-	-	-	(322)	(19)	342	-	1
Died without Beneficiary	(75)	(19)	(1)	(1,469)	(62)	(233)	-	(1,859)
Payments Began	-	-	-	-	-	-	63	63
Payments Ceased	-	-	-	-	-	-	(19)	(19)
New Actives and Rehires	6,573	156	(1)	-	-	-	-	6,728
Changed to Contributing	1,865	(1,865)	-	-	-	-	-	0
Changed to Noncontributing	(4,722)	4,722	-	-	-	-	-	0
Data Corrections	(6)	(1)	0	2	2	50	1	48
Members as of June 30, 2010	144,492	12,531	477	72,235	2,741	4,699	562	237,737

SECTION VI - CENSUS DATA
(continued)

B. Appropriation Number and Salary by Group *

Group	Number of Employers	Number of Members	Salaries
Department of Higher Education	0	0	$ 0
Department of Education	2	196	17,163,852
New Jersey Institute of Technology	1	1	140,907
State Colleges	6	25	2,769,436
County Colleges	7	23	2,393,642
Charter Schools	67	2,116	113,997,894
Other	603	142,131	9,888,935,927
Total	686	144,492	$ 10,025,401,658

* Excludes salary in excess of Taxable Wage Base for members hired after June 30, 2007

SECTION VI - CENSUS DATA
(continued)

C. Number and Annual Benefits Including Pension Adjustments of Retirees, Beneficiaries, and Dependents on Roll

Group	Number	Annual Benefit
Service and Early Retirements	72,797	$ 2,776,654,267
Ordinary Disability Retirements	2,518	63,152,588
Accidental Disability Retirements	223	8,876,383
Ordinary Death Benefits	2	737
Accidental Death Benefits	2	57,624
Dependents of Deceased Beneficiaries	4,600	106,553,503
Dependents of Deceased Beneficiaries who elected to receive annuities certain instead of lump sum	95	2,223,042
Total	80,237	$ 2,957,518,144

SECTION VI - CENSUS DATA
(continued)

D. New* Retirees from Active Contributory Status

	Less than 25 years of service	At least 25 years of service	Total
Number of Retirements	352	2,802	3,154
Total Annual Pension	8,432,339	142,880,600	151,312,939
Average Annual Pension	23,956	50,992	47,975
Average Age at Retirement	63.8	61.0	61.3
Average Service at Retirement	15.2	32.5	30.6

* Members indicated as retired since last actuarial valuation and have not subsequently died prior to the valuation date.

E. Average Age and Average Annual Pension at Retirement

	Average Age at Retirement	Average Annual Pension at Retirement	Count
New Retirees from Active Contributory Status			
Service Retirement	63.8	23,809	352
Early Retirement	61.0	50,992	2,802
Ordinary Disability	57.0	30,394	95
Accidental Disability	56.9	59,193	7
Survivors **	58.8	36,457	29
All Retirees			
Service Retirement	64.2	13,425	13,371
Early Retirement	59.5	38,372	58,864
Ordinary Disability	53.6	21,707	2,518
Accidental Disability	51.1	33,492	223
Survivors	55.9	17,784	4,699

** Members indicated as retired since last actuarial valuation and have subsequently died prior to the valuation date.

SECTION VI - CENSUS DATA
(continued)

F. Age, Service and Salary Profile of Active Contributing Participants

Males

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total	Average Annual Salary
15-19	0	0	0	0	0	0	0	0	0	0	$0
20-24	333	1	0	0	0	0	0	0	0	334	47,620
25-29	2,547	755	1	0	0	0	0	0	0	3,303	50,036
30-34	1,341	3,292	657	1	0	0	0	0	0	5,291	57,035
35-39	673	1,612	2,389	255	1	0	0	0	0	4,930	67,003
40-44	445	922	1,507	1,280	161	1	0	0	0	4,316	75,546
45-49	348	678	720	724	767	164	0	0	0	3,401	78,868
50-54	270	556	563	483	544	825	289	1	0	3,531	83,720
55-59	262	518	474	410	485	554	1,242	538	0	4,483	89,537
60-64	142	405	309	324	320	262	393	1,065	320	3,540	95,277
65 & Up	36	132	129	97	83	76	46	93	263	955	95,695
Total	6,397	8,871	6,749	3,574	2,361	1,882	1,970	1,697	583	34,084	

Average Age	=	44.4
Average Service	=	14.0
Average Age at Entry	=	30.4
Average Annual Salary	=	$74,323

Females

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total	Average Annual Salary
15-19	0	0	0	0	0	0	0	0	0	0	$0
20-24	1,470	2	0	0	0	0	0	0	0	1,472	46,848
25-29	9,485	3,403	6	0	0	0	0	0	0	12,894	50,066
30-34	3,868	9,952	1,738	2	0	0	0	0	0	15,560	55,484
35-39	2,144	4,571	5,881	653	1	0	0	0	0	13,250	61,592
40-44	2,041	2,838	3,389	3,228	533	0	0	0	0	12,029	66,892
45-49	1,631	2,807	2,211	1,658	2,740	593	0	0	0	11,640	69,919
50-54	1,133	2,654	2,867	1,937	2,159	2,642	734	2	0	14,128	73,993
55-59	553	1,647	2,400	2,415	2,828	2,301	3,185	1,006	0	16,335	80,651
60-64	191	698	972	1,257	2,194	1,837	1,129	1,641	421	10,340	84,621
65 & Up	43	180	212	299	536	580	358	212	340	2,760	86,673
Total	22,559	28,752	19,676	11,449	10,991	7,953	5,406	2,861	761	110,408	

Average Age	=	44.5
Average Service	=	13.4
Average Age at Entry	=	31.2
Average Annual Salary	=	$67,834

SECTION VI - CENSUS DATA
(continued)

