

Ohio Police & Fire Pension Fund

Jan. 1, 2015 Actuarial Valuation of Pension
Benefits

October, 2015





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October 13, 2015

Board of Trustees
Ohio Police & Fire Pension Fund
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Members of the Board:

Ohio Police & Fire retained Buck Consultants, LLC (Buck) to complete this actuarial valuation of the Ohio Police & Fire Pension Fund (OP&F). This report presents the results of the annual actuarial valuation of the assets and liabilities of OP&F as of Jan. 1, 2015, prepared in accordance with Chapter 742 of the Ohio Revised Code (ORC), as amended by Senate Bill No. 340. The valuation takes into account all of the promised benefits to which members are entitled, including pension and survivor benefits.

The principal results of the valuation do not take into account Medicare Part B premium reimbursements or any other health care benefits. However, at the request of the Ohio Retirement Study Council (ORSC), supplemental results have been prepared that do take into account Medicare Part B premium reimbursements and are presented in Table 1A in the report.

The purpose of the valuation is to determine the financial status of OP&F on an actuarial basis. Use of this report for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. No one may make any representations or warranties based on any statements or conclusions contained in this report without the written consent of Buck.

This report does not include accounting disclosure information under Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68. Buck Consultants will provide disclosure information under Statement Nos. 67 and 68 in a separate report after OP&F's 2015 year-end. Buck prepares a separate valuation of OP&F retiree health care benefits in accordance with and in compliance with the parameters set forth in Statement No. 43.

The valuation was based on the actuarial assumptions and methods that have been adopted by the Board of Trustees, including a valuation interest rate of 8.25 percent per annum compounded annually. The assumptions were effective Jan. 1, 2012 and recommended by the actuary based on a five-year experience review covering the period 2007-2011. The next experience review will cover the five-year period 2012-2016. Actuarial Standards of Practice require that the likelihood and extent of future mortality improvements be considered. We

have reflected future mortality improvement in the valuation. Additional assumptions related to the benefit provision changes under Senate Bill No. 340 were employed for this valuation.

Assets and Membership Data

OP&F reported to the actuary the individual data for members as of the valuation date. 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 pension trust fund taken into account in the valuation was based on financial statements prepared for us by OP&F.

Since last year's valuation, OP&F changed its method of accounting for the DROP program to comply with the provisions of GASB Statement No. 67, Financial Reporting for Pension Plans, which was implemented during the year ended Dec. 31, 2014. Previously, OP&F recognized the DROP balances as a liability in the statement of fiduciary net position and the related expenses in the statement of changes in fiduciary net position. As a liability, the DROP balances were excluded from the value of assets used for the actuarial valuation. For consistency with this exclusion from the asset value, the actuarial accrued liability (AAL) also was reduced by the DROP balances. Starting with the Jan. 1, 2015 actuarial valuation, the DROP balances are included in both the assets and the AAL.

Including the DROP balances in the assets and AAL has no impact on the unfunded actuarial accrued liability (i.e., the difference between the AAL and assets) or the pension funding period. However, it did slightly increase the funded ratio (i.e., the ratio of actuarial assets to the AAL).

Funding Objectives and Progress

The actuary uses an actuarial cost method to determine the portion of OP&F's liabilities accrued by the members as of the valuation date and the portion that is attributable to future years of service. The rate of contribution necessary to systematically fund the future service liabilities, the normal cost rate, is calculated under the cost method to be a level percentage of active member payroll. The portion of the liabilities accrued as of the valuation date, the actuarial accrued liability (AAL), is compared to a market-related, actuarial value of OP&F's assets. The amount of liabilities in excess of the assets is called the unfunded actuarial accrued liability (UAAL).

The actuary determines how many years are required by OP&F to completely amortize the UAAL (the funding period), using the member and employer contributions reduced by the amount allocated to health care and the amount of normal cost for the year. For 2003-2012, the funding period was infinite years, meaning the annual contribution toward the unfunded when compared to the unfunded amount was not sufficient to pay it off. As a result of benefit and member contribution changes under Senate Bill No. 340, changes to the DROP program, and a reduction in the contribution allocation to the Health Care Stabilization Fund by the

Board of Trustees, and favorable asset investment gains, the pension funding period has decreased to 47 years, 33 years and 30 years for 2013, 2014 and 2015, respectively.

Section 742.16 of the ORC, as adopted by Senate Bill No. 82, sets forth an objective that the funding period is no more than 30 years. If the funding period exceeds 30 years, a plan shall be developed and presented by the Board of Trustees to the ORSC to reduce the funding period to not more than 30 years. Section 742.14 of the ORC, as amended by Senate Bill No. 340, sets forth that the next 30-year funding plan be developed and presented not later than 90 days after the Board of Trustees' receipt of the Jan. 1, 2016 actuarial valuation.

The funded ratio (i.e., the ratio of actuarial assets to the AAL) determined as of Jan. 1, 2015 is 70.8 percent, compared to 66.7 percent determined as of Jan. 1, 2014. Taking into account the Medicare Part B premium reimbursements, the funded ratio would be 69.0 percent. The funded ratio is not intended to measure the adequacy of funding in any analysis of a possible settlement of plan liabilities, nor is it intended to assess the need for or the amount of future contributions. Additionally, the measurement of a Funded Ratio using the Market Value of Assets would not be materially different.

Financial Results and Membership Data

The valuation report shows detailed summaries of the financial results of the valuation and membership data used in preparing this valuation. The actuary prepared supporting schedules included in the Actuarial and Statistical Sections of the OP&F Comprehensive Annual Financial Report. The actuary prepared the trend data schedules included in the Financial Section of the OP&F Comprehensive Annual Financial Report.

The valuation assumptions were chosen by the Board of Trustees with the advice of the actuary. The assumptions used to develop the Jan. 1, 2015 valuation are individually reasonable and in combination represent our best estimate of anticipated experience under the plan.

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. Because of limited scope, Buck performed no analysis of the potential range of such future differences.

Board of Trustees
Ohio Police & Fire Pension Fund
October 13, 2015

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The undersigned are Enrolled Actuaries, Associates of the Society of Actuaries and Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all Applicable Actuarial Standards of Practice. We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

Respectfully submitted,



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Principal, Consulting Actuary



Paul R. Wilkinson, ASA, EA, MAAA
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Summary of Principal Results

Introduction

This report presents the results of the actuarial valuation as of Jan. 1, 2015 of pension benefits for the OP&F Pension Fund.

The principal valuation results include:

- The unfunded actuarial accrued liability funding period, which is 30 years.
- The funded status of the plan determined as of Jan. 1, 2015 based on the actuarial accrued liability and the actuarial value of assets as of that date, which is 70.8 percent.
- The determination of the experience gain or loss as of Jan. 1, 2015, which is a gain of \$292 million.

This valuation report does not contain information under GASB Statement Nos. 67 and 68. Buck Consultants will provide disclosure information under Statement Nos. 67 and 68 in a separate report after OP&F's 2015 year-end.

The valuation was completed based upon membership and financial data submitted by OP&F.

Effective with the Jan. 1, 2015 valuation, DROP balances are included in both the value of assets and actuarial accrued liabilities. Previously, DROP balances were excluded from the assets and actuarial accrued liabilities. Tables and charts of historical information in this report have been footnoted to explain the timing of the change.

A separate valuation is performed for all health care benefits. However, at the request of the ORSC, this report includes a supplemental table, Table 1A, that shows what the valuation results would be if the liability for Medicare Part B premium reimbursements is included in this valuation.

Changes Since Last Year

During the year ended Dec. 31, 2014, OP&F adopted the provisions of GASB Statement No. 67, Financial Reporting for Pension Plans, which is effective for fiscal years beginning after June 15, 2013, and establishes standards for measuring and recognizing liabilities, deferred outflows and inflows of resources, and expenses/expenditures. For defined benefit pensions, Statement No. 67 identifies the methods and assumptions that should be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Statement No. 67 replaces Statement No. 25 and eliminates the calculation of the Annual Required Contribution (ARC) under Statement No. 25.

OP&F changed its method of accounting for the DROP program to comply with the provisions of GASB Statement No. 67, Financial Reporting for Pension Plans. Previously, OP&F recognized the DROP balances as a liability in the statement of fiduciary net position and the related expenses in the statement of changes in fiduciary net position. As a liability, the DROP balances were excluded from the value of assets used for the actuarial valuation. For consistency with this exclusion from the asset value, the actuarial accrued liability (AAL) also was reduced by the DROP balances. Starting with the Jan. 1, 2015 actuarial valuation, the DROP balances are included in both the assets and the AAL. Including the DROP balances in the assets and AAL has no impact on the unfunded actuarial accrued liability (i.e., the difference between the AAL and assets) or the pension funding period. However, it did slightly increase the funded ratio (i.e., the ratio of actuarial assets to the AAL).



Summary of Principal Results

Summarized below are the principal financial results for the OP&F Pension Fund based upon the actuarial valuation as of Jan. 1, 2015. Comparable results from the Jan. 1, 2014 valuation are also shown.

Item	Jan. 1, 2015	Jan. 1, 2014
Membership Data		
Active Members		
> Number	27,602	27,451
> Annualized Salaries	\$ 1,948,353,563	\$ 1,903,886,091
> Average Pay	70,587	69,356
> Membership Payroll	1,986,568,535	1,942,269,436
Retirees and Beneficiaries		
> Number	27,963	27,561
> Annual Allowances	\$ 931,176,016	\$ 890,288,069
> Average Benefit Payment	33,300	32,302
Vested Former Members		
> Number	180	142
Contribution Rates (as a Percentage of Payroll)		
Statutory Contribution Rates:		
> Employer Average	21.61 %	21.61 %
> Member *	<u>11.88</u>	<u>11.13</u>
> Total	33.49 %	32.74 %
Allocation of Employer Contribution Rate:		
> Pension Contribution Rate:		
— Employer Normal Cost	5.82 %	6.55 %
— Accrued Liability Rate	<u>15.29</u>	<u>14.56</u>
— Total Employer Pension Rate	21.11 %	21.11 %
> Health Care Contribution Rate *	<u>0.50</u>	<u>0.50</u>
> Total Employer Contribution Rate	21.61 %	21.61 %
Actuarial Funded Status **		
> Actuarial Accrued Liability (AAL)	\$ 18,395,592,476	\$ 16,577,754,827
> Actuarial Assets	13,029,291,146	11,063,198,418
> Unfunded Accrued Liability (UAAL)	5,366,301,330	5,514,556,409
> Funded Ratio	70.8 %	66.7 %
> Funding Period	30 Years	33 Years

* Contribution rates are blended averages reflecting mid-year changes in the rates. Member contribution rates for 2014 are 10.75% from Jan. 1, 2014 to July 1, 2014 and 11.50% thereafter. Member contribution rates for 2015 are 11.50% from Jan. 1, 2015 to July 1, 2015 and 12.25% thereafter. The increase in member rate from 2014 to 2015 reduced the employer normal cost rate and increased the contribution rate for the accrued liability from 2014 to 2015.

** AAL and Actuarial Assets for Jan. 1, 2014 are net of DROP balances of \$1,245,564,926, AAL and Actuarial Assets for Jan. 1, 2015 include DROP balances of \$1,304,210,784.



Actuarial Funded Status

OP&F's funded status is measured by comparing the actuarial value of assets with the AAL. The AAL is the present value of benefits attributed to past service under OP&F's funding method and reflects future pay increases for active members. The actuarial value of assets is a value based on OP&F's market value, but defers recognition over four years of any market returns that are greater than or less than the assumed valuation assumption of 8.25 percent. The use of this asset valuation method mitigates, or smoothes, market fluctuation in the valuation assets from year to year. The actuarial valuation method includes a 20 percent corridor around the market value, so that the actuarial value must be no less than 80 percent and no greater than 120 percent of the market value.

As of Jan. 1, 2015, the AAL exceeds the actuarial value of assets, resulting in an unfunded actuarial accrued liability of \$5.4 billion. The funded ratio, which is the ratio of the assets to the AAL, is 70.8 percent. These figures are based on an actuarial value of assets of \$13,029,291,146 and an AAL of \$18,395,592,476.

Reasons for Change in the Funded Ratio

The funded ratio increased from 66.7 percent as of Jan. 1, 2014 to 70.8 percent as of Jan. 1, 2015, an increase of 4.1 percentage points. The primary reasons for the increase are as follows:

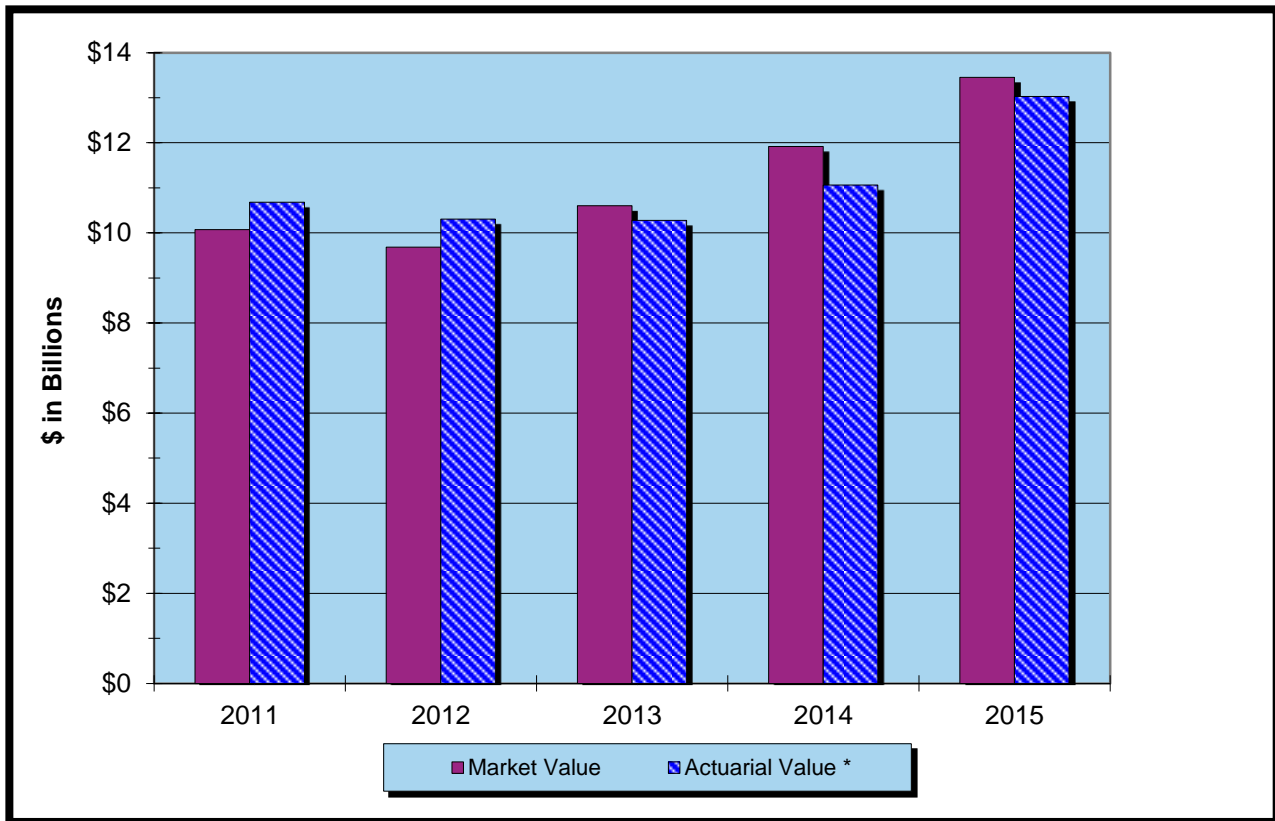
	<u>Increase or (Decrease)</u>
Investment gain based on actuarial value of assets	1.2%
Inclusion of DROP balances in assets and liabilities	2.4
Liability gain due to plan experience	0.2
Contribution level	<u>0.3</u>
Net increase (decrease)	4.1%

Five-Year History of Actuarial Funded Status

In the table and chart below, the AAL and actuarial assets prior to the Jan. 1, 2015 valuation are net of DROP balances. Had the DROP balances been included, the UAAL would have been the same as shown, but the funded ratio would have been slightly higher than shown. Beginning with the Jan. 1, 2015 valuation, as a result of OP&F's change in method for accounting for DROP, the AAL and actuarial assets include DROP balances.

Valuation as of Jan. 1	Actuarial Accrued Liability (AAL) *	Actuarial Assets*	Unfunded Actuarial Accrued Liability (UAAL)	Funded Ratio
2015	\$ 18,395,592,000	\$ 13,029,291,000	\$ 5,366,301,000	70.8 %
2014	16,577,755,000	11,063,198,000	5,514,557,000	66.7
2013	16,007,888,000	10,278,031,000	5,729,857,000	64.2
2012	16,346,699,000	10,308,959,000	6,037,740,000	63.1
2011	15,384,437,000	10,681,012,000	4,703,425,000	69.4

* AAL and asset values shown prior to 2015 exclude DROP balances



* Asset Values shown prior to 2015 exclude DROP balances

Net Actuarial Gain (Loss)

The results of the valuation as of Jan. 1, 2015 determine the net actuarial gain or loss due to plan experience for the year ended Dec. 31, 2014. There was a net experience gain of \$291.7 million, consisting of a gain of \$224.8 million on the actuarial value of assets and a gain of \$66.9 million on liabilities. The asset gain reflects investment performance on a market value basis during 2014 and the previous three years. The analysis of the net experience gain is shown in Table 5.

