

# Report on the Annual Valuation of The Police and Firemen's Retirement System of New Jersey

Prepared as of July 1, 2015



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February 19, 2016

Board of Trustees  
The Police and Firemen's Retirement System  
of New Jersey  
Trenton, New Jersey

Members of the Board:

The law governing the operation of the Police and Firemen's Retirement System of New Jersey provides for annual actuarial valuations of the System. The results of the July 1, 2015 valuation are submitted in this report, which also includes a comparison with the preceding year's valuation.

The valuation provides information concerning the financial condition of the Plan as of July 1, 2015, and sets forth the basis for determining the recommended annual contribution for the State fiscal year beginning July 1, 2016.

The valuation reflects Chapter 78, P.L. 2011, which increased member contributions from 8.50% to 10.00% of salary effective October 2011.

As required under Chapter 255, P.L. 1944, experience studies are performed once in every three year period. The valuation was prepared using the demographic assumptions recommended on the basis of the July 1, 2010 – June 30, 2013 Experience Study and approved by the Board of Trustees at the February 9, 2015 Board meeting. The valuation reflects the economic assumptions recommended by the Treasurer, which include a rate of investment return of 7.90% per annum. Assumed future salary increases are reduced by 1.00% per annum through fiscal year ending 2021. In addition, the mortality improvement scale has been changed from Scale BB to the Buck Modified 2014 Projection Scales. These assumptions will remain in effect for valuation purposes until such time as the Board or the Treasurer recommends revised economic assumptions.

In my opinion, the actuarial assumptions used are appropriate for purposes of the valuation and are reasonably related to the experience of the System and to reasonable long-term expectations. These assumptions were selected in accordance with the applicable Actuarial Standards of Practice published by the Actuarial Standards Board.

The State fiscal year 2015 recommended pension contribution of \$414,316,953 has been reduced to \$139,297,000, and the fiscal year 2016 recommended pension contribution of \$461,081,051 has been reduced to \$138,324,315 (30% of the recommended employer contribution) in anticipation of the provisions of the Appropriations Act of 2016. This amount may be subject to change per the requirements of the State's fiscal year 2016 spending plan.

Reporting requirements of Statements No.67 and No.68 are effective as of June 30, 2014 and June 30, 2015 reporting dates, respectively. These requirements are addressed in separate reports.

The State of New Jersey's Division of Pensions and Benefits reported the individual data for members of the Police and Firemen's Retirement System of New Jersey as of the valuation date for use in the preparation of this report. While we did not verify the data at their source, we did perform tests for internal consistency and reasonableness. The amount of assets in the trust fund taken into account in the valuation was based on statements prepared for us by the Division of Pensions and Benefits. The accuracy of the results presented in this report is dependent on the accuracy of the data.

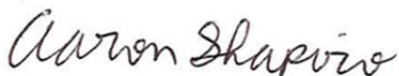
Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of the potential range of future results is beyond the scope of this valuation.

Use of this report for any other reason or by anyone other than the Board or staff of the State of New Jersey's Division of Pensions and Benefits may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, or inapplicability of the report for that purpose. You should ask Buck to review any statement you wish to make on the results contained in this report. Buck will accept no liability for any such statement made without prior review by Buck.

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Qualification Standards of the Academy to render the actuarial opinions contained herein. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions concerning it.

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

Respectfully submitted,

A handwritten signature in cursive script that reads "Aaron Shapiro".

Aaron Shapiro, FSA, EA, MAAA  
Principal, Consulting Actuary

AS:hn

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## Section I – Summary of Key Results

The Police and Firemen's Retirement System of New Jersey was established effective July 1, 1944. Each year an actuarial valuation of the assets and liabilities of the System is made to determine the appropriate level of contributions. This report, prepared as of July 1, 2015, 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 below.

Valuation Fiscal Year	July 1, 2015 2017	July 1, 2014 2016
<u>Number of Active Participants</u>		
• Contributory	39,052	38,806
• Non-Contributory	1,307	1,300
• Total	40,359	40,106
<u>Limited Annual Compensation</u>		
• Contributory Participants	\$ 3,696,334,469	\$ 3,684,784,432
• Non-Contributory Participants	94,313,880	91,061,401
• Total Compensation	\$ 3,790,648,349	\$ 3,775,845,833
<u>Unlimited Annual Compensation</u>	\$ 3,790,724,117	\$ 3,775,878,969
<u>Annual Compensation for Contribution Purposes<sup>4</sup></u>	\$ 3,695,509,355	\$ 3,682,677,356
Number of Pensioners and Beneficiaries	44,252	42,576
Total Annual Allowances	\$ 2,209,791,511	\$ 2,083,969,122
Number of Terminated Vested Members	51	55
Total Annual Allowances	\$ 1,028,508	\$ 1,088,196
<u>Assets</u>		
Total Present Market Value of Assets <sup>1</sup>	\$ 25,191,023,757	\$ 25,094,425,477
Total Valuation Assets <sup>1</sup>	\$ 25,939,616,259	\$ 25,128,684,753
<u>Contribution Amounts</u>		
<u>Recommended Pension Contribution<sup>2</sup></u>		
Normal Contribution	\$ 402,691,551	\$ 403,761,355
Accrued Liability Contribution <sup>3</sup>	860,931,185	833,938,735
Total Pension Contribution <sup>2</sup>	\$ 1,263,622,736	\$ 1,237,700,090

1. Includes discounted receivable contributions of \$128,196,770 as of July 1, 2015 and \$108,411,934 as of July 1, 2014, respectively. The amounts also include the present value of receivable ERI contributions of \$12,887,608 as of July 1, 2015 and \$14,274,396 as of July 1, 2014, respectively. The amounts also include the present value of Chapter 19, P.L. 2009 contribution deferrals of \$159,321,982 as of July 1, 2015 and of \$167,929,024 as of July 1, 2014, respectively.
2. The contribution amounts were calculated assuming payment on 7/1/16 and 7/1/15 respectively. Interest should be added from this date to the actual payment dates.
3. The accrued liability contribution does not include ERI payments and Local employer contributions due to Chapter 19, P.L. 2009 deferrals.
4. The amounts exclude compensation of \$825,114 for 8 contributing active members in 2015 who are age 65 or older and \$2,107,076 for 17 contributing active members in 2014 who are age 65 or older.



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

- The Appropriation Act of fiscal year 2015 which reduced the recommended State Pension contribution of \$414,316,953 to \$139,297,000. (This amount excludes the premium paid to the Non-Contributory Group Insurance Fund of \$7,561,878 for the lump sum death benefits.)
- The potential impact of the Appropriations Act of fiscal year 2016 which allows the State Treasurer to reduce the recommended State normal cost and accrued liability contribution for fiscal year 2016 from \$461,081,051 to \$138,324,315. Therefore, the fiscal year 2016 recommended State pension contribution of \$461,081,051 has been reduced to \$138,324,315 (30% of the recommended employer contribution) and has been recognized as a receivable discounted contribution of \$128,196,770 for purposes of this valuation. (This amount excludes the estimated premium paid to the Non-Contributory Group Insurance Fund of \$10,368,000 for lump sum death benefits.)
- Chapter 19, P.L. 2009 which provides that the State Treasurer will reduce the normal and accrued liability contributions for Local employers to 50 percent of the amount certified for fiscal year 2009. The additional unfunded liability will be paid by Local employers in level annual payments over a period of 15 years, with the first payment due in the fiscal year ending June 30, 2012. The unfunded liability will be adjusted annually by the rate of return on the actuarial value of assets. The legislation also provides that a Local employer may opt to pay 100 percent of the recommended contribution for fiscal year 2009. Employers making this election will be credited with the full payment. In addition, certain employers who were eligible to defer 50% of their fiscal year 2009 recommended contributions but instead paid 100% of the 2009 recommended contributions are permitted to elect to defer 50% of their recommended 2010 fiscal year contributions. The additional unfunded liability will be paid by Local employers in level annual payments over a period of 15 years, with the first payment due in the fiscal year ending June 30, 2012. The unfunded liability will be adjusted by the rate of return on the actuarial value of assets.
- The unauthorized early retirement incentive programs offered by certain Local employers. The additional liability incurred by the System due to these programs is included as a receivable contribution.
- Chapter 78, P.L. 2011, which increased member contributions from 8.50% to 10.00% of Compensation effective October 2011.

There are no other changes to the benefit and contribution provisions since the previous valuation.

As required under Chapter 255, P.L. 1944, experience studies are performed once in every three year period. The valuation was prepared using demographic assumptions recommended on the basis of the July 1, 2010 – June 30, 2013 Experience Study and approved by the Board at the February 9, 2015 Board meeting. The valuation reflects the economic assumptions recommended by the Treasurer, which include a rate of investment return of 7.90% per annum. The assumed future salary increases are reduced by 1.00% per annum through fiscal year ending 2021. In addition, the mortality improvement scale has been changed from Scale BB to the Buck Modified 2014 Projection Scales. As a result of changing the mortality improvement scale, the accrued liability decreased \$23,468,009 for the State and \$156,026,252 for the Local Employers. Additionally, the gross normal cost was reduced by \$623,356 for the State and \$3,978,692 for the Local Employers. These assumptions will remain in effect for valuation purposes until such time as the Board or the Treasurer recommends revised economic assumptions.

The valuation reflects future increases in the compensation limits imposed on certain member tiers. For members hired prior to May 22, 2010, the compensation limit for 2015 is \$265,000 and is assumed to increase by 3.00% annually. For members hired on or after May 22, 2010, the compensation limit for 2015 is \$118,500 and is assumed to increase by 4.0% annually.

Lastly, the employer receivable contribution included in the Market Value of Assets (MVA) and the Actuarial Value of Assets (AVA) has been discounted at the valuation interest rate of 7.90% from the expected

payable date of June 30, 2016 to the valuation date for the State's MVA and AVA and from the expected payable date of April 1, 2016 to the valuation date for the Local's MVA and AVA.

There were no other changes to the actuarial assumptions and methods from those used in the prior valuation. The actuarial assumptions and methods used in this valuation for valuing the Fund are summarized in Appendix B.

The combination of the plan provisions, actuarial assumptions and member and beneficiary data is used to generate the overall recommended level of employer contributions. The recommended contribution schedule is summarized in Sections III (H) and III (I).

The valuation 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, 2015 and July 1, 2014 is set forth in the following table.

**Table I**  
**Comparative Balance Sheet**

	2015	2014
<b>Assets</b>		
Actuarial value of assets of Fund	\$ 25,939,616,259	\$ 25,128,684,753
Net unfunded accrued liability/(surplus)	<u>9,782,787,209</u>	<u>9,476,211,818</u>
Total Assets	\$ 35,722,403,468	\$ 34,604,896,571
<b>Accrued Liabilities</b>		
Present value of benefits to present beneficiaries payable from the Retirement Reserve Fund	\$ 23,025,291,735	\$ 21,789,926,249
Present value of benefits to present active members	<u>12,697,111,733</u>	<u>12,814,970,322</u>
Total Accrued Liabilities	\$ 35,722,403,468	\$ 34,604,896,571

## Section II – Employee Data

The data employed for the valuations were furnished to the actuaries by the Division of Pensions and Benefits. While the actuaries did not verify the data at their source, they did perform tests for internal consistency and reasonableness. The accuracy of the results presented in this report is dependent on the accuracy of the data. The following summarizes and compares the Fund membership as of July 1, 2015 and July 1, 2014 by various categories.

### State Membership

#### Active Membership

Group	2015			2014		
	Number <sup>3</sup>	Annual Compensation	Limited Annual Compensation	Number <sup>3</sup>	Annual Compensation	Limited Annual Compensation
Men	5,608	\$ 422,341,421	\$ 422,341,421	5,735	\$ 432,645,142	\$ 432,645,142
Women	1,275	\$ 95,746,284	\$ 95,746,284	1,290	\$ 96,856,142	\$ 96,856,142
Policemen <sup>1</sup>	6,837	\$ 515,031,110	\$ 515,031,110	6,982	\$ 526,689,514	\$ 526,689,514
Firemen <sup>2</sup>	46	\$ 3,056,595	\$ 3,056,595	43	\$ 2,811,770	\$ 2,811,770

1 There are 49 employer locations in 2015 and 47 employer locations in 2014 reporting payroll for policemen.

2 There are 5 employer locations in 2015 and 5 employer locations in 2014 reporting payroll for firemen.

3 There were no members hired on or after May 22, 2010 whose pay exceeded the Social Security wage base.

#### Retired Members and Beneficiaries

Group	2015		2014	
	Number <sup>4</sup>	Annual Allowances <sup>5</sup>	Number <sup>4</sup>	Annual Allowances <sup>5</sup>
Deferred Terminated Vested	8	\$ 162,756	13	\$ 249,096
Service Retirements	4,353	\$ 224,873,195	4,009	\$ 204,521,228
Ordinary Disability Retirements	735	\$ 20,087,796	733	\$ 19,951,252
Accidental Disability Retirements	338	\$ 15,030,714	325	\$ 14,370,738
Beneficiaries	726	\$ 21,949,484	676	\$ 20,165,696

4 The number counts exclude 436 Domestic Relations beneficiaries in 2015 and 384 Domestic Relations beneficiaries in 2014.

5 Includes annual allowances paid to Domestic Relations beneficiaries.

## Local Employer

### Active Membership

Group	2015			2014		
	Number <sup>3</sup>	Annual Compensation	Limited Annual Compensation	Number <sup>4</sup>	Annual Compensation	Limited Annual Compensation
Men	30,606	\$ 3,014,686,145	\$ 3,014,610,377	30,256	\$ 2,991,449,154	\$ 2,991,416,018
Women	2,870	\$ 257,950,267	\$ 257,950,267	2,825	\$ 254,928,531	\$ 254,928,531
Policemen <sup>1</sup>	27,129	\$ 2,646,342,399	\$ 2,646,266,631	26,779	\$ 2,624,812,520	\$ 2,624,779,384
Firemen <sup>2</sup>	6,347	\$ 626,294,013	\$ 626,294,013	6,302	\$ 621,565,165	\$ 621,565,165

1 There are 516 employer locations in 2015 and 516 employer locations in 2014 reporting payroll for policemen.

2 There are 143 employer locations in 2015 and 141 employer locations in 2014 reporting payroll for firemen.

3 There were 3 members hired on or after May 22, 2010 whose pay exceeded the Social Security wage base.

4 There were 2 members hired on or after May 22, 2010 whose pay exceeded the Social Security wage base.

### Retired Members and Beneficiaries

Group	2015		2014	
	Number <sup>5</sup>	Annual Allowances <sup>6</sup>	Number <sup>5</sup>	Annual Allowances <sup>6</sup>
Deferred Terminated Vesteds	43	\$ 865,752	42	\$ 839,100
Service Retirements	24,691	\$1,549,557,173	23,792	\$1,460,868,085
Ordinary Disability Retirements	2,166	\$ 61,972,178	2,157	\$ 60,726,956
Accidental Disability Retirements	2,401	\$ 119,268,918	2,336	\$ 113,690,175
Beneficiaries	6,414	\$ 197,052,053	6,306	\$ 189,674,992

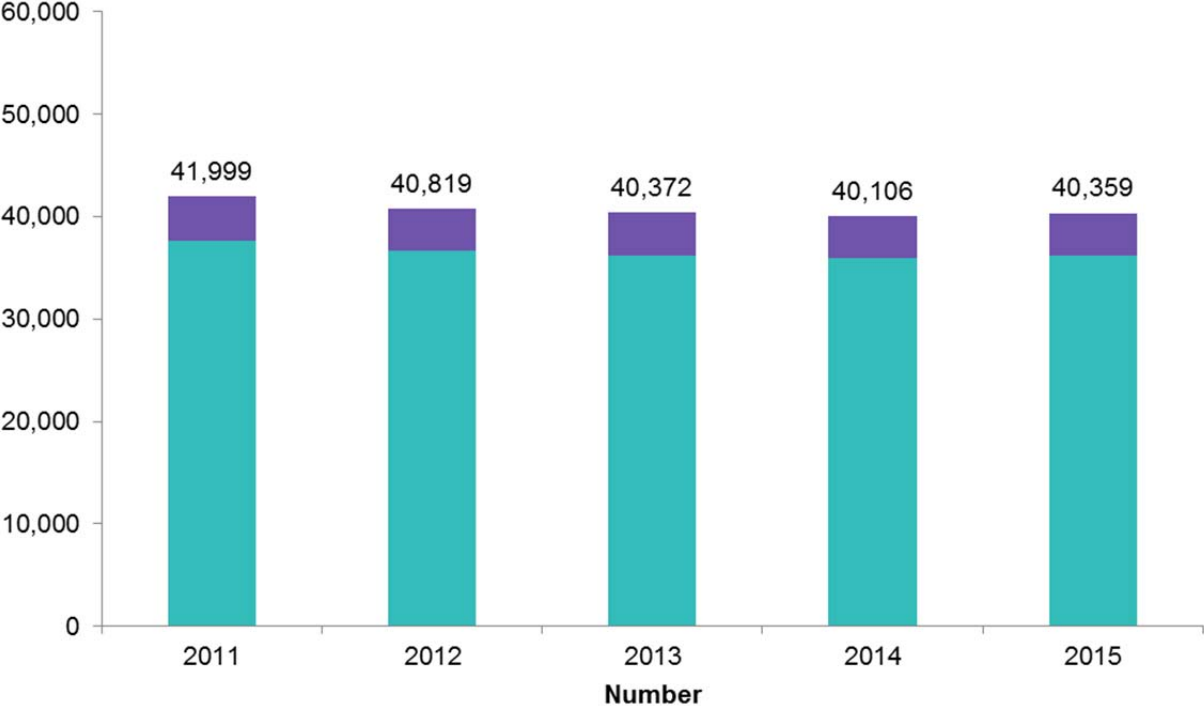
5 The number counts exclude 1,992 Domestic Relations beneficiaries in 2015 and 1,858 Domestic Relations beneficiaries in 2014.

6 Includes annual allowances paid to Domestic Relations beneficiaries.

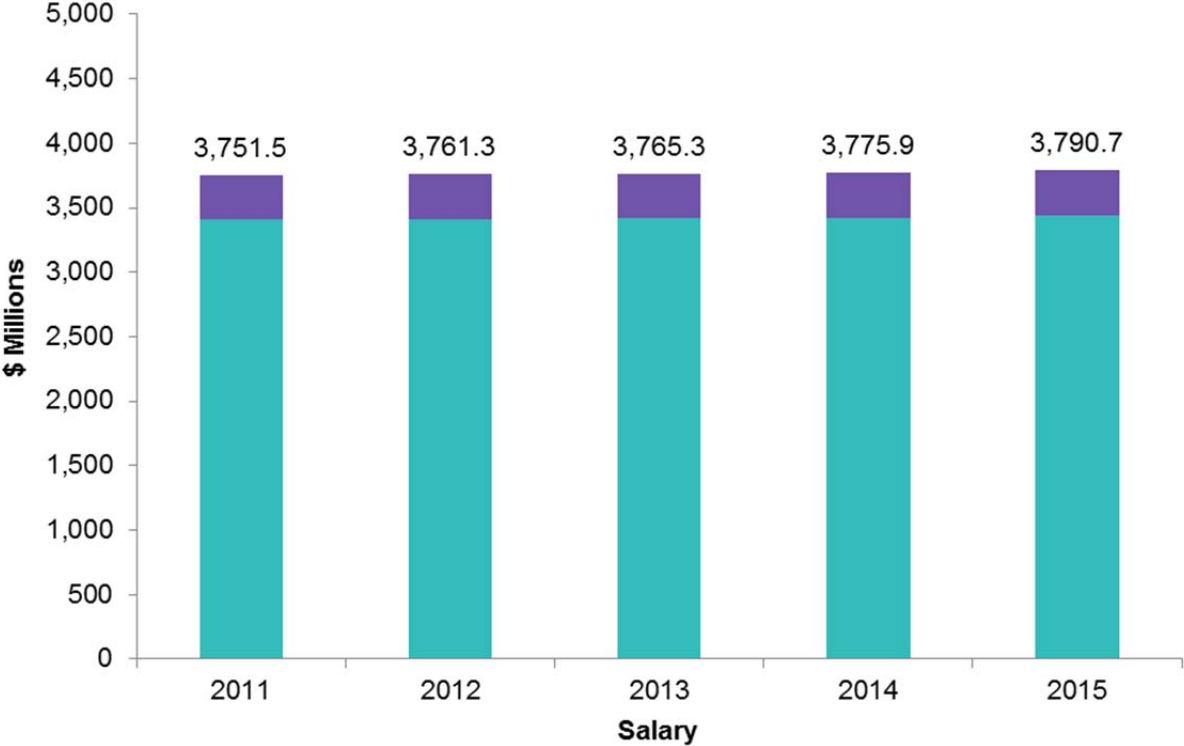
Appendix E provides a detailed distribution between groups.

Graphic presentations of the statistical data on membership are shown on the following pages.

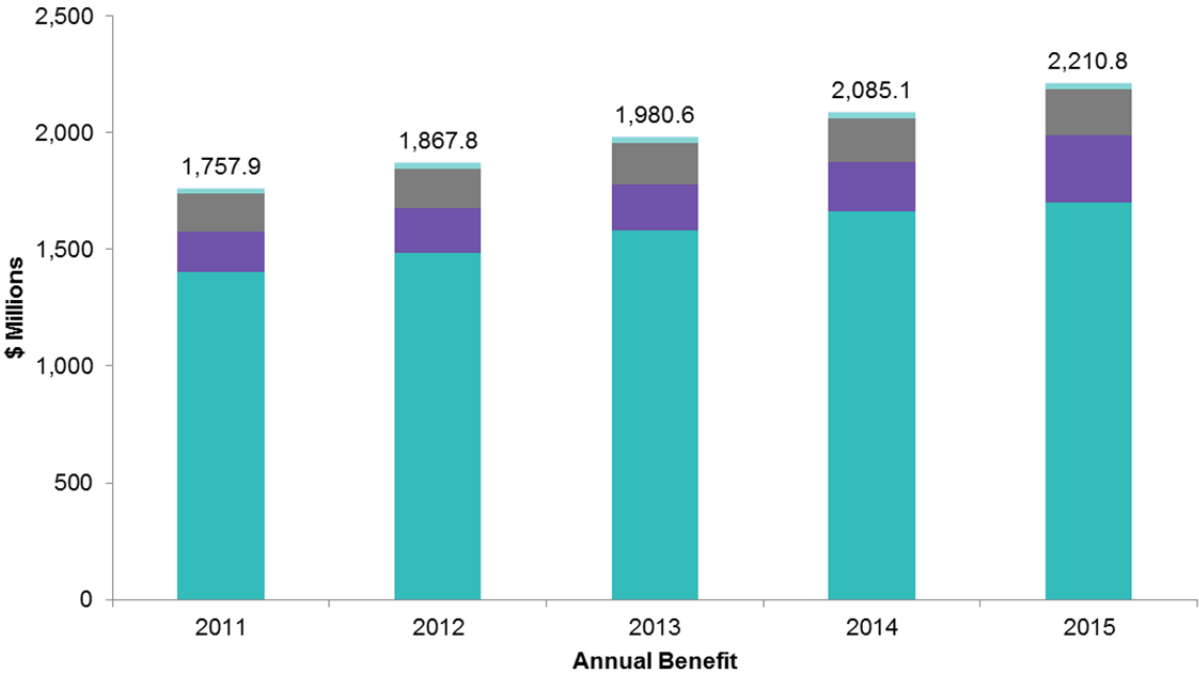
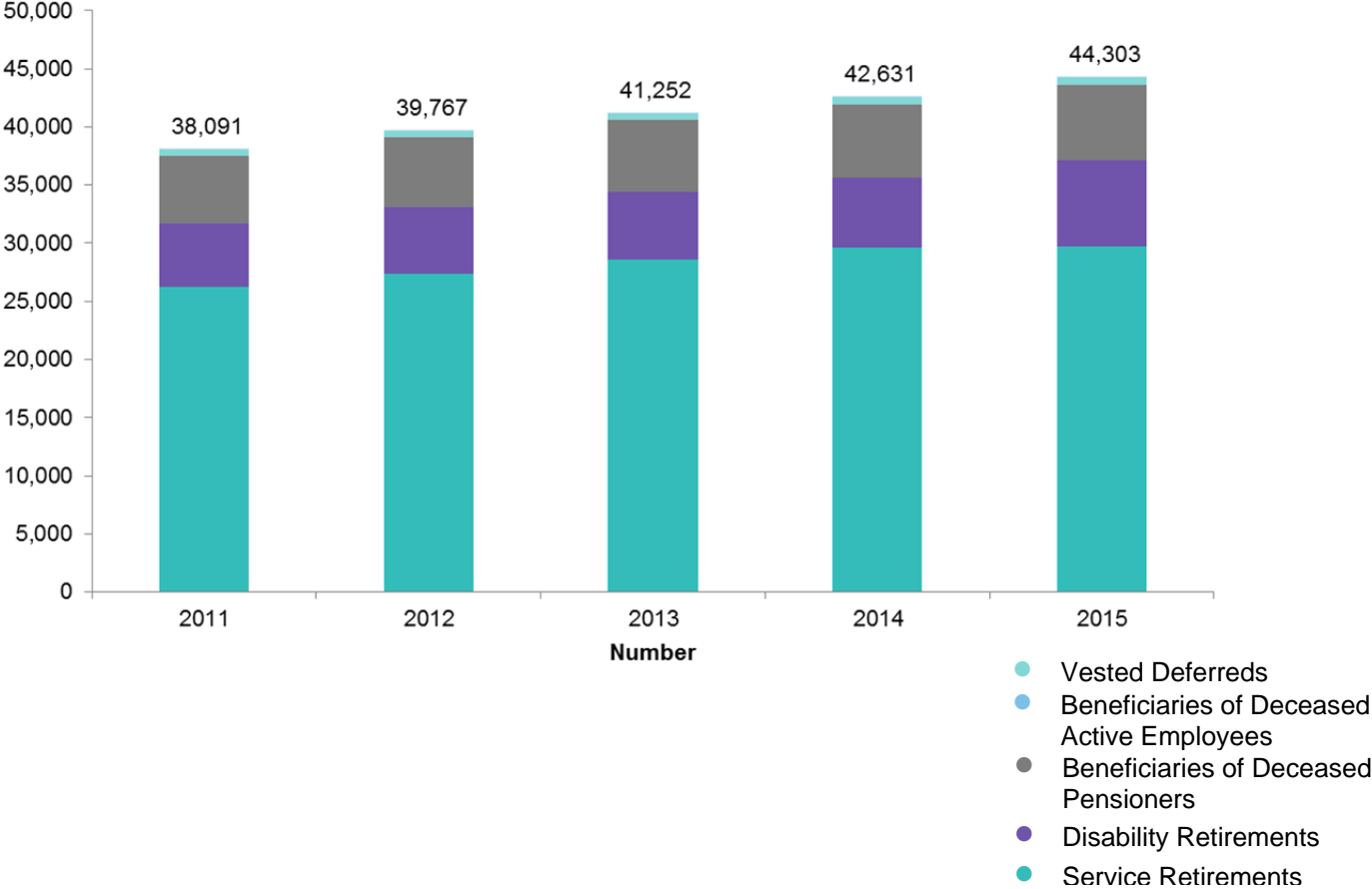
**The Police and Firemen's Retirement System of New Jersey  
Summary of Active Membership  
(Total System)**