G. Age, Service and Salary Profile of Non-Contributing Participants

Males

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total	Average Annual Salary
	Years of Service										
15-19	0	0	0	0	0	0	0	0	0	0	$0
20-24	6	0	0	0	0	0	0	0	0	6	46,858
25-29	255	10	0	0	0	0	0	0	0	265	45,102
30-34	197	90	1	0	0	0	0	0	0	288	49,990
35-39	146	59	55	0	0	0	0	0	0	260	54,443
40-44	92	63	110	11	1	0	0	0	0	277	58,159
45-49	97	31	68	29	12	1	0	0	0	238	57,129
50-54	73	39	80	39	18	2	2	0	0	253	57,919
55-59	63	21	110	55	22	3	7	1	0	282	56,305
60-64	95	24	61	28	18	2	9	7	1	245	53,840
65 & Up	103	12	16	17	8	10	3	2	5	176	43,727
Total	1,127	349	501	179	79	18	21	10	6	2,290	

Average Age	=	46.2
Average Service	=	7.5
Average Age at Entry	=	38.7
Average Annual Salary	=	$53,236

Females

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total	Average Annual Salary
	Years of Service										
15-19	0	0	0	0	0	0	0	0	0	0	$0
20-24	61	0	0	0	0	0	0	0	0	61	44,059
25-29	1,105	117	0	0	0	0	0	0	0	1,222	46,016
30-34	938	1,044	71	0	0	0	0	0	0	2,053	50,803
35-39	510	506	575	11	0	0	0	0	0	1,602	52,374
40-44	359	175	662	86	3	0	0	0	0	1,285	52,039
45-49	315	105	458	102	28	4	0	0	0	1,012	50,390
50-54	282	90	362	130	42	14	4	0	0	924	50,015
55-59	204	90	550	208	69	15	17	2	0	1,155	49,061
60-64	129	50	254	134	44	12	8	14	1	646	45,957
65 & Up	151	18	36	27	19	11	6	7	6	281	41,626
Total	4,054	2,195	2,968	698	205	56	35	23	7	10,241	

Average Age	=	42.4
Average Service	=	7.7
Average Age at Entry	=	34.7
Average Annual Salary	=	$49,727

SECTION VI - CENSUS DATA
(continued)

H. Age and Benefit Profiles

Terminated Vested Participants

	Male		Female		Total	
Age	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension
Under 35	0	$0	0	$0	0	$0
35-39	3	$72,180	5	$56,628	8	128,808
40-44	2	$27,132	16	$195,900	18	223,032
45-49	6	$66,192	23	$291,492	29	357,684
50-54	12	$167,916	46	$623,124	58	791,040
55-59	34	$383,508	237	$3,141,936	271	3,525,444
60 & Up	21	$227,628	72	$928,308	93	1,155,936
Total	78	$944,556	399	$5,237,388	477	$6,181,944
		Average Age	=	55.8		
		Average Annual Pension	=	$12,960		

Service Retired Participants

	Male		Female		Total	
Age	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension
Under 50	1	$27,281	16	$304,104	17	$331,385
50-54	62	2,126,696	178	5,415,025	240	7,541,721
55-59	1,004	45,819,025	2,656	112,342,343	3,660	158,161,368
60-64	5,604	266,400,750	11,450	466,038,590	17,054	732,439,340
65-69	6,307	291,651,798	11,543	442,679,189	17,850	734,330,987
70-74	4,092	182,469,417	7,378	264,519,271	11,470	446,988,688
75-79	3,521	147,715,181	5,622	184,770,636	9,143	332,485,817
80-84	2,524	93,469,071	4,538	126,602,181	7,062	220,071,252
85-89	1,181	36,159,379	2,695	59,939,319	3,876	96,098,698
90-94	363	9,194,449	1,385	26,061,718	1,748	35,256,167
95-99	97	2,328,969	463	8,183,633	560	10,512,602
100 & Up	9	256,716	108	2,179,526	117	2,436,242
Total	24,765	$1,077,618,732	48,032	$1,699,035,535	72,797	$2,776,654,267
		Average Age	=	70.8		
		Average Annual Pension	=	$38,142		

SECTION VI - CENSUS DATA
(continued)

H. Age and Benefit Profiles (continued)

Disabled Retired Participants

	Male		Female		Total	
Age	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension
Under 35	0	$0	0	$0	0	$0
35-39	1	17,780	4	86,905	5	104,685
40-44	6	156,449	23	544,349	29	700,798
45-49	15	406,284	68	1,902,861	83	2,309,145
50-54	42	1,189,472	143	3,876,844	185	5,066,316
55-59	79	2,193,771	319	9,105,572	398	11,299,343
60-64	166	4,760,838	477	13,112,618	643	17,873,456
65-69	131	3,673,552	470	12,685,222	601	16,358,774
70-74	89	2,264,589	281	7,369,282	370	9,633,871
75-79	51	1,157,703	178	3,950,116	229	5,107,819
80-84	30	544,450	87	1,705,641	117	2,250,091
85 & Up	18	297,353	63	1,027,320	81	1,324,673
Total	628	$16,662,241	2,113	$55,366,730	2,741	$72,028,971

Average Age = 65.2
Average Annual Pension = $26,278

SECTION VI - CENSUS DATA
(continued)