Five-Year History of Actuarial Gains or (Losses)

Fiscal Year Ended Dec. 31	Net Gain or (Loss)
2014	\$ 291,700,000
2013	454,508,000
2012	(380,992,000)
2011	(631,882,000)
2010	(396,730,000)

Rate of Return on Assets

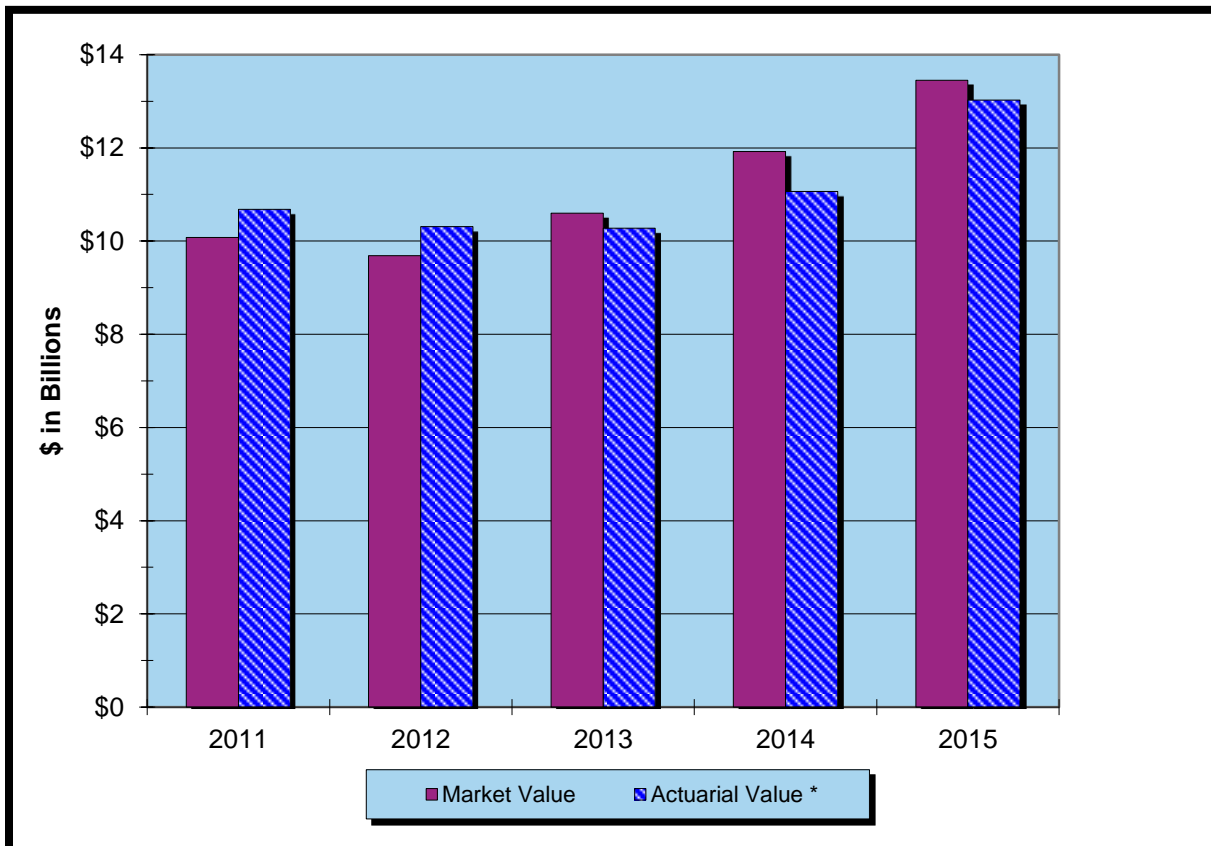
The investment returns of the trust fund on a market value basis (i.e., total return including both realized and unrealized gains and losses) for years ended Dec. 31, 2010 through Dec. 31, 2014 are shown below. Also shown are the rates of return on the actuarial value of assets used to determine OP&F's actuarial funded status.

Five-Year History of Rates of Return

Year Ended Dec. 31	Rate of Return Based on	
	Market Value*	Actuarial Assets
2014	6.8 %	10.1 %
2013	16.9	13.6
2012	14.9	5.9
2011	2.6	2.2
2010	15.8	4.0

* As reported in the OP&F CAFR

Five-Year History of Market Value and Actuarial Assets as of Jan. 1



* Asset values shown prior to 2015 exclude DROP balances

Funding Period

The actuary determines how many years are required to completely amortize the UAAL (the funding period), using the member and employer contributions reduced by the amount allocated to health care and the amount of normal cost for the year. The calculation of the funding period takes into account future payroll growth, currently assumed at 3.75 percent per year. The calculation also takes into account adjustments in the normal cost rate and changes in the statutory contribution rates as a result of Senate Bill No. 340.

The funding period based on the Jan. 1, 2015 valuation is 30 years. This is the number of years it will take to pay off the \$5.4 billion UAAL as of Jan. 1, 2015. The funding period decreased from 33 years as of Jan. 1, 2014, primarily due to net investment performance gains over the past four years.

If all assumptions are met, the funding period will continue to decrease each year. However, if all assumptions are not met, the period could increase. Two assumptions that greatly impact the funding period are investment returns and future payroll growth. OP&F has experienced overall favorable investment results the last few years through 2014. If future returns are much lower than the assumed 8.25 percent, projected contributions may not be sufficient to keep the funding period at or below 30 years. If the investment assumption is met, but payroll growth is less than 3.75 percent over time, which has been in recent years, future contributions will be less than projected and insufficient to pay off the UAAL over 30 years.

Recent white papers regarding public sector actuarial practice favor a funding period for a system's UAAL of 15 to 20 years. Similar to a mortgage, the shorter the amortization period, the higher the annual payments needed, the faster the UAAL is paid off and the lesser the overall interest costs.

Five-Year History of Contribution Rates and Funding Period

Member contribution rates increased from 10 percent to 10.75 percent on July 2, 2013, to 11.50 percent on July 2, 2014 and to 12.25 percent on July 2, 2015. The member rates shown in the table below for 2013, 2014 and 2015 are the average, or blended, rates for the year. A funding period of infinity means the contribution level is not sufficient to pay down the unfunded over any number of years.

Valuation as of Jan. 1	Contribution Rates				Allocation		Funding Period
	Member	Police Employer	Fire Employer	Employer Average	Health Care	Pension	
2015	11.88 %	19.50 %	24.00 %	21.61 %	0.50 %	32.99 %	30 Years
2014	11.13	19.50	24.00	21.61	0.50	32.24	33 Years
2013	10.38	19.50	24.00	21.61	3.62	28.37	47 years
2012	10.00	19.50	24.00	21.62	6.75	24.87	Infinity
2011	10.00	19.50	24.00	21.60	6.75	24.85	Infinity

The remainder of this report consists of tables and exhibits.

Table 1
Summary of Results of Actuarial Valuation
as of Jan. 1, 2015

Item	Police	Firefighters	Total
Membership Data			
1. Number of Members			
a) Active Members			
i) Vested Actives	7,642	6,777	14,419
ii) Non-Vested Actives	<u>7,156</u>	<u>6,027</u>	<u>13,183</u>
iii) Total Actives	14,798	12,804	27,602
b) Vested Former Members	112	68	180
c) Rehired Retirees	121	46	167
d) Retirees and Disableds	11,626	8,548	20,174
e) Beneficiaries and Survivors	4,403	3,386	7,789
f) Contributions Refund Due	<u>2,353</u>	<u>654</u>	<u>3,007</u>
g) Total	33,413	25,506	58,919
2. Annualized Salaries	\$ 1,036,354,669	\$ 911,998,894	\$ 1,948,353,563
3. Membership Payroll	1,055,649,781	930,918,754	1,986,568,535
4. Annual Allowances	534,736,404	396,439,612	931,176,016
Valuation Results			
5. Present Value of Future Benefits (PVFB)			
a) Active Members	\$ 5,769,111,981	\$ 5,435,062,636	\$ 11,204,174,617
b) Vested Former Members	19,270,006	11,701,482	30,971,488
c) Rehired Retirees	8,250,096	3,832,565	12,082,661
d) Retirees and Disableds	5,463,144,860	4,056,759,961	9,519,904,821
e) Beneficiaries and Survivors	394,001,172	281,058,897	675,060,069
f) Contributions Refund Due	<u>20,639,400</u>	<u>7,541,369</u>	<u>28,180,769</u>
g) Total PVFB	\$ 11,674,417,515	\$ 9,795,956,910	\$ 21,470,374,425
6. Normal Cost			
a) Normal Cost	\$ 175,971,505	\$ 156,833,407	\$ 332,804,912
b) Administrative Expenses	11,028,393	8,319,665	19,348,059
c) State Subsidy	<u>285,087</u>	<u>215,065</u>	<u>500,152</u>
d) Total: (a) + (b) - (c)	\$ 186,714,811	\$ 164,938,007	\$ 351,652,819
e) Normal Cost Rate	17.69%	17.72%	17.70%
7. Present Value of Future Normal Cost	\$ 1,580,014,354	\$ 1,475,317,938	\$ 3,055,332,292



Table 1
Summary of Results of Actuarial Valuation
as of Jan. 1, 2015
(Continued)

Item	Police	Firefighters	Total
8. Actuarial Accrued Liability (AAL)			
a) Active Members	\$ 4,189,097,627	\$ 3,959,744,698	\$ 8,148,842,325
b) Vested Former Members	19,270,006	11,701,482	30,971,488
c) Rehired Retirees	8,250,096	3,832,565	12,082,661
d) Retirees and Disableds	5,463,144,860	4,056,759,961	9,519,904,821
e) Beneficiaries and Survivors	394,001,172	281,058,897	675,060,069
f) Contributions Refund Due	20,639,400	7,541,369	28,180,769
g) Total	\$ 10,094,403,161	\$ 8,320,638,972	\$ 18,415,042,133
h) Employer Accrued Liability	(11,467,632)	(7,982,025)	(19,449,657)
i) Adjusted AAL	\$ 10,082,935,529	\$ 8,312,656,947	\$ 18,395,592,476
9. Actuarial Value of Assets *	\$ 7,141,574,961	\$ 5,887,716,185	\$ 13,029,291,146
10. Unfunded Accrued Liability: (8) - (9)	\$ 2,941,360,568	\$ 2,424,940,762	\$ 5,366,301,330
11. Funding Period			30 Years
12. Funded Ratio	70.8%	70.8%	70.8%
Allocation of Employer Contribution Rate			
13. Employer Contribution Rate			
a) Total Employer Rate (by law)	19.50%	24.00%	21.61%
b) Health Care Stabilization Fund Allocation	<u>0.50%</u>	<u>0.50%</u>	<u>0.50%</u>
c) Employer Pension Rate: (a) - (b)	19.00%	23.50%	21.11%
d) Total Normal Cost Rate	17.69%	17.72%	17.70%
e) Member Rate (by law)	<u>11.88%</u>	<u>11.88%</u>	<u>11.88%</u>
f) Employer Normal Cost Rate: (d) - (e)	5.81%	5.84%	5.82%
g) Unfunded Accrued Liability Amortization Rate: (c) - (f)	13.19%	17.66%	15.29%

* The Actuarial Value of Assets is split between Police and Firefighters in proportion to the Actuarial Accrued Liability. Starting with the Jan. 1, 2015 valuation, the assets and liabilities include DROP balances.

The contribution rates shown are for 2015. The member rate of 11.88% is a blend of 11.50% from Jan. 1 to July 1 and 12.25% from July 2 to Dec. 31.

Table 1A
Valuation Results as of Jan. 1, 2015
Adjusted for Medicare Part B Reimbursements

Item	Police	Firefighters	Total
Valuation Results			
1. Present Value of Future Benefits			
a) Pension Benefits	\$ 11,674,417,515	\$ 9,795,956,910	\$ 21,470,374,425
b) Medicare Part B Benefits	<u>311,420,239</u>	<u>268,717,516</u>	<u>580,137,755</u>
c) Total	\$ 11,985,837,754	\$ 10,064,674,426	\$ 22,050,512,180
2. Normal Cost			
a) Pension Benefits	17.69%	17.72%	17.70%
b) Medicare Part B Benefits	<u>0.45%</u>	<u>0.47%</u>	<u>0.46%</u>
c) Total	18.14%	18.19%	18.16%
3. Actuarial Accrued Liability			
a) Pension Benefits	\$ 10,082,935,529	\$ 8,312,656,947	\$ 18,395,592,476
b) Medicare Part B Benefits	<u>267,522,836</u>	<u>226,636,368</u>	<u>494,159,204</u>
c) Total	\$ 10,350,458,365	\$ 8,539,293,315	\$ 18,889,751,680
4. Actuarial Value of Assets *	\$ 7,141,574,961	\$ 5,887,716,185	\$ 13,029,291,146
5. Unfunded Accrued Liability	\$ 3,208,883,404	\$ 2,651,577,130	\$ 5,860,460,534
6. Funded Ratio	69.0%	68.9%	69.0%
Allocation of Employer Contribution Rate			
7. Employer Contribution Rate			
a) Total Employer Rate (by law)	19.50%	24.00%	21.61%
b) Health Care Stabilization Fund Allocation	<u>0.50%</u>	<u>0.50%</u>	<u>0.50%</u>
c) Employer Pension Rate: (a) - (b)	19.00%	23.50%	21.11%
d) Pension Normal Cost Rate	17.69%	17.72%	17.70%
e) Medicare Part B Normal Cost Rate	<u>0.45%</u>	<u>0.47%</u>	<u>0.46%</u>
f) Total Normal Cost Rate: (d) + (e)	18.14%	18.19%	18.16%
g) Member Rate (by law)	<u>11.88%</u>	<u>11.88%</u>	<u>11.88%</u>
h) Employer Normal Cost Rate: (f) - (g)	6.26%	6.31%	6.28%
i) Unfunded Accrued Liability Amortization Rate: (c) - (h)	12.74%	17.19%	14.83%

* The Actuarial Value of Assets is split between Police and Firefighters in proportion to the pension Actuarial Accrued Liability. Starting with the Jan. 1, 2015 valuation, the assets and liabilities include DROP balances.

Table 2
Summary of Market Value of Plan Assets
as of Dec. 31, 2014

Item	Amount
1. Market Value of Assets as of Dec. 31, 2013*	\$ 13,166,077,870
2. Contributions During 2014	
a) Member	\$ 223,989,055
b) Employer	417,993,316
c) State Subsidy	<u>500,152</u>
d) Total	\$ 642,482,523
3. Benefit Payments During 2014	1,126,154,321
4. Administrative Expenses During 2014	15,480,687
5. Income During 2014	
a) Interest, Dividends and Other Income	\$ 296,161,871
b) Appreciation/(Depreciation)	526,421,605
c) Investment Expenses	<u>42,760,066</u>
d) Investment Return After Expenses (a) + (b) - (c)	\$ 779,823,410
e) Interest on Receivables and Other Income	<u>6,699,041</u>
f) Total Income (d) + (e)	\$ 786,522,451
6. Market Value of Assets as of Dec. 31, 2014* (1) + (2d) - (3) - (4) + (5f)	\$ 13,453,447,836
7. Rate of Return (per 2014 Comprehensive Annual Financial Report)	6.79 %

* The Market Value of Assets includes the DROP accrual balances of \$1,245,564,926 at Dec. 31, 2013 and \$1,304,210,784 at Dec. 31, 2014. This is a change from the Jan. 1, 2014 valuation in which the Market Value of Assets excluded the DROP balances.

Table 3
Derivation of Actuarial Value of Assets
as of Jan. 1, 2015

Item					Amount
1. Market Value of Assets as of Dec. 31, 2014					\$ 13,453,447,836
2. Determination of Deferred Gain (Loss)					
Return on Market Value of Assets					
<u>Year</u>	<u>Actual</u>	<u>Expected</u>	<u>Gain/(Loss)</u>	<u>% Deferred</u>	<u>Deferred Amount</u>
2014	\$ 786,522,451	\$ 1,065,611,384	\$ (279,088,933)	75%	\$ (209,316,700)
2013	1,893,854,624	953,408,015	940,446,609	50%	470,223,305
2012	1,531,042,478	878,042,138	653,000,340	25%	163,250,085
2011	210,581,639	908,664,044	(698,082,405)	0%	-
					\$ 424,156,690
3. Adjustment for 20% corridor					\$ -
4. Actuarial Value of Assets (1) - (2) + (3)					\$ 13,029,291,146
5. Actuarial Rate of Return *					10.11 %

* The actuarial rate of return is the rate of return based on the change in the actuarial value of assets from last year to this year. The rate of return is calculated assuming contributions and disbursements occur halfway through the year.

Table 4
Analysis of Change in Unfunded Actuarial Accrued Liability
as of Jan. 1, 2015

Item	Amount
1. Unfunded Accrued Liability at Jan. 1, 2014	\$ 5,514,556,409
2. Contributions Toward Unfunded Accrued Liability	\$ 299,165,137
3. Interest Credit at 8.25% to Dec. 31, 2014	\$ 442,610,342
4. Expected Unfunded Accrued Liability at Dec. 31, 2014 (1) - (2) + (3)	\$ 5,658,001,614
5. Actual Unfunded Accrued Liability at Jan. 1, 2015	<u>\$ 5,366,301,330</u>
6. Net Gain (4) - (5)	\$ 291,700,284
7. Reasons for Net Gain	
(a) Experience Gains (Losses)	
(i) Gain from Investment Return on Actuarial Value of Assets	\$ 224,797,351
(ii) Gain from Demographic Experience and Other	<u>\$ 66,902,933</u>
(b) Total	\$ 291,700,284

Table 5
Detailed Analysis of Gains and Losses due to Plan Experience
Resulting In Differences Between Assumed and Actual Experience

Type of Activity	Gain (Loss)	
	Jan. 1, 2015	Jan. 1, 2014
Plan Experience:		
Turnover <i>If more liabilities are released by withdrawal separations from active membership than assumed, there is a gain. If smaller releases, there is a loss.</i>	\$ (9,205,962)	\$ (9,005,087)
Retirement <i>If members retire at older ages than assumed, there is a gain. If younger, there is a loss.</i>	(742,371)	2,074,994
Death among retired members and beneficiaries <i>If more deaths occur than assumed, there is a gain. If fewer deaths than assumed, there is a loss.</i>	(43,649,147)	4,614,595
Disability retirements <i>If disability claims are less than assumed, there is a gain. If more claims, a loss.</i>	32,032,671	13,304,806
Salary increase/decrease <i>If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.</i>	78,297,521	101,583,243
Return to work <i>If participants return to work with previous service restored, there is a loss.</i>	(497,912)	(1,535,632)
New Entrants <i>If new entrants join OP&F, there is a loss.</i>	(5,138,911)	(5,249,686)
Deaths among actives <i>If claims costs are less than assumed, there is a gain. If more claims, a loss.</i>	(2,689,167)	(2,508,111)
Investment <i>If there is greater investment return than assumed, there is a gain. If less return, a loss.</i>	224,797,351	447,649,124
Other Experience and Payroll Growth <i>If other experience, including less than expected payroll growth, increases the unfunded liability, there is a loss. Otherwise, there is a gain.</i>	<u>18,496,211</u>	<u>(96,420,632)</u>
Net gain (or loss) during the year due to plan experience	\$ 291,700,284	\$ 454,507,614

Table 6
Schedule of Funding Progress
(\$ Amounts in Millions)

Valuation as of Jan. 1	Valuation Assets	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as Percentage of Active Member Payroll
2015	\$ 13,029.3	\$ 18,395.6	\$ 5,366.3	70.8 %	\$ 1,986.6	270.1 %
2014	11,063.2	16,577.8	5,514.6	66.7 %	1,942.3	283.9 %
2013	10,278.0	16,007.9	5,729.9	64.2 %	1,913.4	299.5 %
2012	10,309.0	16,346.7	6,037.7	63.1 %	1,897.4	318.2 %
2011	10,681.0	15,384.4	4,703.4	69.4 %	1,868.5	251.7 %
2010	10,794.1	14,830.7	4,036.6	72.8 %	1,895.2	213.0 %
2009	9,309.2	14,307.1	4,997.9	65.1 %	1,900.9	262.9 %
2008	11,212.9	13,727.8	2,514.9	81.7 %	1,831.4	137.3 %
2007	10,158.0	12,987.5	2,828.5	78.2 %	1,782.9	158.7 %
2006	9,550.6	12,190.4	2,639.8	78.3 %	1,756.2	150.3 %

* Actuarial Assets and Liabilities prior to Jan. 1, 2015 are net of DROP balances.