- Women
- Men



**The Police and Firemen's Retirement System of New Jersey  
Summary of Retired Participation  
(Total System)**



## Section III – Assets, Liabilities and Contributions

### A. Market Value of Assets as of June 30, 2015

1.	Assets		
	a. Cash	\$	2,282,551
	b. Securities Lending Collateral		316,885,258
	c. Investment Holdings		23,919,906,030
	d. Accrued Interest on Investments		3,403,162
	e. Loans Receivable		316,882,143
	f. Employers' Contributions Receivable – Chapter 19		140,757,467
	g. Employers' Contributions Receivable – Local		793,600,474
	h. Employers' Contribution Receivable – Local – ERI		14,274,396
	i. Employers' Contribution Receivable – NCGI – State		2,022,795
	j. Employers' Contribution Receivable – NCGI – Local		36,337,000
	k. Interest Receivable on Loans		3,247,188
	l. Members' Contributions Receivable		47,026,382
	m. Dividends Receivable		0
	n. Employers' Contributions Receivable – Delayed Enrollments		183,299
	o. Employers' Contributions Receivable – Delayed Appropriations		1,014,345
	p. Securities Sold In Transit		17,466,901
	q. Accounts Receivable – Other		5,766,448
	r. Total	\$	<u>25,621,055,839</u>
2.	Liabilities		
	a. Pension Payroll Payable	\$	139,463,569
	b. Pension Adjustment Payroll Payable		17,894,968
	c. Withholdings Payable		26,746,767
	d. Death Benefits Payable		6,685,530
	e. Securities Lending Collateral and Rebates Payable		316,481,308
	f. Accounts Payable – Other		4,887,810
	g. Administrative Expenses Payable		2,036,967
	h. Total Liabilities	\$	<u>514,196,919</u>
3.	Preliminary Market Value of Assets as of June 30, 2015: 1(r) - 2(h)	\$	25,106,858,920
4.	Discounted State Receivable Contributions	\$	128,196,770 <sup>1</sup>
5.	Adjustment to June 30, 2015 Financial Report due to Local employer deferred contributions under Chapter 19, P.L. 2009	\$	18,564,515
6.	Adjustment to June 30, 2015 Financial Report to reflect actuarial present value of receivable ERI contributions as of June 30, 2015	\$	(1,386,788)
7.	Adjustment to June 30, 2015 Financial Report due to receivables from certain locations for the Unauthorized Early Retirement Incentive Programs	\$	2,678,965
8.	Adjustment to June 30, 2015 Financial Report for assets held in the Non-Contributory Group Insurance Premium Fund	\$	(20,840,242)
9.	Adjustment to June 30, 2015 Financial Report due to discounted fiscal year 2016 Local Employers receivable contributions	\$	<u>(43,048,383)</u>
10.	Market Value of Assets as of June 30, 2015 = 3. + 4. + 5. + 6. + 7. + 8 + 9.	\$	25,191,023,757

1 The fiscal year 2016 recommended pension contribution of \$461,081,051 has been reduced to \$128,196,770. This amount reflects the State's planned fiscal year 2016 contribution of \$138,324,315, 30% of the recommended employer contribution, discounted from the expected payable date of June 30, 2016 to the valuation date. This amount may be subject to change per the requirements of the State's fiscal year 2016 spending plan.

## B. Reconciliation of Market Value of Assets from June 30, 2014 to June 30, 2015

	State	Local Employers	Total
1. Market Value of Assets as of June 30, 2014	\$ 1,887,819,030	\$ 23,132,666,755	\$ 25,020,485,785
2. Increases			
a. Pension Contributions			
(1) Members' Contributions	\$ 51,946,722	\$ 332,737,034	\$ 384,683,756
(2) Transfers from Other Systems	689,365	1,618,520	2,307,885
(3) Total	\$ 52,636,087	\$ 334,355,554	\$ 386,991,641
b. Employers' Contributions			
(1) Appropriations	\$ 63,259,000	\$ 852,657,039	\$ 915,916,039
(2) Non-Contributory Group Insurance	7,561,878	36,337,000	43,898,878
(3) Transfers from other Systems	166,194	634,588	800,782
(4) Additional Employers' Contributions	0	25,071,864	25,071,864
(5) Delayed Enrollments	6,494	218,135	224,629
(6) Delayed Appropriations	1,959	863,977	865,936
(7) Total	\$ 70,995,525	\$ 915,782,603	\$ 986,778,128
c. Investment Income	\$ 43,086,327	\$ 879,512,349	\$ 922,598,676
d. Total	\$ 166,717,939	\$ 2,129,650,506	\$ 2,296,368,445
3. Decreases			
a. Benefits Provided by Members			
(1) Withdrawals of Members' Contributions	\$ 2,425,890	\$ 5,196,718	\$ 7,622,608
(2) Withdrawals of Transfers' Contributions	24,624	351,829	376,453
(3) Adjustment for Loans	166,953	0	166,953
(4) Total	\$ 2,617,467	\$ 5,548,547	\$ 8,166,014
b. Benefits Provided by Employers			
(1) Transfer Withdrawals - Employers' Benefits	\$ 12,651	\$ 213,446	\$ 226,097
(2) Death Benefit Claims – NCGI	7,561,878	27,862,462	35,424,340
(3) Administrative Expense	757,576	3,989,139	4,746,715
(4) Miscellaneous Expense	(48,104)	(167,599)	(215,703)
(5) Total	\$ 8,284,001	\$ 31,897,448	\$ 40,181,449
c. Retirement Allowances	\$ 255,203,068	\$ 1,689,803,418	\$ 1,945,006,486
d. Pension Adjustment	\$ 28,906,265	\$ 187,735,096	\$ 216,641,361
e. Total Decreases	\$ 295,010,801	\$ 1,914,984,509	\$ 2,209,995,310
4. a. Preliminary Market Value of Assets as of June 30, 2015 = 1 + 2(d) – 3(e)	\$ 1,759,526,168	\$ 23,347,332,752	\$ 25,106,858,920
b. Discounted State Receivable Contributions	\$ 71,477,133	\$ 56,719,637	\$ 128,196,770 <sup>1</sup>
c. Adjustment to June 30, 2015 Financial Report:			
(1) Reflect actual present value of receivable ERI contributions as of June 30, 2015	N/A	\$ (1,386,788)	\$ (1,386,788)
(2) Reflect actual present value of receivable Chapter 19, P.L. 2009 deferred contributions as of June 30, 2015	N/A	\$ 18,564,515	\$ 18,564,515
(3) Assets held in the Non-Contributory Group Insurance Premium Fund	\$ 0	\$ (20,840,242)	\$ (20,840,242)
(4) Reflect present value of receivable contributions due to unauthorized ERI programs	N/A	\$ 2,678,965	\$ 2,678,965
(5) Adjustment to June 30, 2015 Financial Report for discounted fiscal year 2016 Local Employers receivable contributions	N/A	\$ (43,048,383)	\$ (43,048,383)
5. Market Value of Assets as of June 30, 2015 = 4(a)+4(b)+4(c)(1)+4(c)(2)+4(c)(3)+4(c)(4)+4(c)(5)	\$ 1,831,003,301	\$ 23,360,020,456	\$ 25,191,023,757

1 The fiscal year 2016 recommended pension contribution of \$461,081,051 has been reduced to \$128,196,770. This amount reflects the State's planned fiscal year 2016 contribution of \$138,324,315, 30% of the recommended employer contribution, discounted from the expected payable date of June 30, 2016 to the valuation date. This amount may be subject to change per the requirements of the State's fiscal year 2016 spending plan.



**C. Summary of Market Value of Assets by Source Per Financial Statements**

1.	Reserve for Employers' Contributions	\$ (1,254,198,797)
2.	Reserve for Members' Contributions	3,510,869,351
3.	Reserve for Retirement Fund	22,829,348,124
4.	Reserve for Special Reserve Fund	0
5.	Discounted State Receivable Contributions	128,196,770
6.	Adjustment to the Chapter 19, P.L. 2009 Local deferred contributions	18,564,515
7.	Adjustment to the receivable Local ERI contributions (includes unauthorized Local ERI programs)	1,292,177
8.	Adjustment to June 30, 2015 Financial Report for discounted fiscal year 2016 Local Employers receivable contributions	<u>(43,048,383)</u>
9.	Total Market Value of Assets as of June 30, 2015	\$ 25,191,023,757

**D.(I) Development of Actuarial Value of Assets as of July 1, 2015**

	State	Local Employers	Total
1. Actuarial Value of Assets as of June 30, 2014 (without State receivable contribution)	\$ 1,999,514,502	\$ 22,888,174,411	\$ 24,887,688,913
2. Net Cash Flow excluding Investment Income and Present Value of Remaining ERI Contributions	(171,379,189)	(664,846,352)	(836,225,541)
3. Additional Employer Contributions Paid to Satisfy Remaining ERI Obligations	0	0	0
4. Investment Income at Actuarially Assumed Rate of 7.90%	<u>148,360,615</u>	<u>1,687,743,698</u>	<u>1,836,104,313</u>
5. Expected Actuarial Value of Assets as of June 30, 2015 = 1. + 2. + 3. + 4.	\$ 1,976,495,928	\$ 23,911,071,757	\$ 25,887,567,685
6. Mark-up percentage	20.0%	20.0%	
7. Mark-up to Reflect Growth in Preliminary Market Value of Assets (without receivable contribution)	(43,393,952)	(143,754,174)	(187,148,126)
8. Discounted State Receivable Contribution	71,477,133	56,719,637	128,196,770
9. Present Value of Local Employer Contribution Deferral under the Provisions of Chapter 19, P.L. 2009	N/A	159,321,982	159,321,982
10. Present Value of Receivable ERI Contributions as of June 30, 2015	N/A	12,887,608	12,887,608
11. Present Value of Receivable Contributions due to Unauthorized ERI Programs	N/A	2,678,965	2,678,965
12. Adjustment to June 30, 2015 Financial Report discounted fiscal year 2016 Local Employers receivable contributions	N/A	(43,048,383)	(43,048,383)
13. Adjustment for Assets Held in the Non-Contributory Group Insurance Premium Fund	<u>0</u>	<u>(20,840,242)</u>	<u>(20,840,242)</u>
14. Actuarial Value of Assets as of June 30, 2015 = 5. + 7. + 8. + 9. + 10 + 11. + 12. + 13.	\$ 2,004,579,109	\$ 23,935,037,150	\$ 25,939,616,259

**D.(II) Reconciliation of Fund Balances as of July 1, 2015**

Assets			
	State	Local Employers	Total
Present assets of System creditable to:			
Retirement Reserve Fund:			
Credited to fund	\$ 2,922,428,668	\$ 19,906,919,456	\$ 22,829,348,124
Add (deduct) reserve transferable from (to) Reserve for Employers' Contributions Fund	<u>146,513,886</u>	<u>49,429,725</u>	<u>195,943,611</u>
	\$ 3,068,942,554	\$ 19,956,349,181 <sup>2</sup>	\$ 23,025,291,735
Annuity Savings Fund:			
Credited to Fund	\$ 396,959,255	\$ 3,113,910,096	\$ 3,510,869,351
Reserve for Employers' Contributions Fund:			
Credited to Fund	\$ (1,314,808,814)	\$ 914,207,598	\$ (400,601,216)
Add (deduct) excess interest earnings transferable from (to) Special Reserve Fund	0	0	0
Add (deduct) reserve transferable from (to) Retirement Reserve Fund	<u>(146,513,886)</u>	<u>(49,429,725)</u>	<u>(195,943,611)<sup>1</sup></u>
	\$ (1,461,322,700)	\$ 864,777,873	\$ (596,544,827)
Total Present Assets	\$ 2,004,579,109	\$ 23,935,037,150	\$ 25,939,616,259
Present value of prospective accrued liability contributions payable by the State and Local employers to the Reserve for Employers' Contributions Fund for basic allowances	<u>\$ 2,511,859,056</u>	<u>\$ 7,270,928,153</u>	<u>\$ 9,782,787,209</u>
Total Assets	\$ 4,516,438,165	\$ 31,205,965,303	\$ 35,722,403,468

- 1 It is recommended that the Retirement Reserve Fund be put into balance each year by transferring assets between the Reserve for Employers' Contributions Fund and the Retirement Reserve Fund so that the Retirement Reserve Fund will contain sufficient assets to cover the retiree and beneficiary liability. Therefore, we recommend that \$195,943,611 be transferred from the Reserve for Employers' Contribution Fund to the Retirement Reserve Fund to put the System in balance as of July 1, 2015.
- 2 Includes the present value of ERI payments of \$12,887,608.

### E.1. Summary of Actuarial Accrued Liability as of July 1, 2015

	State	Local Employers	Total
1. Retirees and Beneficiaries			
a. Service Retirement	\$ 2,425,221,723	\$ 16,009,884,801 <sup>1</sup>	\$ 18,435,106,524
b. Disability Retirement	385,294,292	2,010,178,742	2,395,473,034
c. Beneficiaries	<u>258,426,539</u>	<u>1,936,285,638</u>	<u>2,194,712,177</u>
d. Total	\$ 3,068,942,554	\$ 19,956,349,181	\$ 23,025,291,735
2. Terminated Vested Members	\$ 1,458,014	\$ 7,740,999	\$ 9,199,013
3. Active Participants			
a. Service Retirement	\$ 1,265,146,265	\$ 10,135,539,667	\$ 11,400,685,932
b. Vested Retirement	9,181,739	46,683,416	55,865,155
c. Ordinary Disability	70,405,515	443,228,532	513,634,047
d. Accidental Disability	73,517,092	444,850,466	518,367,558
e. Ordinary Death	23,806,567	150,844,313	174,650,880
f. Accidental Death	2,299,897	14,032,254	16,332,151
g. Withdrawal of Contributions	<u>1,680,522</u>	<u>6,696,475</u>	<u>8,376,997</u>
h. Total	\$ 1,446,037,597	\$ 11,241,875,123	\$ 12,687,912,720
4. Total Actuarial Accrued Liability = 1(d) + 2 + 3(h)	\$ 4,516,438,165	\$ 31,205,965,303	\$ 35,722,403,468

<sup>1</sup> Includes the present value of ERI contributions of \$12,887,608.

## E.2. Summary of Active Member Actuarial Accrued Liability & Normal Cost

### State

Employee Type	Number of Members	Total Appropriation Salary	Actuarial Accrued Liability	Gross Pension Normal Cost
Tier 1	5,369	418,814,577	1,407,082,013	81,439,141
Tier 2	249	15,554,786	13,053,246	2,815,923
Tier 3	1,265	59,941,292	25,902,338	11,085,951
<b>Total</b>	<b>6,883</b>	<b>494,310,655</b>	<b>1,446,037,597</b>	<b>95,341,015</b>

### Local Employers

Employee Type	Number of Members	Total Appropriation Salary	Actuarial Accrued Liability	Gross Pension Normal Cost
Tier 1	28,307	2,929,891,344	11,101,178,504	582,587,757
Tier 2	492	32,656,182	30,895,536	5,929,228
Tier 3	4,677	238,651,174	109,801,083	43,622,381
<b>Total</b>	<b>33,476</b>	<b>3,201,198,700</b>	<b>11,241,875,123</b>	<b>632,139,366</b>

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**F. Summary of Unfunded Accrued Liability/(Surplus) and Required Contribution**

I. Development of Unfunded Accrued Liability/(Surplus)	July 1, 2015			July 1, 2014		
	State	Local Employers <sup>1</sup>	Total	State	Local Employers <sup>1</sup>	Total
1. Present Value of Benefits	\$ 4,516,438,165	\$ 31,205,965,303	\$ 35,722,403,468	\$ 4,365,609,664	\$ 30,239,286,907	\$ 34,604,896,571
2. Actuarial Value of Assets	2,004,579,109	23,935,037,150	25,939,616,259	2,062,185,965	23,066,498,788	25,128,684,753
3. Unfunded Accrued Liability/(Surplus):						
(a) Basic Unfunded Accrued Liability/(Surplus) Excluding Chapters 204, 247, 428, 109 and 511	\$ 2,399,379,512	\$ 5,691,093,367	\$ 8,090,472,879	\$ 2,199,823,769	\$ 5,708,356,970	\$ 7,908,180,738
(b) Chapter 204	578,393	5,969,449	6,547,842	555,430	6,134,864	6,690,294
(c) Chapter 247	0	127,886,511	127,886,511	0	130,134,470	130,134,470
(d) Chapter 428 <sup>2</sup>	111,901,151	609,078,762	720,979,913	103,044,500	562,792,018	665,836,518
(e) Chapter 109	0	534,773,904	534,773,904	0	485,158,872	485,158,872
(f) Chapter 511	0	302,126,160	302,126,160	0	280,210,925	280,210,925
(g) Gross Unfunded Accrued Liability/(Surplus) = (a) + (b) + (c) + (d) + (e) + (f)	\$ 2,511,859,056	\$ 7,270,928,153	\$ 9,782,787,209	\$ 2,303,423,699	\$ 7,172,788,119	\$ 9,476,211,818
4. Net adjustment to Gross Unfunded Accrued Liability to account for phase-in of State paid Local Obligations:						
(a) Chapter 247	\$ 101,048,132	\$ (101,048,132)	\$ 0	\$ 94,390,651	\$ (94,390,651)	\$ 0
(b) Chapter 428 <sup>2</sup>	492,264,452	(492,264,452)	0	445,440,270	(445,440,270)	0
(c) Chapter 109	534,773,904	(534,773,904)	0	485,158,872	(485,158,872)	0
(d) Chapter 511	302,126,160	(302,126,160)	0	280,210,925	(280,210,925)	0
(e) Total Adjustments = (a) + (b) + (c) + (d)	\$ 1,430,212,648	\$ (1,430,212,648)	\$ 0	\$ 1,305,200,718	\$ (1,305,200,718)	\$ 0
5. Net Unfunded Accrued Liability/(Surplus) = 3(g) + 4(e)	\$ 3,942,071,704	\$ 5,840,715,505	\$ 9,782,787,209	\$ 3,608,624,417	\$ 5,867,587,401	\$ 9,476,211,818

1 Excludes unfunded accrued liability amounts due to Local ERI programs and Chapter 19, P.L. 2009 Local employer deferrals. The Local unfunded accrued liability amounts due to ERI programs are presented in Appendices F and G and the Chapter 19, P.L. 2009 Local employer deferrals are summarized in Appendix H.

2 The Chapter 428 unfunded accrued liability amounts include the unfunded accrued liability amounts due to Chapters 86 and 318.

II. Development of Unfunded Accrued Liability Contribution Amount	July 1, 2015			July 1, 2014		
	State	Local Employers <sup>1</sup>	Total	State	Local Employers <sup>1</sup>	Total
1. Accrued Liability Contribution due to:						
(a) Basic Unfunded Accrued Liability	\$ 195,665,504	\$ 464,099,425	\$ 659,764,929	\$ 179,392,057	\$ 465,507,244	\$ 644,899,301
(b) Chapter 204	58,375	602,473	660,848	54,546	602,473	657,019
(c) Chapter 247	0	10,428,937	10,428,937	0	10,612,255	10,612,255
(d) Chapter 428 <sup>2</sup>	9,125,358	49,669,384	58,794,742	8,403,112	45,894,775	54,297,887
(e) Chapter 109	0	43,609,944	43,609,944	0	39,563,918	39,563,918
(f) Chapter 511	0	24,637,898	24,637,898	0	22,850,746	22,850,746
(g) Gross Unfunded Accrued Liability Contribution = (a) + (b) + (c) + (d) + (e) + (f)	\$ 204,849,237	\$ 593,048,061	\$ 797,897,298	\$ 187,849,715	\$ 585,031,411	\$ 772,881,126
2. Net adjustment to Gross Unfunded Accrued Liability Contribution due to State paid Local Obligations:						
(a) Chapter 247	\$ 10,428,937	\$ (10,428,937)	\$ 0	\$ 10,612,255	\$ (10,612,255)	\$ 0
(b) Chapter 428 <sup>2</sup>	49,669,384	(49,669,384)	0	45,894,775	(45,894,775)	0
(c) Chapter 109	43,609,944	(43,609,944)	0	39,563,918	(39,563,918)	0
(d) Chapter 511	24,637,898	(24,637,898)	0	22,850,746	(22,850,746)	0
(e) Total Adjustment = (a) + (b) + (c) + (d)	\$ 128,346,163	\$ (128,346,163)	\$ 0	\$ 118,921,694	\$ (118,921,694)	\$ 0
3. Accrued Liability Contribution as of the Valuation Date = 1(g) + 2(e)	\$ 333,195,400	\$ 464,701,898	\$ 797,897,298	\$ 306,771,409	\$ 466,109,717	\$ 772,881,126
4. Interest to reflect 1 Year Delay in Payment	26,322,437	36,711,450	63,033,887	24,234,941	36,822,668	61,057,609
5. Accrued Liability Contribution as of July 1, 2016	\$ 359,517,837	\$ 501,413,348	\$ 860,931,185	\$ 331,006,350	\$ 502,932,385	\$ 833,938,735

1 Excludes Local ERI payments and Chapter 19, P.L. 2009 Local employer payments towards deferrals. The Local ERI payments are presented in Appendices F and G and the Chapter 19, P.L. 2009 Local employer payments towards deferrals are summarized in Appendix H.

2 The Chapter 428 unfunded accrued liability contribution amounts include the unfunded accrued liability contribution amounts due Chapters 86 and 318.

