

**THE CONSOLIDATED POLICE AND
FIREMEN'S PENSION FUND
OF NEW JERSEY
ANNUAL REPORT
OF THE ACTUARY
PREPARED AS OF JULY 1, 2010**

R:\TOBIN\2010\November\NJ1103201JC_CPF10ACTREP.doc

December 17, 2010

Commission
Consolidated Police and Firemen's Pension
Fund of New Jersey
Trenton, New Jersey

Ladies and Gentlemen:

The law governing the operation of The Consolidated Police and Firemen's Pension Fund of New Jersey provides for annual actuarial valuations of the Fund. The results of the July 1, 2010 valuation are submitted in this report, which also includes a comparison with the preceding year's valuation.

The valuation shows the financial condition of the Plan as of July 1, 2010 and gives the basis for determining the required annual contribution for the plan year beginning July 1, 2010.

The valuation was prepared on the basis of the same assumptions as were employed for the previous valuation which include a 2.00% per annum rate of investment return.

The valuation reflects the final provisions of the Appropriation Act for fiscal year 2010. (The fiscal year 2010 pension contribution of \$364,248 has been reduced to \$0.) The valuation also reflects the potential effect of the Appropriation Act for fiscal year 2011. (The fiscal year 2011 recommended pension contribution of \$147,067 has been reduced to \$0.) This amount maybe subject to change per the requirements of the State's fiscal year 2011 spending plan. Lastly, the valuation reflects Chapter 1, P.L. 2010 which allows the State Treasurer to reduce the recommended pension contribution for the 2012 fiscal year to no less than 1/7th of the recommended contribution.

The report does not take into account any changes in U.S. equity prices and bond yields that have occurred after the valuation date. Taking these into account may significantly change the market and actuarial value of assets shown. The effect of these events on any funded ratios shown, and on the Fund's calculations, is not known. The Fund's funding and financial accounting rules generally prohibit reflection of changes in assets and underlying economic conditions that occur after the valuation date.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent qualified actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board and generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the Fund, and on actuarial assumptions that are individually and in the aggregate internally consistent and reasonable based on the actual experience of the Fund.

Commission
December 17, 2010
Page 2

The Table of Contents, which follows, highlights the Sections of the Report.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "JH Cranna".

Janet H. Cranna, F.S.A., E.A., M.A.A.A., F.C.A.
Principal, Consulting Actuary

TABLE OF CONTENTS

<u>Section</u>	<u>Item</u>	<u>Page No.</u>
I	Summary of Key Results	1
II	Employee Data	6
III	Assets, Liabilities and Contributions	8
	A. Market Value of Assets as of June 30, 2010	
	B. Reconciliation of Market Value of Assets from June 30, 2009 to June 30, 2010	
	C. Development of Actuarial Value of Assets as of July 1, 2010	
	D. Present Value of Benefits	
	E. Development of State Contribution	
IV	Comments Concerning the Valuation	11
V	Accounting Information	12
<u>Appendix</u>		
A	Brief Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes	15
B	Outline of Actuarial Assumptions and Methods	17
C	Tabulations Used as a Basis for the 2010 Valuation	19
	Table 1 – Service Retirements	
	Table 2 – Ordinary Disability Retirements	
	Table 3 – Accidental Disability Retirements	
	Table 4 – Active Members’ Death Benefits	
	Table 5 – Retired Members’ Death Benefits	

REPORT ON THE ANNUAL
VALUATION OF
THE CONSOLIDATED POLICE AND FIREMEN'S PENSION FUND
OF NEW JERSEY
PREPARED AS OF JULY 1, 2010

SECTION I - SUMMARY OF KEY RESULTS

The Consolidated Police and Firemen's Pension Fund of New Jersey was established by Chapter 358, P.L. 1952. This report, prepared as of July 1, 2010 presents the results of the annual actuarial valuation of the Fund.

For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized on the following pages.

Valuation Date	July 1, 2010	July 1, 2009
<u>Participant Data</u>		
Active Members	0	0
Retired Members and Beneficiaries	<u>396</u>	<u>446</u>
Total Participants	396	446
Annual Compensation	\$ 0	\$ 0
Annual Retirement Allowances	\$ 2,715,587	\$ 3,071,817
<u>Assets</u>		
Market Value of Assets	\$ 8,760,735	\$ 11,749,083
Actuarial Value of Assets	\$ 10,632,228	\$ 13,879,949
<u>Contribution Amounts</u>		
a) Recommended		
Normal Contribution	\$ 0	\$ 0
Accrued Liability Contribution*	<u>1,216,530</u>	<u>147,067</u>
Total Contribution	\$ 1,216,530	\$ 147,067**
b) Chapter 1, P.L. 2010 Minimum Contribution [∅]		
Normal Contribution	\$ 0	N/A
Accrued Liability Contribution*	<u>173,790</u>	<u>N/A</u>
Total Contribution	\$ 173,790***	N/A

* The unfunded accrued liability has been amortized over a period of one year.

** The recommended contribution could be subject to reduction in accordance with the provisions of the Appropriation Act for fiscal year 2011.