** The amounts reported in this schedule do not include assets or liabilities for post-employment health care benefits.

Table 7
Unfunded Actuarial Accrued Liability Funding Period

Year	Plan Year	Outstanding Balance at Beginning of Year of January 1, 2015	Assumed Amortization Contribution	Assumed Payroll @ 3.75%	Mid-Year Amortization Contribution	Outstanding Balance at End of Year of January 1, 2015
		UAAL (a)	Rate ¹ (b)	Growth Rate (c)	Amount ² (d)	UAAL ³ (e)
1	2015	5,366,301,330	15.285%	2,021,416,822	308,973,561	5,487,555,023
2	2016	5,487,555,023	15.770%	2,097,219,953	330,731,587	5,596,174,387
3	2017	5,596,174,387	15.870%	2,175,865,701	345,309,887	5,698,587,110
4	2018	5,698,587,110	15.970%	2,257,460,665	360,516,468	5,793,627,460
5	2019	5,793,627,460	16.060%	2,342,115,440	376,143,740	5,880,249,515
6	2020	5,880,249,515	16.130%	2,429,944,769	391,950,091	5,957,572,447
7	2021	5,957,572,447	16.200%	2,521,067,698	408,412,967	6,024,146,008
8	2022	6,024,146,008	16.230%	2,615,607,736	424,513,136	6,079,460,747
9	2023	6,079,460,747	16.260%	2,713,693,026	441,246,486	6,121,929,029
10	2024	6,121,929,029	16.280%	2,815,456,515	458,356,321	6,150,099,314
11	2025	6,150,099,314	16.300%	2,921,036,134	476,128,890	6,162,102,488
12	2026	6,162,102,488	16.320%	3,030,574,989	494,589,838	6,155,888,551
13	2027	6,155,888,551	16.340%	3,144,221,551	513,765,801	6,129,210,666
14	2028	6,129,210,666	16.370%	3,262,129,859	534,010,658	6,079,268,448
15	2029	6,079,268,448	16.390%	3,384,459,729	554,712,950	6,003,666,657
16	2030	6,003,666,657	16.410%	3,511,376,969	576,216,961	5,899,454,244
17	2031	5,899,454,244	16.420%	3,643,053,605	598,189,402	5,763,783,463
18	2032	5,763,783,463	16.430%	3,779,668,116	620,999,471	5,593,187,503
19	2033	5,593,187,503	16.430%	3,921,405,670	644,286,952	5,384,288,322
20	2034	5,384,288,322	16.430%	4,068,458,383	668,447,712	5,133,017,316
21	2035	5,133,017,316	16.430%	4,221,025,572	693,514,501	4,834,936,147
22	2036	4,834,936,147	16.430%	4,379,314,031	719,521,295	4,485,204,965
23	2037	4,485,204,965	16.430%	4,543,538,307	746,503,344	4,078,547,958
24	2038	4,078,547,958	16.430%	4,713,920,993	774,497,219	3,609,216,007
25	2039	3,609,216,007	16.440%	4,890,693,031	804,029,934	3,070,437,371
26	2040	3,070,437,371	16.440%	5,074,094,019	834,181,057	2,455,839,287
27	2041	2,455,839,287	16.440%	5,264,372,545	865,462,846	1,757,990,266
28	2042	1,757,990,266	16.450%	5,461,786,516	898,463,882	968,233,349
29	2043	968,233,349	16.450%	5,666,603,510	932,156,277	78,266,818
30	2044	78,266,818	16.450%	5,879,101,142	967,112,138	-

Resulting Funding Period = 30 Years

¹ The amortization contribution rate is the total statutory contribution rate, minus the total normal cost rate, minus the health care contribution rate. The statutory contribution rate is assumed to remain unchanged except for any legislated increases, for which none are assumed after the July 1, 2015 member contribution rate increase. The impact of SB 340 and changes adopted by OP&F that will impact new members will reduce the total normal cost rate over time, and, thus, increase the amortization contribution rate, as reflected above.

² The contribution amount is the product of (b) the amortization contribution rate and (c) the assumed payroll amount.

³ The outstanding balance at the end of the year is derived from the outstanding balance at the beginning of the year with interest minus the mid-year amortization contribution with interest.

$$(e) = [(a) \times 1.0825] - [(d) \times 1.0825^{0.5}]$$

Table 8
Solvency Test
Comparative Summary of Actuarial Accrued Liability and
Actuarial Value of Assets
(\$ Amounts in Thousands)

POLICE

Valuation as of January 1	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Member Employer Financed	Actuarial Value of Assets	Portion of Accrued Liability Covered by Valuation Assets		
					(1)	(2)	(3)
2015	\$ 1,210,400	\$ 5,857,146	\$ 3,015,390	\$ 7,141,575	100 %	100 %	2 %
2014	1,171,496	5,368,637	2,583,711	6,088,816	100 %	92 %	0 %
2013	1,131,664	5,166,808	2,532,580	5,670,069	100 %	88 %	0 %
2012	1,100,146	4,960,051	2,969,900	5,694,783	100 %	93 %	0 %
2011	1,100,251	4,368,659	3,008,219	5,885,449	100 %	100 %	14 %
2010	1,067,209	4,216,219	2,926,199	5,975,121	100 %	100 %	24 %
2009	1,026,597	4,077,113	2,832,235	5,163,648	100 %	100 %	2 %
2008	985,169	3,992,482	2,671,816	6,248,107	100 %	100 %	48 %

FIREFIGHTERS

Valuation as of January 1	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Member Employer Financed	Actuarial Value of Assets	Portion of Accrued Liability Covered by Valuation Assets		
					(1)	(2)	(3)
2015	\$ 1,062,097	\$ 4,337,819	\$ 2,912,741	\$ 5,887,716	100 %	100 %	17 %
2014	1,028,465	3,924,388	2,501,058	4,974,383	100 %	100 %	1 %
2013	974,362	3,751,279	2,451,195	4,607,962	100 %	97 %	0 %
2012	965,598	3,581,800	2,769,204	4,614,176	100 %	100 %	2 %
2011	956,559	3,132,521	2,818,228	4,795,563	100 %	100 %	25 %
2010	916,033	3,004,267	2,700,815	4,818,972	100 %	100 %	33 %
2009	874,756	2,895,243	2,601,180	4,145,508	100 %	100 %	14 %
2008	830,439	2,827,320	2,420,526	4,964,761	100 %	100 %	54 %

TOTAL

Valuation as of January 1	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Member Employer Financed	Actuarial Value of Assets	Portion of Accrued Liability Covered by Valuation Assets		
					(1)	(2)	(3)
2015	\$ 2,272,496	\$ 10,194,965	\$ 5,928,132	\$ 13,029,291	100 %	100 %	9 %
2014	2,199,961	9,293,025	5,084,769	11,063,199	100 %	95 %	0 %
2013	2,106,027	8,918,087	4,983,774	10,278,031	100 %	92 %	0 %
2012	2,065,744	8,541,851	5,739,104	10,308,959	100 %	97 %	0 %
2011	2,056,810	7,501,180	5,826,447	10,681,012	100 %	100 %	19 %
2010	1,983,242	7,220,486	5,627,014	10,794,093	100 %	100 %	28 %
2009	1,901,353	6,972,356	5,433,415	9,309,156	100 %	100 %	8 %
2008	1,815,608	6,819,802	5,092,342	11,212,868	100 %	100 %	51 %

Note: Actuarial Assets and Liabilities prior to Jan. 1, 2015 are net of DROP balances

Table 9
Description of Actuarial Assumptions and Methods

Assumptions

The actuarial assumptions were adopted as of Jan. 1, 2012, based on a five-year experience review covering the period 2007-2011. The next review of the actuarial assumptions is to be completed for adoption with the Jan. 1, 2017 valuation.

INTEREST RATE: 8.25 percent per annum, compounded annually.

SALARY INCREASE RATES: Assumed annual salary increases are as follows:

Years of Service	Salary Increase Rate
Less than 1	11.00%
1	9.50%
2	8.50%
3	6.50%
4	5.00%
5 or more	4.25%

DROP INTEREST RATE: 4.5 percent per annum, compounded annually.

COLA: Three percent simple; 2.6 percent simple for increases based on the lesser of the increase in CPI and three percent.

WITHDRAWAL RATES: The following sample withdrawal rates are based on age and service (for causes other than death, disability, or retirement):

Police

Age	Years of Service										
	0	1	2	3	4	5	6	7	8	9	10+
25	10.3%	6.3%	3.5%	4.4%	3.9%	2.2%	2.1%	2.0%	1.8%	1.8%	1.5%
30	10.4%	5.8%	4.4%	3.5%	3.2%	3.0%	2.9%	2.5%	2.2%	1.8%	1.5%
35	13.0%	5.3%	3.2%	3.8%	3.5%	3.4%	3.2%	3.1%	2.5%	1.7%	1.3%
40	14.0%	6.0%	4.6%	4.5%	4.1%	3.9%	3.3%	3.2%	1.8%	1.5%	0.9%
45	16.0%	6.3%	6.1%	5.9%	5.2%	4.3%	3.5%	3.5%	2.1%	1.2%	0.8%
50	18.0%	8.3%	8.1%	7.5%	6.5%	5.3%	4.1%	4.0%	3.9%	3.1%	1.5%
55	20.0%	12.0%	10.0%	9.4%	8.0%	6.5%	5.2%	5.1%	4.9%	4.5%	1.7%
60	20.0%	12.0%	10.0%	9.4%	8.0%	6.5%	5.2%	5.1%	4.9%	4.5%	1.7%

Table 9
Description of Actuarial Assumptions and Methods
(Continued)

Firefighters

Age	Years of Service										
	0	1	2	3	4	5	6	7	8	9	10+
25	2.8%	2.2%	1.6%	1.5%	1.2%	1.1%	1.0%	1.0%	0.9%	0.9%	0.8%
30	3.8%	1.6%	1.8%	1.7%	1.6%	1.3%	1.2%	1.1%	1.0%	1.0%	0.9%
35	4.2%	3.4%	2.1%	2.0%	1.9%	1.4%	1.3%	1.25%	1.1%	0.9%	0.8%
40	4.5%	3.6%	2.2%	2.1%	2.0%	1.5%	1.4%	1.3%	1.2%	1.0%	0.6%
45	4.6%	3.8%	2.7%	2.6%	2.5%	1.9%	1.6%	1.4%	1.3%	1.1%	0.5%
50	6.1%	4.4%	4.0%	3.8%	3.5%	2.7%	2.4%	2.2%	2.1%	1.5%	0.7%
55	6.1%	5.0%	5.0%	5.0%	4.0%	3.5%	2.4%	2.2%	2.0%	1.5%	1.1%
60	6.1%	5.0%	5.0%	5.0%	4.0%	3.5%	2.4%	2.2%	2.0%	1.5%	1.1%

RATES OF DISABILITY: The following are sample rates of disability and occurrence of disability by type:

Age	Police	Firefighters
20	.002%	.004%
30	.255%	.063%
40	.732%	.454%
50	1.126%	.891%
55	.933%	1.350%
60	.966%	1.331%
64	1.441%	3.126%

On duty permanent and total 23%
 On duty partial 61%
 off duty ordinary 16%

Table 9
Description of Actuarial Assumptions and Methods
(Continued)

RETIREMENT RATES: The following rates of retirement apply to members not in DROP:

Age	Police	Firefighters
48	10%	10%
49-52	5%	5%
53-54	11%	5%
55-57	11%	10%
58-59	5%	13%
60	15%	20%
61	25%	20%
62	25%	50%
63	25%	20%
64	25%	25%
65-69	35%	25%
70	100%	100%

DEFERRED RETIREMENT OPTION PLAN ELECTIONS: 90 percent of members who do not retire when first eligible are assumed to elect DROP.

DROP RETIREMENT RATES: The following rates of retirement apply to members in DROP on or before July 1, 2013:

Police

Age	Years in DROP								
	0	1	2	3	4	5	6	7	8
48	5%								
49	5%	5%							
50	4%	5%	5%						
51	4%	5%	5%	10%					
52	4%	5%	5%	10%	10%				
53	4%	5%	5%	10%	10%	12%			
54	4%	5%	5%	10%	10%	12%	14%		
55	5%	5%	5%	15%	15%	12%	17%	30%	
56	5%	5%	5%	15%	15%	12%	17%	30%	100%
57	5%	5%	5%	15%	15%	12%	17%	30%	100%
58	5%	5%	5%	15%	15%	12%	17%	30%	100%
59	16%	5%	5%	15%	16%	15%	18%	32%	100%
60	16%	5%	5%	15%	16%	15%	18%	32%	100%
61	16%	5%	5%	15%	16%	15%	18%	32%	100%
62	16%	5%	5%	15%	16%	15%	18%	32%	100%
63	16%	5%	5%	15%	16%	15%	18%	32%	100%
64	19%	5%	5%	17%	17%	16%	19%	35%	100%
65-69	19%	5%	5%	17%	17%	16%	19%	35%	100%
70	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 9
Description of Actuarial Assumptions and Methods
(Continued)

Firefighters

Age	Years in DROP								
	0	1	2	3	4	5	6	7	8
48	2%								
49	4%	3%							
50	4%	3%	3%						
51	4%	3%	3%	10%					
52	4%	3%	3%	10%	12%				
53	4%	3%	3%	10%	12%	13%			
54	4%	3%	3%	10%	12%	13%	15%		
55	5%	3%	3%	12%	12%	13%	17%	27%	
56	5%	3%	3%	12%	12%	13%	17%	27%	100%
57	5%	3%	3%	12%	12%	13%	17%	27%	100%
58	5%	3%	3%	17%	16%	15%	20%	35%	100%
59	6%	3%	3%	17%	16%	15%	20%	35%	100%
60	6%	3%	3%	17%	16%	15%	20%	35%	100%
61	6%	3%	3%	17%	16%	15%	20%	35%	100%
62	6%	3%	3%	17%	16%	15%	20%	35%	100%
63	30%	3%	3%	20%	20%	20%	20%	40%	100%
64	30%	3%	3%	20%	20%	20%	20%	40%	100%
65-69	30%	3%	3%	20%	20%	20%	20%	40%	100%
70	100%	100%	100%	100%	100%	100%	100%	100%	100%

The same rates apply for members entering DROP after July 1, 2013, except the rates for years three and four are replaced with the rates for year two.

RETIREMENT AGE FOR INACTIVE VESTED PARTICIPANTS: Commencement at age 48 and 25 years of service from full-time hire date, whichever is later.

MORTALITY: Rates of death are based on the RP2000 Combined Table, age-adjusted as follows. For active members, set back six years. For disability retirements, set forward five years for police and three years for firefighters. For service retirements, set back zero years for police and two years for firefighters. For beneficiaries, set back zero years. The rates are applied on a fully generational basis, with a base year of 2009, using mortality improvement Scale AA.

CREDITED SERVICE: Credited service on the valuation date, as provided by OP&F, includes all service credited under the plan, including service transferred from other municipal plans and purchased service. The valuation assumes future service will be credited at the rate of one year per year worked, with no assumed future crediting of transferred service or purchased service.

415 LIMITS: Benefits are limited by the IRC Section 415, assumed to increase 3.25 percent per annum.

FUTURE EXPENSES: The normal cost is increased by all administrative expenses budgeted, net of the State Subsidy received from the State of Ohio.

Table 9
Description of Actuarial Assumptions and Methods
(Continued)

UNKNOWN DATA FOR MEMBERS: Same as those exhibited by members with similar known characteristics.

PERCENT MARRIED: 75 percent of active members are assumed to be married.

AGE OF SPOUSE: Wives are assumed to be three years younger than their husbands.

OPTIONAL FORM ELECTION: 33 percent of service retirees and 10 percent of disability retirees are assumed to elect the 50 percent Joint and Survivor pension. If the joint annuitant predeceases the retiree, assume the retiree's benefit increases 17.65 percent.

DEPENDENT PARENTS: Costs based upon allowance for mortality (same rates as for beneficiaries), but no specific allowance for change in dependency status.

DEPENDENT CHILDREN: Each member is assumed to have two children, born when the member was age 26. Dependency is assumed to cease when the child is 22.