**G. Development of Normal Cost as of July 1, 2015**

	State	Local Employers	Total
1. Service Retirement	\$ 75,972,956	\$ 528,210,911	\$ 604,183,867
2. Ordinary Disability Retirement	5,202,603	28,213,837	33,416,440
3. Accidental Disability Retirement	8,121,049	42,297,236	50,418,285
4. Ordinary Death Benefits	751,150	3,631,968	4,383,118
5. Accidental Death Benefits	209,035	1,081,550	1,290,585
6. Vested Termination Retirement	850,826	4,214,679	5,065,505
7. Return of Members' Contributions Upon Withdrawal	908,401	4,096,917	5,005,318
8. Portion Attributable to Chapter 428	<u>3,324,996</u>	<u>20,392,268</u>	<u>23,717,264</u>
9. Total (without Non-Contributory Group Insurance Premium)	\$ 95,341,016	\$ 632,139,366	\$ 727,480,382
10. Expected Employee Contributions <sup>1</sup>	(47,773,268)	(306,499,003)	(354,272,271)
11. Portion of Local Normal Cost Payable by the State due to:			
(a) Chapter 511	\$ 11,923,728	\$ (11,923,728)	\$ 0
(b) Chapter 247	157,482	(157,482)	0
(c) Chapter 109	35,213,186	(35,213,186)	0
(d) Chapter 428	<u>20,392,268</u>	<u>(20,392,268)</u>	<u>0</u>
(e) Total	\$ 67,686,664	\$ (67,686,664)	\$ 0
12. Preliminary Pension Normal Cost as of July 1, 2015= 9 + 10 + 11(e)	\$ 115,254,412	\$ 257,953,699	\$ 373,208,111
13. Interest to Reflect a 1 Year Delay in Payment to July 1, 2016	<u>9,105,098</u>	<u>20,378,342</u>	<u>29,483,440</u>
14. Net Pension Normal Cost as of July 1, 2016 = 12 + 13	\$ 124,359,510	\$ 278,332,041	\$ 402,691,551
15. Non-Contributory Group Insurance Fund Premium (one-year term cost)	\$ 8,844,000	\$ 35,500,000	\$ 44,344,000

<sup>1</sup> Member contributions of 10.0% of compensation shall reduce the normal cost contribution.



## H. Summary of Total Recommended Contributions

The following chart summarizes the recommended contribution amounts:

	July 1, 2015			July 1, 2014		
	State	Local Employers	Total	State	Local Employers	Total
Active Participant Payroll	\$ 494,310,655	\$ 3,201,198,700	\$ 3,695,509,355	\$ 507,017,468	\$ 3,175,659,888	\$ 3,682,677,356
1. Normal Cost						
a) Normal Cost (without Chapters 109, 247, 428 and 511)	\$ 39,959,389	\$ 278,332,041	\$ 318,291,430	\$ 41,207,774	\$ 273,686,654	\$ 314,894,428
b) Normal Cost for Chapter 511	14,777,269	N/A	14,777,269	14,088,548	N/A	14,088,548
c) Normal Cost for Chapter 247	169,923	N/A	169,923	244,703	N/A	244,703
d) Chapter 109 Payment	43,862,001	N/A	43,862,001	43,709,698	N/A	43,709,698
e) Normal Cost for Chapter 428	25,590,928	0	25,590,928	30,823,978	0	30,823,978
f) Net Normal Cost = (a) + (b) + (c) + (d) + (e)	\$ 124,359,510	\$ 278,332,041	\$ 402,691,551	\$ 130,074,701	\$ 273,686,654	\$ 403,761,355
2. Accrued Liability <sup>1</sup>						
a) Basic Unfunded Actuarial Liability UAL Payment	\$ 211,123,080	\$ 500,763,280	\$ 711,886,360	\$ 193,564,031	\$ 502,282,317	\$ 695,846,348
b) Chapter 204 UAL Payment	62,987	650,068	713,055	58,855	650,068	708,923
c) Chapter 247 UAL Payment	11,252,823	N/A	11,252,823	11,450,623	N/A	11,450,623
d) Chapter 428 UAL Payment <sup>2</sup>	63,439,525	N/A	63,439,525	58,587,419	N/A	58,587,419
e) Chapter 109 UAL Payment	47,055,130	N/A	47,055,130	42,689,467	N/A	42,689,467
f) Chapter 511 UAL Payment	26,584,292	N/A	26,584,292	24,655,955	N/A	24,655,955
g) Total Accrued Liability =(a)+(b)+(c)+(d)+(e)+(f)	\$ 359,517,837	\$ 501,413,348	\$ 860,931,185	\$ 331,006,350	\$ 502,932,385	\$ 833,938,735
3. Total Pension Contribution = 1(f) + 2(g)	\$ 483,877,347	\$ 779,745,389	\$ 1,263,622,736	\$ 461,081,051	\$ 776,619,039	\$ 1,237,700,090
4. Non-Contributory Group Insurance Premium (one-year term cost)	\$ 8,844,000	\$ 35,500,000	\$ 44,344,000	\$ 10,368,000	\$ 36,337,000	\$ 46,705,000

<sup>1</sup> Does not include ERI and Chapter 19, P.L. 2009 Local employer payments. The entries for Chapters 247, 428, 109 and 511 include a payment required to fund the portions of the State-paid Local obligations that were not contributed due to the phase-in of contributions through fiscal year 2015.

<sup>2</sup> Includes \$ 49,520,462 for the July 1, 2014 valuation and \$53,593,264 for the July 1, 2015 valuation attributable to Municipalities & Local Groups' liabilities which are payable by the State as required under Chapters 428, 86 and 318

## I. Summary of Recommended Contribution Rates

The following chart summarizes the rounded contribution rates that are applied to the applicable compensation for each location to produce the required contributions:

	July 1, 2015		July 1, 2014	
	State	Local Employers <sup>5</sup>	State	Local Employers <sup>5</sup>
<b>1. Normal Contribution Rates:</b>				
a) Basic Allowances	8.084%	8.683%	8.127%	8.605%
b) Chapter 511 <sup>1</sup>	2.989%	N/A	2.779%	N/A
c) Chapter 247 <sup>1</sup>				
• PERS Local normal rate applicable to pay for individuals without past service	N/A	12.300%	N/A	11.830%
• Total PERS Local rate applicable to pay for individuals with past service	N/A	2.020%	N/A	2.111%
• Portion of Municipalities & Local Groups costs payable by the State	0.034%	N/A	0.048%	N/A
d) Chapter 109 <sup>1</sup>	8.873%	N/A	8.621%	N/A
e) Chapter 428 <sup>1</sup>	5.177%	0.000%	6.079%	0.000%
<b>2. Accrued Liability Contribution Rates:<sup>4</sup></b>				
a) Basic Allowances	42.711%	15.718%	38.177%	15.918%
b) Chapter 204	<sup>2</sup>	<sup>2</sup>	<sup>2</sup>	<sup>2</sup>
c) Chapter 247 <sup>1</sup>	2.276%	N/A	2.258%	N/A
d) Chapter 428 <sup>1&amp;3</sup>	12.834%	N/A	11.555%	N/A
e) Chapter 109 <sup>1</sup>	9.519%	N/A	8.420%	N/A
f) Chapter 511 <sup>1</sup>	5.378%	N/A	4.863%	N/A
<b>3. Non-Contributory Group Insurance Premium (one-year term cost)</b>				
	1.789%	1.109%	2.045%	1.144%

1 Payment for certain costs under Chapters 109, 247, 511 and 428 (Chapter 8) for both Municipalities & Local Groups and State Locations are made by the State in accordance with the legislation.

2 Costs for locations affected by Chapter 204 are presented in Appendix C.

3 Includes the additional costs due to Chapter 86, P.L. 2001 and Chapter 318, P.L. 2001.

4 The rates shown for Chapters 247, 428, 109 and 511 include the rate required to fund the portions of the State-paid Local obligations that were not contributed due to the phase-in of contributions through fiscal year 2015.

5 Does not include ERI and the Chapter 19, P.L. 2009 Local employer payments. The Local ERI payments are presented in Appendices F and G and the Chapter 19, P.L. 2009 Local employer payments towards deferrals are summarized in Appendix H.

## Section IV – Comments Concerning The Valuation

The variation in liabilities and contributions reflects the Fund's actual experience during the year. The Plan realized a net actuarial loss during the past year. This was primarily a result of a net actuarial loss and partially due to the investment return, which was less than that expected (6.74% on an actuarial value basis, rather than the 7.90% expected for the period July 1, 2014 to June 30, 2015).

The following shows the development of the actuarial experience, identifies the major experience components and discusses the impact of the unfunded liability on various funded ratios.

### A. Calculation of Net Actuarial Experience

1.	Unfunded Accrued Liability as of July 1, 2014	\$	9,476,211,818
2.	Normal Cost as of July 1, 2014		727,288,406
3.	Interest on (1) and (2) at 7.90%		806,076,518
4.	Actual Members' Contributions		386,991,641
5.	Expected Employer Contribution		1,237,700,090
6.	Expected interest on Members' contributions at 7.90%		<u>14,995,635</u>
7.	Expected Unfunded Accrued Liability as of July 1, 2015 = (1) + (2) + (3) – (4) – (5) – (6)	\$	9,369,889,376
8.	Change in Unfunded Accrued Liability due to revised fiscal year 2016 State contribution	\$	322,756,736
9.	Change in Unfunded Accrued Liability due to Chapter 19 adjustments for actuarial asset loss	\$	(1,535,457)
10.	Change in Unfunded Liability due to changing Mortality Improvement Scale	\$	(179,494,261)
11.	Change in Unfunded Accrued Liability due to the revised fiscal year 2015 State contribution <sup>1</sup>	\$	(22,320,523)
12.	Actual Unfunded Accrued Liability as of July 1, 2015	\$	9,782,787,209
13.	Actuarial (gain)/loss = (12) - (7) - (8) - (9) - (10) - (11)	\$	293,491,338

<sup>1</sup> The anticipated fiscal year 2015 contribution of \$116,976,477 has been increased to \$139,297,000 to reflect the actual State contribution made during fiscal year 2015.

### B. Components of Actuarial Experience

1.	Investment (Gain)/Loss	\$	187,148,126
2.	Other net (Gain)/Loss, including changes in employee data		<u>106,343,212</u>
3.	Total Actuarial (Gain)/Loss	\$	293,491,338

### C. Funded Ratios

The following table presents the System's funded ratios based on the actuarial value of assets (including receivables) and market value basis (including receivables).

	June 30, 2015	June 30, 2014	Change
<b>Actuarial Value of Assets*</b>			
State	44.4%	47.2%	-2.8%
Local Employers	76.7%	76.3%	0.4%
Total System	72.6%	72.6%	0.0%
<b>Market Value of Assets</b>			
State	40.5%	44.7%	-4.2%
Local Employers	74.9%	76.5%	-1.6%
Total System	70.5%	72.5%	-2.0%

\* Statutory funded ratio

For purposes of Chapter 78, P.L. 2011, the "target funded ratio" is 77.857% and 78.571% for June 30, 2014 and June 30, 2015, respectively. The State's statutory funded ratio is 47.2% and 44.4% as of June 30, 2014 and June 30, 2015, respectively. Therefore, the State's statutory funded ratio did not reach the "target funded ratio" as of June 30, 2014 and remained below the "target funded ratio" as of June 30, 2015. The Local employers' statutory funded ratio is 76.3% and 76.7% as of June 30, 2014 and June 30, 2015, respectively. Therefore, the Local employers' statutory funded ratio also did not reach the "target funded ratio" as of June 30, 2014 and remained below the "target funded ratio" as of June 30 2015. However, the Local employer portion of the System did attain the required "target funded ratio" in fiscal year 2012 thus a pension committee has been established for the Local Employer portion of the System.

The funded ratio computed using assets valued on an actuarial value basis provides a different indication of the System's funded position, since the actuarial value smooths the investment (gains)/losses over time. Since July 1, 2000, the System's funded ratio on a market value basis has decreased by 43.7% (72.6% for State and 39.4% for Local). This decrease is primarily due to investment losses experienced over the period, contributions of less than the recommended contributions, the increase in benefits under Chapter 428, P.L. 1999, Chapter 86, P.L. 2001 and Chapter 318, P.L. 2001, and the strengthening of actuarial assumptions.

As of June 30, 2015, the total System market value of assets is greater than the total actuarial liability attributable to retirees. If the assets contained in the Annuity Savings Fund (ASF) of \$3,510,869,351 (\$396,959,255 for State and \$3,113,910,096 for Local) are excluded, the ratio of the remaining market value of assets to the actuarial accrued liability for retirees is 94.2% (46.7% for State and 101.5% for Local).

As of June 30, 2015, the ratio of market value of assets to the prior year's benefit payment is 11.7 (6.4 for State and 12.4 for Local). This is an approximate indication of the number of years that the assets can cover benefit payments, excluding future increases in those payments, employer and member contributions, and investment income. The System ratio decreased by 4.1% (12.3% for State and 4.6% for Local) from the previous year's ratio of 12.2 (7.3 for State and 13.0 for Local). If ASF assets are excluded, since they represent accumulated contributions from active and inactive members, the ratio is 10.0 (5.0 for State and 10.8 for Local).

The valuation also reflects costs attributable to the following legislation:

### Chapter 204, P.L. 1989

The provisions of Chapter 204 allowed employees who were previously excluded on the basis of their titles from PFRS membership to enter the Plan. Employers of such employees are required to contribute any additional contribution necessary to fund any unfunded liability arising from Chapter 204. The valuation reflects the additional accrued liability for three State locations and fifteen Municipality and Local Groups locations with certain employees participating in the Fund under the provisions of this legislation. Appendix C lists all applicable locations and the required contributions.

### Chapter 511, P.L. 1991

The provisions of Chapter 511 increased the benefit payable to the surviving spouse of a retiree from 35% to 50% of the retiree's average final compensation. This law also raised the minimum annual spouse's benefit from \$1,600 to \$4,500 for benefits granted prior to January 14, 1992.

Chapter 511 required that the normal cost and accrued liability contribution attributable to this chapter be separately determined. As a result of Chapter 115, P.L. 1997, the accrued liability contribution attributable to Chapter 511 was eliminated at that time. However, because of the reductions (and anticipated reductions) in the required State contributions for fiscal years 2004 through 2015 due to the various Appropriation Acts and Chapter 1, P.L. 2010, the remaining required contributions that have not been made have been set up as an unfunded accrued liability attributable to Chapter 511. The following summarizes the applicable contribution rates for the current and previous valuations:

Chapter 511 Contribution Rate	June 30, 2015	June 30, 2014
Normal Cost	2.989%	2.779%
Accrued Liability	<u>5.378</u>	<u>4.863</u>
Total Rate	8.367%	7.642%

### Chapter 247, P.L. 1993 and Chapter 201 P.L. 2001

Chapter 247 requires the State to pay the difference between the PFRS normal cost rate and the PERS normal cost rate for certain members who transferred into PFRS as of January 1, 1992 or later. In addition, the law requires the State to pay the "System" unfunded accrued liability contribution for Municipalities and Local Groups that transferred into PFRS on and after January 1, 1992 without past service. The following summarizes the number of active employees affected, the applicable contribution rates, and the Chapter 247 contributions for the current and previous valuations:

Chapter 247	June 30, 2015	June 30, 2014
Number of Active Employees	184	273
<u>Contribution Rates:</u>		
Normal Cost	0.034%	0.048%
Accrued Liability	<u>2.276%</u>	<u>2.258%</u>
Total Rate	2.310%	2.306%
<u>Contributions:</u>		
Normal Cost	\$ 169,923	\$ 244,703
Accrued Liability	<u>11,252,823</u>	<u>11,450,623</u>
Total Contribution	\$ 11,422,746	\$ 11,695,326

Chapter 201, P.L. 2001 made changes to Chapter 247, P.L. 1993 with respect to the benefits payable to members who transferred from PERS to PFRS as a result of the Chapter 247 legislation. The resulting increase in the unfunded accrued liabilities due to the increased benefits was fully funded by the recognition of additional market value surplus in the determination of the actuarial value of assets in the July 1, 1999 valuation. However, because of the reductions (and anticipated reductions) in the required State contributions for fiscal years 2004 through 2015 due to the various Appropriation Acts and Chapter 1, P.L. 2010, the remaining required contributions which were not paid have been added to the Chapter 247 unfunded accrued liability and will be included in future State contributions.

### Chapter 59, P.L. 1999, Chapter 126, P.L. 2000 and Chapter 130, P.L. 2003

Chapter 59, P.L. 1999 authorizes municipalities, counties and other local units of government that enter into agreements to provide governmental services on a joint or consolidated basis, municipalities that join together to establish a new consolidated municipality, or school districts that have merged with one or more other school districts due solely to a municipal consolidation, to offer incentive programs for retirement or termination of employment for employees affected by the consolidation agreements. "County ERI Section 44" of Chapter 126, P.L. 2000 permitted local units to offer early retirement or termination incentives to certain employees of county governing bodies. Chapter 130, P.L. 2003 extended an Early Retirement Incentive Program similar to that offered by the State under Chapter 23, P.L. 2002 to members of Local employer locations. Appendix G lists all applicable locations and summarizes the contribution requirement under Chapter 59, Chapter 126 and Chapter 130.

### Chapter 8, P.L. 2000

Chapter 8, P.L. 2000 required that, if valuation assets are insufficient to fund the normal cost and accrued liability costs attributable to Chapter 428, P.L. 1999, the contribution required to fund these costs for the State and other employers shall be paid by the State. For both the July 1, 2014 and July 1, 2015 valuations, valuation assets were not sufficient to fund the costs attributable to Chapter 428. In addition, because of the reductions (and anticipated reductions) in the required State contributions for fiscal years 2004 through 2015 due to the various Appropriation Acts and Chapter 1, P.L. 2010, the remaining required contributions which were not paid have been added to the Chapter 428 unfunded accrued liability and will be included in future State contributions. The following chart summarizes the applicable contribution rates and the Chapter 428 contributions for the current and previous valuations:

Chapter 428	June 30, 2015	June 30, 2014
<b>Contribution Rates:</b>		
Normal Cost	5.177%	6.079%
Accrued Liability	<u>12.834</u>	<u>11.555</u>
Total Rate	18.011%	17.634%
<b>Contributions:</b>		
Normal Cost	\$ 25,590,928	\$ 30,823,978
Accrued Liability	<u>63,439,525</u>	<u>58,587,419</u>
Total Contribution	\$ 89,030,453	\$ 89,411,397

### Chapter 86, P.L. 2001

Chapter 86, P.L. 2001 amended the active death benefits provided to a beneficiary of a member who died in active duty on or after January 1, 1998 and before January 18, 2000. The law required an eligible beneficiary to apply for the increased benefits within 90 days of enactment and return the member's aggregate contributions to the System. The State is liable for all costs to the System attributable to this law, and these costs have been included in the Chapter 428 accrued liability contributions.

### Chapter 318, P.L. 2001

Chapter 318, P.L. 2001 amended the active death benefits provided to a beneficiary of a member with 10 or more years of service who died in active service on or after June 1, 1995 and before January 1, 1998 and whose beneficiary had, on May 1, 2001, an appeal of a denial of a benefit related to death in the line of duty pending before the Board of Trustees. The law requires that the appeal be withdrawn or denied and that an eligible beneficiary apply for the increased benefits and return the member's aggregate contributions received. The State is liable for all costs to the System attributable to this law and these costs are also included in the Chapter 428 accrued liability contributions.

### Chapter 19, P.L. 2009

Chapter 19, P.L. 2009 provides that the State Treasurer will reduce for Local employers the normal and accrued liability contributions to 50 percent of the amount certified for fiscal years 2009. The additional unfunded liability will be paid by Local employers in level annual payments over a period of 15 years, with the first payment due in the fiscal year ending June 30, 2012. The unfunded liability will be adjusted annually by the rate of return on the actuarial value of assets. The legislation also provides that a Local employer may opt to pay 100 percent of the recommended contribution for fiscal year 2009. Employers making this election will be credited with the full payment. In addition, certain employers who were eligible to defer 50% of their fiscal year 2009 recommended contributions but instead paid 100% of the 2009 recommended contributions are permitted to elect to defer 50% of their recommended 2010 fiscal year contributions. The additional unfunded liability will be paid by Local employers in level annual payments over a period of 15 years, with the first payment due in the fiscal year ending June 30, 2012. The unfunded liability will be adjusted by the rate of return on the actuarial value of assets.

### Chapter 1, P.L. 2010

Chapter 1, P.L. 2010 amended the definition of Compensation and Final Compensation for members hired on or after May 22, 2010. Compensation for such members is to be limited to the annual maximum wage contribution base for Social Security pursuant to the Federal Insurance Contribution Act. In addition, Final Compensation has been changed to the average annual compensation of a member for the three fiscal years providing the largest benefit.

### Chapter 78, P.L. 2011

Chapter 78, P.L. 2011 increases member contributions from 8.5% to 10.0% of compensation. In addition, Chapter 78, P.L. 2011 suspends cost of living adjustments for all current and future retirees and beneficiaries until reactivated as permitted by law; however, Chapter 78, P.L. 2011 does not reduce the benefits for cost of living adjustments that were made in prior years. In addition, for members hired after June 28, 2011 the special retirement benefit is changed to 60% of final compensation at 25 years of service plus 1% of final compensation for each year of service over 25 years. The maximum retirement benefit is 65% of final compensation. Beginning with the July 1, 2010 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars, it will amortize the unfunded accrued liability over an open 30 year period. Beginning with the July 1, 2018 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars it will amortize the unfunded accrued liability over a closed 30 year period (i.e., for each subsequent actuarial valuation, the amortization period will decrease by one year.) Beginning with the July 1, 2028 actuarial valuation when the remaining amortization period reaches 20 years, any increase or

decrease in the unfunded accrued liability as a result of actuarial losses or gains for subsequent valuation years shall serve to increase or decrease, respectively, the amortization period for the unfunded accrued liability, unless an increase in the amortization period will cause it to exceed 20 years. If an increase in the amortization period as a result of actuarial losses for a valuation year would exceed 20 years, the accrued liability contribution shall be computed for that valuation year using a 20 year amortization period.



## D. Schedule of Assets and Liabilities

### State

Actuarial Valuation Date	Market Value of Assets <sup>1</sup> (a)	Actuarial Value of Assets <sup>1</sup> (b)	Actuarial Accrued Liability (c)	Funded Ratio	
				Market Value (a)/(c)	Actuarial Value (b)/(c)
6/30/2015	\$ 1,831,003,301	\$ 2,004,579,109	\$4,516,438,165	40.5%	44.4%
6/30/2014	\$ 1,950,490,493	\$ 2,062,185,965	\$4,365,609,664	44.7%	47.2%
6/30/2013	\$ 1,896,198,371	\$ 2,127,491,585	\$4,188,523,037	45.3%	50.8%
6/30/2012	\$ 1,829,418,795	\$ 2,137,727,566	\$4,026,954,882	45.4%	53.1%
6/30/2011	\$ 1,944,214,316	\$ 2,173,255,647	\$3,926,525,679	49.5%	55.3%
6/30/2010	\$ 1,771,575,807	\$ 2,190,654,958	\$3,672,361,258	48.2%	59.7%
6/30/2009	\$ 1,742,699,083	\$ 2,268,272,056	\$3,993,259,480	43.6%	56.8%
6/30/2008	\$ 2,131,625,019	\$ 2,343,170,793	\$3,749,118,910	56.9%	62.5%
6/30/2007	\$ 2,312,336,064	\$ 2,368,209,888	\$3,426,631,813	67.5%	69.1%
6/30/2006	\$ 2,031,343,980	\$ 2,230,157,166	\$3,082,176,677	65.9%	72.4%

### Local Employers

Actuarial Valuation Date	Market Value of Assets <sup>1</sup> (a)	Actuarial Value of Assets <sup>1</sup> (b)	Actuarial Accrued Liability (c)	Funded Ratio	
				Market Value (a)/(c)	Actuarial Value (b)/(c)
6/30/2015	\$23,360,020,456	\$23,935,037,150	\$31,205,965,303	74.9%	76.7%
6/30/2014	\$23,143,934,984	\$23,066,498,788	\$30,239,286,907	76.5%	76.3%
6/30/2013	\$20,734,802,380	\$22,170,221,173	\$28,811,698,272	72.0%	76.9%
6/30/2012	\$19,296,197,115	\$21,549,327,079	\$27,705,168,437	69.6%	77.8%
6/30/2011	\$19,405,816,249	\$21,051,681,692	\$26,978,632,188	71.9%	78.0%
6/30/2010	\$17,108,014,883	\$20,367,865,987	\$25,601,998,126	66.8%	79.6%
6/30/2009	\$16,283,683,457	\$20,669,565,701	\$28,448,841,765	57.2%	72.7%
6/30/2008	\$18,907,241,962	\$20,404,804,535	\$26,871,106,532	70.4%	75.9%
6/30/2007	\$19,484,653,383	\$19,575,249,807	\$24,562,195,443	79.3%	79.7%
6/30/2006	\$17,112,928,480	\$18,353,459,373	\$22,907,522,660	74.7%	80.1%

<sup>1</sup> The information in the above tables has been taken directly from the final valuation reports for each plan year and does not reflect subsequent changes in the actual employer contribution amounts from the reported receivable contribution after the valuation reports were issued.