H. Age and Benefit Profiles (continued)

Beneficiaries and Dependents

	Male		Female		Total	
Age	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension
Under 25	5	$57,825	7	$125,204	12	$183,029
25-29	6	52,376	11	139,403	17	191,779
30-34	5	103,562	10	181,454	15	285,016
35-39	7	122,368	11	221,060	18	343,428
40-44	11	214,659	14	257,063	25	471,722
45-49	12	182,354	22	384,230	34	566,584
50-54	29	661,650	62	1,420,049	91	2,081,699
55-59	84	1,926,331	124	3,110,302	208	5,036,633
60-64	178	4,045,898	293	8,614,423	471	12,660,321
65-69	182	4,292,243	399	11,420,518	581	15,712,761
70-74	163	4,105,990	511	14,101,378	674	18,207,368
75-79	131	2,887,601	594	15,894,822	725	18,782,423
80-84	116	2,087,806	661	15,480,460	777	17,568,266
85-89	89	1,391,529	504	8,855,657	593	10,247,186
90-94	45	624,854	309	4,611,448	354	5,236,302
95-99	8	79,606	83	1,027,611	91	1,107,217
100 & Up	1	11,745	12	141,427	13	153,172
Total	1,072	22,848,397	3,627	85,986,509	4,699	108,834,906

Average Age = 74.8
Average Annual Pension = $23,161

TEACHERS' PENSION AND ANNUITY FUND OF NEW JERSEY

SECTION VII - ACTUARIAL ASSUMPTIONS AND METHODS AS OF JUNE 30, 2010

A. Actuarial Assumptions

Interest: 8.25% per annum, compounded annually (as prescribed by the State Treasurer).

Future Payroll Growth: 4.0% per annum, compounded annually.

Salary Scale: Salary increases vary by years of employment averaging 5.91% (based on the 2009 Experience Study). Schedule of rates are shown below.

Years of Employment	Annual Rate
0-12	7.35%
13	7.20
14	6.85
15	6.55
16	5.90
17	5.30
18	5.10
19	4.75
20	4.75
21	4.30
22	4.25
23-25	4.10
26-30	3.75
31+	3.40

Increases in Compensation Limits: The IRC Section 401(a)(17) limit is assumed to increase 3.0% per annum, compounded annually. The Social Security Taxable Wage Base is assumed to increase 4.0% per annum, compounded annually.

SECTION VII - ACTUARIAL ASSUMPTIONS AND METHODS AS OF JUNE 30, 2010

A. Actuarial Assumptions (Continued)

Termination: Withdrawal rates vary by age, years of employment and gender. Illustrative rates are shown below:

Less Than 10 Years of Employment

Years of Employment	Male	Female	
		<40	40+
0	8.19%	7.61%	7.61%
1	6.72	7.00	7.00
2	5.90	6.09	6.09
3	4.17	5.89	3.80
4	3.39	5.65	2.59
5	2.68	5.54	2.19
6	2.36	5.54	1.80
7	2.12	5.36	1.68
8	1.59	5.32	1.43
9	1.52	4.07	1.28

A. Actuarial Assumptions (Continued)

Annual Rates for Those With Deferred Annuity Benefits*

	10-14 Years of Employment		15-19 Years of Employment		20-24 Years of Employment	
Age	Male	Female	Male	Female	Male	Female
30	0.81%	4.30%	0.59%	3.52%	0.39%	2.35%
35	0.85	3.21	0.61	2.63	0.41	1.75
40	0.71	1.50	0.51	1.22	0.34	0.82
45	0.59	0.69	0.42	0.57	0.28	0.38
50	0.71	0.70	0.51	0.58	0.34	0.38
55	1.36	1.34	0.98	1.10	0.65	0.73

*Members must have attained 10 years of service or 60 years of age (62 years of age for Class E and F members) in order to receive an annuity benefit.

Annual Rates for Those Receiving Return of Contributions

	10-14 Years of Employment		15-19 Years of Employment		20-24 Years of Employment	
Age	Male	Female	Male	Female	Male	Female
30	0.55%	0.47%	0.40%	0.39%	0.26%	0.26%
35	0.51	0.34	0.37	0.28	0.25	0.19
40	0.34	0.18	0.24	0.14	0.16	0.10
45	0.21	0.07	0.15	0.05	0.10	0.04
50	0.15	0.07	0.11	0.05	0.07	0.04
55	0.10	0.09	0.07	0.07	0.05	0.05

SECTION VII - ACTUARIAL ASSUMPTIONS AND METHODS AS OF JUNE 30, 2010

A. Actuarial Assumptions (Continued)

Retirement: Rates of retirement vary by age, gender and eligibility for an unreduced pension and post-retirement medical benefits.

The rates listed below are for members hired prior to July 1, 2007 (Class A and B employees). Illustrative rates are shown below.

Less than Age 55 or Less than 25 Years of Service			Attainment of Age 55 and 25 Years of Service			
			First Eligibility		After First Eligibility	
Age	Male	Female	Male	Female	Male	Female
<47	1.2%	1.2%	N/A	N/A	N/A	N/A
48	1.5	1.5	N/A	N/A	N/A	N/A
49	1.7	1.7	N/A	N/A	N/A	N/A
50	2.0	2.0	N/A	N/A	N/A	N/A
51	2.4	2.4	N/A	N/A	N/A	N/A
52	2.8	2.8	N/A	N/A	N/A	N/A
53	3.8	3.8	N/A	N/A	N/A	N/A
54	4.8	4.8	N/A	N/A	N/A	N/A
55	N/A	N/A	15.0%	16.0%	N/A	N/A
56	N/A	N/A	22.0	19.0	12.0%	13.0%
57	N/A	N/A	22.0	19.0	13.0	14.0
58	N/A	N/A	25.0	25.0	14.0	14.0
59	N/A	N/A	25.0	25.0	15.0	15.0
60	10.0	7.0	27.0	30.0	21.0	20.0
61	10.0	7.0	30.0	32.0	23.0	22.0
62	11.0	10.0	40.0	46.0	36.0	32.0
63	11.0	10.0	40.0	44.0	30.0	26.5
64	11.0	10.0	40.0	44.0	30.0	26.5
65	17.0	15.0	50.0	50.0	38.0	35.0
66-70	17.0	15.0	50.0	50.0	30.0	30.0
71+	20.0	20.0	50.0	50.0	30.0	30.0

A. Actuarial Assumptions (Continued)

The rates listed below are for members hired on or after July 1, 2007 and before November 2, 2008 (Class D employees). Illustrative rates are shown below.