MEDICARE PART B PREMIUM TREND RATES: The Medicare Part B premium subsidy (\$104.90 per month for 2015) is assumed to increase as follows:

Year	Increase
2015	5.40%
2016	5.30%
2017	5.20%
2018	5.10%
2019 and Later	5.00%

MEDICARE PART B PREMIUM REIMBURSEMENT: 90 percent of members are assumed to be eligible for reimbursement once they reach age 65.

Table 9
Description of Actuarial Assumptions and Methods
(Continued)

METHODS

ACTUARIAL COST METHOD: Projected benefit method with individual level percentage entry age normal cost and AAL. Gains and losses are reflected in the actuarial accrued liability. Prior to Jan. 1, 2015, to be consistent with the asset methodology employed by OP&F, DROP balances were netted out of the liabilities.

ASSET VALUATION METHOD: A four-year moving average market value of assets that spreads the difference between the actual investment income and the expected income on the market value (based on the valuation interest rate) over a period of four years. The actuarial value shall not be less than 80 percent or more than 120 percent of market value.

PAYROLL GROWTH: Inflation rate of 3.25 percent plus productivity increase rate of 0.5 percent.

DATA

CENSUS AND ASSETS: The valuation was based on members of OP&F as of the valuation date and does not take into account future members. All census and asset data was supplied by OP&F.

Table 10
Plan Summary

Summary of Benefit and Contribution Provision

The following is intended to summarize the key provisions valued in this valuation. Members of OP&F and other parties should not rely on this summary as a substitute for or legal interpretation of the laws and rules covering this retirement plan.

Membership

Membership in OP&F is mandatory under Ohio Law for all full-time police officers employed by Ohio municipalities and appointed under the required statutory provisions. Membership is also mandatory for all full-time firefighters employed by Ohio municipalities, townships, villages, joint fire districts or other political subdivisions. In order to become members of OP&F, full-time firefighters are required to satisfactorily complete, or have satisfactorily completed, a firefighter training course approved under former Section 3303.07, Section 4765.55 or conducted under Section 3737.33 of the ORC.

Eligibility for Membership

Full-time police officers or firefighters are eligible for membership in OP&F immediately upon commencement of employment as a full-time police officer or firefighter.

Contributions

Employer and member contributions are established by statute and both are due monthly. Employers of police officers pay 19.5 percent of salary; employers of firefighters pay 24 percent of salary. Members contributed 10 percent of salary through July 1, 2013. On July 2, 2013 the member contribution rate increased by 0.75 percent to 10.75 percent. The member contribution rate will continue to increase annually by 0.75 percent until it reaches 12.25 percent on July 2, 2015.

Employer Contribution Rates – Percentage of Active Member Payroll:

Time Frame of Rates	Police	Fire
Jan 1, 1986 thru Present	19.50%	24.00%

Member Contribution Rates – Percentage of Active Member Payroll:

Time Frame of Rates	Police	Fire
July 2, 2015 and Thereafter	12.25%	12.25%
July 2, 2014 thru July 1, 2015	11.50%	11.50%
July 2, 2013 thru July 1, 2014	10.75%	10.75%
Sept. 9, 1988 thru July 1, 2013	10.00%	10.00%

Table 10
Plan Summary
(Continued)

BENEFITS

Service Retirement

Upon attaining a qualifying age with sufficient years of service, a member of OP&F may retire and receive a lifetime monthly pension. OP&F offers four types of service retirement: normal, service commuted, age/service commuted and actuarially reduced. Each type has different eligibility guidelines and is calculated using the member's average annual salary.

Since average annual salary is subject to certain statutory and administrative limitations, not all salary, earnings, or compensation may be used in the calculation. OP&F calculates allowable average annual salary as follows:

- For OP&F members with 15 or more years of service credit as of July 1, 2013, average annual salary is an average of the three years of highest allowable earnings, regardless of when in their career the highest years occurred. Allowable average annual salary means one-third of the total salary during the three years for which the total earnings were greatest. Members with more than 15 years of service credit will have their pension benefits calculated based on a three-year allowable average annual salary. A "salary benchmark" is established for these members under which certain increases are excluded from salary for the purpose of determining allowable average annual salary.
- For OPF members with less than 15 years of service credit as of July 1, 2013, average annual salary is an average of the five years of highest allowable earnings, regardless of when in their career the highest years occurred. Allowable average annual salary means one-fifth of the total salary during the five years for which the total earnings were greatest. Members with less than 15 years of service credit will have their pension benefits calculated based on a five-year allowable average annual salary with no benchmarking included.

Normal Service Retirement

Eligibility

- For members hired into an OP&F-covered position after July 1, 2013, minimum retirement age is 52 with at least 25 years of service credit.
- For members hired into an OP&F-covered position on or before July 1, 2013, minimum retirement age is 48 with 25 years of service credit.

Benefit

An annual pension equal to a percentage of the allowable average annual salary. The percentage equals 2.5 percent for each of the first 20 years of service, 2.0 percent for each of the next five years of service, and 1.5 percent for each year of service in excess of 25 years. The maximum pension of 72 percent of the allowable average annual salary is paid after 33 years of service.

Table 10
Plan Summary
(Continued)

Service Commuted Retirement

Eligibility

- For members hired into an OP&F-covered position after July 1, 2013, the minimum retirement age is 52, they must have at least 15 years of service credit and 25 years have elapsed from the date of their full-time hire.
- For members hired into an OP&F-covered position on or before July 1, 2013, the minimum retirement age is 48, they must have at least 15 years of service credit and 25 years of service and 25 years have elapsed from the date of their full-time hire.

Benefit

An annual pension equal to 1.5 percent of the allowable average annual salary multiplied by the number of full years of service credit (up to 25 years).

Age/Service Commuted Retirement

Eligibility

Age 62, 15 years of service credit and still working as a full-time police officer or firefighter.

Benefit

An annual pension that uses the same formula as for the Normal Service Retirement benefit.

Actuarially Reduced

Eligibility

For members hired into an OP&F-covered position after July 1, 2013, age 48 with 25 years of service.

Benefit

An annual pension reduced to the actuarial equivalent of the amount payable had the member retired at age 52.

Table 10
Plan Summary
(Continued)

Rights Upon Separation From Service

Deferred Pension

If a member meets the years of service credit required for any of the service retirement pensions but leaves service before attaining the minimum retirement age, a pension becomes payable upon attainment of the qualifying age and filing the appropriate paperwork with OP&F.

Refund of Employee Contributions

Upon separation from service, a member can receive the contributions that he or she made to the plan or the employee share of member contributions picked-up on the member's behalf by their employer. Employer contributions are not refundable.

Termination Before Retirement With 25 Years of Service Credit

Benefit

Same as the Normal Service Retirement benefit, except benefit commences once the member reaches minimum retirement age.

- For members hired into an OP&F-covered position after July 1, 2013, minimum retirement age is 52.
- For members hired into an OP&F-covered position on or before July 1, 2013, minimum retirement age is 48.

Termination Before Retirement With 15 Years of Service Credit

Benefit

Same as the Service Commuted Retirement, except benefit commences once the member reaches minimum retirement age and 25 years have elapsed from the date of full-time hire.

- For members hired into an OP&F-covered position after July 1, 2013, the minimum retirement age is 52.
- For members hired into an OP&F-covered position on or before July 1, 2013, the minimum retirement age is 48.

Table 10
Plan Summary
(Continued)

Termination Before Retirement With Less Than 15 Years of Service Credit

Benefit

A lump sum amount equal to the sum of the member's contributions to OP&F.

Deferred Retirement Option Plan

Eligibility

When a member is eligible for a normal service retirement they can enter DROP by delaying retirement and continuing to work as a full-time police officer or firefighter.

- For members hired into an OP&F-covered position after July 1, 2013, normal service retirement eligibility is age 52 with at least 25 years of service credit.
- For members hired into an OP&F-covered position on or before July 1, 2013, normal service retirement eligibility is age 48 with at least 25 years of service credit.

Benefit

DROP is a cost neutral benefit offered by OP&F. Upon the DROP effective date, the member's pension is calculated as if that were their date of retirement. While the member continues to work and draw their normal salary, the amount they would have received in retirement benefits accumulates tax-deferred at OP&F on their behalf, as well as a portion of their OP&F employee contributions and interest. Since the member's pension has already been calculated:

- The years of DROP service do not apply towards the member's normal service retirement.
- If a member earns a higher salary after their DROP effective date due to a raise, job promotion, etc., it will not be used to recalculate their pension and, therefore, will not result in that member receiving a higher pension upon retirement.

The DROP interest rate is set by administrative rule and is subject to change at any time. OP&F credits interest to all DROP balances each month at a rate equal to the 10-year United States (U.S.) Treasury Note Business Day Series, as published by the U.S. Department of the Treasury, with a cap of five percent. This variable interest rate is adjusted quarterly to match the published 10-year U.S. Treasury Note rate for the last trading business day of the preceding quarter and is in effect for the subsequent quarter.

Table 10
Plan Summary
(Continued)

Members whose election to participate in DROP is effective after July 1, 2013 do not qualify for annual cost-of-living allowances (COLA) at any time during DROP. Members whose election to participate in DROP is effective on or before July 1, 2013 will continue to receive a cost-of-living allowance during DROP, but only when they reach 55 years of age and have been participating in DROP for at least one year. Those members whose enrollment date into DROP qualify them for a cost-of-living allowance during DROP will receive three percent of their base pension.

Member contributions are credited to their DROP account based on the number of years of DROP service. For those members whose election to participate in DROP is effective after July 1, 2013, OP&F applies contributions to DROP in the following manner:

Years of DROP Service	Percentage of Member Contributions
Years 1-3	50 percent of member's contributions
Year 4-5	75 percent of member's contribution
Years 6-8	100 percent of member's contributions

For this group of members, the minimum participation in DROP, without penalty, is five years and the maximum is eight.

- If a member terminates employment within the first five years of joining DROP, then the member forfeits all of their DROP interest. In addition to losing their accumulated interest, members who choose to terminate employment before completing their required participation period cannot withdraw any of the funds in their DROP account until the minimum participation period has expired. The only exception to this rule is if the member dies during the minimum participation period. The member's surviving spouse, designated beneficiary or estate, as applicable will receive the entire DROP account balance determined at the time of death.
- If a member chooses to continue working after eight years in DROP, the member forfeits all DROP benefits and receives the Normal Service Retirement benefit upon retirement, which will be calculated to include the service credit earned during the DROP participation period.

For those members whose election to participate in DROP was on or before July 1, 2013, member contributions are applied to DROP under the following schedule:

Years of DROP Service	Percentage of Member Contributions
Years 1-2	50 percent of member's contributions
Year 3	75 percent of member's contribution
Years 4-8	100 percent of member's contributions

Table 10
Plan Summary
(Continued)

For this group of members, the minimum participation in DROP, without penalty, is three years and the maximum is eight.

- If a member terminates employment within the first three years of joining DROP, then the member forfeits all of their DROP interest. In addition to losing their accumulated interest, members who choose to terminate employment before completing their required participation period cannot withdraw any of the funds in their DROP account until the minimum participation period has expired. The only exception to this rule is if the member dies during the minimum participation period. The member's surviving spouse, designated beneficiary or estate, as applicable will receive the entire DROP account balance determined at the time of death.
- If a member chooses to continue working after eight years in DROP, the member forfeits all DROP benefits and receives the Normal Service Retirement benefit upon retirement, which will be calculated to include the service credit earned during the DROP participation period.

All DROP members retiring before the eight-year max receive their Normal Service Retirement benefit determined at the time of DROP entry, with the COLA adjustment (if applicable) to date of retirement when eligible. These members will also receive the DROP account balance as a lump sum or monthly annuity.

If a member dies while participating in DROP, the member's surviving spouse, designated beneficiary or estate will receive the entire DROP account balance determined at the time of death. The surviving spouse or contingent dependent beneficiary will receive the greater of the retirement allowance made at the time of DROP entry or the Normal Service Retirement benefit paid with COLA adjustments (if applicable) to the date of death, paid as if the member had elected a 50 percent joint and survivor option at death. All other statutory death benefits will apply.

If the member becomes disabled while in DROP, and has not terminated employment, the member must choose either to receive a disability benefit or a service retirement with DROP. If the member chooses the disability benefit, the member forfeits all DROP benefits and receives the disability benefit, with service credit during the DROP period included.

For member's participating in DROP, termination of active service at any time during the disability application process will render a disability application null and void, as well as immediately vest a DROP benefit. If this occurs, the OP&F member must apply for a service pension. Furthermore, if a disability grant is offered the member must accept the grant on a form provided by OP&F prior to termination of active employment.

Table 10
Plan Summary
(Continued)

Cost-of-Living Allowances

Retired members who are at least 55 years old and have been receiving OP&F benefits for at least one year may be eligible for a cost-of-living allowance adjustment. The age 55 provision for receiving a COLA does not apply to those who are receiving a permanent and total disability benefit and statutory survivors.

Members with less than 15 years of service credit on July 1, 2013, will receive a COLA equal to either three percent or the percent increase, if any, in the consumer price index (CPI) over the 12-month period ending on Sept. 30 of the immediately preceding year, whichever is less. The COLA amount for members with at least 15 years of service credit as of July 1, 2013 is equal to three percent of their base pension or disability benefit.

Disability Benefits

Members who become unable to perform their official duties and whose earning capacities are impaired may qualify for disability benefits. Disability benefits are classified as either service-incurred (on-duty) or non-service-incurred (off-duty) and differ in eligibility requirements and benefit formulas. Annual medical evaluations are required for disability benefit recipients who would not have met the age and service requirements for a Normal Service Retirement, unless the Board of Trustee waives this requirement based upon an OP&F physician's certification that the disability is ongoing and further evaluation would not be cost effective. Annual earnings statements are also required to be submitted to OP&F.

Permanent and Total Disability (On-Duty)

Eligibility

No age or service requirement.

Benefit

An annual benefit fixed by the Board of Trustees to be a certain percent up to 60 percent of the allowable average annual salary. If the member has 25 or more years of service credit, the annual disability benefit is equal to the Normal Service Retirement amount.

Table 10
Plan Summary
(Continued)

Partial Disability (On-Duty)

Eligibility

No age or service requirement.

Benefit

An annual benefit fixed by the Board of Trustees to be a certain percent up to 60 percent of the allowable average annual salary. If the member has 25 or more years of service credit, the annual disability benefit is equal to the Normal Service Retirement amount.

Non-Service Incurred Disability (off-Duty)

Eligibility

Any age and five years of service credit.

Benefit

An annual amount is the percent awarded by the Board of Trustees and may not exceed 60 percent of the allowable average annual salary. Service over 25 years cannot be used in calculating an off-duty disability award.

Pre-Retirement Survivor Annuity

Eligibility

Upon death before retirement, but after having satisfied the requirements for a Normal Service Retirement or an Age/Service Commuted retirement.

Benefit

The surviving spouse or contingent dependent beneficiary will receive the equivalent of a 50 percent joint and survivor annuity, calculated under the assumption that the decedent had retired effective the day following his/her death.

Table 10
Plan Summary
(Continued)

Statutory Survivor Benefits

Eligibility

Upon death of any active or retired member of OP&F.

Benefit

Surviving Spouse's Benefit

An annual amount equal to \$6,600 (\$550 monthly), plus an annual COLA of three percent of the original base benefit, paid each July 1, beginning July 1, 2000. The benefit is paid to the surviving spouse for life.

If the spouse is receiving a full death benefit under the Death Fund Benefit statute, the spouse's Statutory Survivor Benefit is \$4,920 (\$410 monthly). The Death Benefit Fund is funded by the State of Ohio and provides special benefits to eligible survivors of public safety officers who are killed in the line of duty or who die from injuries or disease incurred in the performance of official duties. These eligible survivors are entitled to receive the member's full monthly salary, which will be reduced at the member's retirement eligibility date. These death benefit payments are in addition to any optional payment plan benefits elected by the member.

Surviving Child's Benefit

An annual amount equal to \$1,800 (\$150 monthly), payable until such child attains age 18 or marries, whichever occurs first. The payment can continue to an unmarried full-time student until age 22. A dependent disabled child, regardless of age at time of member's death, is entitled to a benefit until death or recovery. A COLA of three percent of the original base is payable each July 1.

Table 10
Plan Summary
(Continued)

Dependent Parents' Benefit

If there is no surviving spouse or dependent children, an annual amount of \$2,400 (\$200 monthly) is payable to one dependent parent or \$1,200 (\$100 monthly) each to two dependent parents for life or until dependency ceases or remarriage. A COLA of three percent of the original base is payable each July 1.

Survivors	Monthly Pension	Causes of Termination
Widow / Widower	current amount + future COLA	* Death
Minor child	current amount + future COLA	* Death * Marriage * Attainment of age 18
Dependent disabled child	current amount + future COLA	* Death * Recovery from disability
Student	current amount + future COLA	* Death * Marriage * Attainment of age 22 * Loss of student status
One dependent parent Two dependent parents	current amount + future COLA ½ current amount (each) + future COLA	* Death * Re-marriage * Termination of dependency

Benefit Type	Base Monthly Benefit Amount	Base Monthly Benefit Amount Plus Increases Through July 1, 2014	Monthly Increases Effective July 1, 2015
Spouse *	\$550	\$793.10 **	\$16.50
Child	150	216.30 ***	4.50
One Parent	200	288.40 ****	6.00
Two Parents	100	144.20	3.00

* Spouse's benefit is \$410 if spouse is receiving a full death benefit under the Death Fund Benefit statute. There is no annual increase on this benefit payment.

** On July 1, 2000 the Statutory Surviving Spouse Benefit increased by \$12.10 per month. This increase was a percentage of the original benefit amount, equaling the percentage increase in the CPI plus unused prior increases, to a maximum of three percent. Every year after 2000, the monthly increase was \$16.50 or three percent of the base benefit.

*** On July 1, 2000 the Statutory Child Benefit increased by \$3.30 per month. This increase was a percentage of the original benefit amount, equaling the percentage increase in the CPI plus unused prior increases, to a maximum of three percent. Every year after 2000, the monthly increase was \$4.50 or three percent of base benefit.