## E. Schedule of Employer Pension Contributions<sup>1</sup>

### State

Fiscal Year Ending June 30	Actuarially Determined Contribution <sup>4</sup> (a)	Actual Pension Contribution (b)	Contribution Deficiency (a) – (b)	Percentage of Contribution Made	
				Annual (b)/(a)	Five-Year Average
2016	\$ 461,081,051	\$ 138,324,315	\$ 322,756,736	30.0%	27.2%
2015	\$ 414,316,953	\$ 139,297,000	\$ 275,019,953	33.6%	21.2%
2014	\$ 389,689,529	\$ 115,623,000	\$ 274,066,529	29.7%	14.5%
2013	\$ 393,637,547	\$ 112,468,000	\$ 281,169,547	28.6%	9.5%
2012	\$ 375,234,766	\$ 53,606,000	\$ 321,628,766	14.3%	14.1%
2011	\$ 339,480,900	\$ 0	\$ 339,480,900	0.0%	22.7%
2010	\$ 299,131,628	\$ 0	\$ 299,131,628	0.0%	29.6%
2009	\$ 271,788,383	\$ 13,038,000	\$ 258,750,383	4.8%	
2008	\$ 248,313,283	\$ 128,032,000	\$ 120,281,283	51.6%	
2007	\$ 212,915,981	\$ 121,355,080	\$ 91,560,901	57.0%	

### Local Employers

Fiscal Year Ending June 30	Actuarially Determined Contribution <sup>4</sup> (a)	Actual Pension Contribution (b)	Contribution Deficiency (a) – (b)	Percentage of Contribution Made	
				Annual (b)/(a)	Five-Year Average
2016	\$ 804,063,662	\$ 804,063,662	\$ 0	100.0%	100.0%
2015	\$ 760,533,458	\$ 760,533,458	\$ 0	100.0%	100.0%
2014	\$ 726,928,577	\$ 726,928,577	\$ 0	100.0%	100.0%
2013	\$ 776,511,374	\$ 776,511,374	\$ 0	100.0%	94.9%
2012	\$ 762,531,584	\$ 762,531,584	\$ 0	100.0%	94.9%
2011	\$ 857,072,909	\$ 857,072,909	\$ 0	100.0%	90.9%
2010	\$ 718,078,464	\$ 717,576,451 <sup>2</sup>	\$ 502,013	99.9%	83.0%
2009	\$ 671,753,023	\$ 500,500,162 <sup>2</sup>	\$ 171,252,861	74.5%	
2008	\$ 613,536,348	\$ 613,536,348	\$ 0	100.0%	
2007	\$ 504,165,661	\$ 404,061,027 <sup>3</sup>	\$ 100,104,634	80.1%	

<sup>1</sup> Excludes contribution for the NCGIPF.

<sup>2</sup> Reflects contribution reductions due to Chapter 19, P.L. 2009.

<sup>3</sup> Reflects contribution reductions due to Chapter 108, P.L. 2003.

<sup>4</sup> The information in the above tables has been taken directly from the final valuation reports for each plan year and does not reflect subsequent changes in the actual employer contribution amounts from the reported receivable contribution after the valuation reports were issued.

## Section V – Level of Funding

Although the value of accrued benefits and the funding ratios shown in the previous section are required for the State's financial statements, it is instructive to also look at these values under an alternative approach. For this purpose, we are presenting liabilities determined on a Financial Accounting Standards ASC715 (formerly Statement No. 87) Accumulated Benefit Obligation (ABO) basis. This is the same approach as was used under GASB Statement No. 5 except that no assumption is made as to future salary increases and assets are at market value with receivables.

### ASC 715 ABO Funded Ratios

Valuation Date: June 30, 2015			
	<u>State</u>	<u>Local Employers</u>	<u>Total</u>
Actuarial present value of accumulated benefits:			
Vested benefits			
Participants currently receiving payments	\$ 3,068,942,554	\$ 19,956,349,181	\$ 23,025,291,735
Other participants	<u>817,871,476</u>	<u>7,412,451,720</u>	<u>8,230,323,196</u>
	\$ 3,886,814,030	\$ 27,368,800,901	\$ 31,255,614,931
Non-vested benefits	<u>403,101,939</u>	<u>2,370,268,742</u>	<u>2,773,370,681</u>
Total	\$ 4,289,915,969	\$ 29,739,069,643	\$ 34,028,985,612
Assets at market value <sup>1</sup>	\$ 1,759,526,168	\$ 23,171,460,647	\$ 24,930,986,815
Ratio of assets to total present value	41.0%	77.9%	73.3%

1. Assets at market value do not include any receivable contribution for the State.

Valuation Date: June 30, 2014			
	<u>State</u>	<u>Local Employers</u>	<u>Total</u>
Actuarial present value of accumulated benefits:			
Vested benefits			
Participants currently receiving payments	\$ 2,836,126,945	\$ 18,953,799,304	\$ 21,789,926,249
Other participants	<u>894,511,435</u>	<u>7,373,640,466</u>	<u>8,268,151,901</u>
	\$ 3,730,638,380	\$ 26,327,439,770	\$ 30,058,078,150
Non-vested benefits	<u>411,059,371</u>	<u>2,460,656,823</u>	<u>2,871,716,194</u>
Total	\$ 4,141,697,751	\$ 28,788,096,593	\$ 32,929,794,344
Assets at market value	\$ 1,950,490,493	\$ 22,959,248,742	\$ 24,909,739,235
Ratio of assets to total present value	47.1%	79.8%	75.6%

As in the case of the Governmental Accounting Standard Board Statement No. 5, the actuarial present value of vested and non-vested accrued benefits was based on an interest rate of 7.90% for 2014 and 2015.

## Appendix A

### Brief Summary of the Benefit and Contribution Provisions as Interpreted For Valuation Purposes

#### Eligibility for Membership

Enrollment is restricted to eligible policemen and firemen who are permanent and full-time and who pass the physical and mental fitness requirements. The maximum enrollment age is 35.

#### 1. Definitions

##### Plan Year

The 12-month period beginning on July 1 and ending on June 30.

##### Credited Service

A year of service is credited for each year an employee is a Member of the Retirement System plus service, if any, covered by a prior service liability.

##### Average Final Compensation (AFC)

The average annual compensation for the three consecutive years of Service immediately preceding retirement or the highest three consecutive fiscal years of Membership Service.

##### Compensation

Base salary upon which contributions by a Member to the Annuity Savings Fund were based in the last year of Service. For Accidental Death, benefits are computed at the annual rate of salary. In accordance with Chapter 1, P.L. 2010, for members hired on or after May 22, 2010 Compensation cannot exceed the annual maximum wage contribution base for Social Security pursuant to the Federal Insurance Contribution Act.

##### Final Compensation (FC)

Annual compensation received by the member in the last 12 months of Credited Service preceding his retirement. In accordance with Chapter 1, P.L. 2010, for members hired on or after May 22, 2010, FC means the average annual compensation for the three fiscal years of membership providing the largest benefit.

##### Accumulated Deductions

The sum of all amounts deducted from the compensation of a Member or contributed by him or on his behalf without interest.

## 2. Benefits

### Service Retirement

Eligibility means age 55 or 20 years of credited service for an employee who was a member of the Retirement System as of January 18, 2000 and age 55 for an employee who became a member of the Retirement System after January 18, 2000; mandatory at age 65 (except that a member hired prior to January 1, 1987 may remain a member of the Retirement System until the member attains the earlier of age 68 or 25 years of creditable service). Benefit is an annual retirement allowance equal to a member annuity plus an employer pension which together equals the greater of:

- i. 1/60th of FC for each year of Credited Service; or
- ii. 2% of FC multiplied by years of Credited Service up to 30 plus 1% of FC multiplied by years of Service over 30. (Prior to January 18, 2000, this benefit was based on AFC rather than FC. However, Policy Memorandum 4-2000, which interpreted the provisions of Chapter 428, P.L. 1999, authorized the change in the salary basis).
- iii. 50% of FC if the member has 20 or more years of Credited Service.

Chapter 428 also requires that, in addition to the 50% of FC benefit, any member as of January 18, 2000 who will have 20 or more years of Credited Service and is required to retire upon attaining age 65 (except that a member hired prior to January 1, 1987 may remain a member of the System until the member attains the earlier of age 68 or 25 years of creditable service), shall receive an additional benefit equal to 3% of FC for each year of Credited Service over 20 years but not over 25 years.

### Special Retirement

After completion of 25 years of Credited Service. The annual retirement benefit is equal to a member annuity plus an employer pension which together equal 65% of FC plus 1% of FC for each year of Credited Service over 25. Effective for members hired after June 28, 2011, the annual retirement benefit is equal to a member annuity plus an employer pension which together equal 60% of FC plus 1% of FC for each year of Credited Service over 25. There is a maximum benefit of 70% of FC (65% of FC for members hired after June 28, 2011) except for those members with 30 or more years of Credited Service on June 30, 1979.

### Vested Termination

- A. Eligible upon termination of service prior to age 55 and prior to 10 years of Credited Service. The benefit equals a refund of Accumulated Deductions less any outstanding loans.
- B. Eligible upon termination of service prior to age 55 and after 10 years of Credited Service (but less than 20 years of Credited Service if a member on or prior to January 18, 2000 or less than 25 years of service if a member after January 18, 2000). The benefit is a deferred retirement benefit, commencing at age 55, equal to a member annuity plus an employer pension which together provide a retirement allowance equal to 2% of FC multiplied by years of Credited Service up to 30 plus 1% of FC multiplied by years of Credited Service over 30.

## Death Benefits

### Ordinary Death Benefit - Lump Sum

1. If a member dies prior to retirement, the benefit payable is as follows:  
  
A lump sum amount equal to 3-1/2 times FC payable to the member's beneficiary.
  
2. After retirement but prior to age 55, the benefit is as follows:
  - i. For death while a Disabled Retiree the benefit is equal to 3-1/2 times Compensation.
  - ii. For death while a Deferred Retiree the benefit is equal to his Accumulated Deductions.
  - iii. For death while a Retiree who has completed 20 years of Credited Service, the benefit is equal to 1/2 times FC.
  
3. After retirement and after age 55, the benefit payable is equal to 1/2 times Compensation. (Note: If a Member is not disabled, 10 years of Credited Service is required for Members enrolling after July 1, 1971.)

### Ordinary Death Benefit - Survivor Annuity

1. If a member dies prior to retirement, the benefit payable to a widow (widower) is equal to 50% of FC (20% of FC payable to one child, 35% of FC payable to two children or 50% of FC payable to three or more children if there is no surviving widow or widower or if the widow or widower dies or remarries or 25% of FC payable to one parent or 40% of FC payable to two parents if no surviving widow, widower or child. If no widow, widower, child or parent, the benefit payable to a beneficiary is the aggregate Accumulated Contributions at the time of death).
  
2. For any member who retired after December 18, 1967, the benefit payable to a widow (widower) is equal to 50% of FC plus 15% of FC for one child and 25% of FC for two or more children.  
  
If no spouse, or spouse remarries, the benefit is equal to 20% of FC for one child, 35% for two children, and 50% for three or more children.  
  
There is also a minimum benefit payable to widows (widowers) of \$4,500 a year.
  
3. For any member who retired with an Accidental Disability Benefit, the benefit payable is equal to \$4,500 a year to the widow (widower). If there is no widow (widower) the benefit payable is \$600 a year for 1 child, \$960 a year for 2 children, and \$1,500 a year for 3 or more children. The benefit for children is payable until age 18.

### Accidental Death Benefit

A death while active resulting from injuries received from an accident during performance of duty is eligible for a lump sum equal to the Accumulated Deductions plus 3-1/2 times Compensation plus an annuity benefit payable is as follows:

- i. The benefit to a widow or widower is equal to 70% of Compensation.
- ii. The benefit, when there is no spouse, or 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, or until age 24 if they are full-time students, or it is payable for life if they are disabled.
- iii. The benefit, when there is no spouse or children, is equal to 25% of Compensation for one parent and 40% for two parents.
- iv. The benefit, when there is no relation as stated above, is equal to the Accumulated Deductions and is payable to a beneficiary or to the Member's estate. This is also the minimum benefit payable under i., ii. and iii.

### Disability Benefits

#### Ordinary Disability Retirement

A Member is eligible for Ordinary Disability Retirement if he (she) has 4 years of Service and is totally and permanently incapacitated from the performance of usual or available duties. The benefit is equal to the greater of:

- i. 1-1/2% of FC times the number of years of Credited Service; or
- ii. 40% of FC.

In addition, a member who has at least 20 years but less than 25 years of Credited Service and who is required to retire upon application by the employer on and after January 18, 2000 shall receive a benefit equal to a member annuity plus an employer pension which together provide a total retirement allowance equal to 50% of FC plus 3% of FC multiplied by the number of years of Credited Service over 20 but not over 25.

#### Accidental Disability Retirement

A Member is eligible upon total and permanent incapacitation from the performance of usual or available duties as a result of injury during the performance of regular duties. The benefit payable is equal to a Member annuity plus an employer pension which together equals 2/3 of the Compensation at date of injury.

#### Special Disability Retirement

A member is eligible for Special Disability Retirement if he (she) has 5 years of Credited Service, is under age 55, and has received a heart transplant. The benefit payable is equal to a Member annuity plus an employer pension which together equals 50% of FC.

### 3. Member Contributions

Chapter 78, P.L. 2011 increased the Member Contributions from 8.5% to 10.0% of Compensation effective October 2011.



## Appendix B

### Outline of Actuarial Assumptions and Method

#### Valuation Interest Rate

7.90% per annum, compounded annually.

#### COLA

No future COLA is assumed.

#### Compensation Limit Increase

401(a)(17) Limit – 3.00% per annum, Social Security Wage Base – 4.00% per annum

#### Separations From Service and Salary Increases

Representative values of the assumed annual rates of separation and annual rates of salary increases are as follows:

Age	<u>Annual Rates of</u> Select Withdrawal					<u>Ultimate</u> <u>Withdrawal</u>
	Up to the 1st Year	2nd Year	3rd Year	4th Year	5 to 9 Years	After 9 Years
25	6.90%	2.03%	1.18%	0.60%	0.35%	0.00%
30	9.30	2.75	1.76	1.31	0.60	0.24
35	9.80	3.17	1.76	1.57	0.77	0.24
40	13.70	2.25	1.85	1.74	0.67	0.27
45	3.50	2.25	1.85	2.32	1.35	0.28
50	0.00	2.25	1.85	2.00	1.60	0.30
55	0.00	0.00	0.00	0.00	0.00	0.00

Age	<u>Annual Rates of</u> Death			<u>Disability</u>	
	Ordinary		Accidental	Ordinary	Accidental
	Male*	Female*			
25	.035%	.019%	.006%	.045%	.029%
30	.042	.025	.006	.147	.278
35	.073	.045	.008	.265	.393
40	.101	.066	.008	.362	.423
45	.140	.105	.009	.394	.396
50	.198	.158	.009	.449	.179
55	.285	.234	.014	.554	.161
60	.439	.338	.013	1.024	.161
64	.598	.450	.008	1.680	.161
65					
and over	0.000	0.000	0.000	0.000	0.000

\* RP2000 Employee Pre-Retirement mortality tables projected thirteen-years using Projection Scale BB and then projected on a generational basis using the Buck Modified 2014 Projection Scales. The above tables are representative for the 2015 valuation.

Age	Service Retirements <u>Length of Service</u>				<u>Salary Increases</u>	
	<u>Less Than 21 Years*</u>	<u>21 to 24 Years</u>	<u>25 Years</u>	<u>26 or More Years</u>	<u>FY2012 to FY2021</u>	<u>FY2022 and thereafter</u>
25					9.48%	10.48%
30					6.47	7.47
35					4.67	5.67
40	4.00%	0.60%	45.57%	15.40%	3.83	4.83
45	4.00	0.60	54.83	15.40	3.40	4.40
50	4.30	0.60	57.62	18.48	3.25	4.25
55	6.00	0.00	64.94	24.47	3.10	4.10
60	3.20	0.00	77.49	27.34	2.85	3.85
64	37.50	0.00	85.24	51.03	2.60	3.60
65 and over	100.00	100.00	100.00	100.00		

\* Retirement assumption prior to age 55 is for any member as of January 18, 2000 upon completion of 20 years of service.

### Deaths After Retirement

RP-2000 Combined Healthy Mortality Tables projected one year using Projection Scale AA and two years using the Buck Modified 2014 Projection Scales is the base table as of the 2015 measurement date for male service retirements and will be further projected on a generational basis using the Buck Modified 2014 Projection Scales. RP-2000 Combined Healthy Mortality Tables projected thirteen-years using Projection Scale BB and then two years projected using the Buck Modified 2014 Projection Scales is the base table as of the 2015 measurement date for female service retirements and beneficiaries and will be further projected on a generational basis using the Buck Modified 2014 Projection Scales. Special mortality tables are used for the period after disability retirement. The following representative values of the assumed annual rates of mortality are effective 2015:

Age	<u>Service Retirements</u>		<u>Beneficiaries</u>		Age	<u>Disability Retirements</u>
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>		
55	0.348%	0.252%	0.341%	0.252%	35	0.598%
60	0.655	0.435	0.607	0.435	40	0.634
65	1.232	0.804	1.068	0.804	45	0.803
70	2.123	1.382	1.771	1.382	50	1.058
75	3.602	2.323	3.002	2.323	55	1.210
80	6.146	3.794	5.101	3.794	60	1.426
85	10.618	6.397	8.785	6.397	65	1.949

### Marriage

Husbands are assumed to be 3 years older than wives. Among the active population, 90% of participants are assumed married. No children are assumed.

## Valuation Method

Projected Unit Credit Method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains and losses are recognized in future accrued liability contributions. In accordance with Chapter 78, P.L. 2011, beginning with the July 1, 2010 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars, it will amortize the unfunded accrued liability over an open 30 year period. Beginning with the July 1, 2018 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars it will amortize the unfunded accrued liability over a closed 30 year period (i.e., for each subsequent valuation, the amortization period shall decrease by one year.) Beginning with the July 1, 2028 actuarial valuation, when the remaining amortization period reaches 20 years, any increase or decrease in the unfunded accrued liability as a result of actuarial losses or gains for subsequent valuation years shall serve to increase or decrease, respectively, the amortization period for the unfunded accrued liability, unless an increase in the amortization period will cause it to exceed 20 years. If an increase in the amortization period as a result of actuarial losses for a valuation year would exceed 20 years, the accrued liability contribution shall be computed for the valuation year using a 20 year amortization period.

## Receivable Contributions

State contributions expected to be paid the June 30<sup>th</sup> following the valuation date are discounted by the valuation interest rate of 7.90% to the valuation date.

Local contributions expected to be paid the April 1<sup>st</sup>, following the valuation are discounted by the valuation interest rate of 7.90% to the valuation date

## Asset Valuation Method

A five year average of market values 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.

## Appendix C

### Additional Contribution Schedules

#### A. Additional Accrued Liability Contribution Schedule Due to Chapter 204, P.L. 1989

	July 1, 2015 Valuation		July 1, 2014 Valuation	
	Fiscal Year 2017 Payment*		Fiscal Year 2016 Payment*	
	Recommended	Years Remaining	Recommended	Years Remaining
<b>State Locations</b>				
• Location #00053:Juv. Jus. Comm/Community Prog.	\$ 1,810	17	\$ 1,691	18
• Location #00323:Dept. Div. of Human Resources	58,135	17	54,322	18
• Location #00498:Rutgers Biomedical and Health Sciences	<u>3,041</u>	17	<u>2,842</u>	18
Total	\$ 62,987		\$ 58,855	
<b>Municipalities &amp; Local Groups</b>				
• Location #21202: Camden City	\$ 94,634	17	\$ 94,634	18
• Location #39300: Belmar Borough	12,660	17	12,660	18
• Location #46800: Roxbury Township	23,957	17	23,957	18
• Location #49700: West Windsor Township	35,535	17	35,535	18
• Location #57700: Sea Isle City	6,430	17	6,430	18
• Location #62400: NJ Institute of Technology	102,522	17	102,522	18
• Location #62500: Brookdale Community College	111,404	17	111,404	18
• Location #62700: Essex County College	33,480	17	33,480	18
• Location #75000: Lakewood Twp Fire District #1	17,779	17	17,779	18
• Location #75700: Middlesex County College	123,833	17	123,833	18
• Location #76200: Lower Camden Regional High School – District 1	2,673	17	2,673	18
• Location #77500: Hopewell Twp Fire District #1	11,018	17	11,018	18
• Location #78600: South Jersey Transit Authority	54,078	17	54,078	18
• Location #78700: Washington Township Board of Fire Comm	18,916	17	18,916	18
• Location #79600: Upper Freehold Twp	<u>1,149</u>	17	<u>1,149</u>	18
Total	\$ 650,068		\$ 650,068	

\* Dollar amounts include one year of interest at 7.90% for fiscal year 2016 and 2017.

**B. Summary of Fiscal Year 2017 Contributions For State College Locations**

Location	Location Name	Number of Members	2015 Appropriation Payroll	Normal Cost	Accrued Liability Contribution	Total Fiscal Year 2017 Pension Contribution	Non-Contributory Group Insurance Premium Fund
00410	Rowan University	28	\$ 2,039,643	\$ 513,134	\$ 1,483,188	\$ 1,996,322	\$ 36,489
00412	Kean University	15	1,121,128	282,053	815,262	1,097,315	20,057
00413	William Paterson University of NJ	22	1,540,378	387,529	1,120,132	1,507,661	27,557
00414	Montclair State University	34	2,523,168	634,779	1,834,797	2,469,576	45,139
00415	The College of NJ	10	775,468	195,092	563,905	758,997	13,873
00421	Richard Stockton College of NJ	17	1,031,802	259,581	750,306	1,009,887	18,459
00497	Rutgers Biomedical and Health Sciences	32	2,410,747	606,496	1,753,047	2,359,543	43,128
00498	Rutgers Biomedical and Health Sciences	11	900,442	226,533	657,825	884,358	16,109
62400	NJ Institute of Technology	26	2,127,012	535,114	1,649,243	2,184,357	38,052
90011	Rutgers University	<u>58</u>	<u>4,458,760</u>	<u>1,121,735</u>	<u>3,242,321</u>	<u>4,364,056</u>	<u>79,767</u>
Total		253	\$ 18,928,548	\$ 4,762,046	\$ 13,870,026	\$ 18,632,072	\$ 338,630

## Appendix D

### Additional Census Data Statistics

In response to prior requests from the Board of Trustees, we have performed additional calculations and constructed additional exhibits based on the July 1, 2015 valuation data.

### Age Breakdown

1. Average Age at Retirement – split by Special/Service Retirements

The exhibit on page 43 provides information split between Police and Firemen and by type of retirement. The average age at retirement is 53.6, 52.8 and 55.0 for service, special, and deferred retirement, respectively.

2. Average Age at Entry

The average age at entry for Contributing active participants at July 1, 2015 is 26.4. The average age at entry for Non-Contributing active participants at July 1, 2015 is 31.4. The average age at entry for all actives at July 1, 2015 is 26.5.

3. & 4. Average Age at Death for Active participants and Retired participants.

We have assumed that all deaths between July 1, 2014 and June 30, 2015 occurred at the middle of the plan year; January 1, 2015. Based on this assumption, the average age at death for the various groups is as follows:

Active Contributing members at July 1, 2014	47.5
Active Non-Contributing members at July 1, 2014	52.0
Retired at July 1, 2014	77.7
Disabled at July 1, 2014	69.7
Beneficiary at July 1, 2014	85.7
Terminated Vested at July 1, 2014	N/A

5. & 6. Average Age at Retirement for those who retired under ordinary and accidental disability.

Specific information by category is contained on page 44. The average age at retirement is 42.5 and 40.3 for ordinary and accidental disability, respectively.

### Breakdown of Members

1. Police/Firemen split for Active and Retirees

The Police/Firemen split summarized below for plan members can be found in Appendix E of this report.

	Policemen	Firemen	Unknown	Total
Active Contributing Members	32,755	6,297	0	39,052
Active Non-Contributing Members	1,211	96	0	1,307
Vested Terminated Participants	46	5	0	51
Retired Participants	23,119	5,191	734	29,044
Disabled Retired Participants	5,007	477	156	5,640
Beneficiaries	<u>3,828</u>	<u>1,138</u>	<u>2,174</u>	<u>7,140</u>
Total	65,966	13,204	3,064	82,234

### Breakdown of Retired Members and Beneficiaries

1-6. Number of members receiving various benefits.

