

The State Police Retirement System of New Jersey Annual Report of the Actuary

Actuarial Valuation
July 1, 2016



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February 3, 2017

Board of Trustees
The State Police Retirement System
of New Jersey
Trenton, New Jersey 08625

Members of the Board:

The law governing the operation of the State Police Retirement System of New Jersey provides for annual actuarial valuations of the System. The results of the July 1, 2016 valuation are submitted in this report, which also includes a comparison with the results of the July 1, 2015 valuation.

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

As required under Section 32 of Chapter 89, P.L. 1965, 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, 2011 – June 30, 2014 Experience Study and approved by the Board of Trustees at the January 26, 2016 Board meeting. These assumptions will be reviewed in a June 30, 2017 experience study and will remain in effect for valuation purposes until such time as the Board adopts revised demographic assumptions.

The Treasurer has recommended a change in the economic assumptions used for the valuation. The rate of investment return has been revised from 7.90% per annum to 7.65% per annum. The assumed future salary increases of 3.45% per annum through fiscal year 2021 and 3.95% per annum for fiscal years 2022 and thereafter have been revised to be 2.95% per annum through fiscal year 2025 and 3.95% per annum for fiscal years 2026 and thereafter. These assumptions will remain in effect for valuation purposes until such time the Board or the Treasurer recommends revised 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 applicable Actuarial Standards of Practice published by the Actuarial Standards Board.

The valuation reflects the actual fiscal year 2016 State Pension Contribution of \$35,580,000. In addition, the valuation also reflects the anticipated fiscal year 2017 State Pension Contribution of \$53,287,065. This amount may be subject to change per the requirements of the State's fiscal year 2017 spending plan.

Reporting requirements of Statements No. 67 and No. 68 are effective as of the 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 State Police 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. Any Statements regarding funded ratios have no specific relevance to any funded position that might be determined in the event a settlement is contemplated. 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 of 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 Conduent to review any statement you wish to make on the results contained in this report. Conduent will accept no liability for any such statement made without prior review by Conduent.

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 I am available to answer questions concerning it.

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

Respectfully submitted,

A handwritten signature in black ink that reads "Aaron Shapiro".

Aaron Shapiro, F.S.A., E.A., M.A.A.A.
Principal, Consulting Actuary
Conduent

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Section I – Summary of Key Results

The State Police Retirement System of New Jersey became effective July 1, 1965 under terms of Chapter 89 of the Laws of 1965. This report, prepared as of July 1, 2016, presents the results of the annual actuarial valuation of the Fund.

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

Valuation Date	July 1, 2016	July 1, 2015
Number of Members	2,725	2,676
Annual Compensation	\$ 277,771,135	\$ 275,477,457
Number of Pensioners and Beneficiaries	3,566	3,511
Total Annual Allowance	\$ 213,292,784	\$ 208,106,636
<u>Assets</u>		
Market Value of Assets	\$ 1,744,462,405 ¹	\$ 1,900,695,725
Valuation Assets	\$ 1,931,131,875 ¹	\$ 1,969,239,472
<u>Contribution Rates</u>		
Pension Contribution		
Recommended Contribution		
Normal Contribution	12.38 %	12.55 %
Accrued Liability Contribution	<u>39.53</u>	<u>35.81</u>
Total Pension Contribution	51.92 %	48.36 %
Non-Contributory Group Insurance Premium	0.61 %	0.65 %
<u>Contribution Rates</u>		
Recommended Contribution		
Normal Contribution	\$ 34,392,980	\$ 34,581,760
Accrued Liability Contribution	<u>109,815,843</u>	<u>98,635,902</u>
Total Pension Contribution	\$ 144,208,823	\$ 133,217,662
Non-Contributory Group Insurance Premium	\$ 1,700,000	\$ 1,800,000

¹ Reflects the State's fiscal year 2017 anticipated contribution of \$53,287,065 discounted one year. This amount is included as a receivable contribution but may be subject to change per the requirements of the State's fiscal year 2017 spending plan.

Section I – Summary of Key Results (continued)

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

The valuation reflects the State's fiscal year 2017 anticipated contribution of \$53,287,065 discounted one year. This amount is included as a receivable contribution but may be subject to change per the requirements of the State's fiscal year 2017 spending plan.

There were no changes to the benefit and contribution provisions.

As required under Chapter 89, P.L. 1965 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, 2011 - June 30, 2014 Experience Study and approved by the Board of Trustees at the January 26, 2016 Board meeting. As mandated by the statute, these assumptions will remain in effect for valuation purpose until such time the Board adopts revised demographic assumptions.

The Treasurer has recommended a change in the economic assumptions used for the valuation. The rate of investment return has been revised from 7.90% per annum to 7.65% per annum. The assumed future salary increases of 3.45% per annum through fiscal year 2021 and 3.95% per annum for fiscal years 2022 and thereafter have been revised to be 2.95% per annum through fiscal year 2025 and 3.95% per annum for fiscal years 2026 and thereafter. These assumptions will remain in effect for valuation purposes until such time the Board or the Treasurer recommends revised assumptions.

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 are summarized in Appendix B.

The combination of the plan provisions, actuarial assumptions and member and beneficiary data is used to generate the overall required level of employer contributions. The required contribution is developed in Section III G. These contributions are composed of two separate portions, an "accrued liability contribution" and a "normal contribution".

The valuation also generates a balance sheet which summarizes in some detail the total present and prospective assets and liabilities of the Fund. A summary comparison of the balance sheets as of July 1, 2015 and July 1, 2016 is set forth in the following table.

Section I – Summary of Key Results (continued)

Table I

Comparative Balance Sheet

	2016	2015
<u>Assets</u>		
Actuarial value of assets of Fund	\$ 1,931,131,875	\$ 1,969,239,472
Unfunded accrued liability/(surplus)	<u>1,278,254,158</u>	<u>1,120,981,012</u>
Total Assets	\$ 3,209,386,033	\$ 3,090,220,484
<u>Accrued Liabilities</u>		
Present value of benefits to present beneficiaries payable from the Retirement Reserve Fund	\$ 2,401,980,284	\$ 2,289,865,821
Present value of benefits to present active members	<u>807,405,749</u>	<u>800,354,663</u>
Total Accrued Liabilities	\$ 3,209,386,033	\$ 3,090,220,484

Section II – Employee Data

The data employed for the valuation was furnished to the actuary by the Division of Pensions and Benefits. The following summarizes and compares the Fund membership as of July 1, 2015 and July 1, 2016 by various categories

Active Membership

Group	2016		2015	
	Number	Annual Compensation ¹	Number	Annual Compensation ¹
Men	2,591	\$ 264,557,446	2,550	\$ 262,783,215
Women	134	\$ 13,213,689	126	\$ 12,694,242

¹ There were no members hired on or after May 22, 2010 whose pay exceeded the Social Security Wage base.