**** On July 1, 2000 the Statutory Surviving One Parent Benefit increased by \$4.40 per month. This increase was a percentage of the original benefit amount, equaling the percentage increase in the CPI plus unused prior increases, to a maximum of three percent. Every year after 2000, the monthly increase was \$6.00 or three percent of base benefit.

Table 10
Plan Summary
(Continued)

Lump Sum Death Benefit

Eligibility

Upon death of any retired or disabled member of OP&F.

Benefit

A lump sum payment of \$1,000 is paid to the member's surviving spouse or, if no surviving spouse, to a designated beneficiary. If there is no surviving spouse or beneficiary, then it is paid to the member's estate.

ANNUITIES

Effective Feb. 28, 1980, for those members who are retiring on either a service pension or a disability benefit, optional annuity plans can be chosen, subject to certain limitations. The member can elect actuarially reduced benefits under a joint and survivor annuity, life annuity certain and continuous, or multiple beneficiary annuity plan. The optional annuity plans allow the member's beneficiary(ies) to receive a lifetime payment upon the member's death.

Annuity Types

Single Life Annuity

For unmarried members, this is the standard annuity plan. Married members may elect this plan only if the spouse consents to the selection in writing. This plan pays the maximum retirement allowance that the member is entitled to receive and, upon the member's death, none of the pension or benefit is continued to any beneficiary.

Table 10
Plan Summary
(Continued)

Joint and Survivor Annuity (JSA)

Under this plan, a member designates that, upon his or her death, a certain percentage of the member's actuarially reduced benefit is continued to a surviving designated beneficiary for life.

Any percentage between one percent and 100 percent of the member's reduced pension may be continued to the surviving designated beneficiary, but the percent continued may be limited based on the beneficiary's age. If a member is married at the time benefits are elected, the standard plan is a 50 percent JSA continuing one-half of the member's reduced monthly benefit to his or her surviving spouse. If the member wants to select a plan which provides for the continuation of benefits for someone other than the spouse or less than 50 percent JSA to the spouse, the spouse must consent in writing to this choice. This plan automatically terminates upon death of the beneficiary, to be effective the month following OP&F's receipt of notice of death, or it may be cancelled upon divorce with the consent of the member's spouse or a specific court order, at which point the annuity reverts to the single life annuity to the member. Elected option may be canceled within one year after benefits commence, with the consent of the beneficiary.

Multiple Beneficiary Annuity

Under the multiple beneficiary annuity plan, a member may designate up to four beneficiaries at the time of retirement so that, upon death, a certain percentage of the member's actuarially reduced benefit is continued to the surviving beneficiaries for their lives. If the member is married at the time of retirement, the spouse must consent in writing for an annuity selection that provides for less than 50 percent JSA payable to the spouse.

Life Annuity Certain and Continuous (LACC)

This plan provides a lifetime allowance to the member and will only be paid to a designated beneficiary if the member dies and the period elected by the member has not expired. The minimum guarantee period is five years and the maximum is 20 years. 100 percent of the member's reduced pension continues to the beneficiary for the guarantee period selected. Elected option may be canceled within one-year after benefits commence, with the consent of the beneficiary. If the member is married at the time of retirement, the spouse must consent in writing for an annuity selection that provides for less than a 50 percent JSA payable to the spouse.

Table 10
Plan Summary
(Continued)

Group Health Insurance and Medicare

Commencing Jan. 1, 1974, the Board of Trustees may contract for group health insurance on the basis of part or all of the cost of the premium for the coverage to be paid by OP&F. Medical and prescription drug coverage sponsored by OP&F are not vested rights and are subject to change at any time upon action of the Board of Trustees.

Effective Jan. 1, 1977, OP&F is mandated to pay the premium for supplemental Medicare (Part B) up to the statutory maximum provided the benefit recipient is not eligible for reimbursement from any other sources. By law, OP&F is required to pay monthly to each recipient of service benefits, disability benefits and survivor benefits not less than \$96.40, with the exception that OP&F cannot pay an amount that exceeds the amount paid by the recipient for the coverage. Once OP&F obtains the proper documentation from the service retiree, disability retiree or surviving beneficiary of their enrollment in the Medicare program, Medicare (Part B) premium payments begin. Note: This benefit is not included in the principal valuation results, but is included in the retiree health care valuation results.

Effective July 1992, retirees and survivors make monthly medical benefit contributions, which are credited to the Health Care Stabilization Fund. These contributions are reviewed on an annual basis to determine adequacy with the rising cost of health care. In 2004, a new contribution strategy was implemented. Retirees and survivors now pay a percentage of the full cost of the benefit. The percentage ranges from 25 percent to 100 percent for themselves and dependents based on the year of retirement.

Tiered Retirement Plan – COLA or Terminal Pay (Non-COLA)

Members retiring on or after July 24, 1986, who had 15 or more years of service as of Jan. 1, 1989, are allowed to select between two different pension calculation plans. Under the terminal pay method, a pension is calculated using terminal payments such as accrued sick leave and vacation compensation to increase the average annual salary, but subject to certain limitations and these members do not receive cost-of-living adjustments. Under the COLA method, no terminal payments are added, but the pension is subject to annual increases once the member attains the age of 55 and has been receiving a pension benefit for at least one year. The COLA method is the automatic calculation method for an active member with fewer than 15 years of service as of Jan. 1, 1989.

OP&F members who have 15 or more years of service as of July 1, 2013 and who are not receiving a benefit from OP&F, and members who are receiving a pension that became effective before July 1, 2013, will receive a COLA once they have received pension benefits for at least one year and have attained the age of 55. The COLA amount will be equal to three percent of the member's base pension benefit.

OP&F members who have less than 15 years of service as of July 1, 2013 will receive a COLA once they have received a pension for at least one year and have attained the age of 55. The COLA amount will be equal to a percentage of the member's base pension benefit where the percentage is the lesser of three percent or the percentage increase in the consumer price index, if any, over the twelve-month period that ends on the thirtieth day of September of the immediately preceding year, rounded to the nearest one-tenth of one percent.

Table 10
Plan Summary
(Continued)

Post-Retirement Cost-of-Living Allowance (COLA)

Members who retired prior to July 24, 1986 or their surviving beneficiaries under optional plans are entitled to cost-of-living increases. The annual increase is paid on July 1st of each year. The annual COLA increase is \$360 under a Single Life Annuity Plan with proportional reductions for optional payment plans.

Re-employed Retiree's Defined Contribution Plan Benefit

Effective June 30, 1991, every person who is retired under an Ohio public pension plan and who is re-employed in an OP&F covered position must contribute to OP&F at the same rate as other police officers or firefighters. The employer pays the normal rate as well. If the re-employed member terminates employment before age 60, Ohio law allows the member to receive a lump sum payment of post-retirement employee contributions made during the period of re-employment, plus interest. If the member waits until age 60 to receive this benefit, he or she can choose to receive either a lump sum payment in an amount equal to twice his or her contributions, plus interest, or a lifetime annuity paid monthly. If, after calculation, the member's lifetime monthly annuity is less than \$25, the member may only select the lump sum payment option. Spousal consent may be required before payment can occur.

Table 11
Summary of Membership Data as of Jan. 1, 2015

Active Members

POLICE

Item	Male	Female	Total
Number of Members	13,420	1,378	14,798
Annual Salaries	\$ 941,758,933	\$ 94,595,736	\$ 1,036,354,669
Average Annual Salary	\$ 70,176	\$ 68,647	\$ 70,033
Average Age	42.2	42.7	42.2
Average Service	14.9	14.9	14.9

FIREFIGHTERS

Item	Male	Female	Total
Number of Members	12,456	348	12,804
Annual Salaries	\$ 888,775,357	\$ 23,223,537	\$ 911,998,894
Average Annual Salary	\$ 71,353	\$ 66,734	\$ 71,228
Average Age	43.0	41.6	43.0
Average Service	15.6	12.9	15.6

TOTAL

Item	Male	Female	Total
Number of Members	25,876	1,726	27,602
Annual Salaries	\$ 1,830,534,290	\$ 117,819,273	\$ 1,948,353,563
Average Annual Salary	\$ 70,743	\$ 68,261	\$ 70,587
Average Age	42.6	42.5	42.6
Average Service	15.2	14.5	15.2

Table 11
Summary of Membership Data as of Jan. 1, 2015
(Continued)

Inactive Members

POLICE

Item	Male	Female	Total
Eligible for Allowances	105	7	112
Eligible for Refunds Only	<u>2,031</u>	<u>322</u>	<u>2,353</u>
Total	2,136	329	2,465

FIREFIGHTERS

Item	Male	Female	Total
Eligible for Allowances	67	1	68
Eligible for Refunds Only	<u>596</u>	<u>58</u>	<u>654</u>
Total	663	59	722

TOTAL

Item	Male	Female	Total
Eligible for Allowances	172	8	180
Eligible for Refunds Only	<u>2,627</u>	<u>380</u>	<u>3,007</u>
Total	2,799	388	3,187

Table 11
Summary of Membership Data as of Jan. 1, 2015
(Continued)

Retirees and Beneficiaries

POLICE

Item	Number	Annual Allowance	Average Allowance	Average Age
Service Retirees	7,842	\$ 348,564,651	\$ 44,448	67.8
Survivors and Beneficiaries	4,403	45,392,789	10,310	71.0
Disability Retirees	<u>3,784</u>	<u>140,778,964</u>	37,204	61.8
Total	16,029	\$ 534,736,404	\$ 33,361	67.3

FIREFIGHTERS

Item	Number	Annual Allowance	Average Allowance	Average Age
Service Retirees	5,972	\$ 261,888,511	\$ 43,853	69.0
Survivors and Beneficiaries	3,386	34,658,596	10,236	73.5
Disability Retirees	<u>2,576</u>	<u>99,892,505</u>	38,778	64.0
Total	11,934	\$ 396,439,612	\$ 33,219	69.2

TOTAL

Item	Number	Annual Allowance	Average Allowance	Average Age
Service Retirees	13,814	\$ 610,453,162	\$ 44,191	68.3
Survivors and Beneficiaries	7,789	80,051,385	10,277	72.1
Disability Retirees	<u>6,360</u>	<u>240,671,469</u>	37,841	62.7
Total	27,963	\$ 931,176,016	\$ 33,300	68.1

Exhibit I
Active Membership Data as of Jan. 1, 2015
Number and Allowable Average Annual Salary

Police

Age	Years of Service									Total	
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+		
Under 25	345 \$44,165										345 \$44,165
25-29	1,244 \$51,268	178 \$67,825									1,422 \$53,340
30-34	759 \$53,704	935 \$70,206	196 \$71,997	1 \$75,623							1,891 \$63,771
35-39	339 \$52,913	523 \$67,525	858 \$74,242	312 \$76,658	5 \$71,050						2,037 \$69,330
40-44	157 \$51,285	314 \$65,810	640 \$69,971	1,462 \$75,367	433 \$80,389	4 \$74,580					3,010 \$72,688
45-49	63 \$51,865	121 \$63,135	259 \$68,833	777 \$72,334	1,298 \$78,920	485 \$83,577	15 \$84,861				3,018 \$75,939
50-54	26 \$42,236	38 \$64,753	79 \$64,462	228 \$68,365	499 \$75,764	828 \$81,836	229 \$83,951	4 \$78,304			1,931 \$77,340
55-59	17 \$41,759	15 \$56,661	28 \$59,710	60 \$62,574	160 \$70,928	249 \$77,145	271 \$82,896	44 \$90,816	1 \$69,808		845 \$75,827
60-64	6 \$68,908	5 \$64,480	5 \$80,910	21 \$63,167	47 \$69,894	71 \$73,967	70 \$78,940	24 \$77,733	3 \$99,328		252 \$74,178
Over 64	1 \$ 59,394	1 \$ 41,557	4 \$ 52,476	5 \$ 53,405	5 \$ 66,655	10 \$ 69,129	8 \$ 76,612	4 \$ 86,703	9 \$ 89,465		47 \$ 71,646
Total	2,957 \$51,171	2,130 \$68,079	2,069 \$71,435	2,866 \$73,733	2,447 \$77,799	1,647 \$81,206	593 \$82,801	76 \$85,809	13 \$90,229		14,798 \$70,033

Note: Excludes rehired retirees.



Exhibit I
Active Membership Data as of Jan. 1, 2015
Number and Allowable Average Annual Salary
(Continued)

Firefighters

Age	Years of Service									Total	
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+		
Under 25	229 \$48,812										229 \$48,812
25-29	887 \$52,027	196 \$64,638	2 \$81,153								1,085 \$54,359
30-34	709 \$54,838	693 \$68,038	242 \$71,688	1 \$63,411							1,645 \$62,883
35-39	283 \$54,827	478 \$68,327	789 \$72,850	348 \$75,939							1,898 \$69,590
40-44	88 \$56,224	183 \$68,095	669 \$71,365	1,021 \$74,775	319 \$79,498	10 \$92,329					2,290 \$73,266
45-49	33 \$59,022	60 \$67,056	283 \$70,315	735 \$74,907	765 \$79,067	421 \$83,064	3 \$67,506				2,300 \$76,777
50-54	16 \$60,267	31 \$62,078	83 \$69,500	305 \$75,138	555 \$77,356	780 \$79,641	253 \$84,180	5 \$80,352			2,028 \$78,070
55-59	4 \$50,986	16 \$64,397	31 \$64,540	92 \$73,709	191 \$73,559	372 \$79,132	267 \$83,092	49 \$90,540	2 \$83,727		1,024 \$78,411
60-64	4 \$45,921	2 \$49,190	10 \$68,454	21 \$72,738	49 \$77,253	80 \$76,898	71 \$79,357	24 \$84,018	6 \$80,944		267 \$77,033
Over 64		2 \$ 65,583	4 \$ 72,422	2 \$ 84,120	7 \$ 73,706	16 \$ 72,772	1 \$ 37,938	3 \$ 72,411	3 \$ 80,059		38 \$ 72,756
Total	2,253 \$53,249	1,661 \$67,519	2,113 \$71,640	2,525 \$74,965	1,886 \$78,012	1,679 \$80,266	595 \$82,954	81 \$87,307	11 \$81,209		12,804 \$71,228

Note: Excludes rehired retirees.



Exhibit I
Active Membership Data as of Jan. 1, 2015
Number and Allowable Average Annual Salary
(Continued)

Total

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 25	574 \$46,019									574 \$46,019
25-29	2,131 \$51,584	374 \$66,155	2 \$81,153							2,507 \$53,781
30-34	1,468 \$54,252	1,628 \$69,283	438 \$71,826	2 \$69,517						3,536 \$63,358
35-39	622 \$53,784	1,001 \$67,908	1,647 \$73,575	660 \$76,279	5 \$71,050					3,935 \$69,455
40-44	245 \$53,059	497 \$66,651	1,309 \$70,684	2,483 \$75,123	752 \$80,011	14 \$87,258				5,300 \$72,938
45-49	96 \$54,325	181 \$64,435	542 \$69,607	1,512 \$73,585	2,063 \$78,975	906 \$83,339	18 \$81,969			5,318 \$76,301
50-54	42 \$49,105	69 \$63,551	162 \$67,043	533 \$72,241	1,054 \$76,602	1,608 \$80,771	482 \$84,071	9 \$79,442		3,959 \$77,714
55-59	21 \$43,516	31 \$60,654	59 \$62,248	152 \$69,314	351 \$72,360	621 \$78,335	538 \$82,993	93 \$90,670	3 \$79,087	1,869 \$77,243
60-64	10 \$59,713	7 \$60,111	15 \$72,606	42 \$67,953	96 \$73,650	151 \$75,520	141 \$79,150	48 \$80,876	9 \$87,072	519 \$75,647
Over 64	1 \$ 59,394	3 \$ 57,575	8 \$ 62,449	7 \$ 62,180	12 \$ 70,768	26 \$ 71,371	9 \$ 72,315	7 \$ 80,578	12 \$ 87,113	85 \$ 72,142
Total	5,210 \$52,070	3,791 \$67,834	4,182 \$71,539	5,391 \$74,310	4,333 \$77,892	3,326 \$80,731	1,188 \$82,878	157 \$86,582	24 \$86,095	27,602 \$70,587

Note: Excludes rehired retirees.