Less than Age 60 or Less than 25 Years of Service			Attainment of Age 60 and 25 Years of Service			
			First Eligibility		After First Eligibility	
Age	Male	Female	Male	Female	Male	Female
<47	0.6%	0.6%	N/A	N/A	N/A	N/A
48	0.8	0.8	N/A	N/A	N/A	N/A
49	0.9	0.9	N/A	N/A	N/A	N/A
50	1.0	1.0	N/A	N/A	N/A	N/A
51	1.2	1.2	N/A	N/A	N/A	N/A
52	1.4	1.4	N/A	N/A	N/A	N/A
53	1.9	1.9	N/A	N/A	N/A	N/A
54	2.4	2.4	N/A	N/A	N/A	N/A
55	11.5	11.5	N/A	N/A	N/A	N/A
56	12.0	12.0	N/A	N/A	N/A	N/A
57	12.5	12.5	N/A	N/A	N/A	N/A
58	13.5	13.5	N/A	N/A	N/A	N/A
59	14.0	14.0	N/A	N/A	N/A	N/A
60	10.0	7.00	29.0%	30.0%	N/A	N/A
61	10.0	7.00	30.0	32.0	23.0%	22.0%
62	11.0	10.00	40.0	46.0	36.0	32.0
63	11.0	10.00	40.0	44.0	30.0	26.5
64	11.0	10.00	40.0	44.0	30.0	26.5
65	17.0	15.00	50.0	50.0	38.0	35.0
66-70	17.0	15.00	50.0	50.0	30.0	30.0
71+	20.0	20.00	50.0	50.0	30.0	30.0

SECTION VII - ACTUARIAL ASSUMPTIONS AND METHODS AS OF JUNE 30, 2010

A. Actuarial Assumptions (Continued)

The rates listed below are for members hired after November 1, 2008 (Class E and Class F employees). Illustrative rates are shown below.

Less than Age 62 or Less than 25 Years of Service			Attainment of Age 62 and 25 Years of Service			
			First Eligibility		After First Eligibility	
Age	Male	Female	Male	Female	Male	Female
<47	0.6%	0.6%	N/A	N/A	N/A	N/A
48	0.7	0.7	N/A	N/A	N/A	N/A
49	0.8	0.8	N/A	N/A	N/A	N/A
50	0.9	0.9	N/A	N/A	N/A	N/A
51	1.1	1.1	N/A	N/A	N/A	N/A
52	1.3	1.3	N/A	N/A	N/A	N/A
53	1.7	1.7	N/A	N/A	N/A	N/A
54	2.2	2.2	N/A	N/A	N/A	N/A
55	10.5	10.5	N/A	N/A	N/A	N/A
56	10.8	10.8	N/A	N/A	N/A	N/A
57	11.0	11.0	N/A	N/A	N/A	N/A
58	12.0	12.0	N/A	N/A	N/A	N/A
59	12.5	12.5	N/A	N/A	N/A	N/A
60	17.0	19.00	N/A	N/A	N/A	N/A
61	18.5	20.50	N/A	N/A	N/A	N/A
62	29.5	24.00	50.0%	46.0%	N/A	N/A
63	11.0	10.00	40.0	44.0	30.0%	26.5%
64	11.0	10.00	40.0	44.0	30.0	26.5
65	17.0	15.00	50.0	50.0	38.0	35.0
66-70	17.0	15.00	50.0	50.0	30.0	30.0
71+	20.0	20.00	50.0	50.0	30.0	30.0

A. Actuarial Assumptions (Continued)

Disability: Incidence of ordinary disabilities among active members apply upon the attainment of 10 years of service until the attainment of first eligibility for retirement. For members eligible for early retirement, the greater of the early retirement and disability benefit is valued. The rates vary by age, gender and type of disability. Illustrative rates are shown below:

	Ordinary		Accidental	
Age	Male	Female	Male	Female
25	0.0301%	0.0379%	0.0060%	0.0060%
30	0.0473	0.0550	0.0060	0.0060
35	0.0609	0.0674	0.0060	0.0060
40	0.0701	0.0893	0.0060	0.0060
45	0.1023	0.1317	0.0060	0.0060
50	0.1421	0.1759	0.0060	0.0060
55	0.3732	0.3506	0.0060	0.0060

Pre-retirement Mortality: Illustrative rates of mortality of active members which vary by age and gender are shown below. No accidental deaths are assumed.

	Ordinary	
Age	Male	Female
25	0.0345%	0.0170%
30	0.0376	0.0191
35	0.0353	0.0207
40	0.0591	0.0284
45	0.0890	0.0466
50	0.1342	0.0645
55	0.1978	0.1016
60	0.2747	0.1589
65	0.4263	0.2374
70	0.6725	0.3754

SECTION VII - ACTUARIAL ASSUMPTIONS AND METHODS AS OF JUNE 30, 2010

A. Actuarial Assumptions (Continued)

Post-retirement Mortality: Rates of mortality vary by age, gender and type of retirement. A generational approach is applied using Scale AA to account for future mortality improvement for non-disabled annuitants. The base year is 2000 for males and 2003 for females. Illustrative rates for the base year and Scale AA are shown below:

	Service Retirements and Beneficiaries		Scale AA		Disability Retirement	
Age	Male	Female	Male	Female	Male	Female
45	0.3573%	0.1375%	1.3%	1.6%	1.8057%	0.7078%
50	0.5265	0.2151	1.8	1.7	2.3180	1.0958
55	0.4781	0.3066	1.9	0.8	2.8354	1.5717
60	0.5813	0.4937	1.6	0.6	3.3634	2.0747
65	1.0238	0.6602	1.4	0.5	4.0139	2.6625
70	1.6962	1.0497	1.5	0.6	5.0066	3.5753
75	2.9598	1.7342	1.4	0.8	6.5654	4.9619
80	5.2282	3.0118	1.0	0.7	8.7498	6.8696
85	9.2106	6.4019	0.7	0.6	11.3282	9.5193

Non-contributory Members: 30% are assumed to return to contributory status.