Retired Members and Beneficiaries

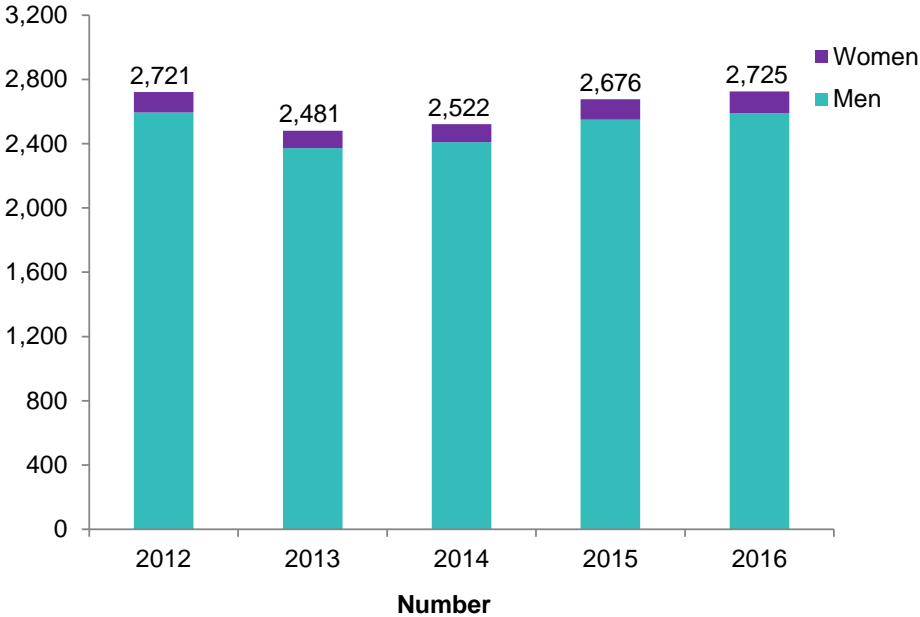
Group	2016		2015	
	Number	Annual Allowances	Number	Annual Allowances
Service Retirements	2,875	\$ 185,519,766	2,824	\$ 180,701,015
Ordinary Disability Retirements	136	\$ 4,777,404	133	\$ 4,618,504
Accidental Disability Retirements	151	\$ 8,296,419	147	\$ 8,079,033
Beneficiaries of Deceased Pensioners	349	\$ 12,230,441	352	\$ 12,236,148
Beneficiaries of Deceased Active Employees	55	\$ 2,468,754	55	\$ 2,471,936

Appendix C provides a detailed distribution between groups

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

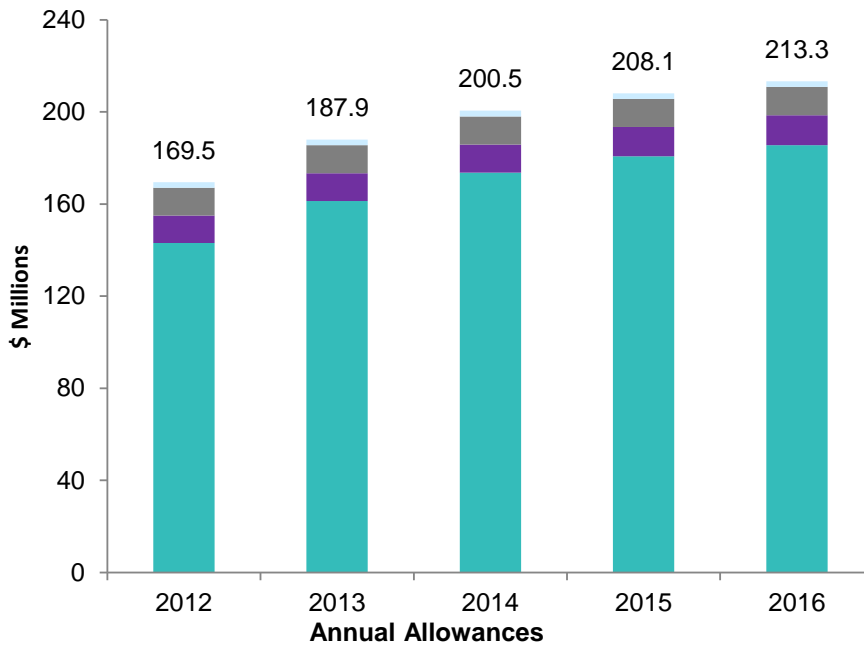
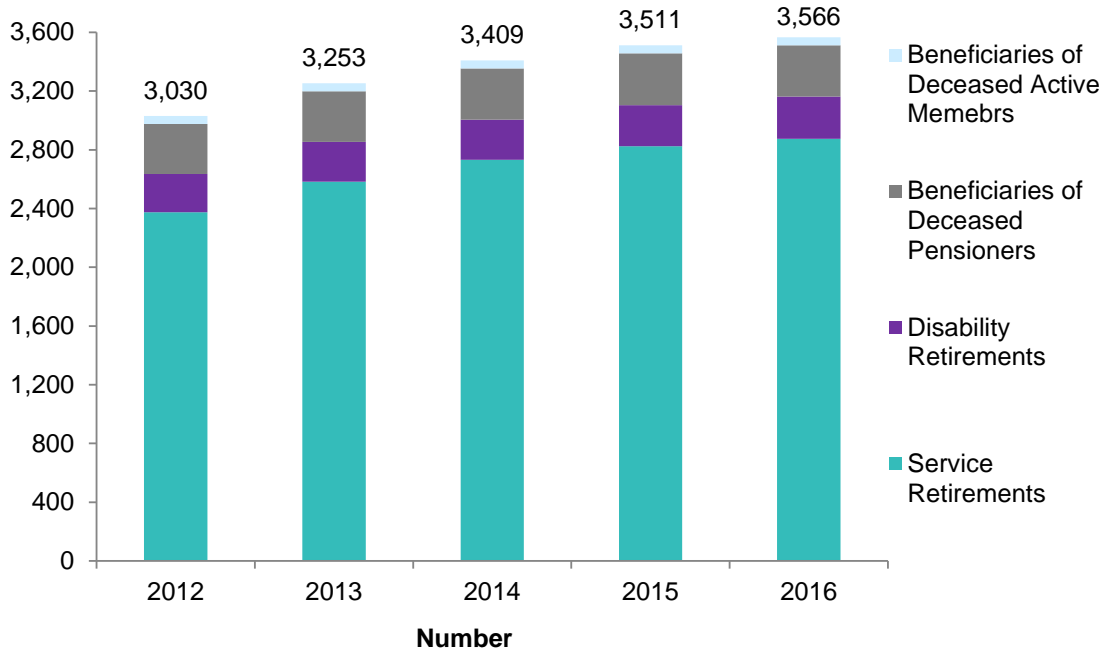
The State Police Retirement System Of New Jersey