*** The contribution could be subject to change in accordance with the provisions of the Appropriation Act for fiscal year 2012.

[∅] Chapter 1, P.L. 2010 allows the State to make a contribution for fiscal year 2012 equal to 1/7th of the recommended contribution.

The major benefit and contribution provisions of the statute as reflected in the valuation are summarized in Appendix A.

The valuation reflects the final provisions of the Appropriation Act for fiscal year 2010, which allowed the State Treasurer to reduce the recommended State contributions for fiscal year 2010 of \$364,248 to \$0.

The valuation also reflects the potential impact of the Appropriation Act for fiscal year 2011, which allows the State Treasurer to reduce the recommended contributions for fiscal year 2011 of \$147,067 to \$0. Accordingly, there is no fiscal year 2011 State appropriation receivable recognized for purposes of this valuation. This amount may be subject to change per the requirements of the State's fiscal year 2011 spending plan.

Lastly, the valuation reflects Chapter 1, P.L. 2010 which allows the State Treasurer to phase in to the full recommended contribution. The State would be in compliance with its funding requirement provided the State makes a payment of at least 1/7th of the full contribution, as computed by the actuaries, in the State fiscal year commencing July 1, 2011 and makes a payment in each subsequent fiscal year that increases by at least an additional 1/7th until payment of the full contribution is made in the seventh fiscal year and thereafter.

There were no other changes from the provisions used in the prior valuation.

The actuarial assumptions and methods used for valuing the Fund are summarized in Appendix B. There were no changes in actuarial assumptions and methods since the previous valuation.

The combination of the plan provisions, actuarial assumptions and member and beneficiary data is used to generate the overall required level of State contributions. The required State contribution is developed in Section III E.

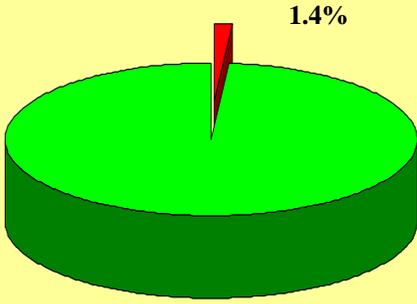
The valuation also generates a balance sheet which summarizes in some detail the total present and prospective assets and liabilities of the Fund. A summary comparison of the balance sheets as of July 1, 2009 and July 1, 2010 is set forth in the following table. The allocation of assets among the various investment alternatives is shown in graphic form on page 5.

**TABLE I
COMPARATIVE BALANCE SHEET**

<u>ASSETS</u>	2010	2009
Actuarial value of assets of Fund	\$ 10,632,228	\$ 13,879,949
Unfunded accrued liability/(surplus)	1,192,676	144,183
Total Assets	\$ 11,824,904	\$ 14,024,132
<u>LIABILITIES</u>		
Present value of benefits to present beneficiaries payable from the Retirement Reserve Fund	\$ 11,824,904	\$ 14,024,132
Present value of benefits to present active members	0	0
Total Liabilities	\$ 11,824,904	\$ 14,024,132