This information is included in Appendix E of this report and is summarized as follows:

	Number of Members
Receiving Special Retirement Benefits	26,801
Receiving Service Retirement Benefits	2,057
Receiving Deferred Retirement Benefits	186
Receiving Ordinary Disability Benefits	2,901
Receiving Accidental Disability Benefits	2,739

7. Members who died as a result of Accidental Death

We did not receive any information that indicates cause of death for deceased members.

8.-10. Number of Widows, Children, and Other Dependents

This information is included in Tables 9 and 10 of Appendix E of this report and is summarized as follows:

	Number
Widows/Widowers	6,803
Children	336
Other Dependents	<u>1</u>
	7,140

13. The Number of Beneficiaries and Children receiving benefits due to the accidental death of a member is 106 (102 Beneficiaries, 3 Children and 1 other dependents). We have no information to perform a further S.H.B.P./Local Health Benefits split.

### Breakdown of Costs

The information contained in this section, "Breakdown of Costs", has been calculated in a manner consistent with that shown in prior reports.

1. Cost per member for Insurance.

Dividing the total death benefit cost of \$44,344,000 (\$8,844,000 for State location and \$35,500,000 for Local groups) by the number of active contributing members of 39,052 gives the total cost per member for insurance \$1,135.51.

2. Cost per member for Administration

Dividing the Administrative cost per member = \$4,746,715/82,234 members = \$57.72.

- 3.&4. The normal contribution rates for State Locations and Municipalities and Local Groups are summarized in Section III(I) of this report.

- 5.&6. The Accrued Liability rates for State Locations and Municipalities and Local Groups are also summarized in Section III(I) of this report.

### Breakdown of Purchases

We do not receive information on the active data file regarding service purchases.

### Breakdown of Inactive Members

To demonstrate the effect that inactive participants have on costs, we have split the liabilities attributable to beneficiaries used to calculate the Accrued Liability into specific categories. The information summarized below can be found in Section III.E.1 of this report.

	Actuarial Accrued Liability	Percentage of Total Accrued Liability
Service/Special Retirements	\$ 18,435,106,524	51.61%
Disableds	2,395,473,034	6.71%
Beneficiaries	2,194,712,177	6.14%
Deferred Terminated Vesteds	<u>9,199,013</u>	<u>0.03%</u>
Total	\$ 23,034,490,748	64.49%

The percentage shown on the right is the percent attributable to each inactive piece of the total Accrued Liability of \$35,722,403,468.



Additional Information Provided for Item 1.

All Healthy Retirees as of July 1, 2015

Sex	Police or Firemen	Type of Retirement	Counts	Average Years of Service	Average Age at Retirement	Average Annual Benefit	Average Current Age
M	Police	Service	1,511	21.5	53.5	42,396	61.5
M	Police	Special	20,190	27.3	52.4	62,292	63.3
M	Police	Deferred	118	15.2	55.1	12,908	68.7
M	Firemen	Service	147	27.0	56.2	56,070	65.4
M	Firemen	Special	4,990	28.4	54.2	63,271	67.4
M	Firemen	Deferred	47	15.9	55.0	10,505	71.9
M	Unknown	Service	130	26.4	53.9	24,255	91.0
M	Unknown	Special	596	27.5	54.0	30,253	86.6
M	Unknown	Deferred	7	17.7	55.0	8,714	85.6
F	Police	Service	268	19.6	52.8	37,410	60.9
F	Police	Special	1018	25.8	52.3	61,115	58.5
F	Police	Deferred	14	14.4	54.5	18,933	59.6
F	Firemen	Special	7	27.1	55.9	63,770	62.6
F	Unknown	Service	1	25.0	56.0	19,031	95.0

New Healthy Retirees as of July 1, 2015

Sex	Police or Firemen	Type of Retirement	Counts	Average Years of Service	Average Age at Retirement	Average Annual Benefit	Average Current Age
M	Police	Service	138	22.6	52.7	52,325	53.4
M	Police	Special	1,304	26.5	51.3	73,539	51.9
M	Police	Deferred	3	15.2	55.0	16,790	56.0
M	Firemen	Service	13	29.3	58.5	75,314	59.5
M	Firemen	Special	231	27.8	53.8	79,644	54.4
F	Police	Service	18	21.4	52.9	45,638	53.8
F	Police	Special	155	25.7	51.2	67,466	51.8
F	Police	Deferred	3	14.2	52.7	23,038	53.7

**Additional Information Provided For Items 5. & 6.**

**All Disabilities as of July 1, 2015**

Sex	Police or Firemen	Type of Retirement	Counts	Average Years of Service	Average Age at Retirement	Average Annual Benefit	Average Current Age
M	Police	Ordinary	2,064	13.7	42.4	27,429	57.0
M	Police	Accidental	2,185	13.3	40.1	48,973	53.2
M	Firemen	Ordinary	273	14.1	42.5	27,679	59.2
M	Firemen	Accidental	199	15.2	42.7	49,822	57.5
M	Unknown	Ordinary	54	13.3	41.8	13,687	79.4
M	Unknown	Accidental	101	13.2	40.3	21,314	82.7
F	Police	Ordinary	504	12.8	42.8	29,067	53.3
F	Police	Accidental	254	11.9	39.3	50,874	48.2
F	Firemen	Ordinary	5	10.7	35.6	26,546	42.4
F	Unknown	Ordinary	1	17.3	54.0	14,424	84.0

**New Disabilities as of July 1, 2015**

Sex	Police or Firemen	Type of Retirement	Counts	Average Years of Service	Average Age at Retirement	Average Annual Benefit	Average Current Age
M	Police	Ordinary	46	15.9	44.7	37,594	45.7
M	Police	Accidental	71	15.4	42.2	66,282	43.1
M	Firemen	Ordinary	14	14.6	44.0	35,043	45.3
M	Firemen	Accidental	9	19.8	48.9	72,909	49.4
F	Police	Ordinary	23	15.5	44.2	35,848	45.5
F	Police	Accidental	12	12.9	40.0	62,208	41.2
F	Firemen	Accidental	1	8.8	37.0	28,710	38.0

## Reconciliation of Census Data



The following chart presents a reconciliation of census data from July 1, 2014 to June 30, 2015:

	Actives		Deferred Vested	Retirees				Beneficiaries	Dependents	Domestic Relations Beneficiaries	Total
	Contrib.	Noncontrib.		Service	Special	Deferred	Disabled				
Members as of July 1, 2014	38,806	1,300	55	1,961	25,656	184	5,551	6,629	353	2,242	82,737
Status Change											
To Contributing	276	(276)									0
To Noncontributing	(482)	482									0
Terminated Vested		(2)	2								0
Terminated Non-Vested	(83)	(136)									(219)
Service Retirement	(148)	(21)		169							0
Special Retirement	(1,677)	(15)			1,692						0
Deferred Vesteds Now Payable		(1)	(5)			6					0
New Disabled	(111)	(66)					177				0
New Death	(33)	(6)		(71)	(553)	(4)	(90)	(269)			(1,026)
Payments Began										308	308
Payments Ceased									(33)	(122)	(155)
New Actives	2,504	48									2,552
Rehires											0
New Beneficiaries								443	17		460
Data Corrections			(1)	(2)	6		2				5
Members as of June 30, 2015	39,052	1,307	51	2,057	26,801	186	5,640	6,803	337	2,428	84,662

### Active Member Fifth Age and Service Distribution

The following charts present distributions of active members by age and service.

### State Locations And Municipalities And Local Groups<sup>1</sup>

Age	Service	1	5	10	15	20	25	30	35	40 and Above	Total
20	Number	277	4								281
	Salary	12,017,416	193,049								12,210,465
25	Number	2,469	736	29							3,234
	Salary	121,217,933	48,214,779	2,002,498							171,435,210
30	Number	1,722	2,797	1,633	51						6,203
	Salary	87,912,982	212,483,984	147,364,000	4,727,395						452,488,361
35	Number	592	1,497	3,575	1,610	20					7,294
	Salary	30,507,149	115,074,737	337,309,889	165,538,244	1,988,026					650,418,045
40	Number	85	577	1,970	3,685	1,270	40				7,627
	Salary	4,981,874	46,017,766	183,933,345	384,634,244	144,607,221	4,441,048				768,615,498
45	Number	5	112	1,053	2,551	3,521	1,301	12			8,555
	Salary	185,779	9,138,726	97,274,233	256,486,335	397,754,343	156,889,479	1,634,444			919,363,339
50	Number	6	5	149	833	1,688	1,569	356	6		4,612
	Salary	182,915	194,109	11,789,671	81,965,137	187,819,947	189,580,832	48,691,817	866,512		521,090,940
55	Number	2	4	32	135	595	599	394	124		1,885
	Salary	104,865	298,068	1,844,276	12,378,268	63,797,984	68,724,937	54,174,928	17,885,468		219,208,794
60	Number	2	4	8	25	147	160	82	116	26	570
	Salary	235,956	151,948	362,352	1,900,122	14,516,396	17,410,400	10,639,945	17,600,573	4,204,157	67,021,849
63	Number	1	4	8	9	25	17	10	11	13	98
	Salary	17,735	162,389	335,401	428,072	1,781,006	1,457,287	1,037,578	1,549,656	2,026,724	8,795,848
Total	Number	5,161	5,740	8,457	8,899	7,266	3,686	854	257	39	40,359
	Salary	257,364,604	431,929,555	782,215,665	908,057,817	812,264,923	438,503,983	116,178,712	37,902,209	6,230,881	3,790,648,349

<sup>1</sup> Based on limited annual compensation.

**Average Age: 40.5 Years**  
**Average Service: 13.9 Years**  
**Average Salary: \$93,923**  
**Number Vested: 25,920**  
**Number Non Vested: 14,439**

Active Member Fifth Age and Service Distribution (Continued)

State Locations<sup>1</sup>

Age	Service	1	5	10	15	20	25	30	35	40 and Above	Total
20	Number	108	1								109
	Salary	4,584,436	56,229								4,640,665
25	Number	531	152	3							686
	Salary	25,183,426	9,463,102	188,490							34,835,018
30	Number	349	508	180	6						1,043
	Salary	17,006,560	33,553,818	12,973,203	473,655						64,007,236
35	Number	124	336	540	267	5					1,272
	Salary	6,114,518	22,765,712	41,751,699	22,356,638	390,274					93,378,841
40	Number	18	128	434	666	117	7				1,370
	Salary	919,250	8,823,105	34,260,799	57,767,522	10,464,802	607,284				112,842,762
45	Number	2	23	254	571	433	123				1,406
	Salary	77,843	1,632,732	20,052,827	49,506,141	39,453,868	11,250,070				121,973,481
50	Number	2	1	54	245	204	147	11			664
	Salary	69,213	38,669	3,975,709	21,247,200	17,964,871	13,743,231	948,976			57,987,869
55	Number	1		4	37	67	71	17	5		202
	Salary	15,489		235,236	3,071,464	5,815,487	6,332,814	1,559,929	557,112		17,587,531
60	Number			4	16	42	33	5	2	1	103
	Salary			201,582	1,258,464	3,634,240	2,896,634	450,711	225,762	124,077	8,791,470
63	Number	1	1	4	2	11	9				28
	Salary	17,735	56,697	211,457	151,754	830,936	774,253				2,042,832
Total	Number	1,136	1,150	1,477	1,810	879	390	33	7	1	6,883
	Salary	53,988,470	76,390,064	113,851,002	155,832,838	78,554,478	35,604,286	2,959,616	782,874	124,077	518,087,705

<sup>1</sup> Based on limited annual compensation.

**Average Age: 39.60 Years**

**Average Service: 12.2 Years**

**Average Salary: \$75,271**

**Number Vested: 4,064**

**Number Non Vested: 2,819**

**There are 51 State employer locations who have reported payroll for the July 1, 2015 valuation.**

Active Member Fifth Age and Service Distribution (continued)

Municipalities And Local Groups<sup>1</sup>

Age	Service	1	5	10	15	20	25	30	35	40 and Above	Total
20	Number	169	3								172
	Salary	7,432,980	136,820								7,569,800
25	Number	1,938	584	26							2,548
	Salary	96,034,507	38,751,677	1,814,008							136,600,192
30	Number	1,373	2,289	1,453	45						5,160
	Salary	70,906,422	178,930,166	134,390,797	4,253,740						388,481,125
35	Number	468	1,161	3,035	1,343	15					6,022
	Salary	24,392,631	92,309,025	295,558,190	143,181,606	1,597,752					557,039,204
40	Number	67	449	1,536	3,019	1,153	33				6,257
	Salary	4,062,624	37,194,661	149,672,546	326,866,722	134,142,419	3,833,764				655,772,736
45	Number	3	89	799	1,980	3,088	1,178	12			7,149
	Salary	107,936	7,505,994	77,221,406	206,980,194	358,300,475	145,639,409	1,634,444			797,389,858
50	Number	4	4	95	588	1,484	1,422	345	6		3,948
	Salary	113,702	155,440	7,813,962	60,717,937	169,855,076	175,837,601	47,742,841	866,512		463,103,071
55	Number	1	4	28	98	528	528	377	119		1,683
	Salary	89,376	298,068	1,609,040	9,306,804	57,982,497	62,392,123	52,614,999	17,328,356		201,621,263
60	Number	2	4	4	9	105	127	77	114	25	467
	Salary	235,956	151,948	160,770	641,658	10,882,156	14,513,766	10,189,234	17,374,811	4,080,080	58,230,379
63	Number		3	4	7	14	8	10	11	13	70
	Salary		105,692	123,944	276,318	950,070	683,034	1,037,578	1,549,656	2,026,724	6,753,016
Total	Number	4,025	4,590	6,980	7,089	6,387	3,296	821	250	38	33,476
	Salary	203,376,134	355,539,491	668,364,663	752,224,979	733,710,445	402,899,697	113,219,096	37,119,335	6,106,804	3,272,560,644

<sup>1</sup> Based on limited annual compensation.

**Average Age: 40.6 Years**

**Average Service: 14.3 Years**

**Average Salary: \$97,758**

**Number Vested: 21,856**

**Number Non Vested: 11,620**

**There are 585 Local employer locations who have reported payroll for the July 1, 2015 valuation.**



**Average Age And Average Annual Benefit At Retirement**

	Service Retirement		Special Retirement (25 Years of Service)		Ordinary Disability		Accidental Disability		Survivors	
	Average Age At Retirement	Average Annual Benefit At Retirement	Average Age At Retirement	Average Annual Benefit At Retirement	Average Age At Retirement	Average Annual Benefit At Retirement	Average Age At Retirement	Average Annual Benefit At Retirement	Average Age At Retirement *	Average Annual Benefit At Retirement
<b>State</b>										
All Retirees	56.7	\$ 29,850	52.2	\$ 51,670	46.2	\$ 25,171	40.3	\$ 41,654	45.3	\$ 25,937
New Retirees	55.9	\$ 37,838	51.9	\$ 59,601	46.7	\$ 32,148	45.8	\$ 59,988	42.8	\$ 28,056
<b>Local</b>										
All Retirees	53.0	\$ 40,078	52.8	\$ 58,882	41.2	\$ 25,405	40.2	\$ 44,999	47.6	\$ 22,785
New Retirees	52.4	\$ 59,964	51.6	\$ 80,854	43.7	\$ 41,494	42.2	\$ 71,471	49.0	\$ 29,028

	All Retirements (excluding Survivors)	
	Average Age At Retirement	Average Annual Benefit At Retirement
<b>State</b>		
All Retirees	51.0	\$ 45,498
<b>Local</b>		
All Retirees	51.0	\$ 54,136

*Note: The Average Annual Benefit at Retirement does not reflect COLA's granted after retirement.*

*\* Calculated as of Member's Date of Retirement*

## Appendix E

### Tabulations Used as a Basis for the 2015 Valuation

The following tables give the distribution of the number and salaries of members by age and length of service as of July 1, 2015. Tables are also given showing the number and retirement allowances of beneficiaries classified by age as of July 1, 2015.



Table 1



The Number And Annual Compensation Of  
Contributing Active Members Distributed By Age  
As Of July 1, 2015

State And Local

Age	Men		Women	
	Number	Amount	Number	Amount
20	6	\$ 291,000		
21	29	1,149,242	1	\$ 40,000
22	59	2,468,958	11	447,892
23	153	6,904,692	19	790,729
24	270	12,809,599	41	1,852,060
25	432	21,035,813	43	1,932,919
26	535	27,126,984	65	3,214,382
27	721	39,425,082	83	4,321,978
28	845	49,381,675	85	4,841,659
29	912	57,748,511	95	5,420,185
30	1,055	72,660,570	107	7,213,610
31	1,055	77,849,771	120	8,000,489
32	1,150	88,886,542	127	9,374,780
33	1,246	102,757,578	152	11,633,375
34	1,259	106,830,547	178	14,696,201
35	1,157	101,094,380	179	14,830,096
36	1,178	106,835,004	179	15,687,463
37	1,322	122,645,156	188	16,099,160
38	1,287	122,239,322	182	15,860,514
39	1,228	119,769,803	157	14,813,656
40	1,185	119,772,646	159	14,455,677
41	1,343	136,489,739	172	16,081,264
42	1,351	141,209,166	173	16,625,592
43	1,509	158,599,244	157	15,231,434
44	1,621	171,850,899	203	19,665,524
45	1,658	179,013,790	173	17,386,385
46	1,619	177,439,558	143	14,036,396
47	1,425	158,272,613	115	11,318,394
48	1,237	138,000,071	104	10,095,624
49	1,068	122,616,382	103	10,107,742
50	985	112,317,533	89	8,964,154
51	857	100,941,058	55	5,776,872
52	645	74,684,044	63	6,630,074
53	524	61,399,453	38	3,732,517
54	485	57,928,286	27	2,786,007
55	390	46,882,919	33	3,242,862
56	330	39,218,208	26	2,704,838
57	272	33,459,328	18	1,819,342
58	192	22,645,610	15	1,547,808

Table 1



The Number And Annual Compensation Of  
Contributing Active Members Distributed By Age  
As Of July 1, 2015

State And Local  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
59	160	\$ 19,406,363	8	\$ 806,223
60	128	16,164,851	7	701,384
61	100	12,135,261	3	290,542
62	57	6,976,319	4	385,221
63	54	6,614,194	3	315,850
64	47	5,790,089	8	817,742
<b>Total</b>	35,141	\$ 3,359,737,853	3,911	\$ 336,596,616

The 39,052 total active contributing participants included in the July 1, 2015 valuation data consist of 32,755 policemen and 6,297 firemen.

Table 1A

The Number And Annual Compensation Of  
Contributing Active Members Distributed By Age  
As Of July 1, 2015



## State Only

Age	Men		Women	
	Number	Amount	Number	Amount
21	11	\$ 448,958	1	\$ 40,000
22	27	1,118,624	7	280,000
23	52	2,291,086	10	421,997
24	64	2,987,281	18	822,770
25	85	3,970,581	15	718,289
26	94	4,637,442	22	1,124,128
27	149	7,837,674	17	871,598
28	159	8,765,655	28	1,503,303
29	135	7,733,133	27	1,462,609
30	153	8,880,606	27	1,663,282
31	168	10,357,591	42	2,513,519
32	194	12,548,670	33	2,089,944
33	183	11,913,504	45	2,980,643
34	174	11,896,979	52	3,529,847
35	181	12,964,772	39	2,758,338
36	175	12,956,958	51	3,768,499
37	217	16,128,756	48	3,729,222
38	236	18,506,326	54	4,185,784
39	202	16,170,369	42	3,392,550
40	204	16,899,498	52	4,162,383
41	222	18,591,701	54	4,422,872
42	211	17,725,538	51	4,132,304
43	233	19,698,360	38	3,170,832
44	261	22,558,511	62	5,158,368
45	254	22,175,590	46	4,014,593
46	207	18,345,082	53	4,531,708
47	208	18,202,697	41	3,571,418
48	162	14,163,927	44	3,909,072
49	140	12,345,018	32	2,797,026
50	119	10,436,873	34	3,021,622
51	102	9,307,352	14	1,288,324
52	78	6,897,772	20	1,784,530
53	59	5,222,853	9	771,391
54	38	3,404,644	9	837,039
55	29	2,560,455	9	794,626
56	40	3,573,628	6	581,950
57	27	2,495,120	1	83,030
58	18	1,484,212	3	261,298
59	22	1,997,383	3	255,799

Table 1A

The Number And Annual Compensation Of  
Contributing Active Members Distributed By Age  
As Of July 1, 2015



State Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
60	22	\$ 1,985,477	4	\$ 332,120
61	16	1,407,113	1	83,030
62	9	766,847	1	124,077
63	9	802,694	1	83,030
64	11	952,521	5	415,150
<b>Total</b>	5,360	\$ 406,115,831	1,171	\$ 88,443,914

The 6,531 total State active contributing participants included in the July 1, 2015 valuation data consist of 6,488 policemen and 43 firemen.

Table 1B

The Number And Annual Compensation Of  
Contributing Active Members Distributed By Age  
As Of July 1, 2015



## Local Only

Age	Men		Women	
	Number	Amount	Number	Amount
20	6	\$ 291,000		
21	18	700,284		
22	32	1,350,334	4	\$ 167,892
23	101	4,613,606	9	368,732
24	206	9,822,318	23	1,029,290
25	347	17,065,232	28	1,214,630
26	441	22,489,542	43	2,090,254
27	572	31,587,408	66	3,450,380
28	686	40,616,020	57	3,338,356
29	777	50,015,378	68	3,957,576
30	902	63,779,964	80	5,550,328
31	887	67,492,180	78	5,486,970
32	956	76,337,872	94	7,284,836
33	1,063	90,844,074	107	8,652,732
34	1,085	94,933,568	126	11,166,354
35	976	88,129,608	140	12,071,758
36	1,003	93,878,046	128	11,918,964
37	1,105	106,516,400	140	12,369,938
38	1,051	103,732,996	128	11,674,730
39	1,026	103,599,434	115	11,421,106
40	981	102,873,148	107	10,293,294
41	1,121	117,898,038	118	11,658,392
42	1,140	123,483,628	122	12,493,288
43	1,276	138,900,884	119	12,060,602
44	1,360	149,292,388	141	14,507,156
45	1,404	156,838,200	127	13,371,792
46	1,412	159,094,476	90	9,504,688
47	1,217	140,069,916	74	7,746,976
48	1,075	123,836,144	60	6,186,552
49	928	110,271,364	71	7,310,716
50	866	101,880,660	55	5,942,532
51	755	91,633,706	41	4,488,548
52	567	67,786,272	43	4,845,544
53	465	56,176,600	29	2,961,126
54	447	54,523,642	18	1,948,968
55	361	44,322,464	24	2,448,236
56	290	35,644,580	20	2,122,888
57	245	30,964,208	17	1,736,312
58	174	21,161,398	12	1,286,510

Table 1B

The Number And Annual Compensation Of  
Contributing Active Members Distributed By Age  
As Of July 1, 2015



Local Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
59	138	\$ 17,408,980	5	\$ 550,424
60	106	14,179,374	3	369,264
61	84	10,728,148	2	207,512
62	48	6,209,472	3	261,144
63	45	5,811,500	2	232,820
64	36	4,837,568	3	402,592
<b>Total</b>	29,781	\$ 2,953,622,022	2,740	\$ 248,152,702

The 32,521 total Local active contributing participants included in the July 1, 2015 valuation data consist of 26,267 policemen and 6,254 firemen.