Summary of Active Participants



The State Police Retirement System of New Jersey (continued)

Summary of Retired Participants



Section III - Assets, Liabilities and Contributions

A. Market Value of Assets as of June 30, 2016

1.	Assets		
	a.	Cash	\$ 1,587,746
	b.	Securities Lending Collateral	30,479,331
	c.	Accounts Receivable	109,365
	d.	Investment Holdings	1,693,673,285
	e.	Accrued Interest on Investments	2,128
	f.	Employer Contribution Receivable - NCGI	158,804
	g.	Members' Contributions Receivable	1,236,348
	h.	Dividends Receivable	0
	i.	Loans Receivable	15,479,409
	j.	Interest Receivable - Member Loans	616,727
	k.	Total	\$ <u>1,743,343,143</u>
2.	Liabilities		
	a.	Pension Payroll Payable	\$ 13,096,259
	b.	Securities Lending Collateral and Rebates Payable	30,442,602
	c.	Pension Adjustment Payroll Payable	1,811,263
	d.	Withholdings Payable	2,834,363
	e.	Securities Purchased in Transit	0
	f.	Accounts Payable - Other	37,739
	g.	Death Benefits Payable	158,804
	h.	Total	\$ <u>48,381,030</u>
3.	Preliminary Market Value of Assets as of June 30, 2016: 1(k) - 2(h)		\$ 1,694,962,113
4.	Discounted State Appropriations Receivable		\$ <u>49,500,292</u> ¹
5.	Market Value of Assets as of June 30, 2016: 3. + 4.		\$ 1,744,462,405 ²

¹ Reflects the State's fiscal year 2017 anticipated contribution of \$53,287,065 discounted one year. This amount is included as a receivable contribution but may be subject to change per the requirements of the State's fiscal year 2017 spending plan.

² Excludes assets held in the Non-Contributory Group Insurance Fund.

Section III - Assets, Liabilities and Contributions (continued)

B. Reconciliation of Market Value of Assets: June 30, 2015 to June 30, 2016

1.	Market Value of Assets as of June 30, 2015	\$	1,867,720,470
	Adjustment to June 30, 2015 Market Value of Assets		<u>(11,359)</u>
	Adjusted June 30, 2015 Market Value of Assets	\$	<u>1,867,709,111</u>
2.	Increases		
a.	Pension Contributions		
	Members' Contributions	\$	22,474,634
	Transfer from Other Systems		343,661
b.	Employers' Contributions		
	State Appropriations		35,580,000
	Non-Contributory Group Insurance		1,855,541
	Transfer from Other Systems		54,000
	Administrative Fee Loans		3,920
c.	Income		
	Per Statement		<u>(19,284,054)</u>
d.	Total	\$	<u>41,027,702</u>
3.	Decreases		
a.	Benefits Provided by Members		
	Withdrawals - Members' Contribution		
	Regular	\$	54,013
	Death		23,726
	Adjustment - Member Account Loans - State		51,684
b.	Benefits Provided by Employers and Members		
	Retirement Allowances		189,392,434
c.	Benefits Provided by Employers		
	Benefit Expense - Pension Adjustment		22,058,752
	Administrative Expense		345,166
	Administrative Expense Loans		3,936
	Adjusted Member Accounts Expense - State		<u>(10,552)</u>
	NCGI Premium Expense		<u>1,855,541</u>
d.	Total	\$	<u>213,774,700</u>
4.	Preliminary Market Value of Assets as of June 30, 2016: 1. +2.(d) - 3.(d)	\$	1,694,962,113
5.	Discounted State Appropriations Receivable		<u>49,500,292</u> ¹
6.	Market Value of Assets as of June 30, 2016 = 4. + 5.	\$	1,744,462,405 ²

¹ Reflects the State's fiscal year 2017 anticipated contribution of \$53,287,065 discounted one year. This amount is included as a receivable contribution but may be subject to change per the requirements of the State's fiscal year 2017 spending plan.

² Excludes assets held in the Non-Contributory Group Insurance Fund.

Section III - Assets, Liabilities and Contributions (continued)

C. Development of Actuarial Value of Assets as of July 1, 2016

The actuarial value of plan assets is determined using a five-year average market value with write up. The following summary shows the development of the actuarial value of plan assets for the current valuation:

1.	Actuarial Value of Assets July 1, 2015	\$	1,936,264,217	
2.	Net Cash Flow (excluding investment income)		(153,462,944)	
3.	Expected Investment Income at 7.90%			
	a. Interest on assets as of July 1, 2015:		152,964,873	
	b. Interest on Net Cash Flows		(7,467,196)	
	c. Total	\$	<u>145,497,677</u>	
4.	Expected Actuarial Value of Assets as of July 1, 2016: 1. + 2. + 3.(c)		1,928,298,950	
5.	20% of Difference from Preliminary Market Value of Assets		(46,667,367)	
6.	Discounted Receivable Employer Contributions		<u>49,500,292</u>	¹
7.	Actuarial Value of Assets as of July 1, 2016 = 4. + 5. + 6.	\$	1,931,131,875	²

¹ Reflects the State's fiscal year 2017 anticipated contribution of \$53,287,065 discounted one year. This amount is included as a receivable contribution but may be subject to change per the requirements of the State's fiscal year 2017 spending plan.

² Excludes assets held in the Non-Contributory Group Insurance Fund.

Section III - Assets, Liabilities and Contributions (continued)

D. Accrued Liabilities as of July 1, 2016

1.	Retirees and Beneficiaries		
a.	Service Retirement	\$	2,128,491,126
b.	Disability Retirements		153,562,597
c.	Beneficiaries		119,926,561
d.	Total	\$	<u>2,401,980,284</u>
2.	Terminated Vested Members	\$	0
3.	Contributing Active Participants		
a.	Service Retirement	\$	735,167,712
b.	Ordinary Disability		17,905,654
c.	Accidental Disability		25,138,886
d.	Ordinary Death		8,216,132
e.	Accidental Death		8,588,419
f.	Vested Termination Withdrawal Benefits		961,937
g.	Withdrawal Benefits		138,275
h.	Total	\$	<u>796,117,015</u>
4.	Non-Contributing Active Participants	\$	11,288,734
5.	Total Accrued Liability ¹ = 1.(d) +2. + 3.(h) +4.	\$	3,209,386,033