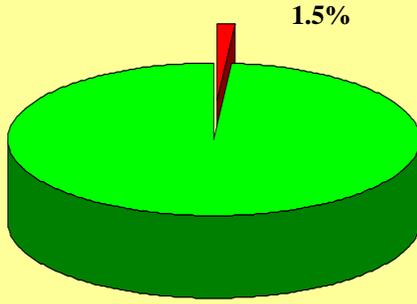
THE CONSOLIDATED POLICE AND FIREMEN'S PENSION FUND OF NEW JERSEY

ASSET ALLOCATION MARKET VALUE



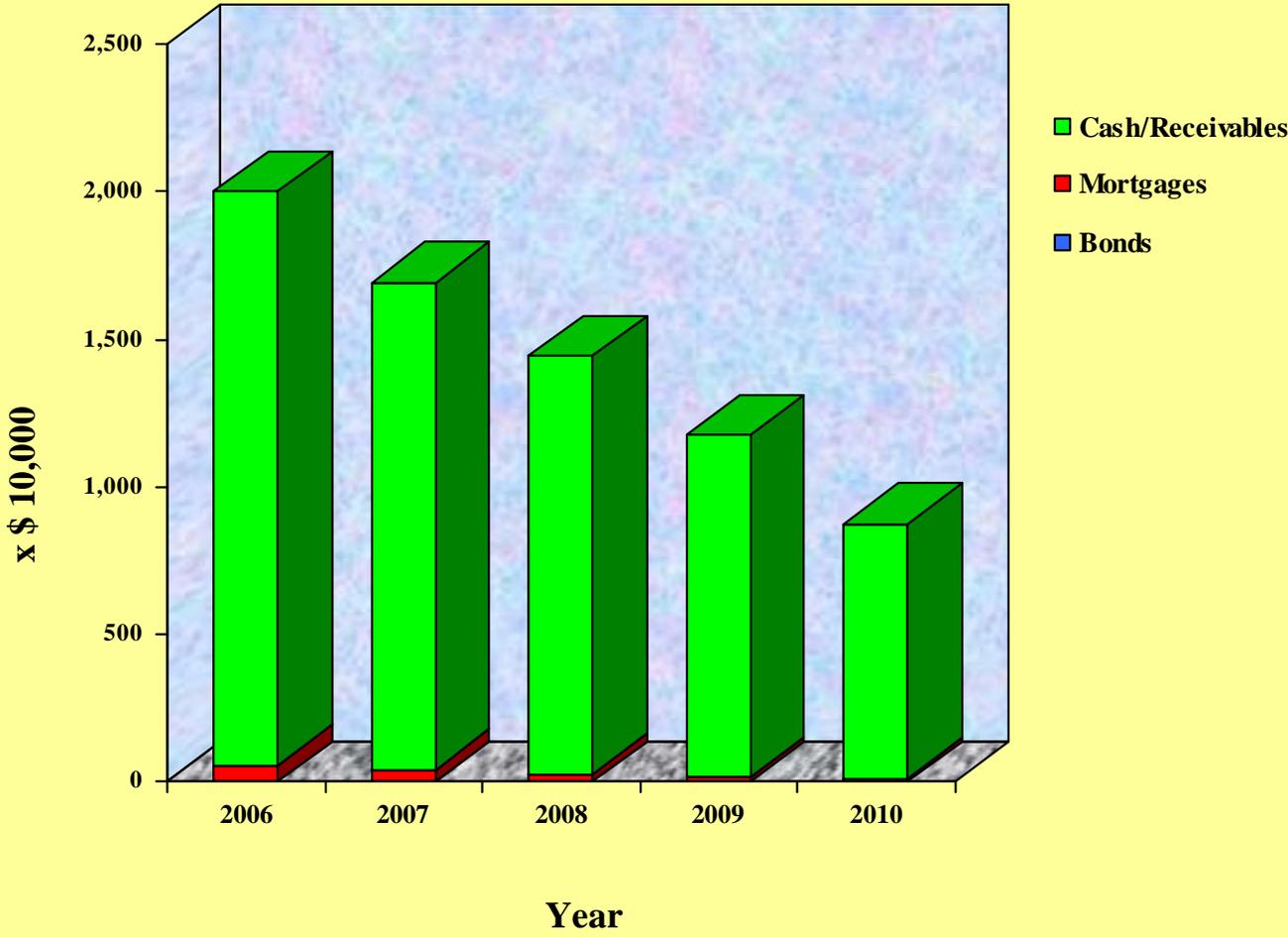
98.6%

2010



98.5%

2009



SECTION II - EMPLOYEE DATA

The data employed for the valuations were furnished to the actuary by the Division of Pensions and Benefits. Appendix C contains summary tables, which present the number and retirement allowances of members classified by age. The following summarizes and compares the Fund membership as of July 1, 2009 and July 1, 2010 by various categories.

ACTIVE MEMBERSHIP

- There have been no active participants in the Plan since July 1, 1992.