Exhibit II
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances

Police

Group	Annual Allowances as of January 1, 2015			
	Number	Basic	Cost-of-Living Increases	Total
Service Retirees				
Males	7,495	\$ 251,345,544	\$ 81,258,138	\$ 332,603,682
Females	<u>347</u>	<u>12,927,384</u>	<u>3,033,585</u>	<u>15,960,969</u>
Subtotal	7,842	\$ 264,272,928	\$ 84,291,723	\$ 348,564,651
Survivors and Beneficiaries				
Males	169	\$ 811,327	\$ 259,516	\$ 1,070,843
Females	<u>4,234</u>	<u>31,551,145</u>	<u>12,770,801</u>	<u>44,321,946</u>
Subtotal	4,403	\$ 32,362,472	\$ 13,030,317	\$ 45,392,789
Disability Retirees				
Males	3,298	\$ 91,478,816	\$ 31,447,353	\$ 122,926,169
Females	<u>486</u>	<u>13,918,312</u>	<u>3,934,483</u>	<u>17,852,795</u>
Subtotal	3,784	\$ 105,397,128	\$ 35,381,836	\$ 140,778,964
Grand Total	16,029	\$ 402,032,528	\$ 132,703,876	\$ 534,736,404

Exhibit II
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
(Continued)

Firefighters

Group	Annual Allowances as of January 1, 2015			
	Number	Basic	Cost-of-Living Increases	Total
Service Retirees				
Males	5,936	\$ 197,078,999	\$ 63,230,246	\$ 260,309,245
Females	<u>36</u>	<u>1,448,047</u>	<u>131,219</u>	<u>1,579,266</u>
Subtotal	5,972	\$ 198,527,046	\$ 63,361,465	\$ 261,888,511
Survivors and Beneficiaries				
Males	98	\$ 250,934	\$ 97,345	\$ 348,279
Females	<u>3,288</u>	<u>24,656,596</u>	<u>9,653,721</u>	<u>34,310,317</u>
Subtotal	3,386	\$ 24,907,530	\$ 9,751,066	\$ 34,658,596
Disability Retirees				
Males	2,478	\$ 72,939,022	\$ 23,575,058	\$ 96,514,080
Females	<u>98</u>	<u>2,798,502</u>	<u>579,923</u>	<u>3,378,425</u>
Subtotal	2,576	\$ 75,737,524	\$ 24,154,981	\$ 99,892,505
Grand Total	11,934	\$ 299,172,100	\$ 97,267,512	\$ 396,439,612

Exhibit II
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
(Continued)

Total

Group	Annual Allowances as of January 1, 2015			
	Number	Basic	Cost-of-Living Increases	Total
Service Retirees				
Males	13,431	\$ 448,424,543	\$ 144,488,384	\$ 592,912,927
Females	<u>383</u>	<u>14,375,431</u>	<u>3,164,804</u>	<u>17,540,235</u>
Subtotal	13,814	\$ 462,799,974	\$ 147,653,188	\$ 610,453,162
Survivors and Beneficiaries				
Males	267	\$ 1,062,261	\$ 356,861	\$ 1,419,122
Females	<u>7,522</u>	<u>56,207,741</u>	<u>22,424,522</u>	<u>78,632,263</u>
Subtotal	7,789	\$ 57,270,002	\$ 22,781,383	\$ 80,051,385
Disability Retirees				
Males	5,776	\$ 164,417,838	\$ 55,022,411	\$ 219,440,249
Females	<u>584</u>	<u>16,716,814</u>	<u>4,514,406</u>	<u>21,231,220</u>
Subtotal	6,360	\$ 181,134,652	\$ 59,536,817	\$ 240,671,469
Grand Total	27,963	\$ 701,204,628	\$ 229,971,388	\$ 931,176,016

Exhibit III
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Average Annual Allowance

Police

Age Last Birthday	Number	Annual Allowance	Average Annual Allowance
Service Retirees			
Under 60	1,520	\$ 71,710,206	\$ 47,178
60 - 64	1,680	82,470,921	49,090
65 - 69	1,824	87,856,017	48,167
70 - 74	1,304	56,466,217	43,302
75 - 79	731	27,526,751	37,656
Over 79	<u>783</u>	<u>22,534,539</u>	<u>28,780</u>
Total	7,842	\$ 348,564,651	\$ 44,448
Survivors and Beneficiaries			
Under 60	752	\$ 7,091,242	\$ 9,430
60 - 64	409	4,919,404	12,028
65 - 69	547	6,365,642	11,637
70 - 74	630	6,783,099	10,767
75 - 79	639	6,462,787	10,114
Over 79	<u>1,426</u>	<u>13,770,615</u>	<u>9,657</u>
Total	4,403	\$ 45,392,789	\$ 10,310
Disability Retirees			
Under 60	1,578	\$ 61,417,327	\$ 38,921
60 - 64	652	25,803,962	39,577
65 - 69	687	26,015,949	37,869
70 - 74	413	14,371,006	34,797
75 - 79	270	8,515,997	31,541
Over 79	<u>184</u>	<u>4,654,723</u>	<u>25,297</u>
Total	3,784	\$ 140,778,964	\$ 37,204

Exhibit III
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Average Annual Allowance
(Continued)

Firefighters

Age Last Birthday	Number	Annual Allowance	Average Annual Allowance
Service Retirees			
Under 60	1,100	\$ 53,528,273	\$ 48,662
60 - 64	1,228	60,364,409	49,157
65 - 69	1,138	53,405,149	46,929
70 - 74	955	42,007,646	43,987
75 - 79	635	25,448,437	40,076
Over 79	<u>916</u>	<u>27,134,597</u>	<u>29,623</u>
Total	5,972	\$ 261,888,511	\$ 43,853
Survivors and Beneficiaries			
Under 60	501	\$ 5,026,160	\$ 10,032
60 - 64	204	2,627,674	12,881
65 - 69	316	3,665,143	11,599
70 - 74	435	4,635,068	10,655
75 - 79	462	4,582,569	9,919
Over 79	<u>1,468</u>	<u>14,121,982</u>	<u>9,620</u>
Total	3,386	\$ 34,658,596	\$ 10,236
Disability Retirees			
Under 60	894	\$ 35,442,077	\$ 39,644
60 - 64	461	19,573,393	42,459
65 - 69	470	19,271,487	41,003
70 - 74	359	13,639,670	37,994
75 - 79	218	7,328,693	33,618
Over 79	<u>174</u>	<u>4,637,185</u>	<u>26,650</u>
Total	2,576	\$ 99,892,505	\$ 38,778

Exhibit III
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Average Annual Allowance
(Continued)

Total

Age Last Birthday	Number	Annual Allowance	Average Annual Allowance
Service Retirees			
Under 60	2,620	\$ 125,238,479	\$ 47,801
60 - 64	2,908	142,835,330	49,118
65 - 69	2,962	141,261,166	47,691
70 - 74	2,259	98,473,863	43,592
75 - 79	1,366	52,975,188	38,781
Over 79	<u>1,699</u>	<u>49,669,136</u>	<u>29,234</u>
Total	13,814	\$ 610,453,162	\$ 44,191
Survivors and Beneficiaries			
Under 60	1,253	\$ 12,117,402	\$ 9,671
60 - 64	613	7,547,078	12,312
65 - 69	863	10,030,785	11,623
70 - 74	1,065	11,418,167	10,721
75 - 79	1,101	11,045,356	10,032
Over 79	<u>2,894</u>	<u>27,892,597</u>	<u>9,638</u>
Total	7,789	\$ 80,051,385	\$ 10,277
Disability Retirees			
Under 60	2,472	\$ 96,859,404	\$ 39,183
60 - 64	1,113	45,377,355	40,770
65 - 69	1,157	45,287,436	39,142
70 - 74	772	28,010,676	36,283
75 - 79	488	15,844,690	32,469
Over 79	<u>358</u>	<u>9,291,908</u>	<u>25,955</u>
Total	6,360	\$ 240,671,469	\$ 37,841

Exhibit IV
10-Year History of Membership Data

ACTIVE MEMBERS
(Dollars in Thousands)

Valuation as of Jan. 1	Number of Members *	Percentage Change in Membership	Total Annual Payroll	Percentage Change in Payroll
2015	27,769	0.59%	\$ 1,986,569	2.28%
2014	27,605	0.59%	1,942,269	1.51%
2013	27,444	(0.65%)	1,913,383	0.84%
2012	27,623	(2.12%)	1,897,413	1.55%
2011	28,222	(1.39%)	1,868,502	(1.41%)
2010	28,619	(1.52%)	1,895,196	(0.30%)
2009	29,062	0.69%	1,900,935	3.79%
2008	28,864	0.89%	1,831,438	2.73%
2007	28,609	2.08%	1,782,851	1.52%
2006	28,026		1,756,230	

* Includes rehired retirees

RETIRES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS
(Dollars in Thousands)

Year Ended Dec. 31	Added to Rolls		Removed from Rolls		Number on Rolls End of Year	Annual Allowances	Percentage Change in Allowances	Average Annual Allowances	Percentage Change in Membership
	Number	Annual Allowances	Number	Annual Allowances					
2014	1,261	\$ 413,778	859	\$ 17,204	27,963	\$ 931,176	4.59%	\$ 33.30	1.46%
2013	1,362	44,842	1,044	23,851	27,561	890,288	4.42%	32.30	1.17%
2012	1,390	48,249	1,225	19,469	27,243	852,602	5.58%	31.30	0.61%
2011	1,783	65,572	779	16,397	27,078	807,550	8.52%	29.82	3.85%
2010	1,165	34,553	803	15,721	26,074	744,144	4.74%	28.54	1.41%
2009	1,128	30,920	733	14,566	25,712	710,463	4.52%	27.63	1.56%
2008	1,046	25,590	607	12,825	25,317	679,769	4.18%	26.85	1.76%
2007	1,128	27,877	933	14,586	24,878	652,474	3.55%	26.23	0.79%
2006	1,186	32,147	962	12,701	24,683	630,080	4.70%	25.53	0.92%
2005	916	19,803	797	12,132	24,459	601,775		24.60	0.49%



Exhibit V
Reconciliation of Membership Data
From Jan. 1, 2014 to Jan. 1, 2015

Police

	Active Members	Vested Former Members	Rehired Retirees	Disableds	Service Retirees	Beneficiaries	Total
Number as of January 1, 2014	14,731	86	110	3,820	7,623	4,395	30,765
New participants	818	0	0	0	0	0	818
Vested terminations	(36)	36	0	0	0	0	0
Non-vested terminations	(318)	0	0	0	0	0	(318)
Retirements	(353)	(10)	(8)	0	363	0	(8)
Disabilities	(42)	(1)	0	43	0	0	0
Return to work	21	(1)	0	(1)	0	0	19
Died with beneficiary	(9)	0	0	(37)	(83)	257	128
Died without beneficiary	(5)	0	0	(41)	(60)	(202)	(308)
Rehired retirees	0	0	19	0	0	0	19
Cessation of benefits	0	0	0	0	0	(47)	(47)
Data corrections	(9)	2	0	0	(1)	0	(8)
Number as of January 1, 2015	14,798	112	121	3,784	7,842	4,403	31,060



Exhibit V
Reconciliation of Membership Data
From Jan. 1, 2014 to Jan. 1, 2015
(Continued)

Firefighters

	Active Members	Vested Former Members	Rehired Retirees	Disableds	Service Retirees	Beneficiaries	Total
Number as of January 1, 2014	12,720	56	44	2,588	5,784	3,351	24,543
New participants	563	0	0	0	0	0	563
Vested terminations	(15)	15	0	0	0	0	0
Non-vested terminations	(94)	0	0	0	0	0	(94)
Retirements	(332)	(4)	(1)	0	336	0	(1)
Disabilities	(33)	0	0	33	0	0	0
Return to work	7	0	0	0	0	0	7
Died with beneficiary	(6)	0	0	(24)	(75)	225	120
Died without beneficiary	(2)	0	0	(25)	(69)	(162)	(258)
Rehired retirees	0	0	3	0	0	0	3
Cessation of benefits	0	0	0	0	0	(28)	(28)
Data corrections	(4)	1	0	4	(4)	0	(3)
Number as of January 1, 2015	12,804	68	46	2,576	5,972	3,386	24,852



Exhibit V
Reconciliation of Membership Data
From Jan. 1, 2014 to Jan. 1, 2015
(Continued)

Total

	Active Members	Vested Former Members	Rehired Retirees	Disableds	Service Retirees	Beneficiaries	Total
Number as of January 1, 2014	27,451	142	154	6,408	13,407	7,746	55,308
New participants	1,381	0	0	0	0	0	1,381
Vested terminations	(51)	51	0	0	0	0	0
Non-vested terminations	(412)	0	0	0	0	0	(412)
Retirements	(685)	(14)	(9)	0	699	0	(9)
Disabilities	(75)	(1)	0	76	0	0	0
Return to work	28	(1)	0	(1)	0	0	26
Died with beneficiary	(15)	0	0	(61)	(158)	482	248
Died without beneficiary	(7)	0	0	(66)	(129)	(364)	(566)
Rehired retirees	0	0	22	0	0	0	22
Cessation of benefits	0	0	0	0	0	(75)	(75)
Data corrections	<u>(13)</u>	<u>3</u>	<u>0</u>	<u>4</u>	<u>(5)</u>	<u>0</u>	<u>(11)</u>
Number as of January 1, 2015	27,602	180	167	6,360	13,814	7,789	55,912

Exhibit VI

Detailed Tabulations of the Data

Exhibit VI-1
Active Membership Data as of Jan. 1, 2015
Number and Annual Salaries
Distributed by Age

Police

Age	Male		Female		Totals	
	Number	Compensation	Number	Compensation	Number	Compensation
21	16	\$ 698,901	2	\$ 55,309	18	\$ 754,209
22	47	1,961,440	7	293,241	54	2,254,680
23	98	4,233,369	9	443,607	107	4,676,976
24	147	6,658,798	19	892,181	166	7,550,979
25	195	9,326,692	17	767,390	212	10,094,082
26	240	12,283,027	13	635,984	253	12,919,011
27	290	15,335,489	21	1,126,880	311	16,462,369
28	273	14,782,815	21	1,228,205	294	16,011,020
29	320	18,549,455	32	1,814,070	352	20,363,525
30	344	20,962,897	26	1,734,730	370	22,697,627
31	341	21,581,817	32	1,892,001	373	23,473,818
32	341	21,558,657	33	2,178,841	374	23,737,498
33	329	21,417,652	38	2,428,313	367	23,845,965
34	363	23,949,061	44	2,886,842	407	26,835,903
35	358	23,937,028	36	2,446,057	394	26,383,085
36	337	23,297,811	35	2,413,562	372	25,711,372
37	394	27,541,439	24	1,587,770	418	29,129,209
38	367	25,554,087	44	2,851,175	411	28,405,261
39	398	28,465,183	44	3,131,109	442	31,596,292
40	427	30,605,284	43	2,921,261	470	33,526,545
41	465	33,828,313	57	4,039,330	522	37,867,643
42	544	39,238,885	55	3,997,742	599	43,236,627
43	609	44,465,792	59	4,285,757	668	48,751,549
44	668	49,446,065	83	5,962,262	751	55,408,327
45	606	45,639,882	63	4,439,736	669	50,079,618
46	584	44,097,316	55	4,065,009	639	48,162,325
47	534	40,732,716	57	4,207,503	591	44,940,219
48	518	39,769,090	63	4,546,319	581	44,315,409
49	487	38,246,254	51	3,440,131	538	41,686,385
50	456	35,268,110	50	3,752,804	506	39,020,915
51	368	28,540,888	42	2,978,672	410	31,519,561
52	345	26,945,037	30	2,181,948	375	29,126,985
53	321	24,595,284	33	2,597,465	354	27,192,749
54	258	20,358,156	28	2,124,437	286	22,482,593
55	233	17,995,998	19	1,424,553	252	19,420,551
56	165	12,632,860	31	2,255,834	196	14,888,695
57	144	10,918,076	16	1,213,117	160	12,131,193
58	118	8,904,530	15	1,054,843	133	9,959,373
59	96	7,055,829	8	618,379	104	7,674,208
60	74	5,428,717	6	474,366	80	5,903,083

Exhibit VI-1
Active Membership Data as of Jan. 1, 2015
Number and Annual Salaries
Distributed by Age

Police
(Continued)

Age	Male		Female		Totals	
	Number	Compensation	Number	Compensation	Number	Compensation
61	68	5,050,948	4	321,082	72	5,372,029
62	48	3,555,553	3	226,815	51	3,782,368
63	27	2,037,851	3	190,863	30	2,228,714
64	16	1,212,284	3	194,497	19	1,406,781
65	16	1,153,709	1	69,706	17	1,223,415
66	11	851,238	1	61,172	12	912,410
67	8	515,727			8	515,727
68	4	269,816	1	63,484	5	333,300
69	1	113,991	1	79,380	2	193,370
70	1	34,770			1	34,770
71	1	41,557			1	41,557
72						
73						
74						
75	1	112,791			1	112,791
Total	13,420	\$ 941,758,933	1,378	\$ 94,595,736	14,798	\$1,036,354,669

Exhibit VI-2
Active Membership Data as of Jan. 1, 2015
Number and Annual Salaries
Distributed by Years of Service

Police

Years of Service	Male		Female		Totals	
	Number	Compensation	Number	Compensation	Number	Compensation
0	777	\$ 32,358,994	75	\$ 3,026,371	852	\$ 35,385,365
1	670	32,919,627	58	2,841,603	728	35,761,231
2	526	28,661,838	39	2,052,720	565	30,714,558
3	416	24,617,563	41	2,406,013	457	27,023,576
4	334	21,188,503	21	1,239,577	355	22,428,080
5	234	15,098,314	22	1,534,677	256	16,632,991
6	406	26,947,158	45	3,023,664	451	29,970,822
7	548	37,612,630	72	4,975,950	620	42,588,581
8	416	29,008,705	53	3,706,379	469	32,715,084
9	299	20,782,061	35	2,319,624	334	23,101,686
10	336	23,710,433	44	3,084,275	380	26,794,708
11	303	21,473,005	29	1,996,458	332	23,469,463
12	388	28,037,289	45	3,252,505	433	31,289,794
13	437	30,833,551	53	3,888,522	490	34,722,074
14	403	29,260,881	31	2,262,247	434	31,523,128
15	460	33,208,170	62	4,448,884	522	37,657,054
16	524	37,554,216	52	3,574,217	576	41,128,433
17	528	39,118,742	48	3,625,622	576	42,744,364
18	530	39,536,527	51	3,787,072	581	43,323,599
19	557	42,663,024	54	3,801,175	611	46,464,200
20	499	38,716,866	56	4,060,789	555	42,777,655
21	444	34,494,204	57	4,082,973	501	38,577,177
22	403	31,413,922	51	3,768,936	454	35,182,858
23	399	30,996,732	41	3,097,259	440	34,093,991
24	446	35,827,102	51	3,915,766	497	39,742,868
25	379	30,511,101	41	3,099,289	420	33,610,390
26	335	27,667,388	31	2,331,274	366	29,998,662
27	314	25,822,627	34	2,577,312	348	28,399,939
28	259	20,945,527	10	708,819	269	21,654,346
29	223	18,399,169	21	1,683,188	244	20,082,356
30	166	13,596,388	13	1,076,776	179	14,673,164
31	149	12,168,395	12	952,467	161	13,120,863
32	112	9,590,818	14	1,049,079	126	10,639,897
33	79	6,623,089	5	374,492	84	6,997,581
34	36	3,118,730	7	550,916	43	3,669,646
35	26	2,156,473	2	277,085	28	2,433,558
36	15	1,186,599			15	1,186,599
37	19	1,710,830	1	76,075	20	1,786,905
38	5	508,504	1	65,682	6	574,186
39	7	540,260			7	540,260

Exhibit VI-2
Active Membership Data as of Jan. 1, 2015
Number and Annual Salaries
Distributed by Years of Service