¹ Excludes lump sum death benefits payable from the Non-Contributory Group Insurance Premium Fund

E. Development of Normal Cost as of July 1, 2016

1.	Service Retirements	\$	46,655,578
2.	Ordinary Disability		1,628,415
3.	Accidental Disability		2,578,583
4.	Ordinary Death		773,574
5.	Accidental Death		1,056,086
6.	Vested Termination		92,741
7.	Withdrawal Benefits		<u>52,518</u>
8.	Total Pension Normal Cost ¹ = 1 + 2 + 3 + 4 + 5 + 6 + 7	\$	52,837,495

¹ Excludes lump sum death benefits payable from the Non-Contributory Group Insurance Premium Fund

Section III - Assets, Liabilities and Contributions (continued)

F. Summary of Active member accrued actuarial liability and Normal Cost payable July 1, 2016

Membership Tier	Number of members	Total Appropriation Salary	Actuarial Accrued Liability	Gross Pension Normal Cost
Tier 1	2,051	\$ 228,469,834	\$ 788,090,210	\$ 45,562,072
Tier 2	<u>674</u>	<u>49,301,301</u>	<u>19,315,539</u>	<u>7,275,423</u>
Total	2,725	\$ 277,771,135	\$ 807,405,749	\$ 52,837,495

G. Development of Recommended State Pension Contributions

1.	Accrued Liability	\$ 3,209,386,033
2.	Actuarial Value of Assets	<u>1,931,131,875</u>
3.	Unfunded Actuarial Accrued Liability/(Surplus) = 1. - 2.	\$ 1,278,254,158
4.	Amortization Period	30
5.	Amortization of Unfunded Actuarial Accrued Liability payable July 1, 2017 (Level Dollar)	\$ 109,815,843
6.	a. Gross Normal Cost (excluding Non-Contributory Group Insurance Premium)	\$ 52,837,495
	b. Expected Member Contributions	<u>20,888,605</u>
	c. State Normal Cost = (a) - (b)	\$ 31,948,890
	d. State Normal Cost payable July 1, 2017 = (c) * 1.0765	\$ 34,392,980
7.	Total Recommended Pension Contribution as of July 1, 2017 = 5. +6.(d)	\$ 144,208,823

H. Non-Contributory Group Insurance Premium (One-Year Term Cost)

\$ 1,700,000

Section IV - Comments Concerning the Valuation

The variation in liabilities and contributions reflects the System's actual experience during the year. The System experienced a net actuarial loss during the year that ended June 30, 2016

The System experienced a net liability gain among active and retired members. There was also a loss due to an actual return on System assets less than expected. For valuation purposes, a 7.90% per annum rate of return was assumed for the period July 1, 2015 through June 30, 2016. The actual return on the Fund's actuarial value of assets was 5.32% for this period.

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

A. Calculation of Actuarial Experience for the Year Ended June 30, 2016.

1.	Unfunded Accrued Liability/(Surplus) as of July 1, 2015	\$	1,120,981,012
2.	Gross Normal Cost as of July 1, 2015		52,738,881
3.	Interest on (1) and (2) at 7.90%		92,723,872
4.	Actual Members' Contributions Received		22,474,634
5.	Employers' Contributions (including discounted receivable)		49,500,292
6.	Interest on Contributions at 7.90%		<u>887,748</u>
7.	Expected Unfunded Accrued Liability/(Surplus) as of July 1, 2016 = (1) + (2) + (3) - (4) - (5) - (6)	\$	1,193,581,091
8.	Change in Unfunded Accrued Liability due to the revised fiscal year 2016 State contribution ¹		300
9.	Change in Unfunded Accrued Liability due to assumption changes		45,696,315
10.	Actual Unfunded Accrued Liability as of July 1, 2016		<u>1,278,254,158</u>
11.	Actuarial (Gain)/Loss = (10) - (7) - (8) - (9)	\$	38,976,452

¹ The anticipated fiscal year 2016 contribution of \$35,580,300 has been decreased to \$35,580,000 to reflect the actual State contribution made during fiscal year 2016.

B. Components of Actuarial Experience

1.	Investment (Gain)/Loss	\$	46,667,367
2.	Other (Gain)/Loss, including mortality, changes in employee data and salary increases different than expected		<u>(7,690,915)</u>
3.	Total Actuarial (Gain)/Loss	\$	38,976,452

Section IV – Comments Concerning the Valuation (continued)

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, 2016	June 30, 2015	Change
Actuarial Value of Assets¹	60.2%	63.7%	(3.5)%
Market Value of Assets	54.4%	61.5%	(7.1)%

¹ Statutory funded ratio.

The System's statutory funded ratio is 63.7% and 60.2% as of June 30, 2015 and June 30, 2016, respectively. For purposes of Chapter 78, P.L. 2011, the "target funded ratio" is 78.570% and 79.285% for June 30, 2015 and June 30, 2016 respectively. Therefore, the System's statutory funded ratio fell below the "target funded ratio" for June 30, 2015 and the "target funded ratio" for June 30, 2016.

There is a difference on a market value basis since the actuarial value smooths the investment gains and losses over time. Since July 1, 2000, the funded ratio on a market value basis has decreased by 78.4%. This decrease is primarily due to investment losses experienced over the period, State contributions less than the statutorily determined amounts, and the strengthening of actuarial assumptions.

As of June 30, 2016, the market value of assets is less than the actuarial liability attributable to retirees. Furthermore, if the assets contained in the Annuity Savings Fund (ASF) of \$197,482,820 are excluded, the funded ratio of the remaining market value of assets to the actuarial accrued liability for retirees is 64.4%.

As of June 30, 2016, the ratio of market value of assets to the prior year's benefit payment is 8.2. This is a simplistic measure of the number of years that the assets can cover benefit payments, excluding: future increases in those payments, State and member contributions, and investment income. This ratio decreased by 12% from the previous year's ratio of 9.3. If ASF assets are excluded, since they represent accumulated contributions from active and inactive members, the ratio is 7.3.

Section IV – Comments Concerning the Valuation (continued)

D. Schedule of Assets and Liability

The following presents a ten-year schedule of the System's assets, liabilities and funded ratio. The System's assets and funded ratio are provided on a market value (including receivables) basis and actuarial value of assets (including receivables) basis.