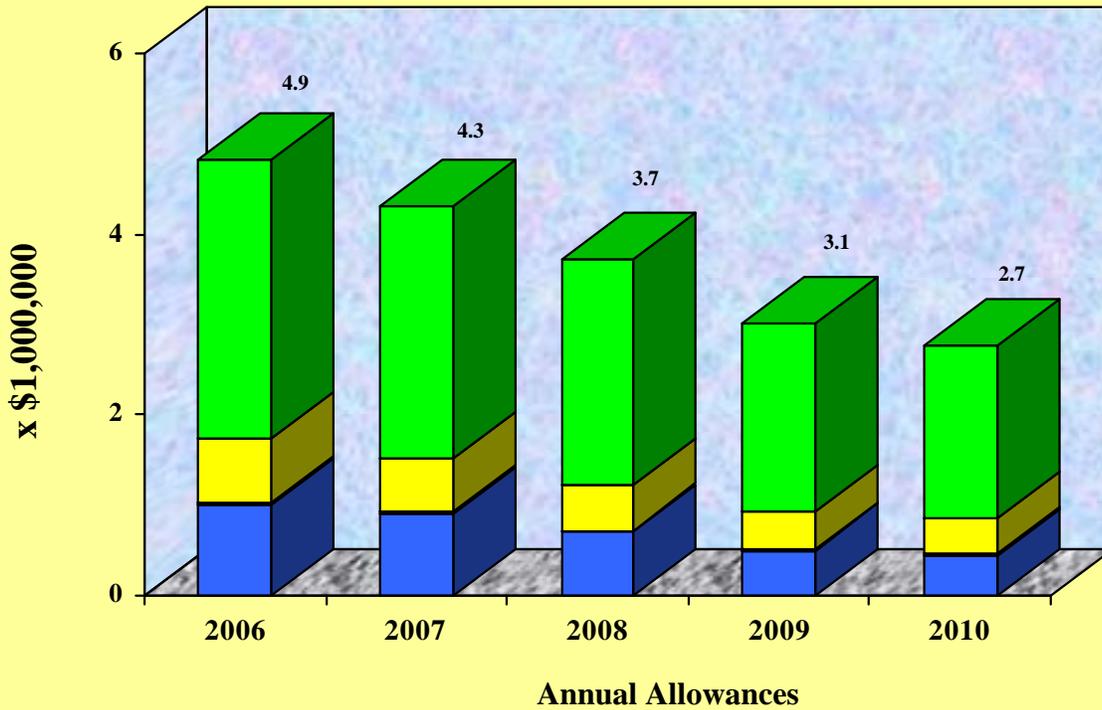
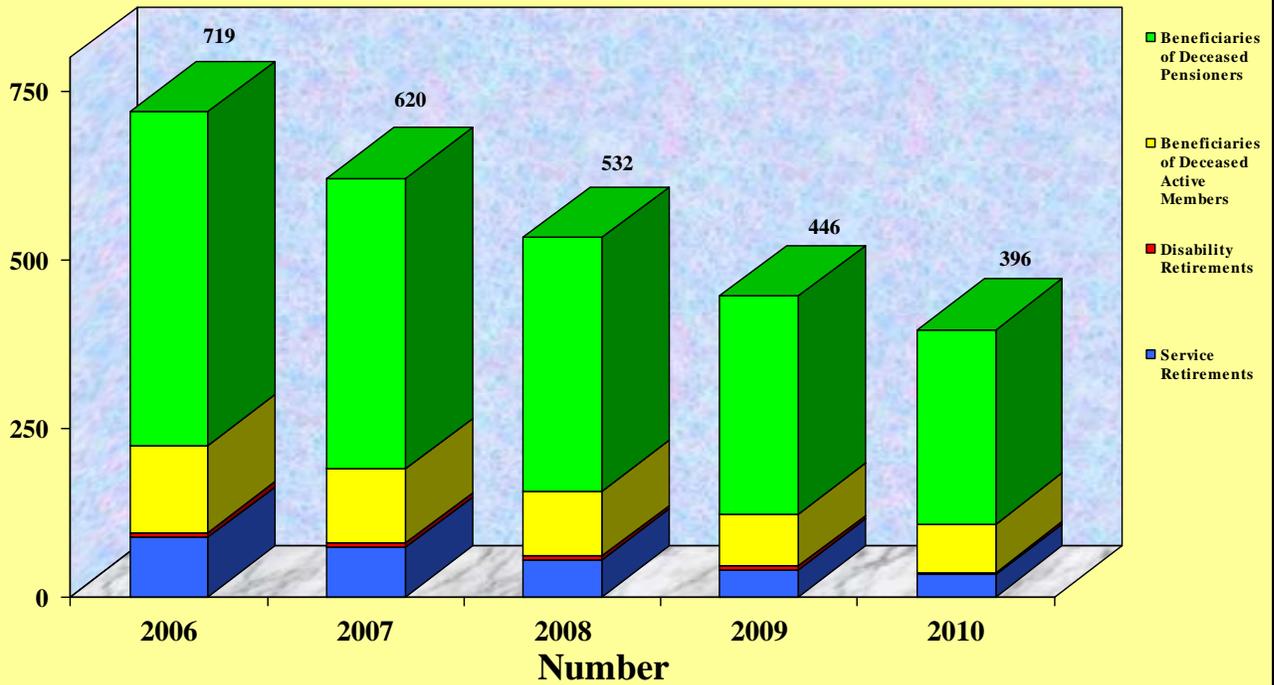
RETIRED MEMBERS AND BENEFICIARIES

GROUP	2010		2009	
	Number	Annual Allowances	Number	Annual Allowances
Service Retirements	32	\$ 441,459	40	\$ 530,601
Ordinary Disability Retirements	3	\$ 14,294	4	\$ 17,186
Accidental Disability Retirements	1	\$ 5,950	1	\$ 5,950
Beneficiaries of Deceased Pensioners	289	\$ 1,895,197	324	\$ 2,128,009
Beneficiaries of Deceased Active Employees	71	\$ 358,687	77	\$ 390,071

Graphic presentations of the statistical data on membership for the five preceding years are shown on the following page.

THE CONSOLIDATED POLICE AND FIREMEN'S PENSION FUND OF NEW JERSEY

SUMMARY OF RETIRED PARTICIPATION



SECTION III - ASSETS, LIABILITIES AND CONTRIBUTIONS

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

1.	Assets		
	a. Cash	\$	152,685
	b. Investment Holdings		8,315,231
	c. Accrued Interest on Investments		575
	d. Employer Contribution Receivable – State		0
	e. Accounts Receivable - Other		566,264
	f. Administrative Expense Receivable		16,138
	g. Employers' Contributions Receivable – Pension Adjustment		<u>370,390</u>
	h. Total	\$	9,421,283
2.	Liabilities		
	a. Pension Payroll Payable	\$	182,251
	b. Pension Adjustment Payroll Payable		399,232
	c. Withholdings Payable		43,044
	d. Administrative Expense Payable		0
	e. Accounts Payable – Other		<u>36,021</u>
	f. Total	\$	660,548
3.	Preliminary Market Value of Assets as of June 30, 2010 = 1(h) – 2(f)	\$	8,760,735
4.	State Appropriations Receivable	\$	<u>0</u> *
5.	Market Value of Assets as of June 30, 2010= 3. + 4.	\$	8,760,735

* This amount may be subject to change per the requirements of the State's fiscal year 2011 spending plan.