Table 2

The Number And Annual Compensation Of  
Contributing Active Members Distributed By Service  
As Of July 1, 2015



## State And Local

Years of Service	Men		Women	
	Number	Amount	Number	Amount
0	361	\$ 14,748,696	40	\$ 1,681,618
1	1,520	68,608,393	214	9,539,756
2	1,404	72,936,773	163	8,145,065
3	1,130	65,826,050	109	6,126,097
4	853	54,919,972	85	5,434,313
5	539	36,709,923	54	3,613,622
6	876	65,016,191	109	7,848,667
7	1,301	103,311,610	154	11,262,310
8	1,360	115,228,612	180	13,872,460
9	1,414	125,344,798	200	16,761,321
10	1,606	149,697,408	236	20,503,679
11	1,286	121,787,847	170	14,508,212
12	1,282	124,365,039	242	22,089,403
13	1,380	135,059,884	254	23,372,172
14	1,461	145,199,329	188	17,667,739
15	1,628	165,143,222	192	18,635,218
16	1,514	158,103,704	156	15,498,776
17	1,551	164,169,667	179	17,811,541
18	1,582	166,141,542	150	14,770,891
19	1,243	134,433,859	142	14,691,703
20	1,480	166,745,519	152	15,736,353
21	1,683	192,585,329	120	12,473,355
22	1,132	129,418,031	96	9,711,202
23	1,013	117,019,289	76	7,691,606
24	966	112,050,912	72	7,441,976
25	1,087	125,513,357	87	9,311,491
26	517	64,304,551	27	2,978,811
27	482	61,138,186	21	2,478,735
28	376	47,986,112	19	2,104,878
29	293	39,273,042	7	848,640
30	243	33,126,925	6	626,578
31	131	18,593,492	3	272,470
32	79	10,989,120	4	497,730
33	79	11,023,882	1	160,500
34	75	10,676,520	1	122,640
35	61	8,904,494		
36	64	9,656,596		
37	31	4,856,024	1	108,728
38	21	3,176,872		
39	7	1,192,864		

Table 2

The Number And Annual Compensation Of  
Contributing Active Members Distributed By Service  
As Of July 1, 2015



State And Local  
(Continued)

Years of Service	Men		Women	
	Number	Amount	Number	Amount
40	6	\$ 874,853		
41	16	2,584,888	1	\$ 196,360
42	6	1,032,612		
43	1	136,908		
45	1	124,956		
<b>Total</b>	35,141	\$ 3,359,737,853	3,911	\$ 336,596,616

The 39,052 total active contributing participants included in the July 1, 2015 valuation data consist of 32,755 policemen and 6,297 firemen.



Table 2A

The Number And Annual Compensation Of  
Contributing Active Members Distributed By Service  
As Of July 1, 2015



## State Only

Years of Service	Men		Women	
	Number	Amount	Number	Amount
0	73	\$ 2,942,544	10	\$ 400,000
1	322	13,959,393	77	3,318,310
2	246	11,771,427	52	2,475,049
3	249	13,980,112	45	2,502,805
4	235	14,815,658	48	3,010,933
5	77	4,846,741	13	801,014
6	118	7,866,245	19	1,257,993
7	284	19,440,174	54	3,816,428
8	189	13,218,992	52	3,550,038
9	205	15,103,268	49	3,603,105
10	182	13,438,772	66	4,880,997
11	227	17,566,909	60	4,650,632
12	168	13,384,889	62	4,894,909
13	261	21,493,382	91	7,453,472
14	291	24,306,939	57	4,746,523
15	289	24,632,462	52	4,361,202
16	231	19,683,684	47	4,165,152
17	289	25,307,937	57	5,021,927
18	365	32,747,370	54	4,808,889
19	185	16,231,805	32	2,895,075
20	126	11,293,295	30	2,663,361
21	135	12,191,829	31	2,916,371
22	112	10,383,877	25	2,302,480
23	133	11,774,461	34	3,040,414
24	98	8,778,596	20	1,768,020
25	146	13,326,019	23	2,117,123
26	41	3,762,173	4	347,879
27	19	1,813,070	4	395,211
28	27	2,566,932		
29	13	1,149,802		
30	8	701,613	1	83,030
31	3	257,640	1	83,030
32	2	200,012	1	112,542
33	3	270,858		
34	4	386,232		
35	2	266,118		
36	1	130,524		
40	1	124,077		
<b>Total</b>	<b>5,360</b>	<b>\$ 406,115,831</b>	<b>1,171</b>	<b>\$ 88,443,914</b>

The 6,531 total State active contributing participants included in the July 1, 2015 valuation data consist of 6,488 policemen and 43 firemen.

Table 2B

The Number And Annual Compensation Of  
Contributing Active Members Distributed By Service  
As Of July 1, 2015



## Local Only

Years of Service	Men		Women	
	Number	Amount	Number	Amount
0	288	\$ 11,806,152	30	\$ 1,281,618
1	1,198	54,649,000	137	6,221,446
2	1,158	61,165,346	111	5,670,016
3	881	51,845,938	64	3,623,292
4	618	40,104,314	37	2,423,380
5	462	31,863,182	41	2,812,608
6	758	57,149,946	90	6,590,674
7	1,017	83,871,436	100	7,445,882
8	1,171	102,009,620	128	10,322,422
9	1,209	110,241,530	151	13,158,216
10	1,424	136,258,636	170	15,622,682
11	1,059	104,220,938	110	9,857,580
12	1,114	110,980,150	180	17,194,494
13	1,119	113,566,502	163	15,918,700
14	1,170	120,892,390	131	12,921,216
15	1,339	140,510,760	140	14,274,016
16	1,283	138,420,020	109	11,333,624
17	1,262	138,861,730	122	12,789,614
18	1,217	133,394,172	96	9,962,002
19	1,058	118,202,054	110	11,796,628
20	1,354	155,452,224	122	13,072,992
21	1,548	180,393,500	89	9,556,984
22	1,020	119,034,154	71	7,408,722
23	880	105,244,828	42	4,651,192
24	868	103,272,316	52	5,673,956
25	941	112,187,338	64	7,194,368
26	476	60,542,378	23	2,630,932
27	463	59,325,116	17	2,083,524
28	349	45,419,180	19	2,104,878
29	280	38,123,240	7	848,640
30	235	32,425,312	5	543,548
31	128	18,335,852	2	189,440
32	77	10,789,108	3	385,188
33	76	10,753,024	1	160,500
34	71	10,290,288	1	122,640
35	59	8,638,376		
36	63	9,526,072		
37	31	4,856,024	1	108,728
38	21	3,176,872		
39	7	1,192,864		

Table 2B

The Number And Annual Compensation Of  
Contributing Active Members Distributed By Service  
As Of July 1, 2015



Local Only  
(Continued)

Years of Service	Men		Women	
	Number	Amount	Number	Amount
40	5	\$ 750,776		
41	16	2,584,888	1	\$ 196,360
42	6	1,032,612		
43	1	136,908		
45	1	124,956		
<b>Total</b>	29,781	\$ 2,953,622,022	2,740	\$ 248,152,702

The 32,521 total Local active contributing participants included in the July 1, 2015 valuation data consist of 26,267 policemen and 6,254 firemen.

Table 3



The Number And Annual Compensation Of  
Non-Contributing Active Members Distributed By Age  
As Of July 1, 2015

State And Local

Age	Men		Women	
	Number	Amount	Number	Amount
22	1	\$ 33,456		
23	2	84,496		
24	10	393,286	1	\$ 48,560
25	9	385,763	3	136,240
26	23	993,700	2	91,531
27	23	1,097,486	4	191,358
28	33	1,810,542	6	344,592
29	33	1,863,407	6	408,490
30	30	1,536,888	2	82,828
31	32	1,793,662	5	350,193
32	26	1,528,837	3	231,260
33	38	2,528,889	9	618,492
34	27	1,702,460	4	312,703
35	26	1,951,465	12	840,075
36	30	2,185,500	16	1,124,105
37	30	2,258,865	9	720,809
38	24	2,052,437	7	451,793
39	22	1,910,537	9	757,272
40	26	2,065,073	8	552,932
41	32	2,595,047	11	890,969
42	34	2,739,420	10	799,586
43	37	2,949,670	4	306,778
44	48	4,270,024	7	687,602
45	53	4,741,528	12	1,027,123
46	36	2,829,992	7	526,090
47	37	3,416,904	11	812,998
48	38	3,292,843	8	678,971
49	41	3,153,069	6	467,291
50	27	2,092,827	10	737,986
51	34	2,617,546	7	543,807
52	26	1,801,315	4	279,294
53	26	1,928,482	4	299,490
54	24	1,970,663	4	228,476
55	20	1,461,535	4	262,784
56	15	1,055,320	3	236,863
57	12	809,517	1	53,332
58	10	664,999	4	230,098
59	12	871,304	3	215,695
60	4	210,264	3	241,954
61	11	816,501	1	90,436
62	7	440,501	1	82,760

Table 3



The Number And Annual Compensation Of  
Non-Contributing Active Members Distributed By Age  
As Of July 1, 2015

State And Local  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
63	4	\$ 256,227		
64	40	2,051,698	3	\$ 136,319
<b>Total</b>	1,073	\$ 77,213,945	234	\$ 17,099,935

The 1,307 total active non-contributing participants included in the July 1, 2015 valuation data consist of 1,211 policemen and 96 firemen.

Table 3A



The Number And Annual Compensation Of  
Non-Contributing Active Members Distributed By Age  
As Of July 1, 2015

State Only

Age	Men		Women	
	Number	Amount	Number	Amount
23	1	\$ 40,000		
24	3	128,518	1	\$ 48,560
25	2	98,571		
26	8	321,467	2	91,531
27	6	243,811	4	191,358
28	7	367,814	2	104,667
29	4	123,416	1	55,842
30	8	374,533		
31	5	249,289	2	137,601
32	4	221,529	2	101,912
33	6	315,009	4	284,604
34	6	372,519	1	67,423
35	5	294,167	5	323,575
36	7	463,392	8	563,291
37	4	220,395	4	315,845
38	4	286,767	1	45,987
39	4	270,549	4	312,924
40	3	213,290	4	285,434
41	13	926,855	7	521,889
42	11	776,514	4	301,110
43	11	867,790		
44	11	960,038	2	160,002
45	10	757,746	5	385,031
46	13	982,790	4	325,074
47	8	648,340	4	304,824
48	6	411,613	5	407,057
49	11	880,749	1	89,739
50	13	989,833	5	398,528
51	8	517,424	5	370,731
52	4	272,371	3	165,378
53	4	230,890	3	199,464
54	2	159,281	2	133,930
55	3	192,997	2	130,760
56	3	221,054	2	158,743
57	2	135,157		
58	4	244,825	2	134,782
59	6	461,148	2	125,935
61	4	220,531		
62	2	94,159		
63	1	52,127		
64	11	616,322	1	58,839
<b>Total</b>	<b>248</b>	<b>\$ 16,225,590</b>	<b>104</b>	<b>\$ 7,302,370</b>

The 352 total State active non-contributing participants included in the July 1, 2015 valuation data consist of 349 policemen and 3 firemen.

Table 3B



The Number And Annual Compensation Of  
Non-Contributing Active Members Distributed By Age  
As Of July 1, 2015

## Local Only

Age	Men		Women	
	Number	Amount	Number	Amount
22	1	\$ 33,456		
23	1	44,496		
24	7	264,768		
25	7	287,192	3	\$ 136,240
26	15	672,233		
27	17	853,675		
28	26	1,442,728	4	239,925
29	29	1,739,991	5	352,648
30	22	1,162,355	2	82,828
31	27	1,544,373	3	212,592
32	22	1,307,308	1	129,348
33	32	2,213,880	5	333,888
34	21	1,329,941	3	245,280
35	21	1,657,298	7	516,500
36	23	1,722,108	8	560,814
37	26	2,038,470	5	404,964
38	20	1,765,670	6	405,806
39	18	1,639,988	5	444,348
40	23	1,851,783	4	267,498
41	19	1,668,192	4	369,080
42	23	1,962,906	6	498,476
43	26	2,081,880	4	306,778
44	37	3,309,986	5	527,600
45	43	3,983,782	7	642,092
46	23	1,847,202	3	201,016
47	29	2,768,564	7	508,174
48	32	2,881,230	3	271,914
49	30	2,272,320	5	377,552
50	14	1,102,994	5	339,458
51	26	2,100,122	2	173,076
52	22	1,528,944	1	113,916
53	22	1,697,592	1	100,026
54	22	1,811,382	2	94,546
55	17	1,268,538	2	132,024
56	12	834,266	1	78,120
57	10	674,360	1	53,332
58	6	420,174	2	95,316
59	6	410,156	1	89,760
60	4	210,264	3	241,954
61	7	595,970	1	90,436

Table 3B

The Number And Annual Compensation Of  
 Non-Contributing Active Members Distributed By Age  
 As Of July 1, 2015

Local Only  
 (Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
62	5	\$ 346,342	1	\$ 82,760
63	3	204,100		
64	29	1,435,376	2	77,480
<b>Total</b>	825	\$ 60,988,355	130	\$ 9,797,565

The 955 total Local active non-contributing participants included in the July 1, 2015 valuation data consist of 862 policemen and 93 firemen.



Table 4



The Number And Annual Compensation Of  
Non-Contributing Active Members Distributed By Service  
As Of July 1, 2015

State And Local

Years of Service	Men		Women	
	Number	Amount	Number	Amount
0	25	\$ 854,471		
1	92	3,848,112	12	\$ 483,895
2	42	2,015,534	8	393,162
3	34	1,751,526	7	405,454
4	25	1,401,728	6	257,148
5	35	2,000,255	5	285,464
6	45	2,869,936	12	868,067
7	38	2,629,433	17	1,167,766
8	33	2,274,353	13	957,719
9	31	2,398,263	17	1,280,043
10	59	4,496,998	20	1,421,012
11	66	4,362,544	16	1,107,342
12	78	5,729,164	14	1,014,688
13	68	5,428,640	18	1,487,221
14	61	4,900,851	15	1,207,756
15	53	4,266,565	7	637,439
16	50	4,206,406	11	874,695
17	52	4,482,555	9	735,893
18	39	3,516,684	1	87,348
19	33	3,076,176	6	598,722
20	25	2,240,219	4	396,958
21	21	2,022,180	1	80,396
22	12	1,040,992	4	336,397
23	18	1,528,305	5	438,323
24	9	833,612	2	229,818
25	10	915,546	3	256,773
26	4	456,188		
27	3	326,308		
28	1	176,728		
29	4	390,008		
30	3	296,129		
33	1	80,196		
34	2	309,900	1	90,436
41	1	87,440		
<b>Total</b>	<b>1,073</b>	<b>\$ 77,213,945</b>	<b>234</b>	<b>\$ 17,099,935</b>

The 1,307 total active non-contributing participants included in the July 1, 2015 valuation data consist of 1,211 policemen and 96 firemen.

Table 4A



The Number And Annual Compensation Of  
Non-Contributing Active Members Distributed By Service  
As Of July 1, 2015

State Only

Years of Service	Men		Women	
	Number	Amount	Number	Amount
0	8	\$ 287,063		
1	26	987,551	5	\$ 224,360
2	10	476,036	3	147,026
3	6	291,168	4	225,626
4	8	381,372	1	20,300
5	8	436,597	1	47,492
6	7	470,012	3	201,601
7	9	577,067	7	470,654
8	12	830,090	5	330,663
9	9	660,599	12	887,989
10	7	451,272	9	592,264
11	12	774,342	8	549,736
12	16	1,015,360	6	449,062
13	18	1,327,186	9	672,859
14	18	1,361,973	9	687,680
15	10	686,057	2	161,475
16	6	471,516	5	380,279
17	13	1,048,523	6	514,319
18	9	738,929		
19	8	622,626	2	153,446
20	8	629,303	1	83,030
21	3	249,090	1	80,396
22	4	335,002	2	173,297
23	6	453,517	1	81,803
24	2	191,816		
25	3	252,414	2	167,013
26	1	118,020		
30	1	101,089		
<b>Total</b>	<b>248</b>	<b>\$ 16,225,590</b>	<b>104</b>	<b>\$ 7,302,370</b>

The 352 total State active non-contributing participants included in the July 1, 2015 valuation data consist of 349 policemen and 3 firemen.

Table 4B



The Number And Annual Compensation Of  
Non-Contributing Active Members Distributed By Service  
As Of July 1, 2015

## Local Only

Years of Service	Men		Women	
	Number	Amount	Number	Amount
0	17	\$ 567,408		
1	66	2,860,561	7	\$ 259,535
2	32	1,539,498	5	246,136
3	28	1,460,358	3	179,828
4	17	1,020,356	5	236,848
5	27	1,563,658	4	237,972
6	38	2,399,924	9	666,466
7	29	2,052,366	10	697,112
8	21	1,444,263	8	627,056
9	22	1,737,664	5	392,054
10	52	4,045,726	11	828,748
11	54	3,588,202	8	557,606
12	62	4,713,804	8	565,626
13	50	4,101,454	9	814,362
14	43	3,538,878	6	520,076
15	43	3,580,508	5	475,964
16	44	3,734,890	6	494,416
17	39	3,434,032	3	221,574
18	30	2,777,755	1	87,348
19	25	2,453,550	4	445,276
20	17	1,610,916	3	313,928
21	18	1,773,090		
22	8	705,990	2	163,100
23	12	1,074,788	4	356,520
24	7	641,796	2	229,818
25	7	663,132	1	89,760
26	3	338,168		
27	3	326,308		
28	1	176,728		
29	4	390,008		
30	2	195,040		
33	1	80,196		
34	2	309,900	1	90,436
41	1	87,440		
<b>Total</b>	<b>825</b>	<b>\$ 60,988,355</b>	<b>130</b>	<b>\$ 9,797,565</b>

The 955 total Local active non-contributing participants included in the July 1, 2015 valuation data consist of 862 policemen and 93 firemen.

Table 5



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Service Retirements

State And Local

Age	Men		Women	
	Number	Amount	Number	Amount
39			1	\$ 51,638
41	7	\$ 336,408	1	52,403
42	2	88,270	1	27,241
43	13	767,568	1	54,618
44	22	1,095,557	3	144,341
45	32	1,637,568	11	548,958
46	51	2,493,466	7	290,405
47	43	2,105,026	4	251,165
48	61	2,869,766	6	299,720
49	55	2,725,976	12	557,841
50	51	2,481,085	10	433,914
51	69	3,268,728	12	562,687
52	41	1,836,573	10	468,328
53	49	2,221,104	9	383,985
54	39	1,655,804	13	585,654
55	58	2,420,113	5	221,762
56	49	1,968,385	3	51,537
57	51	1,774,513	15	553,748
58	41	1,601,942	12	434,653
59	56	1,826,760	6	195,123
60	49	1,833,860	8	221,179
61	46	1,818,182	11	406,982
62	43	1,838,001	9	249,651
63	25	856,141	7	252,514
64	28	1,115,556	7	243,588
65	49	2,488,210	1	34,232
66	61	3,170,554	5	170,158
67	68	3,026,439	7	273,243
68	60	3,239,945	13	542,116
69	74	3,596,344	3	98,081
70	34	1,579,063	8	280,192
71	50	2,138,403	7	199,350
72	53	2,421,844	6	208,463
73	49	2,122,778	5	149,486
74	36	1,216,651	1	13,375
75	43	1,783,907	2	43,823
76	42	1,414,333	8	180,138
77	41	1,077,032	9	151,062
78	40	1,596,195	4	85,017
79	24	691,601	1	25,136

Table 5



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Service Retirements

State And Local  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
80	15	\$ 515,564	1	\$ 20,576
81	17	359,939	6	109,089
82	18	336,603	2	41,055
83	17	236,095	2	37,696
84	12	163,881	2	41,094
85	11	216,314	1	14,557
86	17	395,716	2	33,967
87	12	252,998	1	21,036
88	17	354,939		
89	21	495,953		
90	23	516,811		
91	18	496,235	1	11,482
92	12	275,739		
93	13	328,203		
94	11	267,172		
95	7	163,996	1	19,031
96	4	93,120		
97	4	98,935		
98	1	20,245		
99	4	101,170		
101	1	23,136		
<b>Total</b>	1,960	\$ 79,912,415	283	\$ 10,347,090

The 2,243 total service retirements consist of 1,911 policemen, 194 firemen and 138 retirees for whom the information was not reported.

Table 5A



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Service Retirements

State Only

Age	Men		Women	
	Number	Amount	Number	Amount
41	1	\$ 41,090		
42	1	40,204		
44	3	151,002		
45	1	40,192	3	\$ 139,226
46	7	325,531		
47	8	345,865		
48	9	393,451		
49	6	271,219	3	127,962
50	7	294,536	1	36,415
51	9	379,702	2	83,216
52	4	153,967	4	164,321
53	9	335,507	5	206,683
54	7	271,547	3	120,628
55	10	353,522	1	50,579
56	9	255,765	3	51,537
57	6	148,518	8	281,195
58	9	317,160	5	198,274
59	10	290,185	2	64,913
60	8	238,864	4	68,851
61	4	138,873	2	59,571
62	8	278,940	4	103,881
63	6	218,327	1	39,684
64	6	206,974	1	9,840
65	14	541,304		
66	13	530,477	3	97,429
67	23	772,884	3	117,950
68	9	324,490	5	225,433
69	14	454,589	2	60,357
70	11	348,838	2	57,350
71	18	510,197	4	104,407
72	18	470,839	4	158,948
73	15	449,425	3	98,475
74	12	354,064		
75	10	268,271	2	43,823
76	13	261,110	3	39,866
77	16	308,752	3	55,419
78	14	361,383	1	25,243
79	6	182,187		
80	5	115,312	1	20,576

Table 5A



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Service Retirements

State Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
81	4	\$ 74,024	1	\$ 18,636
82	4	63,779		
83	6	76,858		
84	3	48,185	1	23,515
85	1	12,439		
86	4	54,319	1	15,817
87	3	60,354		
88	2	32,385		
89	3	63,773		
90	1	6,350		
91	3	37,057		
92	2	32,856		
93	1	13,346		
<b>Total</b>	396	\$ 12,320,788	91	\$ 2,970,020

The 487 total service retirements consist of 474 policemen, 2 firemen and 11 retirees for whom the information was not reported.

Table 5B



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Service Retirements

Local Only

Age	Men		Women	
	Number	Amount	Number	Amount
39			1	\$ 51,638
41	6	\$ 295,318	1	52,403
42	1	48,066	1	27,241
43	13	767,568	1	54,618
44	19	944,555	3	144,341
45	31	1,597,376	8	409,732
46	44	2,167,935	7	290,405
47	35	1,759,160	4	251,165
48	52	2,476,314	6	299,720
49	49	2,454,757	9	429,879
50	44	2,186,549	9	397,499
51	60	2,889,025	10	479,472
52	37	1,682,606	6	304,007
53	40	1,885,596	4	177,302
54	32	1,384,257	10	465,026
55	48	2,066,592	4	171,184
56	40	1,712,619		
57	45	1,625,994	7	272,553
58	32	1,284,783	7	236,379
59	46	1,536,575	4	130,210
60	41	1,594,995	4	152,328
61	42	1,679,309	9	347,411
62	35	1,559,061	5	145,770
63	19	637,814	6	212,830
64	22	908,581	6	233,748
65	35	1,946,908	1	34,231
66	48	2,640,078	2	72,727
67	45	2,253,556	4	155,293
68	51	2,915,455	8	316,683
69	60	3,141,754	1	37,724
70	23	1,230,225	6	222,842
71	32	1,628,207	3	94,943
72	35	1,951,005	2	49,515
73	34	1,673,353	2	51,011
74	24	862,587	1	13,375
75	33	1,515,637		
76	29	1,153,223	5	140,272
77	25	768,280	6	95,643
78	26	1,234,812	3	59,774
79	18	509,414	1	25,136



Table 5B

The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015



## Service Retirements

Local Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
80	10	\$ 400,252		
81	13	285,915	5	\$ 90,453
82	14	272,824	2	41,055
83	11	159,237	2	37,696
84	9	115,696	1	17,580
85	10	203,875	1	14,557
86	13	341,397	1	18,150
87	9	192,644	1	21,036
88	15	322,554		
89	18	432,180		
90	22	510,461		
91	15	459,179	1	11,482
92	10	242,883		
93	12	314,857		
94	11	267,172		
95	7	163,996	1	19,031
96	4	93,120		
97	4	98,935		
98	1	20,245		
99	4	101,170		
101	1	23,136		
<b>Total</b>	1,564	\$ 67,591,627	192	\$ 7,377,070

The 1,756 total service retirements consist of 1,437 policemen, 192 firemen and 127 retirees for whom the information was not reported.