Actuarial Valuation Date	Market Value of Assets ¹ (a)	Actuarial Value of Assets ¹ (b)	Actuarial Accrued Liability (c)	Funded Ratio	
				Market Value (b)/(a)	Actuarial Value (b)/(a)
7/1/2016	\$ 1,744,462,405	\$ 1,931,131,875	\$ 3,209,386,033	54.4%	60.2%
7/1/2015	\$ 1,900,695,725	\$ 1,969,239,472	\$ 3,090,220,484	61.5%	63.7%
7/1/2014	\$ 1,967,141,815	\$ 1,981,376,495	\$ 2,963,182,120	66.4%	66.9%
7/1/2013	\$ 1,832,851,456	\$ 1,990,797,312	\$ 2,870,590,700	63.8%	69.4%
7/1/2012	\$ 1,755,429,511	\$ 1,995,388,133	\$ 2,767,768,813	63.4%	72.1%
7/1/2011	\$ 1,820,438,444	\$ 2,015,624,130	\$ 2,581,950,846	70.5%	78.1%
7/1/2010	\$ 1,656,194,924	\$ 2,019,350,048	\$ 2,497,094,137	66.3%	80.9%
7/1/2009	\$ 1,564,180,409	\$ 2,067,242,877	\$ 2,825,455,568	55.4%	73.2%
7/1/2008	\$ 1,976,540,990	\$ 2,136,006,509	\$ 2,609,164,869	75.8%	81.9%
7/1/2007	\$ 2,105,399,764	\$ 2,101,672,160	\$ 2,485,649,230	84.7%	84.6%

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

E. Schedule of Employer Pension Contributions

The following table presents a ten-year schedule that provides information about the System's actuarially determined contribution and the percentage of the actuarially determined contribution recognized by the System as contributed.

Fiscal Year Ending June 30	Actuarially Determined Contribution ¹ (a)	Actual Pension Contribution (b)	Contribution Deficiency (a) - (b)	Percentage of Contribution Made	
				Annual (b)/(a)	Five-Year Average
2017	\$ 133,217,662	\$ 53,287,065	\$ 79,930,597	40.00%	33.16%
2016	\$ 118,600,705	\$ 35,580,000	\$ 83,020,705	30.00%	28.02%
2015	\$ 108,904,703	\$ 37,358,000	\$ 71,546,703	34.30%	22.02%
2014	\$ 106,977,623	\$ 35,231,000	\$ 71,746,623	32.93%	15.16%
2013	\$ 89,535,903	\$ 25,582,000	\$ 63,953,903	28.57%	9.46%
2012	\$ 89,671,744	\$ 12,810,000	\$ 76,861,744	14.29%	13.59%
2011	\$ 103,745,281	\$ 0	\$ 103,745,281	0.00%	22.01%
2010	\$ 82,485,012	\$ 0	\$ 82,485,012	0.00%	27.29%
2009	\$ 75,889,699	\$ 3,378,000	\$ 72,511,699	4.45%	
2008	\$ 70,942,933	\$ 34,918,000	\$ 36,024,933	49.22%	

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

Section V – Level of Funding

The tables below present the liabilities determined on a Financial Accounting Standards Board ASC 715 (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 without receivables

ASC 715 ABO Funded Ratios

Actuarial present value of accumulated benefits:	June 30, 2016	June 30, 2015
Vested benefits		
Participants currently receiving payments	\$ 2,401,980,284	\$ 2,289,865,821
Other participants	433,467,084	432,514,759
	<u>\$ 2,835,447,368</u>	<u>\$ 2,722,380,580</u>
Non-vested benefits	212,800,988	180,195,287
Total	<u>\$ 3,048,248,356</u>	<u>\$ 2,902,575,867</u>
Assets at market value ¹	\$ 1,694,962,113	\$ 1,867,720,470
Ratio of assets to total present value	55.6%	64.3%

1. Assets at market value do not include any receivable contributions.

The actuarial present value of vested and non-vested accrued benefits was based on an interest rate of 7.65% for 2016 and 7.90% for 2015

Appendix A

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

Eligibility for Membership

All members of the former State Police and Benevolent Fund: full-time commissioned officers, non-commissioned officers or troopers of the Division of State Police. Membership is a condition of employment.

1. Definitions

Plan Year

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

Service

Service rendered while a member as described above.

Credited Service

A year is credited for each year of service as an officer or trooper in the State Police. Service with other State Retirement Systems is included in the calculation of the retirement benefit at the rate of 1% of final compensation for each year of service credit.

Compensation

Based on contractual salary, including maintenance allowance, received by the member in the last 12 months of credited service preceding retirement, termination or death. Compensation does not include individual salary adjustments granted primarily in anticipation of the retirement or for temporary or extracurricular duties beyond the ordinary work day. (Effective June 30, 1996, Chapter 113, P.L. 1997 provided that the amount of compensation used for employer and member contributions and benefits under the program cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code; Chapter 1, P.L. 2010 provides that for members hired on or after May 22, 2010, the amount of compensation used for employer and member contributions and benefits under the System cannot exceed the annual maximum wage contribution base for Social Security, pursuant to the Federal Insurance Contributions Act.)

Final Compensation

Average compensation received by member in last 12 months of credited service preceding retirement or death. Such term includes the value of the member's maintenance allowance for the same period. (Chapter 1, P.L. 2010 provides that for members hired on or after May 22, 2010, Final Compensation means the average annual salary for service for which contributions are made during any three fiscal years of membership providing the largest possible benefit to the member or the member's beneficiary. Such term shall include the value of the member's maintenance allowance.)

Aggregate Contributions

The sum of all amounts deducted from the compensation of a member or contributed by him or on his behalf. For contribution purposes, compensation does not include overtime, bonuses, maintenance or any adjustments before retirement.

Adjusted Final Compensation

The amount of compensation or compensation as adjusted, as the case may be, increased by the same percentage increase which is applied in any adjustments of the compensation schedule of active members after the member's death and before the date on which the deceased member of the retirement system would have accrued 25 years of service under an assumption of continuous service, at which time that

Appendix A (continued)

amount will become fixed. Adjustments to compensation or adjusted compensation shall take effect at the same time as any adjustments in the compensation schedule of active members.

2. Benefits

Service Retirement

Mandatory retirement at age 55. Voluntary retirement prior to age 55 with 20 years of credited service. Benefit is an annual retirement allowance equal to the greater of (a), (b), or (c), as follows:

- a. 50% of final compensation;
- b. For members retiring with 25 or more years of service, 65% of final compensation, plus 1% for each year of service in excess of 25 years, to a maximum of 70% of final compensation.
- c. For members as of August 29, 1985 who would not have 20 years of service by age 55, benefit as defined in (a) above. For members as of August 29, 1985 who would have 20 years of service but would not have 25 years of service at age 55, benefit as defined in (a) above plus 3% for each year of service in excess of 20 years.

Vested Termination

Termination of service prior to age 55. Benefit for 10 to 20 years of service - Refund of aggregate contributions, or a deferred life annuity beginning at age 55 equal to 2% of final compensation for each year of service up to 20 years.