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

1.	Market Value of Assets as of June 30, 2009	\$	11,385,083
2.	Increases		
	a. State Appropriations	\$	0
	b. Administrative Revenue – Local		13,236
	c. Pension Adjustment		4,830,461
	d. Investment Income		<u>35,223</u>
	e. Total	\$	4,878,920
3.	Decreases		
	a. Retirement Allowances	\$	2,664,607
	b. Benefit Expense – Pension Adjustment		4,830,461
	c. Miscellaneous Expense		0
	d. Administrative Expenses		<u>8,200</u>
	e. Total	\$	7,503,268
4.	Preliminary Market Value of Assets as of June 30, 2010 = 1. + 2(e) – 3(e)	\$	8,760,735
5.	State Appropriations Receivable	\$	<u>0</u> *
6.	Market Value of Assets as of June 30, 2010 = 4. + 5.	\$	8,760,735

* This amount may be subject to change per the requirements of the State's fiscal year 2011 spending plan.

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

1.	Actuarial Value of Assets as of July 1, 2009 (without State Appropriations Receivable)	\$	13,515,949
2.	Net Cash Flow excluding Investment Income and receivable Employer Contributions		(2,659,571)
3.	Expected Investment Income at 2.0%:		
	a. Interest on Assets as of July 1, 2009	\$	270,319
	b. Interest on Net Cash Flow		<u>(26,596)</u>
	c. Total	\$	243,723
4.	Expected Actuarial Value of Assets as of July 1, 2010 = 1. + 2. + 3 (c)	\$	11,100,101
5.	20% of Difference from Preliminary Market Value of Assets		(467,873)
6.	State Appropriations Receivable		<u>0</u> *
7.	Actuarial Value of Assets as of July 1, 2010 = 4. + 5. + 6.	\$	10,632,228

* This amount may be subject to change per the requirements of the State's fiscal year 2011 spending plan.

D. Present Value of Benefits

1.	Active Members		
	a. Service Retirement	\$	0
	b. Death After Retirement		<u>0</u>
	c. Total: (a) + (b)	\$	0
2.	Service Retirees		1,811,473
3.	Disability Retirees		73,064
4.	Beneficiaries of Deceased Pensioners		8,545,029
5.	Beneficiaries of Deceased Active Employees		<u>1,395,338</u>
6.	Total Present Value of Benefits = 1(c) + 2. + 3. + 4. + 5.	\$	11,824,904

E. Development of State Contribution

1.	Present Value of Benefits as of July 1, 2010	\$	11,824,904
2.	Actuarial Value of Assets		<u>10,632,228</u>
3.	Unfunded Accrued Liability/(Net Surplus) = 1. – 2.	\$	1,192,676
4.	Amortization Years Remaining*		1
5.	Total State Contribution as of July 1, 2010	\$	1,192,676
6.	Total State Contribution as of July 1, 2011 (prior to reflecting Chapter 1, P.L. 2010)	\$	1,216,530
7.	Total State contribution as of July 1, 2010 after reflecting Chapter 1, P.L. 2010 = 6. x 1/7	\$	173,790

*The latest unfunded accrued liability payment schedule required the amortization of any plan gains or losses over the remainder of the 9-year period that began on June 30, 1991. Without additional guidance, we have assumed the immediate payment of any unfunded accrued liability.

^oChapter 1, P.L. 2010 allows the State Treasurer to reduce the fiscal year 2012 contribution to no less than 1/7th of the recommended contribution.

SECTION IV - COMMENTS CONCERNING THE VALUATION

The variation in liabilities and contributions reflects the Fund's actual experience during the year.

The Fund experienced a net actuarial loss during the year that ended June 30, 2010.

The experience loss is primarily due to an actual return on Fund assets less than that expected. For valuation purposes, a 2.0% per annum rate of return was assumed. The actual return on the Fund's actuarial value of assets was approximately (1.84)% for the period from July 1, 2009 through June 30, 2010. There was also an experience loss due to the mortality experience among the retired participants and beneficiaries of the Fund.