Police
(Continued)

Years of Service	Male		Female		Totals	
	Number	Compensation	Number	Compensation	Number	Compensation
40	3	244,609			3	244,609
41	3	313,333			3	313,333
42	1	78,805			1	78,805
43	2	174,218			2	174,218
44	2	166,566			2	166,566
45						
46						
47						
48	1	82,657			1	82,657
49						
50						
51						
52						
53	1	112,791			1	112,791
Total	13,420	\$ 941,758,933	1,378	\$ 94,595,736	14,798	\$1,036,354,669

Exhibit VI-3
Active Membership Data as of Jan. 1, 2015
Number and Annual Salaries
Distributed by Age

Firefighters

Age	Male		Female		Totals	
	Number	Compensation	Number	Compensation	Number	Compensation
19	2	\$ 90,395			2	\$ 90,395
20	4	159,312	1	48,916	5	208,229
21	15	681,393			15	681,393
22	32	1,532,819	1	51,249	33	1,584,068
23	70	3,465,504	3	114,081	73	3,579,585
24	98	4,884,594	3	149,625	101	5,034,219
25	144	7,239,201	2	101,861	146	7,341,063
26	164	8,405,464	8	413,569	172	8,819,033
27	221	11,891,516	9	457,938	230	12,349,453
28	237	13,250,984	5	249,232	242	13,500,216
29	284	16,352,160	11	617,069	295	16,969,229
30	286	16,976,077	10	511,396	296	17,487,473
31	292	18,309,582	13	759,374	305	19,068,957
32	339	21,355,904	12	760,481	351	22,116,385
33	327	21,055,628	7	443,774	334	21,499,401
34	345	22,401,073	14	869,402	359	23,270,475
35	369	24,785,757	11	743,993	380	25,529,750
36	371	25,525,496	12	783,441	383	26,308,937
37	346	23,917,493	12	767,493	358	24,684,986
38	366	26,155,449	14	862,043	380	27,017,491
39	382	27,485,096	15	1,055,220	397	28,540,316
40	401	29,084,152	7	527,324	408	29,611,476
41	384	27,885,561	11	798,089	395	28,683,650
42	450	32,975,892	12	792,715	462	33,768,607
43	494	36,336,078	15	964,894	509	37,300,973
44	509	37,921,685	7	493,765	516	38,415,450
45	498	37,931,035	13	1,053,630	511	38,984,665
46	446	33,857,275	13	944,145	459	34,801,420
47	422	32,416,516	7	581,342	429	32,997,858
48	429	33,333,934	9	733,570	438	34,067,504
49	453	35,087,600	10	647,118	463	35,734,718
50	484	37,784,900	10	763,513	494	38,548,413
51	397	30,535,893	11	760,736	408	31,296,629
52	395	31,309,393	9	662,793	404	31,972,186
53	365	28,392,509	9	621,671	374	29,014,180
54	340	26,868,105	8	626,881	348	27,494,986
55	297	23,558,448	8	588,203	305	24,146,651
56	255	20,155,894	8	604,029	263	20,759,923
57	177	14,042,354	6	398,880	183	14,441,235
58	148	11,501,876	2	139,829	150	11,641,705

Exhibit VI-3
Active Membership Data as of Jan. 1, 2015
Number and Annual Salaries
Distributed by Age

Firefighters
(Continued)

Age	Male		Female		Totals	
	Number	Compensation	Number	Compensation	Number	Compensation
59	117	8,828,650	6	474,446	123	9,303,096
60	95	7,297,684	1	82,055	96	7,379,738
61	72	5,637,408	2	138,614	74	5,776,021
62	44	3,361,646	1	65,138	45	3,426,783
63	30	2,421,395			30	2,421,395
64	22	1,563,834			22	1,563,834
65	16	1,142,325			16	1,142,325
66	8	638,845			8	638,845
67	8	501,880			8	501,880
68	2	132,355			2	132,355
69	1	91,168			1	91,168
70	1	63,072			1	63,072
71						
72	2	195,100			2	195,100
Total	12,456	\$ 888,775,357	348	\$ 23,223,538	12,804	\$ 911,998,894

Exhibit VI-4

**Active Membership Data as of Jan. 1, 2015
Number and Annual Salaries
Distributed by Years of Service**

Firefighters

Years of Service	Male		Female		Totals	
	Number	Compensation	Number	Compensation	Number	Compensation
0	532	\$ 23,371,763	24	\$ 1,026,788	556	\$ 24,398,552
1	519	26,334,142	20	962,522	539	27,296,664
2	384	21,357,309	14	670,098	398	22,027,407
3	427	25,145,653	13	800,301	440	25,945,954
4	310	19,668,756	10	632,084	320	20,300,840
5	250	16,062,249	5	357,879	255	16,420,128
6	395	26,102,269	13	799,417	408	26,901,686
7	351	23,749,701	12	778,090	363	24,527,791
8	369	25,990,335	16	1,096,426	385	27,086,761
9	241	16,667,688	9	544,621	250	17,212,309
10	290	20,573,180	13	867,970	303	21,441,150
11	441	30,988,737	8	533,951	449	31,522,688
12	348	25,161,894	18	1,230,917	366	26,392,811
13	448	32,676,436	18	1,277,542	466	33,953,978
14	507	36,481,706	22	1,582,755	529	38,064,461
15	514	38,210,085	18	1,313,849	532	39,523,934
16	512	38,144,481	25	1,856,477	537	40,000,957
17	501	37,603,525	5	318,691	506	37,922,216
18	508	38,376,036	13	1,019,020	521	39,395,056
19	425	32,151,692	4	291,886	429	32,443,578
20	390	30,175,461	4	383,910	394	30,559,372
21	364	28,054,683	4	306,413	368	28,361,096
22	401	31,525,617	5	383,422	406	31,909,039
23	361	28,506,836	9	670,707	370	29,177,543
24	341	26,596,272	7	526,971	348	27,123,242
25	496	39,171,909	8	597,067	504	39,768,975
26	330	26,222,026	5	374,288	335	26,596,314
27	284	23,210,116	5	371,452	289	23,581,568
28	253	20,541,770	6	443,813	259	20,985,583
29	284	23,156,389	8	677,842	292	23,834,231
30	183	15,266,942	3	220,053	186	15,486,994
31	126	10,418,458	3	239,185	129	10,657,643
32	131	10,656,482			131	10,656,482
33	109	8,989,084	1	67,133	110	9,056,217
34	39	3,500,506			39	3,500,506
35	39	3,360,316			39	3,360,316
36	16	1,435,655			16	1,435,655
37	13	1,082,265			13	1,082,265
38	7	691,760			7	691,760
39	6	501,877			6	501,877

Exhibit VI-4
Active Membership Data as of Jan. 1, 2015
Number and Annual Salaries
Distributed by Years of Service

Firefighters
(Continued)

Years of Service	Male		Female		Totals	
	Number	Compensation	Number	Compensation	Number	Compensation
40	3	199,611			3	199,611
41	3	265,787			3	265,787
42	1	61,981			1	61,981
43	1	77,616			1	77,616
44						
45	1	99,382			1	99,382
46	1	111,048			1	111,048
47						
48	1	77,868			1	77,868
Total	12,456	\$ 888,775,357	348	\$ 23,223,538	12,804	\$ 911,998,894

Exhibit VI-5
Active Membership Data as of Jan. 1, 2015
Number and Annual Salaries
Distributed by Age

Total

Age	Male		Female		Totals	
	Number	Compensation	Number	Compensation	Number	Compensation
19	2	\$ 90,395			2	\$ 90,395
20	4	159,312	1	48,916	5	208,229
21	31	1,380,294	2	55,309	33	1,435,602
22	79	3,494,259	8	344,490	87	3,838,749
23	168	7,698,874	12	557,688	180	8,256,561
24	245	11,543,393	22	1,041,806	267	12,585,199
25	339	16,565,893	19	869,252	358	17,435,145
26	404	20,688,491	21	1,049,554	425	21,738,044
27	511	27,227,005	30	1,584,818	541	28,811,823
28	510	28,033,799	26	1,477,437	536	29,511,236
29	604	34,901,615	43	2,431,139	647	37,332,754
30	630	37,938,973	36	2,246,126	666	40,185,100
31	633	39,891,399	45	2,651,375	678	42,542,775
32	680	42,914,561	45	2,939,322	725	45,853,882
33	656	42,473,280	45	2,872,087	701	45,345,366
34	708	46,350,134	58	3,756,244	766	50,106,379
35	727	48,722,785	47	3,190,050	774	51,912,835
36	708	48,823,306	47	3,197,003	755	52,020,309
37	740	51,458,932	36	2,355,262	776	53,814,195
38	733	51,709,535	58	3,713,218	791	55,422,753
39	780	55,950,279	59	4,186,328	839	60,136,608
40	828	59,689,437	50	3,448,585	878	63,138,021
41	849	61,713,874	68	4,837,420	917	66,551,293
42	994	72,214,777	67	4,790,457	1,061	77,005,234
43	1,103	80,801,870	74	5,250,652	1,177	86,052,522
44	1,177	87,367,750	90	6,456,027	1,267	93,823,777
45	1,104	83,570,918	76	5,493,366	1,180	89,064,283
46	1,030	77,954,591	68	5,009,154	1,098	82,963,745
47	956	73,149,232	64	4,788,845	1,020	77,938,077
48	947	73,103,024	72	5,279,889	1,019	78,382,913
49	940	73,333,854	61	4,087,249	1,001	77,421,103
50	940	73,053,010	60	4,516,318	1,000	77,569,328
51	765	59,076,781	53	3,739,408	818	62,816,190
52	740	58,254,430	39	2,844,742	779	61,099,171
53	686	52,987,793	42	3,219,136	728	56,206,929
54	598	47,226,261	36	2,751,318	634	49,977,579
55	530	41,554,446	27	2,012,756	557	43,567,202
56	420	32,788,754	39	2,859,864	459	35,648,617
57	321	24,960,430	22	1,611,997	343	26,572,427
58	266	20,406,406	17	1,194,671	283	21,601,077

Exhibit VI-5
Active Membership Data as of Jan. 1, 2015
Number and Annual Salaries
Distributed by Age

Total
(Continued)

Age	Male		Female		Totals	
	Number	Compensation	Number	Compensation	Number	Compensation
59	213	15,884,479	14	1,092,826	227	16,977,304
60	169	12,726,401	7	556,421	176	13,282,822
61	140	10,688,355	6	459,695	146	11,148,051
62	92	6,917,199	4	291,953	96	7,209,152
63	57	4,459,247	3	190,863	60	4,650,109
64	38	2,776,118	3	194,497	41	2,970,615
65	32	2,296,033	1	69,706	33	2,365,740
66	19	1,490,083	1	61,172	20	1,551,255
67	16	1,017,607			16	1,017,607
68	6	402,171	1	63,484	7	465,655
69	2	205,158	1	79,380	3	284,538
70	2	97,841			2	97,841
71	1	41,557			1	41,557
72	2	195,100			2	195,100
73						
74						
75	1	112,791			1	112,791
Total	25,876	\$1,830,534,290	1,726	\$ 117,819,273	27,602	\$1,948,353,563

Exhibit VI-6
Active Membership Data as of Jan. 1, 2015
Number and Annual Salaries
Distributed by Years of Service

Total

Years of Service	Male		Female		Totals	
	Number	Compensation	Number	Compensation	Number	Compensation
0	1,309	\$ 55,730,757	99	\$ 4,053,159	1,408	\$ 59,783,917
1	1,189	59,253,769	78	3,804,125	1,267	63,057,895
2	910	50,019,147	53	2,722,818	963	52,741,965
3	843	49,763,217	54	3,206,314	897	52,969,531
4	644	40,857,258	31	1,871,661	675	42,728,920
5	484	31,160,563	27	1,892,556	511	33,053,118
6	801	53,049,427	58	3,823,081	859	56,872,508
7	899	61,362,331	84	5,754,040	983	67,116,371
8	785	54,999,040	69	4,802,805	854	59,801,845
9	540	37,449,749	44	2,864,246	584	40,313,995
10	626	44,283,613	57	3,952,244	683	48,235,857
11	744	52,461,741	37	2,530,410	781	54,992,151
12	736	53,199,183	63	4,483,422	799	57,682,605
13	885	63,509,988	71	5,166,064	956	68,676,052
14	910	65,742,588	53	3,845,002	963	69,587,589
15	974	71,418,255	80	5,762,733	1,054	77,180,988
16	1,036	75,698,696	77	5,430,694	1,113	81,129,390
17	1,029	76,722,268	53	3,944,313	1,082	80,666,580
18	1,038	77,912,564	64	4,806,091	1,102	82,718,655
19	982	74,814,716	58	4,093,061	1,040	78,907,777
20	889	68,892,328	60	4,444,699	949	73,337,027
21	808	62,548,887	61	4,389,386	869	66,938,273
22	804	62,939,539	56	4,152,358	860	67,091,897
23	760	59,503,569	50	3,767,966	810	63,271,534
24	787	62,423,374	58	4,442,737	845	66,866,110
25	875	69,683,009	49	3,696,356	924	73,379,365
26	665	53,889,414	36	2,705,562	701	56,594,976
27	598	49,032,743	39	2,948,765	637	51,981,508
28	512	41,487,298	16	1,152,632	528	42,639,930
29	507	41,555,558	29	2,361,030	536	43,916,588
30	349	28,863,330	16	1,296,829	365	30,160,158
31	275	22,586,853	15	1,191,652	290	23,778,505
32	243	20,247,300	14	1,049,079	257	21,296,379
33	188	15,612,173	6	441,625	194	16,053,798
34	75	6,619,236	7	550,916	82	7,170,152
35	65	5,516,789	2	277,085	67	5,793,874
36	31	2,622,255			31	2,622,255
37	32	2,793,095	1	76,075	33	2,869,170
38	12	1,200,264	1	65,682	13	1,265,946
39	13	1,042,138			13	1,042,138

Exhibit VI-6
Active Membership Data as of Jan. 1, 2015
Number and Annual Salaries
Distributed by Years of Service

Total
(Continued)

Years of Service	Male		Female		Totals	
	Number	Compensation	Number	Compensation	Number	Compensation
40	6	444,220			6	444,220
41	6	579,120			6	579,120
42	2	140,786			2	140,786
43	3	251,834			3	251,834
44	2	166,566			2	166,566
45	1	99,382			1	99,382
46	1	111,048			1	111,048
47						
48	2	160,525			2	160,525
49						
50						
51						
52						
53	1	112,791			1	112,791
Total	25,876	\$1,830,534,290	1,726	\$ 117,819,273	27,602	\$1,948,353,563

Exhibit VI-7
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Police
Service Retirees

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
48	20	\$ 731,256	2	\$ 90,113	22	\$ 821,369
49	33	1,483,133	3	114,438	36	1,597,571
50	42	1,747,635	4	182,845	46	1,930,480
51	56	2,169,224	7	302,983	63	2,472,208
52	60	2,609,496	6	243,286	66	2,852,782
53	66	2,823,071	17	739,902	83	3,562,974
54	67	2,915,452	3	151,265	70	3,066,717
55	101	4,886,256	9	457,591	110	5,343,847
56	161	7,929,062	16	816,833	177	8,745,895
57	212	10,175,426	23	989,083	235	11,164,509
58	271	13,466,127	26	1,205,369	297	14,671,496
59	291	14,308,048	24	1,172,311	315	15,480,359
60	322	16,111,092	31	1,463,258	353	17,574,350
61	274	13,601,299	23	1,077,831	297	14,679,130
62	310	15,184,597	22	1,079,984	332	16,264,581
63	329	16,308,119	19	950,552	348	17,258,670
64	335	15,966,297	15	727,891	350	16,694,189
65	347	16,728,640	18	830,364	365	17,559,004
66	371	18,461,888	12	587,062	383	19,048,950
67	423	20,936,833	16	807,037	439	21,743,870
68	365	16,938,508	5	226,044	370	17,164,552
69	258	11,942,982	9	396,660	267	12,339,642
70	257	11,992,938	8	399,063	265	12,392,001
71	274	12,140,780	2	63,883	276	12,204,664
72	287	12,376,646	6	257,714	293	12,634,360
73	264	10,996,096	3	143,664	267	11,139,760
74	200	7,992,335	3	103,098	203	8,095,433
75	177	6,904,132			177	6,904,132
76	171	6,641,849			171	6,641,849
77	148	5,610,015			148	5,610,015
78	109	4,155,770	3	83,052	112	4,238,822
79	122	4,093,501	1	38,432	123	4,131,934
80	87	2,950,248			87	2,950,248
81	94	3,249,248	2	36,303	96	3,285,551
82	82	2,402,722	5	134,803	87	2,537,525
83	68	1,903,821	1	21,310	69	1,925,131
84	67	1,942,760	1	25,703	68	1,968,462
85	59	1,659,149			59	1,659,149
86	68	1,920,672	1	22,505	69	1,943,177
87	52	1,455,676			52	1,455,676



Exhibit VI-7
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Police
Service Retirees
(Continued)

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
88	57	1,478,703			57	1,478,703
89	40	1,005,629			40	1,005,629
90	35	849,291			35	849,291
91	24	555,822			24	555,822
92	8	185,909			8	185,909
93	11	284,604			11	284,604
94	10	200,935	1	18,739	11	219,674
95	4	92,106			4	92,106
96	2	45,115			2	45,115
97						
98	2	48,332			2	48,332
99	1	16,320			1	16,320
100						
101	1	28,115			1	28,115
Total	7,495	\$ 332,603,682	347	\$ 15,960,969	7,842	\$ 348,564,651

Exhibit VI-8
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Police
Disability Retirees