Non-Vested Termination

Termination of service prior to age 55 and less than 10 years of service – Return of aggregate contributions.

Ordinary Death

Before Retirement

Death of an active member of the plan. Benefit is equal to:

- a. Lump sum payment equal to 3-1/2 times compensation, plus
- b. Spousal life annuity of 50% of final compensation payable until spouse's death or remarriage. If there is no surviving spouse, or upon death or remarriage, a total of 20%, 35% or 50% of final compensation payable to one, two or three dependent children. If there is no surviving spouse (or dependent children), 25% or 40% of final compensation to one or two dependent parents.

Minimum benefit: Aggregate contributions.

After Retirement

Death of a retired member of the plan. The benefit is equal to:

- a. Lump sum of 50% of compensation, plus
- b. Spousal life annuity of 50% of final compensation payable until spouse's death or remarriage. If there is no surviving spouse, or upon death or remarriage, a total of 20%, 35% or 50% of final compensation payable to one, two or three dependent children, respectively.

Appendix A (continued)

Accidental Death

Death of an active member of the plan resulting during performance of duties. Benefit is equal to:

- a. Lump sum payment equal to 3-1/2 times compensation, plus
- b. Spousal life annuity of 70% of adjusted final compensation payable until spouse's death. If there is no surviving spouse, or upon death of the surviving spouse, a total of 20%, 35% or 50% of adjusted final compensation payable to one, two or three dependent children. If there is no surviving spouse or dependent children, 25% or 40% of adjusted final compensation to one or two dependent parents.

Ordinary Disability Retirement

Mentally or physically incapacitated for the performance of his usual duty and of any other available duty in the Division of State Police and such incapacity is likely to be permanent.

- a. The benefit for members with less than four years of service is a refund of the member's aggregate contributions.
- b. For members with at least four years of service, the benefit is an immediate life annuity equal to 40% of final compensation plus 1-1/2% of final compensation for years of creditable service in excess of 26-2/3.
- c. For members who are forced to retire with 20 but less than 25 years of service, the benefit is 50% of the member's final compensation plus 3% of final compensation for each year of service in excess of 20 years, to a maximum of 65% of final compensation.

For death following disability retirement, a lump sum equal to 3-1/2 times compensation if death occurs prior to age 55 or 1/2 of compensation after age 55.

Accidental Disability Retirement

Totally and permanently disabled as a direct result of a traumatic event occurring during and as a result of his regular or assigned duties. Benefit is an immediate life annuity equal to 2/3 of final compensation. Upon death after disability retirement, lump sum benefit of 3-1/2 times final compensation if death occurs before 55 and 1/2 times final compensation if death occurs after 55.

Loan Provision

Eligible if an active member of the State Police Retirement System with at least 3 years of contributory service. If eligible, a member may borrow an amount which is greater than \$50, but not more than 50% of aggregate contributions. The loan accrues interest at a rate set by the State Treasurer, which is based on a commercially reasonable rate as required by the Internal Revenue Code. An administrative fee may be charged for the loan.

Member Contributions

Each member contributes 9.0% of Compensation.

Appendix B

Outline of Actuarial Assumptions and Methods

Valuation Interest Rate

7.65% per annum, compounded annually.

COLA

No future COLA is assumed.

Salary Increases

Salaries are assumed to increase by 2.95% per year through fiscal year 2025 and 3.95% per year for fiscal years 2026 and thereafter.

401(a)(17) Pay Limit

\$265,000 for 2016 increasing 3.00% per annum, compounded annually.

Social Security Wage Base

\$118,500 for 2016 increasing 4.00% per annum, compounded annually.

Termination

Withdrawal rates vary by length of service. Illustrative rates are shown below:

Age	Lives per Thousand	
	Less Than 5 Years of Service	Five to Nineteen Years of Service
25	3.8	0.0
30	3.8	2.0
35	8.3	1.4
40	0.0	0.8
45	0.0	1.0
50	0.0	0.0

Separations from Service

Representative mortality, disability and retirement rates are as follows:

Appendix B (continued)

Age	Annual Rates of ¹				
	Ordinary Death ²		Accidental Death	Ordinary Disability	Accidental Disability
	Male	Female			
25	0.4	0.2	0.3	0.4	0.2
30	0.4	0.3	0.5	0.6	0.5
35	0.5	0.5	0.5	1.5	1.9
40	0.9	0.7	0.5	1.7	2.1
45	1.2	1.1	0.7	2.2	2.1
50	1.7	1.6	0.9	3.8	2.3

1 Per one thousand lives.

2 RP-2000 Combined Healthy Male (set back 3 years) and RP-2000 Combined Healthy Female Mortality Tables projected on a generational basis from the base year of 2000 to 2013 using Projection Scale BB as the base table. The base tables will be further projected using the Buck Modified 2014 Projected Scale. Rates shown above are unadjusted for the Buck Modified 2014 Projection Scale.

Marriage

Husbands are assumed to be 3 years older than wives. Among the active population, 83.3% of participants are assumed married. No children are assumed. Neither the percentage married nor the number of children assumption is individually explicit but are considered reasonable as a single combined assumption.

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, 2019 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, 2029 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 30th following the valuation date are discounted by the valuation interest rate of 7.65% to the valuation date.

Asset Valuation Method

A five-year average of market values with write-up. (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 B (continued)

Deaths After Retirement

For healthy inactive members and beneficiaries of deceased members the RP-2000 Combined Healthy Male (set back 3 years) and RP-2000 Combined Healthy Female Mortality tables projected on a generational basis from the base year of 2000 to 2013 using Projection Scale BB. These base tables will further be projected beyond the valuation date using the Buck Modified 2014 mortality improvement scale. For disabled members the RP-2000 Combined Healthy Male (set forward 5 years) and RP-2000 Combined Healthy Female Mortality (set forward 5 years) tables are used. Illustrative rates of mortality unadjusted for the Buck Modified 2014 Projection Scale are shown below:

Age	Lives per Thousand			
	Retired Members and Beneficiaries of Deceased Members		Disabled Members	
	Males	Females	Males	Females
55	2.6	2.5	6.7	5.1
60	4.3	4.4	12.7	9.7
65	7.5	8.3	22.2	16.7
70	13.2	14.3	37.8	28.1
75	22.4	24.0	64.4	45.9
80	38.5	39.2	110.8	77.4
85	66.1	66.2	183.4	131.7
90	117.8	114.0	267.5	194.5

Rates of Retirement

Rates of retirement vary by length of service and age (if more than 24 years of service) with 100% of those remaining at age 55 retiring at age 55. The rates are shown below:

Service	Lives Per 100
20	2.0
21	0.5
22	0.0
23	0.0
24	0.0
25	50.0

Service	Lives Per 100
<u>Greater than 25:</u>	
(a) through age 42	5.0
(b) ages 43-47	28.0
(c) ages 48-53	33.0
(d) age 54	61.0

Summary of Changes from the July 1, 2015 Valuation

The rate of investment return has been reduced from 7.90% per annum to 7.65% per annum. The assumed future salary increases of 3.45% per annum through fiscal year 2021 and 3.95% per annum for fiscal years 2022 and thereafter have been reduced by 0.5% at all ages for both the select and ultimate periods. In addition the select period was extended through fiscal year 2025. The impact of the assumption changes is shown in Section IV A which indicates an increase in the accrued liability of \$45,696,315 due to these assumption changes.