The following shows the development of the actuarial experience and identifies the major experience components:

A. Calculation of Actuarial Experience for the Year Ended June 30, 2010

1.	Unfunded Accrued Liability as of July 1, 2009	\$	144,183
2.	Interest on 1. at 2.0%		2,884
3.	Contributions Receivable		0
4.	Interest on 3.		<u>0</u>
5.	Expected Unfunded Accrued Liability as of July 1, 2010 = 1. + 2. - 3. - 4.	\$	147,067
6.	Increase in Unfunded Accrued Liability due to the final Provisions of the Appropriation Act for fiscal year 2010	\$	371,532*
7.	Actual Unfunded Accrued Liability as of July 1, 2010	\$	1,192,676
8.	Actuarial Loss/(Gain) = 7. - 5. - 6.	\$	674,077

B. Components of Actuarial Experience

1.	Investment Loss/(Gain)	\$	467,873
2.	Other Loss/(Gain), including mortality and changes in employee data		<u>206,204</u>
3.	Total Actuarial Loss/(Gain) Loss = 1. + 2.	\$	674,077

* The anticipated Appropriation Act for fiscal year 2010 contribution of \$364,248 has been reduced to \$0 in accordance with the final provisions of the Appropriation Act for fiscal year 2010.

SECTION V - ACCOUNTING INFORMATION

Statement No. 5 of the Governmental Accounting Standards Board, issued November 1986, established standards of disclosure of pension information by public retirement systems. Statement No. 25 of the Governmental Accounting Standards Board, issued November 1994, established financial reporting standards for defined benefit pension plans and for the notes to the financial statements of defined contribution plans of state and local governmental liabilities and superseded Statement No. 5 effective for periods beginning after June 15, 1996. Statement No. 27, Accounting for Pensions by State and Local Governmental Employers superseded Statement 5 for employers participating in pension plans and is effective for periods beginning after June 15, 1997. Statement No. 50, Accounting for Pensions by State and Local Governmental Employers amends the note disclosure and required supplementary information (RSI) of Statements No. 25 and No. 27 to conform with applicable changes adopted in Statements No. 43 and 45 for Postemployment Benefit Plans other than Pension Plans. Statement No. 50 is intended to improve the transparency of reported information about pensions by State and Local governmental plans and employers. Statement No. 50 is effective for periods beginning after June 15, 2007.

The information required by Statements No. 25, No. 27 and No. 50 is presented in the following tables. These include the development of the Annual Required Contribution (ARC), the development of the Net Pension Obligation (NPO), the Schedule of Funding Progress and the Schedule of Employer Contributions.

(A) Development of the Annual Required Contribution (ARC) as of June 30, 2012

1.	Actuarial Value of Plan Assets as of June 30, 2010		
(a)	Valuation Assets as of June 30, 2010	\$	10,632,228
(b)	Adjustment for Receivable Contributions included in (a)		<u>0</u>
(c)	Valuation Assets as of June 30, 2010 for GASB Disclosure = (a) - (b)	\$	10,632,228
2.	Actuarial Accrued Liability as of June 30, 2010 for GASB Disclosure	\$	11,824,904
3.	Unfunded Actuarial Accrued Liability/(Surplus) as of June 30, 2010 = 2. - 1 (c)	\$	1,192,676
4.	Amortization of Unfunded Actuarial Accrued Liability/(Surplus) over 1 year	\$	1,192,676
5.	Normal Cost as of June 30, 2010	\$	0
6.	Annual Required Contribution as of June 30, 2012		
(a)	Annual Required Contribution as of June 30, 2010 = 4. + 5.	\$	1,192,676
(b)	Interest Adjustment to June 30, 2012		<u>48,184</u>
(c)	Annual Required Contribution as of June 30, 2012 = (a) + (b)	\$	1,240,860

(B) Development of the Net Pension Obligation (NPO) as of June 30, 2012:

1.	Annual Required Contribution as of June 30, 2012	\$	1,240,860
2.	Interest on Net Pension Obligation		10,574
3.	Adjustment to Annual Required Contribution		<u>(539,288)</u>
4.	Annual Pension Cost = 1. + 2. + 3.	\$	712,146
5.	Expected Employer Contributions for Fiscal Year 2012		<u>173,790*</u>
6.	Increase in Net Pension Obligation = 4. - 5.	\$	538,356
7.	Net Pension Obligation at June 30, 2011		<u>528,714**</u>
8.	Net Pension Obligation at June 30, 2012 = 6. + 7.	\$	1,067,070

* The recommended contribution of \$1,216,530 has been reduced to \$173,790 for fiscal year 2012 in accordance with Chapter 1, P.L. 2010. This amount may be subject to change per the requirements of the State's fiscal year 2012 spending plan.

** The June 30, 2011 Net Pension Obligation amount has been revised from the amount shown in the prior year's report to reflect the adjustment to the fiscal year 2010 and fiscal year 2011 employer contributions.

C. Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded Actuarial Accrued Liability (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	Unfunded Actuarial Accrued Liability as a Percentage of Covered Payroll <u>(b-a)</u> c
6/30/05	\$ 21,886,445	\$ 30,031,591	\$ 8,145,146	72.9%	\$ 0	N/A
6/30/06	\$ 22,453,828	\$ 24,749,667	\$ 2,295,839	90.7%	\$ 0	N/A
6/30/07	\$ 19,336,247	\$ 21,090,186	\$ 1,753,939	91.7%	\$ 0	N/A
6/30/08	\$ 15,705,984	\$ 17,319,488	\$ 1,613,504	90.7%	\$ 0	N/A
6/30/09	\$ 13,515,949	\$ 14,024,132	\$ 508,183	96.4%	\$ 0	N/A
6/30/10	\$ 10,632,228	\$ 11,824,904	\$ 1,192,676	89.9%	\$ 0	N/A

D. Schedule of Employer Contributions

Fiscal Year	Annual Required Contribution	Employer Contribution	Percentage Contributed
2007	\$ 8,474,210	\$ 1,784,000	21.1%
2008	\$ 2,388,591	\$ 523,000	21.9%
2009	\$ 1,824,798	\$ 1,256,000	68.8%
2010	\$ 1,678,690	\$ 0*	0.0%
2011	\$ 528,714	\$ 0**	0.0%
2012	\$ 1,240,860	\$ 173,790	14.0%

* The fiscal year 2010 contribution of \$364,000 has been reduced to \$0 in accordance with the final provisions of the Appropriation Act for fiscal year 2010.

**The fiscal year 2011 recommended contribution of \$147,067 has been reduced to \$0 in anticipation of the provisions of the Appropriation Act for fiscal year 2011.

o The recommended contribution of \$1,216,530 has been reduced to \$173,790 for fiscal year 2012 in accordance with Chapter 1, P.L. 2010. This amount may be subject to change per the requirements of the State's fiscal year 2012 spending plan.

E. The information presented in the required supplementary schedules was determined as part of the actuarial valuation. Additional information follows:

Valuation Date	June 30, 2010
Actuarial Cost Method	Projected Unit Credit
Amortization Method	Level Dollar, closed
Remaining Amortization Period	1 year
Asset Valuation Method	5 year average of market value
Actuarial Assumptions:	
Investment Rate of Return	2.00%

APPENDIX A

BRIEF SUMMARY OF THE BENEFIT AND
CONTRIBUTION PROVISIONS AS INTERPRETED
FOR VALUATION PURPOSES

Eligibility for Membership

Member of a municipal police department, municipal paid or part-paid fire department or county police department, or a paid or part-paid fire department of a fire district located in a township who has contributed to this pension fund; and who is not covered by the Police and Firemen's Retirement System which became effective on July 1, 1944.

Active Member: Any member who is a policeman, fireman, detective, lineman, driver of police van, fire alarm operator, or inspector of combustibles and who is subject to call for active service as such.

Employee Member: Any member who is not subject to active service or duty.

1. Definitions

Plan Year	The 12-month period beginning on July 1 and ending on June 30.
Service	Service rendered while a member as described above.
Compensation	Base salary; not including individual salary adjustments which are granted primarily in anticipation of retirement or additional remuneration for performing temporary duties beyond the regular work day. (Effective June 30, 1996 Chapter 113, P.L. 1997 provided that the amount of compensation used for employer and member contributions and benefits under the program cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code.)
Final Compensation	Compensation received during the last 12 months of service preceding retirement or termination of service.
Average Salary	Salary averaged over the last three years prior to retirement or other termination of service.

2. Benefits:

Service

Retirement

Mandatory retirement at age 65 with 25 years of service (a municipality may retain the Chief of Police until age 70). Voluntary retirement after 25 years of service for an active member and after age 60 with 25 years of service for an employee member. Benefit is life annuity equal to 60% of final compensation, plus 1% of final compensation for years of service in excess of 25.

Death

Benefit

While on duty:

Immediate life annuity equal to 70% of average salary payable to the spouse. If there is no spouse or if the spouse dies or remarries, 20% of final compensation will be payable to one surviving child and 35% (50%) of final compensation will be payable, to two (three) surviving children. If there is no surviving spouse or child, 25% (40%) of final compensation will be payable to one (two) surviving dependent parent(s). The minimum spousal annuity is \$4,500 per annum.

While not on duty after retirement:

Life annuity equal to 50% of the member's average salary payable to the spouse, plus 15% (25%) to one (two or more) surviving child (children). If there is no surviving spouse or if the surviving spouse dies or remarries, 20% (35%, 50%) of the member's average salary to one (two, three or more) surviving child (children). In the event that there is no surviving spouse or child, 25% (40%) of the member's average salary will be payable to one (two) dependent parent(s). The minimum spousal annuity is \$4,500 per annum.

Ordinary

Disability

Retirement

Totally and permanently incapacitated from service for any cause other than as a direct result of a traumatic event occurring during the performance of duty. Benefit is an immediate life annuity equal to 1/2 of average salary.

Accidental

Disability

Retirement

Totally and permanently incapacitated as a direct result of a traumatic event occurring while performing regular or assigned duties. Benefit is an immediate life annuity equal to 2/3 of average salary.

3. Contributions

Each active member contributes 7% of his salary to the pension fund.

APPENDIX B

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

VALUATION INTEREST RATE: 2.00% per annum, compounded annually for development of costs.