Marriage: Husbands are assumed to be 3 years older than wives. Among the active population, 80% of participants are assumed to be married. No children are assumed. Neither the percentage married nor the number of children assumptions are necessarily individually explicit, but they are considered reasonable, when viewed as a single combined assumption.

Form of Payment: Modified Cash Refund Annuity.

Special Data Adjustments: Determination of employee type is based on Class Code and was used as provided by the Division. Active members where no salary was provided, no date of birth was provided, or ASF was negative were excluded from the valuation. A liability equal to the ASF was held. For beneficiaries where no gender code or date of birth was provided, reasonable assumptions were made based on records provided in prior years or the deceased retiree's records. All

SECTION VII - ACTUARIAL ASSUMPTIONS AND METHODS AS OF JUNE 30, 2010

A. Actuarial Assumptions (Continued)

such records were included in the valuation. Retiree members where no benefit and monthly allowance was provided, or no cause, class, or option was provided were excluded from the valuation.

B. Actuarial Valuation Method

The Projected Unit Credit Method was used as required by Chapter 62, P.L. 1994 as modified by Chapters 115, P.L. 1997 and 133, P.L. 2001. Non-contributory life insurance benefits are funded on a term cost basis.

C. Asset Valuation Method

A five year average of market value with write-up was used. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five year period. Cash flows are based on an accrual accounting approach. This method is prescribed by statute. The market value of assets is used for the Contributory Group Insurance Premium Fund for GASB purposes.

D. Changes in Actuarial Assumptions

This is the first valuation that reflects the proposed assumptions adopted in the June 30, 2006 – June 30, 2009 Experience Study.

SECTION VIII – SUMMARY OF PRINCIPAL PLAN APROVISIONS AS OF JUNE 30, 2010

This summary of plan provisions is intended only to describe the essential features of the plan. All eligibility requirements and benefit amounts shall be determined in strict accordance with the plan document itself.

1. Type of Plan

   The Plan is a contributory, defined benefit plan. Effective October 1, 2011, contributions by Members are 6.5% and increase by 1/7 of 1% each July thereafter until an ultimate rate of 7.5% is attained on July 1, 2018. For members hired on or after July 1, 2007, compensation for contributions is capped at the Social Security Taxable Wage Base ($106,800 for 2010). For compensation in excess of the Social Security Taxable Wage Base, contributions on the excess compensation are made to the Defined Contribution Retirement Program.

2. Effective Date

   The Plan was established in 1919. It was reorganized and integrated with Social Security in 1955. Social Security integration was eliminated in 1966, i.e., reductions in retirement benefits based on Social Security benefits were eliminated.

3. Eligibility for Membership

   Employees appointed to positions requiring certification as members of a regular teaching or professional staff of a public school system in New Jersey are required to enroll as a condition of employment. Employees of the Department of Education holding unclassified, professional and certificated titles are eligible for membership. Temporary or substitute employees are not eligible. The eligible employee must be scheduled to work at least 32 hours per week effective May 22, 2010, per Chapter 1, P.L. 2010.

4. Definitions

   a. Fiscal Year: A Fiscal Year is a 12-month period beginning on July 1 and ending on June 30.

4. Definitions (continued)

   b. Credited Service: A year of Credited Service for each year an employee is a Member of the Retirement System plus service, if any, covered by a prior service liability. Class F members must be scheduled to work at least 32 hours per week, Class E members also must have an annual salary of $7,500 (indexed for inflation) and other members must have an annual salary of $500.

   c. Final Compensation: This is the average annual compensation upon which contributions by a member are based on the period consecutive years of Creditable Service immediately preceding retirement or the period of highest fiscal years of Membership Service. The period equals three for members hired prior to May 22, 2010 and five for Class F and later members.

   d. Final Year Compensation: This is the compensation upon which contributions by a Member to the Annuity Savings Fund are based in the last year of Membership Service.

   e. Aggregate Member Contributions: This is the sum of all amounts deducted from the compensation of a Member or contributed by him or on his behalf without interest.

   f. Class A Member: Any member who contributes towards retirement allowance based on 1/64th benefit rate per year of creditable service.

   g. Class B Member: Any member hired prior to July 1, 2007 who contributes towards a retirement allowance based on 1/55th benefit rate per year of creditable service.

   h. Class D Member: Any member hired on or after July 1, 2007 and before November 2, 2008 who contributes up to the Social Security Taxable Wage Base towards a retirement allowance based on 1/55th benefit rate per year of creditable service payable at age 60.

   i. Class E Member: Any member hired after November 1, 2008 and before May 22, 2010 who contributes up to the Social Security Taxable Wage Base towards a retirement allowance based on 1/55th benefit rate per year of creditable service payable at age 62.

4. Definitions (continued)

   j. Class F Member: Any member hired after May 21, 2010 and before June 28, 2011 who contributes up to the Social Security Taxable Wage Base towards a retirement allowance based on 1/60th benefit rate per year of creditable service payable at age 62.

   k. Class G Member: Any member hired on or after June 28, 2011 who contributes up to the Social Security Taxable Wage Base towards a retirement allowance based on 1/60th benefit rate per year of creditable service payable at age 65.