Appendix C

Tabulations Used as a Basis for the 2016 Valuation

The following tables give a reconciliation of data from July 1, 2015 to June 30, 2016. Tables are also given showing active member number and salaries by age and length of service as of July 1, 2016 and showing the number and retirement allowances of beneficiaries classified by age as of July 1, 2016.

Table 1

Reconciliation of Data from July 1, 2015 to June 30, 2016

	Actives		Deferred Vested	Retirees				Beneficiaries	Dependents	Domestic Relations Beneficiaries		Total
	Contrib.	Noncontrib.		Service	Special	Deferred	Disabled			Retirees	Disabilities	
Members as of July 1, 2015	2,638	38	0	364	2,252	6	257	405	2	202	23	6,187
Changed to Contributing	2	(2)										
Changed to Noncontributing	(10)	10										
Terminated Vested												
Terminated Non-Vested												
Service Retirement	(4)			4								
Special Retirement	(72)	(1)			73							
Deferred Vesteds Now Payable												
New Disabled	(6)						6				3	3
New Death	(1)			(15)	(22)			(27)		(1)		(66)
Payments Began												
Payments Ceased										(15)	(2)	(17)
Lump sum	(1)											(1)
New Actives	134											134
Rehires												
New Beneficiaries								23	1	27		51
Data Corrections												
Members as of June 30, 2016	2,680	45	0	353	2,303	6	263	401	3	213	24	6,291

Appendix C (continued)

Table 2

Distribution Of Active Members By Age and Service

Age	Service	1	5	10	15	20	25	30	35	40	Total
20	Number										
	Salary										
25	Number	119	53								172
	Salary	8,482,213	3,905,604								12,387,817
30	Number	183	227	67	2						479
	Salary	13,050,027	17,380,630	6,214,671	166,387						36,811,715
35	Number	41	101	433	71						646
	Salary	2,919,153	8,154,461	43,688,391	7,629,721						62,391,726
40	Number	1	14	203	302	45					565
	Salary	74,594	1,197,595	21,041,884	33,935,885	5,229,337					61,479,295
45	Number		3	41	138	302	12				496
	Salary		215,924	4,304,980	15,675,890	37,332,704	1,513,957				59,043,455
50 and over	Number			5	26	160	103	72		1	367
	Salary			364,434	2,904,299	19,957,941	13,155,111	9,129,939		145,403	45,657,127
Total	Number	344	398	749	539	507	115	72		1	2,725
	Salary	24,525,987	30,854,214	75,614,360	60,312,182	62,519,982	14,669,068	9,129,939		145,403	277,771,135

Appendix C (continued)

Table 4

The Number And Annual Compensation Of
Active Members Distributed By Service
As Of June 30, 2016

Years Of Service	Men		Women	
	Number	Amount	Number	Amount
0	106	\$ 7,553,053	11	\$ 783,783
1	81	5,771,937	5	356,265
2	131	9,345,078	10	715,871
3	185	13,675,617	9	667,116
4	71	5,572,631	7	559,244
5	16	1,168,966	1	71,253
6	17	1,244,421	4	316,984
7	86	7,399,798	2	178,184
8	148	13,864,121	6	570,804
9	63	6,059,915	8	761,310
10	95	9,386,384	6	599,308
11	253	26,182,818	7	732,208
12	160	17,136,254	3	321,238
13	119	12,938,571	9	1,001,925
14	58	6,365,672	4	438,375
15	263	29,982,719	12	1,373,042
16	36	3,983,479	3	343,084
17	35	3,885,315		
18	116	13,940,237	7	839,506
19	107	12,780,272	6	743,276
20	20	2,319,921		
21	136	17,200,270	9	1,180,217
22	102	12,981,389	4	534,894
23	76	9,701,245		
24	9	1,105,857		
25	7	878,212		
26	10	1,274,516	1	125,802
27	12	1,583,436		
28	28	3,528,042		
29	25	3,207,900		
30	12	1,503,673		
31	5	663,150		
32	2	227,174		
38	1	145,403		
Total	2,591	\$ 264,557,446	134	\$ 13,213,689

Of the 2,725 active members included in the June 30, 2016 valuation data, 1,673 are vested and 1,052 have not yet completed the vesting service requirement.

Appendix C (continued)

Table 5

State Police Retirement System of New Jersey

	Service Retirement		Special Retirement (25 Years of Service)		Ordinary Disability		Accidental Disability		Survivors	
	Average Age At Retirement	Average Annual Benefit At Retirement ¹	Average Age At Retirement	Average Annual Benefit At Retirement ¹	Average Age At Retirement	Average Annual Benefit At Retirement ¹	Average Age At Retirement	Average Annual Benefit At Retirement ¹	Average Age At Retirement ²	Average Annual Benefit At Retirement
All Retirees	50.3	\$ 31,544	51.0	\$ 68,663	41.8	\$ 33,751	40.0	\$ 51,506	46.6	\$ 24,881
New Retirees	52.3	\$ 64,026	51.8	\$ 92,908	N/A	N/A	43.3	\$ 98,528	43.0	\$ 25,206

	All Retirements (excluding Survivors)	
	Average Age At Retirement	Average Annual Benefit At Retirement
All Retirees	50.0	\$ 62,015

¹The Average Annual Benefit at Retirement does not reflect COLA's granted after retirement.