Table 6



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Special Retirements

State And Local

Age	Men		Women	
	Number	Amount	Number	Amount
44	13	\$ 889,925	3	\$ 203,343
45	63	4,496,259	6	350,190
46	121	8,726,219	9	611,771
47	187	13,214,103	15	1,005,386
48	288	20,802,661	31	2,073,576
49	445	32,663,219	41	2,792,838
50	540	39,090,051	38	2,733,464
51	657	47,638,988	46	2,968,910
52	701	50,667,564	48	3,219,711
53	683	48,440,812	62	3,730,460
54	791	56,290,500	59	3,704,814
55	803	56,622,212	45	2,973,932
56	811	57,790,042	58	3,738,878
57	800	57,490,715	50	3,190,043
58	930	66,613,194	54	3,547,288
59	910	64,666,338	39	2,489,164
60	1018	70,511,537	58	3,279,721
61	940	64,597,222	48	2,853,252
62	900	61,087,711	46	2,713,095
63	856	57,616,480	26	1,466,743
64	884	58,026,328	38	2,240,731
65	878	57,770,808	36	2,132,242
66	937	59,865,364	26	1,426,746
67	910	58,305,799	17	943,379
68	1001	60,143,594	21	1,195,673
69	940	55,919,635	17	889,412
70	683	39,526,173	11	615,618
71	662	36,842,189	9	502,990
72	757	42,228,746	11	529,297
73	760	40,693,794	7	354,737
74	558	30,799,674	10	433,384
75	513	26,520,147	6	286,630
76	470	24,837,381	4	167,516
77	444	22,520,306	3	143,087
78	380	19,002,875	8	399,918
79	361	17,673,352	4	166,113
80	295	13,813,626	4	207,144
81	253	11,347,690	4	167,496
82	248	11,070,545		
83	221	9,536,947		
84	222	9,282,885	2	100,808
85	183	7,226,313		

Table 6



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Special Retirements

State And Local  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
86	134	\$ 5,302,733	1	\$ 49,379
87	121	4,715,301		
88	114	4,344,093		
89	119	4,460,433		
90	79	3,049,491	1	32,008
91	63	2,157,459	1	29,176
92	49	1,772,567	1	34,598
93	23	816,137		
94	28	970,932		
95	9	342,814	1	27,057
96	9	289,655		
97	3	141,012		
98	5	138,455		
99	2	49,728		
101	1	28,412		
<b>Total</b>	25,776	\$ 1,621,449,145	1,025	\$ 62,721,718

The 26,801 total special retirements consist of 21,208 policemen, 4,997 firemen and 596 retirees for whom the information was not reported.

Table 6A



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Special Retirements

State Only

Age	Men		Women	
	Number	Amount	Number	Amount
44	3	\$ 161,211	1	\$ 53,639
45	11	634,268	1	53,172
46	26	1,544,404	2	117,955
47	44	2,614,296	2	119,466
48	65	3,838,093	10	576,387
49	102	6,075,532	19	1,130,697
50	125	7,216,794	10	669,254
51	135	7,945,693	23	1,278,500
52	137	7,888,756	16	896,351
53	153	8,611,432	26	1,419,259
54	164	9,249,100	31	1,720,623
55	182	10,090,374	19	1,033,739
56	142	7,958,948	21	1,210,700
57	125	6,980,547	25	1,441,516
58	172	9,641,383	17	960,724
59	141	7,770,595	15	835,570
60	161	8,877,381	29	1,523,297
61	141	7,728,845	16	848,461
62	132	7,294,344	17	992,909
63	124	6,607,151	11	609,723
64	123	6,573,471	16	872,640
65	109	5,763,698	12	667,275
66	125	6,611,885	11	572,373
67	105	5,674,261	8	422,120
68	109	5,659,336	6	324,134
69	92	4,513,389	5	255,413
70	62	3,126,079	4	215,374
71	67	3,284,351	7	358,208
72	39	1,940,307	5	215,935
73	60	2,911,886	2	82,777
74	40	1,856,890	6	244,811
75	45	2,125,675	2	85,768
76	25	1,143,501	1	36,178
77	32	1,452,294		
78	23	1,024,730	4	197,685
79	21	1,008,769		
80	17	739,931	3	154,593
81	9	421,692	1	39,285
82	9	402,934		
83	14	502,273		
84	15	524,527		

Table 6A



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Special Retirements

State Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
85	15	\$ 637,229		
86	8	274,706		
87	6	226,059		
88	1	23,532		
89	2	65,132		
90	1	43,143		
91	1	25,518		
92	1	32,959		
96	1	26,572		
<b>Total</b>	3,462	\$ 187,345,876	404	\$ 22,236,511

The 3,866 total special retirements consist of 3,765 policemen, 53 firemen and 48 retirees for whom the information was not reported.

Table 6B



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Special Retirements

Local Only

Age	Men		Women	
	Number	Amount	Number	Amount
44	10	\$ 728,715	2	\$ 149,703
45	52	3,861,990	5	297,018
46	95	7,181,815	7	493,816
47	143	10,599,808	13	885,919
48	223	16,964,568	21	1,497,189
49	343	26,587,686	22	1,662,141
50	415	31,873,257	28	2,064,210
51	522	39,693,295	23	1,690,410
52	564	42,778,808	32	2,323,360
53	530	39,829,380	36	2,311,201
54	627	47,041,400	28	1,984,190
55	621	46,531,838	26	1,940,193
56	669	49,831,094	37	2,528,177
57	675	50,510,168	25	1,748,528
58	758	56,971,811	37	2,586,564
59	769	56,895,743	24	1,653,594
60	857	61,634,157	29	1,756,424
61	799	56,868,377	32	2,004,791
62	768	53,793,368	29	1,720,186
63	732	51,009,329	15	857,020
64	761	51,452,856	22	1,368,090
65	769	52,007,109	24	1,464,967
66	812	53,253,478	15	854,374
67	805	52,631,537	9	521,259
68	892	54,484,258	15	871,539
69	848	51,406,246	12	634,000
70	621	36,400,094	7	400,244
71	595	33,557,839	2	144,782
72	718	40,288,439	6	313,362
73	700	37,781,908	5	271,960
74	518	28,942,784	4	188,573
75	468	24,394,472	4	200,861
76	445	23,693,880	3	131,338
77	412	21,068,012	3	143,087
78	357	17,978,145	4	202,233
79	340	16,664,583	4	166,113
80	278	13,073,695	1	52,550
81	244	10,925,999	3	128,211
82	239	10,667,611		
83	207	9,034,674		
84	207	8,758,358	2	100,808

Table 6B



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Special Retirements

Local Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
85	168	\$ 6,589,084		
86	126	5,028,027	1	\$ 49,379
87	115	4,489,242		
88	113	4,320,561		
89	117	4,395,301		
90	78	3,006,348	1	32,008
91	62	2,131,941	1	29,176
92	48	1,739,608	1	34,598
93	23	816,137		
94	28	970,932		
95	9	342,814	1	27,057
96	8	263,083		
97	3	141,012		
98	5	138,455		
99	2	49,728		
101	1	28,412		
<b>Total</b>	22,314	\$ 1,434,103,269	621	\$ 40,485,207

The 22,935 total special retirements consist of 17,443 policemen, 4,944 firemen and 548 retirees for whom the information was not reported.

Table 7



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Ordinary Disability Retirements

State And Local

Age	Men		Women	
	Number	Amount	Number	Amount
30	1	\$ 19,468		
31	4	120,585		
32	2	48,566		
33	5	155,835		
34	10	282,581	4	\$ 102,479
35	10	326,886		
36	12	336,071	2	64,083
37	12	393,842	4	96,340
38	18	560,759	7	191,878
39	11	357,927	7	224,266
40	29	914,480	9	266,500
41	22	709,742	9	271,343
42	27	859,602	8	252,964
43	47	1,372,397	27	833,833
44	57	1,720,348	22	674,689
45	74	2,353,545	17	463,519
46	62	1,895,921	14	453,252
47	75	2,294,697	18	526,938
48	70	2,250,725	28	921,559
49	72	2,235,711	23	695,248
50	86	2,838,867	24	715,723
51	80	2,630,944	28	810,645
52	67	2,189,069	17	487,336
53	89	2,785,056	19	515,154
54	75	2,268,602	12	337,752
55	70	2,394,159	19	522,734
56	69	2,210,730	21	695,449
57	54	1,871,126	22	592,713
58	73	2,429,507	19	594,145
59	64	1,935,591	13	334,292
60	76	2,350,927	12	381,577
61	70	1,894,714	12	317,084
62	69	1,949,781	8	211,965
63	53	1,483,958	8	235,985
64	70	1,835,584	9	246,940
65	58	1,594,621	9	258,636
66	68	1,682,525	10	291,837
67	74	1,732,020	8	215,478
68	74	1,634,164	3	79,831
69	60	1,359,325	4	104,500
70	39	783,709	5	99,902



Table 7



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Ordinary Disability Retirements

State And Local  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
71	34	\$ 719,442	3	\$ 81,702
72	53	1,045,688	3	72,804
73	31	582,818	8	221,962
74	48	872,606	4	104,061
75	29	567,214	2	47,743
76	29	530,677		
77	19	415,470	2	58,786
78	15	264,741	1	21,547
79	14	262,586		
80	10	192,361	1	22,856
81	11	183,017	1	19,151
82	8	100,007	1	22,912
83	7	94,918	1	18,838
84	2	36,386	1	14,424
85	6	85,282	1	18,877
86	2	24,711		
87	1	15,405		
88	3	47,605		
89	3	39,207		
90	2	22,488		
91	5	59,535		
94	1	18,911		
<b>Total</b>	2,391	\$ 67,245,742	510	\$ 14,814,232

The 2,901 ordinary disability retirees consist of 2,568 policemen, 278 firemen and 55 retirees for whom the information was not reported.

Table 7A



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Ordinary Disability Retirements

State Only

Age	Men		Women	
	Number	Amount	Number	Amount
33	2	\$ 47,531		
34	1	24,310	3	\$ 75,636
35	1	26,549		
36	3	77,363	1	30,367
37	1	27,588	2	47,280
38	3	78,893	2	46,724
39	4	112,156	1	21,188
40	5	117,702	3	81,830
41	2	52,891	1	24,978
42	6	150,817	3	87,556
43	10	284,296	8	243,251
44	11	313,213	5	137,913
45	14	403,542	5	130,026
46	14	352,928	4	114,210
47	11	315,956	5	138,119
48	16	464,964	9	254,508
49	10	259,510	8	223,100
50	21	592,167	12	351,769
51	15	420,036	7	194,436
52	11	279,845	4	108,746
53	21	570,783	7	185,140
54	13	332,144	5	141,216
55	14	433,075	8	210,383
56	19	549,254	11	307,869
57	15	448,906	7	195,298
58	19	615,280	10	301,332
59	16	468,469	7	174,614
60	24	712,685	5	149,250
61	12	308,525	8	214,357
62	15	440,887	3	79,804
63	19	489,624	5	136,778
64	16	401,912	7	204,423
65	14	386,986	7	199,210
66	19	486,143	7	190,167
67	17	452,233	3	73,628
68	18	510,417	2	57,775
69	16	429,081	3	84,437
70	9	205,374	2	51,520
71	9	210,266	3	81,702
72	12	288,131	2	50,313

Table 7A



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Ordinary Disability Retirements

State Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
73	6	\$ 171,568	4	\$ 106,049
74	11	263,885	4	104,061
75	8	207,698	1	23,651
76	9	213,707		
77	5	130,161		
78	1	23,730	1	21,547
79	3	86,050		
80	1	33,538	1	22,856
81	3	72,175		
83	1	15,680		
84	1	23,485		
90	1	11,783		
91	1	12,887		
<b>Total</b>	529	\$ 14,408,779	206	\$ 5,679,017

The 735 ordinary disability retirees consist of 723 policemen, 3 firemen and 9 retirees for whom the information was not reported.

Table 7B



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Ordinary Disability Retirements

Local Only

Age	Men		Women	
	Number	Amount	Number	Amount
30	1	\$ 19,468		
31	4	120,585		
32	2	48,566		
33	3	108,304		
34	9	258,271	1	\$ 26,842
35	9	300,337		
36	9	258,708	1	33,716
37	11	366,255	2	49,061
38	15	481,866	5	145,154
39	7	245,771	6	203,078
40	24	796,778	6	184,669
41	20	656,851	8	246,365
42	21	708,785	5	165,408
43	37	1,088,101	19	590,582
44	46	1,407,135	17	536,777
45	60	1,950,003	12	333,493
46	48	1,542,993	10	339,042
47	64	1,978,742	13	388,819
48	54	1,785,761	19	667,049
49	62	1,976,201	15	472,148
50	65	2,246,699	12	363,955
51	65	2,210,907	21	616,210
52	56	1,909,224	13	378,589
53	68	2,214,273	12	330,014
54	62	1,936,458	7	196,535
55	56	1,961,084	11	312,351
56	50	1,661,477	10	387,580
57	39	1,422,220	15	397,415
58	54	1,814,226	9	292,813
59	48	1,467,122	6	159,678
60	52	1,638,242	7	232,327
61	58	1,586,189	4	102,727
62	54	1,508,894	5	132,161
63	34	994,334	3	99,208
64	54	1,433,672	2	42,517
65	44	1,207,636	2	59,426
66	49	1,196,382	3	101,670
67	57	1,279,787	5	141,850
68	56	1,123,747	1	22,056
69	44	930,244	1	20,063

Table 7B



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Ordinary Disability Retirements

Local Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
70	30	\$ 578,335	3	\$ 48,382
71	25	509,176		
72	41	757,557	1	22,492
73	25	411,249	4	115,913
74	37	608,721		
75	21	359,517	1	24,092
76	20	316,970		
77	14	285,309	2	58,786
78	14	241,010		
79	11	176,537		
80	9	158,822		
81	8	110,841	1	19,151
82	8	100,007	1	22,912
83	6	79,238	1	18,838
84	1	12,901	1	14,424
85	6	85,282	1	18,877
86	2	24,711		
87	1	15,405		
88	3	47,605		
89	3	39,207		
90	1	10,706		
91	4	46,648		
94	1	18,911		
<b>Total</b>	1,862	\$ 52,836,963	304	\$ 9,135,215

The 2,166 ordinary disability retirees consist of 1,845 policemen, 275 firemen and 46 retirees for whom the information was not reported.

Table 8



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Accidental Disability Retirements

State And Local

Age	Men		Women	
	Number	Amount	Number	Amount
28			1	\$ 31,216
30	4	\$ 169,411	1	50,632
31	6	326,038		
32	10	552,580	1	41,587
33	11	485,857	3	100,491
34	16	872,294	2	112,313
35	13	725,688	5	229,595
36	24	1,343,293	9	480,003
37	20	1,145,261	5	274,831
38	32	1,893,646	8	415,407
39	32	1,836,212	11	556,883
40	49	2,765,830	2	97,323
41	54	3,080,208	8	454,801
42	72	3,935,112	12	747,855
43	70	3,928,808	12	641,434
44	79	4,581,467	12	640,825
45	89	5,070,581	9	514,272
46	105	5,896,126	12	610,728
47	113	6,525,074	15	782,773
48	85	4,754,312	11	623,480
49	100	5,676,040	17	878,869
50	97	5,741,771	7	336,278
51	110	6,098,254	8	412,984
52	82	4,594,625	9	501,967
53	82	4,450,404	7	378,534
54	62	3,421,044	5	216,052
55	75	3,880,540	10	472,426
56	59	3,264,953	6	310,199
57	53	2,863,699	6	337,081
58	58	2,856,567	4	212,709
59	39	1,911,527	10	439,819
60	54	2,311,031	3	117,043
61	52	2,115,666	8	365,772
62	46	2,030,953	4	139,183
63	28	1,231,019		
64	48	2,109,109	2	94,870
65	39	1,575,536	2	62,698
66	43	1,753,760	1	12,914

Table 8



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Accidental Disability Retirements

State And Local  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
67	55	\$ 2,007,768		
68	45	1,408,747	1	\$ 39,353
69	46	1,432,868	1	55,043
70	38	1,264,177	1	46,429
71	32	838,043		
72	29	894,515	2	93,253
73	36	1,049,667		
74	21	562,579		
75	20	563,062		
76	10	255,198	1	15,584
77	14	383,411		
78	12	296,629		
79	11	248,428		
80	15	354,549		
81	15	366,639		
82	15	334,368		
83	6	133,037		
84	12	268,925		
85	3	56,658		
86	6	127,210		
87	3	63,760		
88	3	64,690		
89	6	127,428		
90	7	173,779		
91	5	110,840		
92	4	69,182		
93	3	80,484		
94	2	43,186		
<b>Total</b>	2,485	\$ 121,354,123	254	\$ 12,945,509

The 2,739 accidental disability retirees consist of 2,439 policemen, 199 firemen and 101 retirees for whom the information was not reported.

Table 8A



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Accidental Disability Retirements

State Only

Age	Men		Women	
	Number	Amount	Number	Amount
31	2	\$ 75,770		
32	1	39,047		
33	4	144,082	2	\$ 75,364
34	2	87,188	1	42,775
35	3	127,199	1	48,708
36	3	133,674	2	84,203
37	5	232,471	2	103,082
38	5	239,621	3	123,452
39	6	295,442	3	128,088
40	8	359,090	1	57,456
41	7	318,203		
42	12	550,979	3	174,139
43	7	326,808	3	146,904
44	8	380,586	3	139,935
45	11	498,530	2	103,081
46	14	649,154	3	119,321
47	11	514,216	4	161,376
48	13	587,090	2	133,212
49	10	512,917	4	196,196
50	13	601,869	1	44,244
51	11	474,433		
52	9	393,363	2	92,599
53	8	339,876	3	139,850
54	4	195,326	1	44,198
55	7	329,749	5	217,223
56	11	514,495		
57	8	384,354	1	59,661
58	9	352,249		
59	6	265,210	3	134,283
60	5	171,004	1	42,053
61	4	181,757	4	175,341
62	8	341,315	1	41,064
64	4	178,856	2	94,870
65	3	128,636		
66	2	83,111	1	12,914
67	8	344,580		
68	3	93,567	1	39,353
69	4	149,449		
71	1	39,582		
72	1	19,641		



Table 8A



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Accidental Disability Retirements

State Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
73	2	\$ 87,416		
74	1	52,856		
75	2	63,719		
76	1	31,804		
79	1	40,026		
80	1	31,926		
81	2	51,192		
82	1	23,537		
83	1	18,804		
<b>Total</b>	273	\$ 12,055,769	65	\$ 2,974,945

The 338 accidental disability retirees consist of 332 policemen and 6 retirees for whom the information was not reported.

Table 8B



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Accidental Disability Retirements

Local Only

Age	Men		Women	
	Number	Amount	Number	Amount
28			1	\$ 31,216
30	4	\$ 169,411	1	50,632
31	4	250,268		
32	9	513,533	1	41,587
33	7	341,775	1	25,127
34	14	785,107	1	69,537
35	10	598,489	4	180,887
36	21	1,209,619	7	395,799
37	15	912,790	3	171,749
38	27	1,654,025	5	291,955
39	26	1,540,770	8	428,795
40	41	2,406,740	1	39,866
41	47	2,762,005	8	454,801
42	60	3,384,132	9	573,716
43	63	3,602,001	9	494,529
44	71	4,200,881	9	500,891
45	78	4,572,051	7	411,191
46	91	5,246,972	9	491,406
47	102	6,010,859	11	621,399
48	72	4,167,220	9	490,269
49	90	5,163,122	13	682,673
50	84	5,139,900	6	292,034
51	99	5,623,821	8	412,984
52	73	4,201,262	7	409,368
53	74	4,110,528	4	238,684
54	58	3,225,718	4	171,854
55	68	3,550,791	5	255,203
56	48	2,750,458	6	310,199
57	45	2,479,345	5	277,421
58	49	2,504,318	4	212,709
59	33	1,646,317	7	305,536
60	49	2,140,026	2	74,990
61	48	1,933,910	4	190,432
62	38	1,689,638	3	98,118
63	28	1,231,019		
64	44	1,930,254		
65	36	1,446,900	2	62,698
66	41	1,670,649		
67	47	1,663,189		

Table 8B



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Accidental Disability Retirements

Local Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
68	42	\$ 1,315,180		
69	42	1,283,420	1	\$ 55,043
70	38	1,264,177	1	46,429
71	31	798,461		
72	28	874,874	2	93,253
73	34	962,251		
74	20	509,723		
75	18	499,344		
76	9	223,394	1	15,584
77	14	383,411		
78	12	296,629		
79	10	208,402		
80	14	322,622		
81	13	315,447		
82	14	310,831		
83	5	114,233		
84	12	268,925		
85	3	56,658		
86	6	127,210		
87	3	63,760		
88	3	64,690		
89	6	127,428		
90	7	173,779		
91	5	110,840		
92	4	69,182		
93	3	80,484		
94	2	43,186		
<b>Total</b>	2,212	\$ 109,298,354	189	\$ 9,970,564

The 2,401 accidental disability retirees consist of 2,107 policemen, 199 firemen and 95 retirees for whom the information was not reported.

Table 9



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Active Members' Death Benefits

State And Local

Age	Men		Women	
	Number	Amount	Number	Amount
2			1	\$ 14,404
3	1	\$ 13,013	1	10,041
5			1	13,521
6	1	10,560	1	12,802
7	1	8,811		
8			4	42,801
9	1	12,923	2	26,768
10	2	23,947	4	82,405
11	1	19,959	1	12,712
12	1	11,533		
13	1	13,552	7	86,878
14	2	25,515	7	110,602
15			5	88,194
16	5	64,927	7	86,455
17	3	48,454	5	72,856
18	2	30,264	3	35,076
19	1	20,086	5	62,684
20			1	11,848
22			1	89,465
24			1	13,036
25			1	44,321
27			1	11,194
29	1	11,705		
31			2	81,108
32			1	30,830
33	1	11,973	3	142,013
34			3	120,460
35			5	195,043
36			3	134,411
37			3	93,556
38			7	274,846
39			6	256,203
40	1	38,840	6	248,225
41	2	75,810	7	244,226
42			13	501,943
43	1	31,518	17	776,092
44			14	627,539
45			9	375,970

Table 9



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Active Members' Death Benefits

State And Local  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
46			16	\$ 646,909
47	1	\$ 36,261	12	471,224
48	1	45,006	19	754,822
49			12	507,315
50			16	713,478
51	1	23,344	14	639,894
52	1	65,421	13	483,495
53			28	1,166,876
54	1	33,367	15	644,018
55			19	886,272
56			22	900,843
57			15	646,303
58			13	545,110
59			23	1,000,334
60			15	606,174
61			13	603,255
62			13	557,145
63			15	594,480
64	1	39,264	22	945,192
65			13	582,194
66			9	376,535
67			12	486,343
68			10	396,042
69	1	36,607	9	339,394
70			8	250,691
71			5	157,961
72			6	209,653
73			7	252,799
74			7	228,388
75			5	152,876
77			2	64,505
78			3	81,188
80			2	78,438
81			2	72,976
82			1	23,882
83			1	23,951
84			1	27,708
85			3	66,761

Table 9



**The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015**

**Active Members' Death Benefits**

**State And Local  
(Continued)**

Age	Men		Women	
	Number	Amount	Number	Amount
86			3	\$ 59,041
87			3	62,994
88			1	29,682
89			3	95,244
90			3	52,743
92			4	76,120
93			3	60,010
95			1	15,158
97			1	613
100			1	14,247
<b>Total</b>	35	\$ 752,660	602	\$ 22,681,804

The 637 beneficiaries are receiving active members' death benefits on behalf of 198 deceased policemen and 40 deceased firemen. Information was not reported for the other 399 beneficiaries.

Table 9A



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Active Members' Death Benefits

State Only

Age	Men		Women	
	Number	Amount	Number	Amount
3	1	\$ 13,013	1	\$ 10,041
5			1	13,521
6	1	10,560		
8			2	23,273
10			1	12,605
11			1	12,712
13	1	13,552	2	22,673
14			3	34,387
15			2	31,081
16	1	14,185	3	27,818
17	1	13,521		
18			2	20,112
19	1	20,086	2	22,662
24			1	13,036
27			1	11,194
31			1	40,597
32			1	30,830
33	1	11,973	2	89,665
34			1	29,811
37			1	31,225
38			1	33,377
40	1	38,840	1	34,449
41	1	28,422	1	24,880
42			6	198,734
43	1	31,518	2	79,049
44			2	75,364
45			1	28,598
46			4	143,289
47	1	36,261	2	60,052
48			4	136,141
49			1	30,193
50			1	30,128
51	1	23,344		
52			4	149,497
53			7	220,538
54	1	33,367	3	106,853
55			2	72,424
56			5	165,414
57			2	73,984
58			4	143,458

Table 9A



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Active Members' Death Benefits

State Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
59			5	\$ 181,490
60			2	54,689
61			5	214,457
62			4	139,618
63			4	147,057
64	1	\$ 39,264	4	153,303
65			3	107,687
66			1	33,481
67			1	29,156
68			3	101,548
69			1	33,853
70			1	39,054
72			2	81,111
73			1	29,348
74			2	67,761
75			1	32,025
81			1	28,579
86			1	32,069
<b>Total</b>	14	\$ 327,906	123	\$ 3,789,951

The 137 beneficiaries are receiving active members' death benefits on behalf of 49 deceased policemen and 1 deceased fireman. Information was not reported for the other 87 beneficiaries.