5. Cost-of-Living Adjustment

   The Pension Adjustment Program provides a cost-of-living adjustment (COLA) to retirees and their survivors who receive a monthly retirement allowance from the TPAF. The first adjustment is received in the 25^{th} month after the member's retirement. Subsequent cost-of-living adjustments are computed annually and are first reflected in February. The rate of increase is equal to 60 percent of the percentage change between the average CPI for the 12 month period ending December 31 in the year of retirement and the August 31 preceding the February adjustment. Any pension adjustments to be paid on or after July 1, 2011 have been eliminated for all members.

6. Retirement Benefits

   a. Service Retirement

      Service Retirement Eligibility: Eligibility means age 60 (Class A, B, and D), age 62 (Class E and F) or age 65 (Class G) with no minimum service requirement.

      Service Retirement Benefit: An employee's annual service retirement allowance is equal to a member annuity plus an employer pension which together equals $1/64^{th}$ of Final Compensation for each year of service for Class A members, $1/55^{th}$ of Final Compensation for each year of service for Class B, D and E members and $1/60^{th}$ of Final Compensation for each year of service for Class F and G members. Member annuity based on member contributions credited at the valuation interest rate.

6. Retirement Benefits (continued)

   Note: See Section 12 for special benefits for veteran members.

   b. Early Retirement

   Early Retirement Eligibility: Class A, B, D, E and F members may retire after completion of 25 years of Creditable Service and Class G members may retire after completion of 30 years of Creditable Service.

   Early Retirement Benefit: The benefit may be either:

   (i) the lump sum withdrawal benefit described in 7.a. below; or

   (ii) the Service Retirement Benefit reduced by 1/4 of one percent for each month the retirement date precedes age 55 for Class B members; or

   (iii) the Service Retirement Benefit reduced by 1/12 of one percent for each month the retirement date precedes age 60 but over age 55 and by ¼ of one percent for each month the retirement date precedes age 55, for Class D members.

   (iv) the Service Retirement Benefit reduced by 1/12 of one percent for each month the retirement date precedes age 62 but over age 55 and by ¼ of one percent for each month the retirement date precedes age 55, for Class E and F members.

   (v) the Service Retirement Benefit reduced by ¼ of one percent for each month the retirement date precedes age 65, for Class G members.

   c. Deferred Retirement

   Eligibility: A Member is eligible upon termination of service prior to age 60 (Class A, B, D), age 62 (Class E and Class F) or age 65 (Class G) and after 10 years of Creditable Service.

6. Retirement Benefits (continued)

Deferred Retirement Benefit: The benefit may be either:

(i) the lump sum withdrawal benefit described in 7.a. above; or
(ii) a deferred retirement benefit, commencing at age 60 (Class A, B, D), age 62 (Class E and Class F) or age 65 (Class G), equal to a member annuity plus an employer pension which together provide a retirement allowance equal to the service retirement benefit based on Final Compensation and Creditable Service at date of termination. Member annuity based on member contributions credited at the valuation interest rate.

7. Termination Benefits

a. Lump Sum Withdrawal

Eligibility: A Member is eligible upon termination of service.

Lump Sum Withdrawal Benefit: The benefit equals a refund of Aggregate Member Contributions plus, if the member has completed three years of service, interest accumulated at 2.0% per annum allowed thereon.

8. Death Benefits

a. Ordinary Death (Insured) Benefit - Lump Sum (Non-Contributory)

Pre-retirement Death Benefit Eligibility: Any current active member is eligible.

Pre-retirement Death Benefit: The benefit is a lump sum benefit equal to the Aggregate Contributions with interest allowed thereon plus an amount equal to 1-1/2 times Compensation at date of death.

Post-retirement Death Benefit Prior to Age 60 (Class A, B, D), Age 62 (Class E and Class F) or Age 65 (Class G) Eligibility: Eligible if disabled or retired early.

8. Death Benefits (continued)

Post-retirement Death Benefit Prior to Age 60 (Class A, B, D), Age 62 (Class E and Class F) or Age 65 (Class G) Benefit: The benefit is as follows:

(i) For death while a Disabled Retiree the benefit is equal to 1-1/2 times Compensation.
(ii) For death while an Early Retiree, the benefit is equal to 3/16 times Compensation.
(iii) For death while vested terminated, the benefit is equal to his Aggregate Contributions with interest allowed thereon.

Post-retirement Death Benefit After Age 60 (Class A, B, D), Age 62 (Class E and F) or Age 65 (Class G) Eligibility: Eligible after attainment of service retirement , deferred and disabled retirements (if not disabled, 10 years of Creditable Service required for members enrolling on or after July 1, 1971).

Post-retirement Death Benefit After Age 60 (Class A, B, D), Age 62 (Class E and F) or Age 65 (Class G) Benefit: The benefit payable is equal to 3/16 times Compensation.

b. Contributory Death Benefit: An additional, employee-paid, death benefit is also available through group insurance purchased by the Board of Trustees. Contributions for this benefit are required by Members during the first year of enrollment. Participation may be terminated after the first year. The benefit prior to retirement is 2 times compensation. The benefit after retirement is 1/4 times final year compensation (coverage at retirement, and 10 years of participation for Members enrolling on or after July 1, 1970, is required).

c. Pre-retirement Accidental Death Benefit:

Eligibility: A death resulting from injuries received from an accident during performance of duty and not a result of willful negligence is eligible.

Pre-retirement Lump Sum Benefit: The benefit is a lump sum equal to 1-1/2 times Compensation.

8. Death Benefits (continued)

Pre-retirement Accidental Death Benefit: The benefit payable is as follows:

(i) The annuity benefit to a widow or widower is equal to 50% of Compensation, payable for life or until remarriage.
(ii) The annuity benefit, when there is no spouse, or the spouse is remarried, is equal to 20% of Compensation for one child, 35% for two children, 50% for three or more children. The benefit is payable while the children are under age 18 and it is payable for life if they are disabled.