DEATHS AFTER RETIREMENT: Rates vary by age. Representative values of the assumed orders of mortality are as follows:

Age	Lives Per 1,000		
	Service Pensioners	Disability Pensioners	Widows
50	6.2	12.8	2.2
55	9.9	17.4	3.3
60	15.6	24.5	5.5
65	23.9	35.7	9.6
70	30.3	53.2	16.5
75	49.1	80.2	32.4
80	81.5	121.1	56.1
85	126.3	182.0	89.2

MARRIAGE: Males are assumed to be 4 years older than females, no assumption was made as to children.

For those participants with listed beneficiaries, the beneficiary allowance was assumed to be the greater of twice the amount contained in the record or the minimum of \$4,500/yr. (The information contained in the record has not been updated for the change from 25% to 50% payment to the survivor.)

For those participants without listed beneficiaries, 65% were assumed to be married and the beneficiary amount was assumed to be the minimum benefit payable (\$4,500/yr.).

Actuarial Method: The unfunded accrued liability was measured as of June 30, 1990 and the accrued liability contribution rate was then determined such that the unfunded accrued liability was to be amortized over a period of 9 years with contributions expected to remain constant.

In determining the unfunded accrued liability and the contribution rate, the actuarial value of assets as of June 30, 1990 was based upon 100% of the market value of system assets. For subsequent actuarial valuations, the actuarial value of assets is adjusted to reflect actual contributions and benefit payments, an assumed rate of return on the previous year's assets and current year's cash flow at an annual rate of 2.00% with an adjustment to reflect 20% of the difference between the resulting value and the actual market value of System assets.

In developing the unfunded accrued liability contribution rate as of June 30, 1991 and subsequent years, the contribution rate is adjusted to amortize any gains or losses over the remainder of the 9-year period. (Without additional guidance, we have assumed that the unfunded accrued liability determined as of June 30, 2010 will be amortized over 1 year.)

APPENDIX C

TABULATIONS USED AS A BASIS FOR THE 2010 VALUATION

The following tables give the number and retirement allowances of beneficiaries classified by age as of July 1, 2010.

TABLE 1

**THE NUMBER AND ANNUAL RETIREMENT
ALLOWANCES OF RETIRED MEMBERS DISTRIBUTED
BY AGE AS OF JULY 1, 2010**

SERVICE RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
90	1	\$ 32,757		
91	2	51,834		
92	5	81,101		
93	4	78,294		
94	3	19,676		
95	7	103,834		
96	1	5,707		
97	5	43,905		
100	2	8,099		
103	2	16,252		
TOTAL	32	\$ 441,459		

TABLE 2

**THE NUMBER AND ANNUAL RETIREMENT
ALLOWANCES OF RETIRED MEMBERS DISTRIBUTED
BY AGE AS OF JULY 1, 2010**

ORDINARY DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
90	1	\$ 3,065		
94	1	5,377		
96	1	5,852		
TOTAL	3	\$ 14,294		

TABLE 3

**THE NUMBER AND ANNUAL RETIREMENT
ALLOWANCES OF RETIRED MEMBERS DISTRIBUTED
BY AGE AS OF JULY 1, 2010**

ACCIDENTAL DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
94	1	\$ 5,950		
TOTAL	1	\$ 5,950		

TABLE 4

**THE NUMBER AND ANNUAL RETIREMENT
ALLOWANCES OF BENEFICIARIES DISTRIBUTED
BY AGE AS OF JULY 1, 2010**

ACTIVE MEMBERS' DEATH BENEFITS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
59			1	\$ 778
65			1	1,800
66	1	\$ 1,800		
68			1	2,215
73			1	4,500
74			1	705
82			2	9,000
84			2	4,845
85			2	15,163
86			2	9,000
87			3	13,500
88			2	9,000
89			6	42,075
90			1	4,500
91			1	4,500
92			6	34,123
93			5	33,812
95			9	51,542
96			2	13,556
97			2	9,000
98			5	22,500
99			3	13,500
100			4	18,000
101			1	4,500
102			4	21,273
103			1	4,500
105			1	4,500
108			1	4,500
TOTAL	1	\$ 1,800	70	\$ 356,887

TABLE 5

**THE NUMBER AND ANNUAL RETIREMENT
ALLOWANCES OF BENEFICIARIES DISTRIBUTED
BY AGE AS OF JULY 1, 2010**

RETIRED MEMBERS' DEATH BENEFITS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
50			1	\$ 3,168
56	1	\$ 3,575		
57			1	2,071
62	1	1,670		
63			1	4,500
67			2	3,515
70			1	4,500
71			2	2,494
72	1	1,350	1	4,500
74			2	9,000
75	1	450	2	5,795
77			2	19,688
78			2	9,000
79			4	24,559
80			3	16,130
81	1	1,923	3	31,615
82			5	35,182
83			6	54,969
84			4	32,356
85			6	51,481
86			9	69,853
87			7	64,534
88			18	111,039
89			15	103,460
90			20	138,089
91			23	165,797
92			22	150,630
93			28	194,324
94			19	131,485
95			23	139,765
96			14	87,789
97			14	83,788
98			6	36,742
99			9	51,443
100			1	4,500
101			5	23,991
102			1	5,260
103			1	4,717
105			1	4,500
	5	\$ 8,968	284	\$ 1,886,229