Table 9B



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Active Members' Death Benefits

Local Only

Age	Men		Women	
	Number	Amount	Number	Amount
2			1	\$ 14,404
6			1	12,802
7	1	\$ 8,811		
8			2	19,528
9	1	12,923	2	26,768
10	2	23,947	3	69,800
11	1	19,959		
12	1	11,533		
13			5	64,206
14	2	25,515	4	76,215
15			3	57,113
16	4	50,742	4	58,637
17	2	34,934	5	72,856
18	2	30,264	1	14,964
19			3	40,021
20			1	11,848
22			1	89,465
25			1	44,321
29	1	11,705		
31			1	40,511
33			1	52,349
34			2	90,649
35			5	195,043
36			3	134,411
37			2	62,331
38			6	241,469
39			6	256,203
40			5	213,775
41	1	47,388	6	219,346
42			7	303,209
43			15	697,042
44			12	552,175
45			8	347,372
46			12	503,621
47			10	411,171
48	1	45,006	15	618,681
49			11	477,122
50			15	683,350

Table 9B



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Active Members' Death Benefits

Local Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
51			14	\$ 639,894
52	1	\$ 65,421	9	333,999
53			21	946,337
54			12	537,165
55			17	813,848
56			17	735,428
57			13	572,319
58			9	401,652
59			18	818,844
60			13	551,485
61			8	388,799
62			9	417,527
63			11	447,422
64			18	791,889
65			10	474,507
66			8	343,054
67			11	457,187
68			7	294,494
69	1	36,607	8	305,542
70			7	211,637
71			5	157,961
72			4	128,542
73			6	223,451
74			5	160,628
75			4	120,851
77			2	64,505
78			3	81,188
80			2	78,438
81			1	44,397
82			1	23,882
83			1	23,951
84			1	27,708
85			3	66,761
86			2	26,972
87			3	62,994
88			1	29,682
89			3	95,244
90			3	52,743
92			4	76,120

Table 9B



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Active Members' Death Benefits

Local Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
93			3	\$ 60,010
95			1	15,158
97			1	613
100			1	14,247
<b>Total</b>	21	\$ 424,754	479	\$ 18,891,853

The 500 beneficiaries are receiving active members' death benefits on behalf of 149 deceased policemen and 39 deceased firemen. Information was not reported for the other 312 beneficiaries.

Table 10



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Retired Members' Death Benefits

State And Local

Age	Men		Women	
	Number	Amount	Number	Amount
4			4	\$ 50,718
5	1	\$ 17,163	2	18,159
6			2	27,247
7			2	17,539
8			2	28,907
9			6	70,931
10	1	18,375	12	131,563
11	2	21,746	9	91,729
12	1	6,048	11	115,437
13			13	134,320
14	2	16,037	14	173,427
15	2	19,730	12	117,416
16	3	35,674	26	314,991
17	2	25,066	22	269,427
18	4	35,781	22	291,476
19	2	18,439	22	281,930
20			7	81,485
21			1	15,131
22			2	19,877
23			1	11,375
24	1	14,760		
26			1	41,249
30			2	78,415
31	1	52,346		
32			1	10,738
34			2	18,040
36			2	46,428
37	1	47,833	4	117,170
38	1	7,878	4	102,832
39			2	68,634
40			3	90,011
41			3	98,989
42			7	290,991
43			4	149,454
44	2	88,151	12	455,687
45	2	49,781	12	396,676
46			8	360,120
47			16	625,439
48	1	31,334	12	463,313
49	1	29,453	29	1,226,157
50			33	1,200,620

Table 10



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Retired Members' Death Benefits

State And Local  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
51			26	\$ 1,154,019
52	1	\$ 2,592	36	1,364,332
53	2	22,425	35	1,387,213
54	3	96,891	41	1,726,970
55	3	74,379	44	1,712,240
56	1	5,550	41	1,515,986
57	3	79,842	56	2,205,386
58	1	7,529	83	3,406,206
59	2	94,479	98	3,773,622
60	1	38,637	109	4,083,698
61			83	3,240,333
62	1	7,765	80	3,121,765
63	2	39,434	103	3,638,645
64			119	4,230,345
65	1	35,304	109	3,968,048
66	1	49,553	133	5,151,168
67	1	15,849	153	5,486,653
68	4	141,903	176	6,231,199
69	1	38,727	167	6,021,736
70	1	15,793	134	4,403,378
71	1	30,613	171	5,537,451
72	3	128,635	187	6,538,819
73	1	45,282	207	6,755,836
74			229	7,573,118
75	1	20,969	185	5,983,264
76	3	77,242	195	6,263,208
77			186	5,518,498
78	1	39,864	193	5,541,282
79			209	5,840,289
80			199	5,522,798
81			189	5,429,162
82	3	103,365	186	4,894,039
83			198	5,300,654
84	2	47,882	166	4,310,446
85			221	5,645,317
86			190	4,855,250
87	1	17,456	194	4,745,996
88	1	28,961	204	4,822,973
89			150	3,476,612
90	1	35,296	151	3,517,949

Table 10



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Retired Members' Death Benefits

State And Local  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
91			123	\$ 2,790,124
92			102	2,272,175
93			63	1,319,308
94			53	1,097,889
95			53	1,184,425
96			31	640,365
97			6	137,394
98			5	134,482
99			2	48,458
100			1	19,162
101			2	45,528
<b>Total</b>	77	\$ 1,877,812	6,426	\$ 193,689,261

The 6,503 beneficiaries are receiving retired members' death benefits on behalf of 3,630 deceased policemen, 1,098 deceased firemen and 1,775 deceased retirees for whom the information was not reported.

Table 10A



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Retired Members' Death Benefits

State Only

Age	Men		Women	
	Number	Amount	Number	Amount
4			1	\$ 8,313
5			1	9,477
6			1	11,650
9			2	15,010
10			2	14,196
11	1	\$ 11,130	3	24,932
12			5	44,004
13			2	14,471
14			3	32,599
15			5	37,014
16			6	78,619
17			5	51,732
18	1	5,253	3	28,858
19			4	55,544
20			1	10,698
23			1	11,375
30			1	33,251
31	1	52,346		
32			1	10,738
37	1	47,833	2	46,058
38			2	38,156
39			2	68,634
42			2	98,997
44			6	202,349
45			2	67,480
46			3	105,999
47			2	93,869
48			3	102,891
49	1	29,453	5	187,173
50			7	192,064
51			4	154,057
52			5	192,111
53			7	248,740
54			7	311,992
55			4	125,167
56			8	270,754
57	1	21,603	9	339,002
58			8	292,800
59	2	94,479	13	499,349
60	1	38,637	24	796,045
61			7	308,307

Table 10A



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Retired Members' Death Benefits

State Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
62			8	\$ 282,942
63	1	\$ 31,769	10	361,045
64			21	769,683
65	1	35,304	13	466,328
66	1	49,553	13	446,252
67			22	762,506
68	3	109,776	24	850,985
69			16	555,432
70	1	15,793	13	402,098
71			13	387,118
72	1	45,912	19	606,247
73			18	557,550
74			15	448,833
75			19	536,280
76			14	408,359
77			18	518,232
78	1	39,864	11	315,086
79			11	298,235
80			16	530,389
81			13	377,642
82	1	27,472	10	226,199
83			8	223,111
84	1	28,086	6	156,146
85			12	289,549
86			8	251,856
87			7	151,286
88			12	317,713
89			4	94,770
90			4	86,974
91			3	74,142
92			1	18,395
93			5	90,763
94			1	18,485
95			1	18,424
96			1	13,834
<b>Total</b>	20	\$ 684,263	569	\$ 17,147,364

The 589 beneficiaries are receiving retired members' death benefits on behalf of 503 deceased policemen, 14 deceased firemen and 72 deceased retirees for whom the information was not reported.



Table 10B



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Retired Members' Death Benefits

Local Only

Age	Men		Women	
	Number	Amount	Number	Amount
4			3	\$ 42,405
5	1	\$ 17,163	1	8,682
6			1	15,597
7			2	17,539
8			2	28,907
9			4	55,921
10	1	18,375	10	117,367
11	1	10,615	6	66,798
12	1	6,048	6	71,434
13			11	119,849
14	2	16,037	11	140,829
15	2	19,730	7	80,402
16	3	35,674	20	236,372
17	2	25,066	17	217,695
18	3	30,529	19	262,618
19	2	18,439	18	226,383
20			6	70,787
21			1	15,131
22			2	19,877
24	1	14,760		
26			1	41,249
30			1	45,163
34			2	18,040
36			2	46,428
37			2	71,112
38	1	7,878	2	64,677
40			3	90,011
41			3	98,989
42			5	191,994
43			4	149,454
44	2	88,151	6	253,338
45	2	49,781	10	329,196
46			5	254,121
47			14	531,570
48	1	31,334	9	360,422
49			24	1,038,984
50			26	1,008,555
51			22	999,962
52	1	2,592	31	1,172,220
53	2	22,425	28	1,138,473
54	3	96,891	34	1,414,978

Table 10B



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Retired Members' Death Benefits

Local Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
55	3	\$ 74,379	40	\$ 1,587,071
56	1	5,549	33	1,245,233
57	2	58,240	47	1,866,384
58	1	7,528	75	3,113,405
59			85	3,274,272
60			85	3,287,653
61			76	2,932,026
62	1	7,765	72	2,838,824
63	1	7,665	93	3,277,601
64			98	3,460,663
65			96	3,501,722
66			120	4,704,918
67	1	15,849	131	4,724,147
68	1	32,127	152	5,380,215
69	1	38,727	151	5,466,305
70			121	4,001,280
71	1	30,613	158	5,150,333
72	2	82,724	168	5,932,572
73	1	45,282	189	6,198,286
74			214	7,124,285
75	1	20,969	166	5,446,985
76	3	77,242	181	5,854,848
77			168	5,000,265
78			182	5,226,196
79			198	5,542,054
80			183	4,992,409
81			176	5,051,520
82	2	75,893	176	4,667,840
83			190	5,077,543
84	1	19,796	160	4,154,299
85			209	5,355,766
86			182	4,603,393
87	1	17,456	187	4,594,710
88	1	28,961	192	4,505,260
89			146	3,381,842
90	1	35,296	147	3,430,975
91			120	2,715,982
92			101	2,253,779
93			58	1,228,546
94			52	1,079,404

Table 10B



The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of July 1, 2015

Retired Members' Death Benefits

Local Only  
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
95			52	\$ 1,166,001
96			30	626,532
97			6	137,394
98			5	134,482
99			2	48,458
100			1	19,162
101			2	45,528
<b>Total</b>	57	\$ 1,193,549	5,857	\$ 176,541,897

The 5,914 beneficiaries are receiving retired members' death benefits on behalf of 3,127 deceased policemen, 1,084 deceased firemen and 1,703 deceased retirees for whom the information was not reported.

Table 11



The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015

Deferred Terminated Vesteds

State And Local

Age	Men		Women	
	Number	Amount	Number	Amount
38	3	\$ 54,648		
39	1	26,364		
41	1	32,940		
42	1	20,856		
44	4	62,340	1	\$ 14,424
45	2	38,340		
46	7	148,032		
47	1	9,804		
48	4	76,404		
49	6	128,748		
50	2	35,412		
51			2	33,312
52	2	50,340		
53	3	72,060	1	38,820
54	5	101,364	1	15,624
55	3	59,808		
68	1	8,868		
<b>Total</b>	46	\$ 926,328	5	\$ 102,180

The 51 deferred terminated vested members consist of 46 policemen and 5 firemen.

Table 11A

The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015



Deferred Terminated Vesteds

State Only

Age	Men		Women	
	Number	Amount	Number	Amount
39	1	\$ 26,364		
44	1	18,840		
45	1	13,200		
46	1	15,792		
49	1	10,260		
50	1	18,996		
53			1	\$ 38,820
55	1	20,484		
<b>Total</b>	7	\$ 123,936	1	\$ 38,820

The 8 deferred terminated vested members consist of 8 policemen.

Table 11B

The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of July 1, 2015



Deferred Terminated Vesteds

Local Only

Age	Men		Women	
	Number	Amount	Number	Amount
38	3	\$ 54,648		
41	1	32,940		
42	1	20,856		
44	3	43,500	1	\$ 14,424
45	1	25,140		
46	6	132,240		
47	1	9,804		
48	4	76,404		
49	5	118,488		
50	1	16,416		
51			2	33,312
52	2	50,340		
53	3	72,060		
54	5	101,364	1	15,624
55	2	39,324		
68	1	8,868		
<b>Total</b>	<b>39</b>	<b>\$ 802,392</b>	<b>4</b>	<b>\$ 63,360</b>

The 43 deferred terminated vested members consist of 38 policemen and 5 firemen.

## Appendix F - Early Retirement Incentive (ERI) Contribution Schedule

Location Number	Location Name	ERI 1 Information	
		Current Payment	Present Value as of 7/1/2015
22100	East Rutherford Borough	\$ 77,958	\$ 820,814
25100	Riverside Township	37,937	33,211
25500	Glen Ridge Borough	56,056	590,208
29300	Maple Shade Township	56,841	49,759
34600	Wallington Borough	36,649	385,881
38800	Phillipsburg Town	10,971	115,512
40500	Haddon Heights Borough	36,692	32,121
43400	Bound Brook Borough	32,575	342,980
54400	Linwood City	51,078	537,797
57100	Mine Hill Township	17,807	187,492
57700	Sea Isle City	20,359	17,823
61200	Raritan Township	<u>53,681</u>	<u>565,202</u>
	Total	\$ 488,604	\$ 3,678,800



**Appendix G - Early Retirement Incentive (ERI) Contribution Schedule  
Additional Contribution Schedules Due to Recent  
Early Retirement Incentive (ERI) Legislation**

Location Number	Location Name	Years and Form of Payment	ERI Information	
			Current Payment	Present Value as of 7/1/15
<b>Chapter 126, P.L. 2000</b>				
71600	Passaic County	15 Year - Level	\$ 175,820	\$ 551,287
71603	Passaic County	15 Year - Level	27,871	87,391
72000	Union County	15 Year - Level	50,027	272,587
72001	Union County	15 Year - Level	17,887	97,465
72003	Union County	15 Year - Level	54,934	207,727
72003	Union County (Effective 2006)	15 Year - Level	201,062	1,095,541
	Sub-Total		\$ 527,601	\$ 2,311,998
<b>Chapter 130, P.L. 2003</b>				
20300	Bayonne City	15 Year - Increasing	\$ 298,934	\$ 1,194,886
22100	East Rutherford Borough	15 Year - Increasing	49,363	231,563
22400	Union City	15 Year - Increasing	34,960	139,742
28300	Montclair Township	15 Year - Increasing	276,864	1,106,671
31800	Harrison Town	15 Year - Increasing	200,708	802,263
32500	Nutley Township	15 Year - Increasing	109,496	437,672
33300	Wood-Ridge Borough	15 Year - Increasing	33,999	159,493
35400	Belleville Township	15 Year - Increasing	47,272	221,753
36000	Livingston Township	15 Year - Increasing	74,580	349,859
43100	Ewing Township	15 Year - Increasing	160,372	641,033
43600	Roseland Borough	15 Year - Increasing	39,686	186,170
49300	Berkeley Heights Township	15 Year - Increasing	38,886	182,414
56500	Franklin Township	15 Year - Increasing	35,443	166,263
61200	Raritan Township	15 Year - Increasing	24,572	115,269
62600	Monroe Township	15 Year - Increasing	19,914	93,419
71100	Mercer County	15 Year - Increasing	154,611	618,004
72000	Union County	15 Year - Increasing	1,147	5,382
72003	Union County	15 Year - Increasing	52,217	244,954
	Sub-Total		\$ 1,653,024	\$ 6,896,810
	Total		\$ 2,180,625	\$ 9,208,808



**Appendix H - Local Employer Chapter 19, P,L. 2009  
Deferral And Payment Schedule**

Location Number	Location Name	Fiscal Year 2017 Payment	Present Value as of July 1, 2015
20300	Bayonne City	\$ 607,369	\$ 3,867,013
20400	Salem City	23,972	152,626
20600	Plainfield City	347,376	2,211,681
21001	Elizabeth City	485,255	3,089,531
21002	Elizabeth City	347,366	2,211,618
21101	Newark City	1,812,773	11,541,608
21102	Newark City	885,129	5,635,462
21202	Camden City	301,418	1,919,077
21300	North Plainfield Borough	108,258	689,259
21600	Somerville Borough	42,843	272,771
21800	Roselle Borough	139,415	887,628
22000	Freehold Borough	51,707	329,208
22400	Union City	294,884	1,877,472
22501	Passaic City	263,082	1,674,995
22502	Passaic City	174,553	1,111,350
22800	Metuchen Borough	37,911	241,373
23000	West New York Town	171,177	1,089,851
23200	Oradell Borough	33,977	216,325
23301	Hoboken City	214,116	1,363,240
23302	Hoboken City	205,943	1,311,201
23400	Audubon Borough	24,776	157,745
23800	East Orange City	533,856	3,398,971
23900	Maplewood Township	154,180	981,639
24100	Hightstown Borough	19,483	124,046
24200	West Milford Township	78,040	496,867
24400	Saddle Brook Township	65,680	418,170
24500	Perth Amboy City	265,898	1,692,928
24600	Secaucus Town	101,370	645,404
24800	Lyndhurst Township	87,615	557,827
24900	Orange City	245,383	1,562,314
25500	Glen Ridge Borough	36,185	230,383
25600	Guttenberg Town	29,875	190,212
25801	Collingswood Borough	42,672	271,684
25802	Collingswood Borough	18,289	116,441
26100	Dunellen Borough	18,279	116,381
26600	Fairview Borough	52,067	331,503
26700	Keansburg Borough	43,514	277,045
27300	New Milford Borough	56,255	358,168
27400	Paramus Borough	181,990	1,158,696

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 Deferral And Payment Schedule



Location Number	Location Name	Fiscal Year 2017 Payment	Present Value as of July 1, 2015
27600	South Amboy City	\$ 36,824	\$ 234,450
27700	Weehawken Township	89,443	569,471
28000	Hackensack City	377,860	2,405,770
28500	Penns Grove Borough	18,263	116,276
28600	Matawan Borough	32,753	208,534
28700	Cedar Grove Township	49,692	316,380
28900	Bogota Borough	21,123	134,484
29100	Irvington Township	439,304	2,796,970
29200	Cinnaminson Township	62,805	399,867
29500	Little Ferry Borough	28,162	179,303
29700	Garwood Borough	22,685	144,432
30701	Paterson City	475,582	3,027,946
30702	Paterson City	376,346	2,396,130
30801	Atlantic City	466,321	2,968,985
30802	Atlantic City	345,661	2,200,765
31100	Fanwood Borough	27,614	175,812
31300	East Hanover Township	60,527	385,363
31600	Rutherford Borough	69,288	441,143
31800	Harrison Township	158,600	1,009,778
32200	Gloucester City	71,569	455,669
32600	Union Township	348,049	2,215,969
32700	Bloomfield Township	327,738	2,086,650
32900	Morristown Town	121,906	776,155
33200	Asbury Park City	182,497	1,161,929
33401	Trenton City	462,794	2,946,531
33402	Trenton City	345,577	2,200,231
33800	Lakewood Township	187,981	1,196,841
34000	North Arlington Borough	57,574	366,562
34100	Rahway City	202,019	1,286,220
34200	Verona Township	47,875	304,814
34301	Hillside Township	107,439	684,047
34302	Hillside Township	74,327	473,224
34600	Wallington Borough	38,899	247,660
34700	East Newark Borough	6,829	43,477
34800	Clifton City	461,471	2,938,108
34900	Wildwood City	77,887	495,896
35000	Palisades Park Borough	52,879	336,671
35100	Pleasantville City	157,145	1,000,518
35400	Belleville Township	280,607	1,786,574
35500	Dover Town	61,404	390,946
35600	South Orange Village	145,568	926,804
35800	Garfield City	105,693	672,928
35900	Linden City	383,569	2,442,119

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 Deferral And Payment Schedule



Location Number	Location Name	Fiscal Year 2017 Payment	Present Value as of July 1, 2015
36200	Bridgeton City	\$ 85,307	\$ 543,133
36400	Washington Borough	17,142	109,137
36700	Fairfield Township	57,216	364,287
36900	Middlesex Borough	45,788	291,523
37000	Middletown Township	164,270	1,045,876
37400	Maywood Borough	44,218	281,526
37700	Piscataway Township	132,637	844,477
38101	Jersey City	1,221,710	7,778,413
38102	Jersey City Fire Dept.	926,237	5,897,191
38500	Runnemede Borough	27,634	175,940
39500	Mountainside Borough	35,354	225,092
39900	Long Branch City	164,765	1,049,033
40400	Wanaque Borough	35,714	227,387
41000	Manville Borough	35,683	227,190
41400	Oceanport Borough	23,527	149,794
41500	Haworth Borough	18,986	120,880
41600	Little Falls Twp	31,962	203,495
41900	North Haledon Borough	25,454	162,060
42000	Haledon Borough	26,246	167,106
42500	Wharton Borough	30,002	191,020
43000	West Paterson Borough	38,291	243,789
43100	Ewing Township	138,476	881,655
43400	Bound Brook Borough	33,819	215,317
43500	Emerson Borough	33,416	212,757
43600	Roseland Borough	40,399	257,213
43700	Norwood Borough	23,051	146,759
43800	Prospect Park Borough	22,348	142,287
44100	Englewood Cliffs Borough	58,415	371,917
44800	Englishtown Borough	5,376	34,229
44900	Ringwood Borough	33,228	211,559
46300	Borough Of Lake Como	13,600	86,589
46400	Aberdeen Township	45,928	292,417
46600	West Long Branch Borough	26,279	167,315
46700	Pt Pleasant Beach Borough	38,353	244,189
47300	Brooklawn Borough	5,967	37,994
47800	Hopatcong Borough	39,612	252,205
47900	West Deptford Township	53,320	339,479
48200	South Bound Brook Borough	19,262	122,635
48600	Gloucester Township	148,656	946,467
48800	Upper Saddle River Boro	32,405	206,316
49100	Willingboro Township	112,057	713,448
50000	Brielle Borough	24,760	157,641
50700	South Brunswick Township	123,757	787,938

Appendix H - Local Employer Chapter 19, P.L. 2009  
 Deferral And Payment Schedule



Location Number	Location Name	Fiscal Year 2017 Payment	Present Value as of July 1, 2015
51100	Jefferson Township	\$ 57,628	\$ 366,905
51600	Wall Township	125,463	798,802
52800	Berlin Borough	23,137	147,307
53500	Winslow Township	107,674	685,541
53900	Berkeley Township Municipal Bld	120,400	766,568
54100	Mansfield Township	16,833	107,171
54300	Lebanon Township	11,372	72,406
54600	Vernon Township	50,238	319,858
54700	Seaside Heights Borough	31,481	200,437
54800	Manchester Township	87,630	557,925
55100	Pine Hill Borough	26,082	166,058
55300	Lindenwold Borough	55,296	352,062
55700	Bloomington Borough	24,493	155,940
56000	Howell Township	153,305	976,064
56200	Plainsboro Township	57,033	363,117
56300	Marlboro Township	128,680	819,285
56500	Franklin Township	33,957	216,197
58200	Egg Harbor Township	119,303	759,582
58400	Holmdel Township	69,807	444,449
58500	Milltown Borough	22,175	141,184
58900	Buena Borough	6,896	43,906
59000	Eastampton Township	21,975	139,913
59800	Chesilhurst Borough	8,192	52,160
59900	Egg Harbor City	14,479	92,183
60000	Harrison Township	16,647	105,987
60100	Woodbury Heights Borough	7,601	48,392
60600	Waterfront Comm Of Ny Harbor	1,876	11,943
61000	Somerdale Borough	14,449	91,993
61200	Raritan Township	53,962	343,564
62300	Nj Transit Corporation	260,498	1,658,544
63100	Allentown Borough	6,934	44,149
63300	Barnegat Township	38,319	243,973
67700	Lambertville City	9,725	61,920
68000	Lawnside Borough	7,648	48,695

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 Deferral And Payment Schedule



Location Number	Location Name	Fiscal Year 2017 Payment	Present Value as of July 1, 2015
68800	Mount Arlington Borough	\$ 13,484	\$ 85,850
69000	National Park Borough	4,360	27,762
70404	Camden County Regional	529,795	3,373,115
71600	Passaic County	877,964	5,589,844
71603	Passaic County	125,546	799,328
72000	Union County	409,825	2,609,283
72001	Union County	67,438	429,365
72003	Union County	315,692	2,009,959
72700	South Toms River Borough	7,254	46,182
73500	Union Beach Borough	12,317	78,422
74000	West Amwell Township	3,305	21,042
74100	Winfield Township	5,857	37,291
74400	Hamilton Twp Fire Comm Dist 2	10,093	64,263
75000	Lakewood Twp Fire District #1	4,934	31,411
75900	Gloucester Twp Fire District #2	3,353	21,346
79000	North Hudson Reg Fire & Rescue	508,660	3,238,549
	<b>Total</b>	\$ 25,023,772	\$ 159,321,982