(iii) The annuity benefit, when there is no spouse or children, is equal to 25% of Compensation for one dependent parent and 40% for two dependent parents.

(iv) The benefit, when there is no relation as stated above, is equal to the Aggregate Contributions with interest allowed thereon and is payable to a beneficiary or to the Member's estate. This is also the minimum benefit payable under (i), (ii) and (iii) above.

9. Disability Benefits

a. Ordinary Disability Retirement

Eligibility: A Member is eligible for Ordinary Disability Retirement if he (she) has 10 years of Creditable Service and is totally and permanently incapacitated from the performance of usual or available duties.

Ordinary Disability Retirement Benefit for Class A, B, D and E members: The total retirement allowance is equal to the greater of:

(i) 1.64% of Final Compensation times the number of years of Creditable Service; or

(ii) 43.6% of Final Compensation.

Note: See Section 12 for special benefits for veteran members.

9. Disability Benefits (continued)

   Ordinary and Accidental Disability Retirement Benefit for Class F and G members: A disability benefit equal to 60% of salary reduced by the initial Social Security benefit is paid until the earlier of age 70 or commencement of a retirement benefit from a disability income policy outside of TPAF. The policy also makes employee contributions during the period of disability.

   b. Accidental Disability Retirement for Class A, B, D and E members

      Eligibility: A Member is eligible upon total and permanent incapacitation as a direct result of a traumatic event occurring during and as a result of the performance of regular or assigned duties.

      Accident Disability Retirement Benefit: The benefit payable is equal to a Member annuity plus an employer pension which together equals 72.7% of the Compensation at date of injury.

10. Additional Old-Plan Benefit: An additional pension is payable to any retiree who was a member of the old Teachers' Retirement Fund. This pension is the actuarial equivalent of his contributions to the old Teachers' Retirement Fund without interest.

11. Special Minimum Benefit: A member who retired prior to 1955 with 20 or more years of service may receive a minimum pension of $500 a month inclusive of any amounts payable under any pension adjustments.

12. Special Benefits for Veterans:

    a. Service Retirement: Eligible if member attains age 60 and completes 20 years of service or attains age 55 and completes 25 years of service. Benefit equals 54.5% of highest 12-month contributory compensation.

    b. Chapter 97 Benefit: Eligible if age 55 and completes 35 years of service. Benefit equals 1/55th of final year compensation for each year of service.

13. Benefit and Compensation Limits

The provisions of IRC Section 415 and IRC Section 401(a)(17), which limit benefits paid and limit compensation used in determining benefits, has been reflected in this report. The IRC Section 415 limit is $195,000 and the 401(a)(17) compensation cap is $245,000 for 2010 and is applied on a calendar year basis.

14. Forms of Payment

a. Maximum Option – Single life annuity.
b. Option 1 – Single life annuity with return of reserve option.
c. Option 2 – 100% joint and survivor annuity.
d. Option 3 – 50% joint and survivor annuity.
e. Option 4 – Other percentage joint and survivor annuity.
f. Option A – 100% pop-up joint and survivor annuity.
g. Option B – 75% pop-up joint and survivor annuity.
h. Option C – 50% pop-up joint and survivor annuity.
i. Option D – 25% pop-up joint and survivor annuity.

15. Contributions

a. Member Contributions: Each member becoming a member on or after January 1, 1956 and prior to July 1, 2007 contributes at the rate of contribution applicable to Class B members. Any members hired after June 30, 2007 and prior to November 2, 2008 are Class D members. Members hired after November 1, 2008 and prior to May 22, 2010 are Class E members. Members hired after May 21, 2010 are Class F members and members hired after June 28, 2011 are Class G members.

   (i) Class D, E, F or G Membership: Class D, E, F or G members contribute at their applicable contribution rate up to the Social Security Taxable Wage Base.
   (ii) Class B Membership: Any member on December 31, 1955 may elect to be classified as a Class B member and contribute at the rate of contribution applicable to Class B members at his age at membership. Any such member may elect to increase his accumulated deductions by the amount required by the Board to receive credit as a Class B member for all or part of his service prior to such election.

15. Contributions (continued)

(iii) Class A Membership: Any member who is not a veteran and does not elect to be classified as a Class B member continues to contribute at the rate of contribution applicable to his age at membership which was payable prior to the establishment of the integrated system, except that if he became a member subsequent to June 30, 1946 he will pay after January 1, 1955 at the rate of contribution in effect on June 30, 1946 applicable to his age at membership.

Prior to July 1, 1979 different contribution rates were established for men and women. Effective on that date members contribute at rates intermediate between the rates previously applicable to male and female members, computed to provide the same present value of future employee contributions at each entry age on the basis of the membership as constituted on the effective date.

b. Local Employer Contributions

(i) Early Retirement Incentive Contributions: The State and Local employers which elected to participate in the early retirement incentive programs authorized by Chapters 137, 229 and 231, P.L. 1991, Chapters 48, 138 and 163, P.L. 1993, Chapter 23, P.L. 2001 and Chapters 128 and 129, P.L. 2003 pay contributions to cover the additional liability for these programs over amortization periods chosen by the employer (15 years for Chapters 128 and 129) or the amortization period for the Unfunded Accrued Liability of the system (Chapter 23, P.L. 2002 and Chapter 21, P.L. 2008).

(ii) Chapter 113 Contributions: Certain School Districts have elected to exempt a select group of employees from the compensation limit under IRC Section 401(a)(17) incorporated under Chapter 113. These school districts will pay the full cost of this exemption at a member's date of retirement.

16. Changes in Plan Provisions Since Prior Valuation

This valuation reflects the adoption of Chapter 78, P.L. 2011 as well as Chapter 1, P.L. 2010 and Chapter 3, P.L. 2010.