²Calculated as of Member's Date of Retirement

Appendix C (continued)

Table 6

The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of June 30, 2016

Service Retirements

Age	Men		Women	
	Number	Amount	Number	Amount
44			1	\$ 20,738
45			2	36,901
46			3	61,488
47	3	\$ 236,660	3	36,712
48	9	730,782	2	57,364
49	36	2,837,112	11	203,766
50	67	5,403,469	9	192,921
51	107	8,652,170	18	612,448
52	132	10,264,222	21	576,697
53	130	10,607,495	15	536,310
54	117	9,437,227	18	710,048
55	112	8,994,217	18	695,237
56	79	6,039,647	12	458,261
57	104	8,237,352	23	883,570
58	91	7,026,463	11	302,082
59	94	7,184,016	9	487,779
60	89	6,602,013	9	308,788
61	62	4,521,849	10	318,186
62	81	5,999,054	8	302,652
63	50	3,727,773	5	82,597
64	60	4,342,753	3	100,462
65	70	4,743,424	5	68,418
66	50	3,536,277	2	36,622
67	68	4,708,348	6	148,901
68	64	4,015,736	1	31,212
69	83	5,428,787	8	189,060
70	95	5,797,782	7	146,918
71	72	4,204,920	6	129,630
72	64	3,553,011	1	16,049
73	83	4,665,614		
74	77	4,147,950	1	12,000
75	83	4,303,681	3	52,772
76	53	2,800,722		
77	39	2,037,450	3	77,114
78	47	2,307,229	2	57,691
79	23	1,096,144		
80	25	1,092,899	1	2,600
81	24	1,133,324		

Appendix C (continued)

Table 6

The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of June 30, 2016

Service Retirements
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
82	14	\$ 655,030		
83	15	634,529		
84	24	1,126,553		
85	22	904,668		
86	22	921,154		
87	16	631,234		
88	23	982,139		
89	7	232,265		
90	12	366,989		
91	7	239,629		
92	6	189,153		
93	2	67,072		
94	1	23,316		
95	2	79,787		
96	1	56,486		
99	1	38,196		
Total	2,618	\$ 177,565,772	257	\$ 7,953,994

Appendix C (continued)

Table 7

The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of June 30, 2016

Beneficiaries Of Deceased Pensioners

Age	Men		Women	
	Number	Amount	Number	Amount
48			1	\$ 41,495
50			1	45,902
53			2	80,325
54			3	137,528
57			4	168,491
58	1	\$ 10,100	2	104,570
59			5	224,658
60			3	159,197
61	1	63,120	3	110,702
62			2	69,443
63			4	180,787
64			3	135,059
65			1	54,071
66			9	416,517
67			5	198,283
68			14	510,319
69	1	10,132	16	660,823
70			5	196,381
71			8	334,659
72			14	567,021
73			12	429,507
74	1	41,306	15	605,022
75			14	497,782
76			13	453,404
77			8	320,596

Appendix C (continued)

Table 7

The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of June 30, 2016

Beneficiaries Of Deceased Pensioners
(Continued)

Age	Men		Women	
	Number	Amount	Number	Amount
78			14	\$ 501,592
79			9	308,587
80			5	155,021
81			11	363,188
82			10	318,405
83			9	297,277
84			20	590,159
85			15	417,572
86			16	509,984
87			15	442,120
88			12	344,314
89			13	388,000
90			8	231,541
91			5	146,830
92			4	122,823
93			3	51,434
94			4	116,934
95			1	27,945
96			1	28,095
97			1	9,548
98			1	21,859
101			1	10,013
Total	4	\$ 124,658	345	\$ 12,105,783

Table 8

The Number And Annual Retirement Allowances Of Beneficiaries Distributed By Age As Of June 30, 2016

Beneficiaries Of Deceased Active Employees

Age	Men		Women	
	Number	Amount	Number	Amount
27			1	\$ 44,198
36			2	127,918
40			1	75,469
41			1	47,113
43			1	76,154
48			1	42,679
50			2	130,089
51			1	76,449
52			1	37,577
53			2	151,689
54			1	76,449
55			1	52,511
57			1	65,123
58			2	111,851
61			1	40,928
62			1	45,884
64			1	59,625
65			2	84,074
66			1	56,211
67			3	100,966
69			1	36,769
70			1	50,776
71			3	113,570
72			2	79,894
73			3	146,710
74			1	47,768
75			2	80,957
76			2	62,886
77			1	21,964
79			1	41,037
81			1	29,387
82			1	36,622
84			1	24,135
86			1	27,716
87			1	22,518
90			1	32,548
91			1	19,466
92			2	52,289
95			1	18,325
96			1	20,460
Total			55	\$ 2,468,754

Appendix C (continued)

Table 9

The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of June 30, 2016

Ordinary Disability Retirements

Age	Men		Women	
	Number	Amount	Number	Amount
20	1	\$ 5,200		
37	1	31,970		
38	1	43,464		
40	2	79,960		
41			1	\$ 43,524
44			1	38,141
45	1	40,556	1	28,593
46	1	43,528		
47	2	84,009		
48	4	160,925		
49	2	73,660		
50	7	251,790	4	45,460
51	4	112,840		
52	8	282,468	3	118,406
53	5	214,562	4	120,041
54	5	197,936	3	71,332
55	5	195,046	3	72,623
56	1	37,270	1	18,497
57	6	302,669	2	65,299
58	4	173,059	1	9,007
59	4	248,031	1	51,125
60	3	146,915		
61	1	56,880		
62	4	205,922	1	26,235
63	2	83,864		
64	3	143,500		
65	2	29,357	1	8,141
66	1	26,351	1	21,833
67	1	50,998		
68	2	28,573		
69	4	132,403	1	32,532
71	2	49,944		
72	2	88,750	1	13,757
73	1	23,847		
74	3	82,557		
75	2	39,317		
76	3	73,789		
77	2	75,309		
78	2	40,046		
79	1	19,311		
91	1	16,282		
Total	106	\$ 3,992,858	30	\$ 784,546

Appendix C (continued)

Table 10

The Number And Annual Retirement Allowances Of Retired Members Distributed By Age As Of June 30, 2016

Accidental Disability Retirements

Age	Men		Women	
	Number	Amount	Number	Amount
34	2	\$ 108,180	1	\$ 50,082
35	1	47,708		
37	2	136,079	1	70,405
38	4	260,784		
40	2	131,805		
41	1	58,530		
42	3	134,716		
43	3	159,400		
44	4	236,631		
45	7	462,438		
46	2	126,931		
47	1	50,017		
48	5	289,172		
49	9	551,748	4	194,549
50	4	259,952		
51	8	543,127	1	57,133
52	9	544,951	1	9,316
53	8	520,916	1	61,104
54	7	408,825		
55	7	367,956	2	25,854
56	4	264,376	1	40,988
57	4	269,782	1	3,380
58	2	96,843	1	31,413
59	1	71,460	2	112,506
60	4	206,630		
61	1	63,937		
62	3	177,645		
64	3	140,156	1	10,452
66	3	176,931	1	51,830
69	1	54,720		
70	1	36,349		
71	1	74,400		
72	2	65,090		
73	1	28,265		
74	5	161,462		
75	1	26,722		
76	1	25,289		
77	3	105,442		
78	1	45,399		
79	1	51,305		
91	1	35,338		
Total	133	\$ 7,577,407	18	\$ 719,012