TEACHERS' PENSION AND ANNUITY FUND OF NEW JERSEY

APPENDIX I - EARLY RETIREMENT INCENTIVE CONTRIBUTION SCHEDULE

Group	Number	Location Name	ERI 1 Present Value June 30, 2010	ERI 1 Fiscal Year 2012 Payment	ERI 2 Present Value June 30, 2010	ERI 2 Fiscal Year 2012 Payment
3	981	NJ INST OF TECH	$184,327	$25,621	$379,242	$37,614
5	1001	ATLANTIC COMMUNITY COLLEGE	59,756	8,306	N/A	N/A
6	911	ALLAMUCHY BD OF ED	N/A	N/A	109,985	10,609
6	300	ASBURY PARK BD OF ED	2,993,746	416,124	N/A	N/A
6	969	ATLANTIC CO VOCATIONAL SCHOOLS	180,096	25,033	N/A	N/A
6	4014	BERLIN BORO BD OF ED	N/A	N/A	34,359	N/A
6	4015	BERLIN TWP BD OF ED	171,449	23,831	123,731	26,439
6	412	BOONTON TWP BD OF ED	116,757	16,229	N/A	N/A
6	774	BYRAM TWP BD OF ED	205,356	28,544	N/A	N/A
6	4017	CHESILHURST BORO BD OF ED	26,065	3,623	18,813	4,020
6	4018	CLEMENTON BD OF ED	96,994	13,482	70,001	14,958
6	121	EAST WINDSOR REG SCHOOL DIST	N/A	N/A	154,332	32,978
6	6012	ESSEX CO EDUCATIONAL SERV COMM	178,996	10,908	N/A	N/A
6	329	FARMINGDALE BD OF ED	N/A	N/A	40,066	N/A
6	753	GREEN BROOK BD OF ED	272,731	37,909	N/A	N/A
6	8082	GUTTENBERG BORO BD OF ED	146,686	20,389	N/A	N/A
6	956	HUDSON CO VOCATIONAL SCHOOL	N/A	N/A	738,793	71,263
6	6040	IRVINGTON TWP BD OF ED	N/A	N/A	2,462,786	526,252
6	521	LAKEHURST BORO BD OF ED	76,634	10,652	N/A	N/A
6	645	LAKELAND REGIONAL	688,997	95,769	N/A	N/A
6	111	MERCER CO SPECIAL SERVICES	340,667	47,352	N/A	N/A
6	953	MERCER CO VOCATIONAL SCHOOLS	N/A	N/A	76,833	N/A
6	346	MONMOUTH BEACH BD OF ED	93,419	12,985	N/A	N/A
6	987	MONMOUTH CO VOCATIONAL SCHOOLS	551,196	76,615	N/A	N/A
6	3036	PEMBERTON TWP BD OF ED	N/A	N/A	N/A	N/A
6	210	PERTH AMBOY BD OF ED	N/A	N/A	$370,582	N/A
6	4069	PINE HILL BORO BD OF ED	$247,975	$34,468	$106,434	$22,743
6	531	SEASIDE HEIGHTS BD OF ED	N/A	N/A	$2,307	N/A
6	5071	SHILOH BOROUGH BD OF ED	$10,187	$1,416	N/A	N/A
6	641	WANAQUE BD OF ED	N/A	N/A	$238,683	$23,023
6	8070	WEST NEW YORK TWP BD OF ED	N/A	N/A	$2,594,272	$250,240
6	934	WHITE TWP BD OF ED	$192,651	$26,778	N/A	N/A
		Grand total for Local Employers	**$6,834,685**	**$936,034**	**$7,521,219**	**$1,020,139**

APPENDIX I - EARLY RETIREMENT INCENTIVE CONTRIBUTION SCHEDULE
(continued)

Group	Number	Location Name	ERI 3 Present Value June 30, 2010	ERI 3 Fiscal Year 2012 Payment	ERI 4 Present Value June 30, 2010	ERI 4 Fiscal Year 2012 Payment
2	90400	EDUCATION DEPARTMENT	$13,441,019	$1,323,036	N/A	N/A
2	90416	MARIE KATZENBACK SCH FOR DEAF	$2,391,915	$235,443	N/A	N/A
2	90207	OFFICE OF ADM LAW	$565,934	$55,706	N/A	N/A
3	981	NJ INST OF TECH	$561,193	$55,240	N/A	N/A
4	90411	NEW JERSEY UNIVERSITY	$2,790,644	$274,691	N/A	N/A
4	90412	KEAN UNIVERSITY	$1,459,662	$143,678	N/A	N/A
4	90414	MONTCLAIR STATE UNIVERSITY	$1,154,753	$113,665	N/A	N/A
4	90410	ROWAN UNIVERSITY	$473,358	$46,594	N/A	N/A
4	90415	THE COLLEGE OF NEW JERSEY	$296,801	$29,215	N/A	N/A
4	90413	WILLIAM PATERSON UNIVERSITY	$538,970	$53,052	N/A	N/A
6	8083	HARRISON TWP BD OF ED	N/A	N/A	$1,456,800	$202,492
6	956	HUDSON CO VOCATIONAL SCHOOL	N/A	N/A	$1,148,306	$159,612
6	620	PASSAIC BD OF ED	N/A	N/A	$17,979,690	$2,499,137
6	9034	STOCKTON BOROUGH BD OF ED	N/A	N/A	$92,858	$12,907
		Grand total for State Locations and Local Employers	**$23,674,249**	**$2,330,320**	**$20,677,654**	**$2,874,148**

Group	Number	Location Name	ERI 5 Present Value June 30, 2010	ERI 5 Fiscal Year 2012 Payment
2	90400	EDUCATION DEPARTMENT	$3,311,162	$325,927
2	90416	MARIE KATZENBACK SCH FOR DEAF	$968,662	$95,348
		Grand total for State Locations	**$4,279,824**	**$421,275**