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
31	1	\$ 17,778			1	\$ 17,778
32	1	43,869	2	57,042	3	100,912
33	3	95,486			3	95,486
34	4	129,348	1	27,156	5	156,504
35	5	143,537	2	27,677	7	171,214
36	7	215,320	1	26,822	8	242,142
37	6	219,746	4	155,395	10	375,142
38	7	263,736	1	17,694	8	281,431
39	16	601,357	5	144,162	21	745,519
40	17	607,825	5	174,616	22	782,441
41	12	384,649	11	410,949	23	795,598
42	31	1,131,173	6	142,888	37	1,274,061
43	43	1,653,668	8	314,056	51	1,967,724
44	51	1,976,708	15	553,258	66	2,529,966
45	43	1,553,938	12	442,366	55	1,996,304
46	59	2,375,730	17	603,569	76	2,979,299
47	75	2,895,985	10	315,132	85	3,211,116
48	62	2,429,037	15	525,864	77	2,954,901
49	76	3,138,170	19	716,948	95	3,855,118
50	71	2,782,580	25	853,884	96	3,636,464
51	61	2,411,566	18	727,058	79	3,138,624
52	55	2,214,350	18	714,730	73	2,929,080
53	75	2,970,326	15	516,883	90	3,487,209
54	67	2,714,946	10	413,598	77	3,128,544
55	66	2,712,882	12	475,580	78	3,188,461
56	77	3,121,546	18	759,740	95	3,881,286
57	102	4,405,526	28	1,094,027	130	5,499,553
58	72	2,889,072	30	1,004,076	102	3,893,147
59	84	3,293,491	21	808,810	105	4,102,302
60	117	4,864,991	17	569,406	134	5,434,397
61	103	4,292,979	27	1,025,034	130	5,318,013
62	110	4,394,806	19	782,321	129	5,177,127
63	127	4,824,333	11	443,365	138	5,267,698
64	106	4,029,618	15	577,109	121	4,606,727
65	111	4,180,560	17	634,531	128	4,815,092
66	125	4,808,534	12	486,095	137	5,294,628
67	168	6,451,498	12	380,575	180	6,832,073
68	130	4,786,177	10	347,896	140	5,134,074
69	99	3,853,049	3	87,034	102	3,940,083
70	85	3,103,780	4	146,704	89	3,250,485

Exhibit VI-8
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Police
Disability Retirees
(Continued)

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
71	105	3,669,337	1	33,299	106	3,702,636
72	85	2,776,199	3	81,397	88	2,857,596
73	69	2,461,799	1	37,509	70	2,499,308
74	59	2,018,607	1	42,374	60	2,060,981
75	70	2,330,362			70	2,330,362
76	60	1,864,411	3	132,506	63	1,996,917
77	45	1,457,435			45	1,457,435
78	44	1,384,324			44	1,384,324
79	48	1,346,959			48	1,346,959
80	28	793,487			28	793,487
81	23	622,239			23	622,239
82	16	419,115			16	419,115
83	13	356,621			13	356,621
84	23	618,746			23	618,746
85	16	380,304			16	380,304
86	12	273,722			12	273,722
87	14	356,935			14	356,935
88	12	282,326			12	282,326
89	9	185,295			9	185,295
90	11	233,761			11	233,761
91	3	56,248			3	56,248
92	2	33,332	1	21,658	3	54,990
93	1	20,935			1	20,935
Total	3,298	\$ 122,926,169	486	\$ 17,852,795	3,784	\$ 140,778,964

Exhibit VI-9
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Police
Survivors and Beneficiaries

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
1			1	\$ 2,596	1	\$ 2,596
2	2	5,191			2	5,191
3	1	2,596			1	2,596
4	1	2,596	1	2,596	2	5,191
5	1	2,596	1	2,596	2	5,191
6	2	5,191	3	7,787	5	12,978
7	5	12,978	1	2,596	6	15,574
8	6	15,574	5	12,978	11	28,552
9	4	10,382	3	7,787	7	18,169
10	4	10,382	2	5,191	6	15,574
11	2	5,191	5	12,978	7	18,169
12	3	7,787	6	15,574	9	23,360
13	9	23,360	5	12,978	14	36,338
14	4	10,382	9	23,173	13	33,556
15	8	20,765	6	15,534	14	36,299
16	12	43,362	8	20,671	20	64,033
17	7	18,130	8	20,725	15	38,855
18	14	35,085	8	20,632	22	55,716
19	5	12,924	5	12,978	10	25,902
20	6	15,480	4	10,289	10	25,769
21	3	7,787	12	53,891	15	61,678
22	4	10,382	4	10,382	8	20,765
23						
24	2	19,079			2	19,079
25	1	2,596	1	2,596	2	5,191
26						
27			1	9,517	1	9,517
28	1	24,813			1	24,813
29	1	28,747	1	2,596	2	31,343
30						
31						
32			2	19,034	2	19,034
33						
34	2	138,519	3	17,033	5	155,551
35	2	5,191	1	4,920	3	10,111
36						
37	1	2,596	2	19,316	3	21,912
38			4	63,672	4	63,672
39			6	59,691	6	59,691
40	1	2,596	7	57,426	8	60,022

Exhibit VI-9
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Police
Survivors and Beneficiaries
(Continued)

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
41	1	2,596	11	140,577	12	143,173
42	1	14,159	6	84,410	7	98,569
43	1	27,648	6	47,909	7	75,557
44	1	2,596	11	255,057	12	257,653
45	3	35,160	10	85,978	13	121,137
46	1	2,596	12	102,688	13	105,283
47	4	41,959	15	164,365	19	206,325
48	2	25,618	20	253,752	22	279,370
49			21	300,924	21	300,924
50	1	2,596	28	304,749	29	307,344
51	2	12,113	20	242,372	22	254,485
52	1	2,596	28	302,713	29	305,308
53	3	16,165	32	410,138	35	426,303
54	2	12,113	34	370,770	36	382,883
55	3	46,498	29	377,615	32	424,113
56	2	12,113	48	580,165	50	592,278
57	4	45,713	55	740,350	59	786,063
58	3	33,673	40	442,653	43	476,326
59			52	516,161	52	516,161
60	1	9,517	49	560,406	50	569,923
61			82	1,053,089	82	1,053,089
62			102	1,256,380	102	1,256,380
63	1	9,517	89	1,074,378	90	1,083,895
64	3	49,583	82	906,533	85	956,116
65	2	19,034	121	1,506,328	123	1,525,362
66	3	28,552	128	1,590,760	131	1,619,312
67			129	1,434,006	129	1,434,006
68	1	9,517	97	1,069,503	98	1,079,020
69	1	29,118	65	678,824	66	707,942
70			122	1,342,500	122	1,342,500
71			127	1,415,765	127	1,415,765
72	2	12,113	132	1,347,498	134	1,359,610
73	1	9,517	134	1,475,638	135	1,485,155
74	1	2,596	111	1,177,472	112	1,180,068
75	1	25,061	110	1,115,571	111	1,140,633
76			130	1,343,244	130	1,343,244
77			125	1,270,159	125	1,270,159
78			123	1,230,997	123	1,230,997
79			150	1,477,754	150	1,477,754
80	2	19,034	117	1,231,113	119	1,250,147

Exhibit VI-9
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Police
Survivors and Beneficiaries
(Continued)

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
81			117	1,150,015	117	1,150,015
82			113	1,062,049	113	1,062,049
83			126	1,268,074	126	1,268,074
84			142	1,386,749	142	1,386,749
85			123	1,187,594	123	1,187,594
86			126	1,167,365	126	1,167,365
87			116	1,106,427	116	1,106,427
88			90	837,354	90	837,354
89			66	732,561	66	732,561
90			86	817,627	86	817,627
91			55	506,804	55	506,804
92			29	244,777	29	244,777
93			39	335,385	39	335,385
94	1	9,517	27	243,622	28	253,139
95			17	155,338	17	155,338
96			5	43,816	5	43,816
97			10	84,568	10	84,568
98			6	57,103	6	57,103
99			7	66,620	7	66,620
100			3	28,552	3	28,552
101			3	28,552	3	28,552
Total	169	\$ 1,070,843	4,234	\$ 44,321,946	4,403	\$ 45,392,790

Exhibit VI-10
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Firefighters
Service Retirees

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
48	5	\$ 213,540	1	\$ 41,648	6	\$ 255,188
49	17	751,503	2	80,000	19	831,504
50	21	874,986	4	165,631	25	1,040,617
51	27	1,221,957	4	182,283	31	1,404,239
52	46	2,130,062	2	113,826	48	2,243,889
53	60	2,766,597	3	122,856	63	2,889,454
54	76	3,399,058	2	76,339	78	3,475,397
55	82	3,596,693	1	56,215	83	3,652,908
56	131	6,750,369	1	48,458	132	6,798,827
57	185	9,355,740	1	36,878	186	9,392,618
58	193	9,666,317	1	74,836	194	9,741,154
59	235	11,802,479			235	11,802,479
60	233	11,595,445	1	37,636	234	11,633,081
61	238	11,629,140	3	147,552	241	11,776,692
62	239	11,812,407	1	41,547	240	11,853,954
63	262	13,081,146	1	25,264	263	13,106,410
64	248	11,914,010	2	80,262	250	11,994,272
65	229	11,027,567	1	41,071	230	11,068,638
66	234	11,236,756	1	38,099	235	11,274,855
67	276	12,723,929			276	12,723,929
68	240	11,081,384			240	11,081,384
69	155	7,176,059	2	80,283	157	7,256,343
70	190	8,581,585	1	42,669	191	8,624,254
71	210	9,239,544	1	45,912	211	9,285,456
72	214	9,360,194			214	9,360,194
73	169	7,428,465			169	7,428,465
74	170	7,309,277			170	7,309,277
75	147	6,128,466			147	6,128,466
76	144	5,840,527			144	5,840,527
77	116	4,986,415			116	4,986,415
78	116	4,419,280			116	4,419,280
79	112	4,073,750			112	4,073,750
80	109	3,831,098			109	3,831,098
81	93	3,189,758			93	3,189,758
82	71	2,155,188			71	2,155,188
83	104	3,259,283			104	3,259,283
84	96	2,825,433			96	2,825,433
85	72	2,058,446			72	2,058,446
86	74	1,994,813			74	1,994,813
87	99	2,686,233			99	2,686,233

Exhibit VI-10
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Firefighters
Service Retirees
(Continued)

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
88	66	1,840,635			66	1,840,635
89	42	1,085,519			42	1,085,519
90	26	662,939			26	662,939
91	21	491,054			21	491,054
92	12	281,824			12	281,824
93	10	284,552			10	284,552
94	8	194,170			8	194,170
95	2	55,134			2	55,134
96	4	85,345			4	85,345
97	4	81,805			4	81,805
98	1	23,508			1	23,508
99	1	27,584			1	27,584
100						
101						
102						
103						
104						
105	1	20,274			1	20,274
Total	5,936	\$ 260,309,245	36	\$ 1,579,266	5,972	\$ 261,888,511

Exhibit VI-11
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Firefighters
Disability Retirees

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
29	1	\$ 35,385			1	\$ 35,385
30						
31	1	29,886			1	29,886
32	1	33,692			1	33,692
33	3	89,205	2	28,601	5	117,806
34						
35	2	73,599			2	73,599
36	6	182,173			6	182,173
37	4	93,704	1	34,640	5	128,344
38	2	80,876	1	11,271	3	92,147
39	5	167,677			5	167,677
40	9	311,694	1	40,359	10	352,053
41	13	461,153			13	461,153
42	13	421,409	2	60,313	15	481,721
43	17	623,058	2	33,458	19	656,516
44	20	812,094	1	45,411	21	857,505
45	17	696,491	5	148,530	22	845,021
46	24	875,580	2	113,367	26	988,947
47	31	1,113,177	4	138,254	35	1,251,431
48	28	1,183,212	3	98,856	31	1,282,067
49	42	1,617,455	3	113,501	45	1,730,956
50	45	1,871,106	8	291,582	53	2,162,688
51	40	1,598,302	1	32,250	41	1,630,552
52	43	1,706,561	5	167,968	48	1,874,529
53	56	2,121,873	4	146,361	60	2,268,235
54	51	2,167,598	5	178,658	56	2,346,256
55	52	2,081,875	3	128,138	55	2,210,013
56	68	2,835,509	6	189,794	74	3,025,303
57	72	3,039,919	10	346,476	82	3,386,396
58	81	3,375,520	4	108,678	85	3,484,198
59	71	3,166,344	3	119,483	74	3,285,827
60	76	3,204,561	5	198,177	81	3,402,738
61	94	4,179,502	3	129,751	97	4,309,253
62	99	4,052,438	4	109,130	103	4,161,567
63	86	3,704,543	2	97,061	88	3,801,605
64	90	3,842,747	2	55,484	92	3,898,231
65	101	4,326,228	2	82,682	103	4,408,910
66	90	3,691,244	3	96,296	93	3,787,540
67	114	4,812,718			114	4,812,718
68	93	3,692,603	1	33,894	94	3,726,498

Exhibit VI-11
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Firefighters
Disability Retirees
(Continued)

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
69	66	2,535,821			66	2,535,821
70	68	2,625,655			68	2,625,655
71	80	3,023,200			80	3,023,200
72	77	2,974,846			77	2,974,846
73	71	2,635,493			71	2,635,493
74	63	2,380,476			63	2,380,476
75	54	2,138,158			54	2,138,158
76	50	1,636,578			50	1,636,578
77	46	1,387,911			46	1,387,911
78	39	1,238,085			39	1,238,085
79	29	927,960			29	927,960
80	27	857,153			27	857,153
81	19	513,918			19	513,918
82	18	522,480			18	522,480
83	15	399,782			15	399,782
84	14	337,105			14	337,105
85	10	302,680			10	302,680
86	21	552,300			21	552,300
87	18	399,559			18	399,559
88	13	327,374			13	327,374
89	11	252,134			11	252,134
90	2	53,579			2	53,579
91	1	28,806			1	28,806
92	2	41,006			2	41,006
93	2	32,640			2	32,640
94	1	16,671			1	16,671
Total	2,478	\$ 96,514,080	98	\$ 3,378,425	2,576	\$ 99,892,505

Exhibit VI-12
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Firefighters
Survivors and Beneficiaries

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
1	1	\$ 2,596	1	\$ 2,596	2	\$ 5,191
2	1	2,596	1	2,596	2	5,191
3						
4			2	5,191	2	5,191
5						
6	1	2,596			1	2,596
7	1	2,596	3	7,787	4	10,382
8			1	2,596	1	2,596
9	3	7,787	4	10,382	7	18,169
10			3	7,787	3	7,787
11	3	7,787	4	10,382	7	18,169
12	8	24,356	3	7,787	11	32,143
13	4	10,289	5	12,978	9	23,267
14	6	15,574	7	18,076	13	33,649
15	3	7,787	7	18,169	10	25,956
16	9	23,227	5	12,978	14	36,205
17	9	23,321	8	24,356	17	47,677
18	9	23,267	10	25,862	19	49,129
19	2	5,191	6	15,574	8	20,765
20	4	10,343	4	10,382	8	20,725
21	2	5,191	6	15,574	8	20,765
22	2	19,215	2	13,296	4	32,511
23						
24			1	9,517	1	9,517
25			1	2,596	1	2,596
26			1	46,103	1	46,103
27	1	2,596			1	2,596
28			2	20,217	2	20,217
29			1	9,517	1	9,517
30			1	10,700	1	10,700
31			2	7,516	2	7,516
32	1	2,596	1	9,517	2	12,113
33			1	9,517	1	9,517
34			2	19,034	2	19,034
35						
36			2	44,972	2	44,972
37			1	9,517	1	9,517
38			1	9,517	1	9,517
39	1	27,012	4	33,472	5	60,484
40			2	48,483	2	48,483

Exhibit VI-12
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Firefighters
Survivors and Beneficiaries
(Continued)

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
41			3	36,188	3	36,188
42			5	62,957	5	62,957
43	1	2,596	5	59,192	6	61,788
44	1	2,596	9	146,126	10	148,721
45	1	2,596	9	136,920	10	139,516
46	2	12,113	7	79,581	9	91,694
47	2	5,191	11	237,424	13	242,615
48	1	2,596	10	94,427	11	97,022
49			17	196,478	17	196,478
50	1	2,596	19	275,837	20	278,433
51	2	5,191	19	324,550	21	329,742
52	2	5,191	18	249,139	20	254,330
53	1	2,596	10	135,174	11	137,769
54	1	2,596	20	255,511	21	258,106
55	4	48,818	21	287,642	25	336,459
56			23	281,424	23	281,424
57			40	527,139	40	527,139
58	1	2,596	30	404,125	31	406,721
59	1	2,596	28	395,999	29	398,594
60			35	430,466	35	430,466
61	1	9,517	30	342,440	31	351,957
62			47	639,795	47	639,795
63			49	720,251	49	720,251
64			42	485,205	42	485,205
65	1	2,596	53	649,872	54	652,468
66			69	767,556	69	767,556
67	1	2,596	62	735,010	63	737,606
68			70	860,532	70	860,532
69			60	646,981	60	646,981
70	1	2,596	77	855,654	78	858,249
71			79	834,183	79	834,183
72			88	938,819	88	938,819
73			90	963,328	90	963,328
74			100	1,040,489	100	1,040,489
75			100	1,028,806	100	1,028,806
76			80	798,758	80	798,758
77			101	1,003,330	101	1,003,330
78			77	729,030	77	729,030
79			104	1,022,645	104	1,022,645
80			126	1,240,728	126	1,240,728

Exhibit VI-12
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Firefighters
Survivors and Beneficiaries
(Continued)

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
81			145	1,389,221	145	1,389,221
82	1	2,596	113	1,113,798	114	1,116,393
83			92	850,179	92	850,179
84			150	1,452,029	150	1,452,029
85			117	1,154,734	117	1,154,734
86	1	2,596	104	1,150,764	105	1,153,359
87			132	1,275,378	132	1,275,378
88			110	999,541	110	999,541
89			104	939,200	104	939,200
90			73	690,184	73	690,184
91			58	555,943	58	555,943
92			31	275,423	31	275,423
93			33	295,744	33	295,744
94			21	217,658	21	217,658
95			18	165,098	18	165,098
96			15	131,449	15	131,449
97			7	66,620	7	66,620
98			9	76,963	9	76,963
99			2	19,034	2	19,034
100			1	9,517	1	9,517
101			3	28,552	3	28,552
102			1	9,517	1	9,517
103			1	9,517	1	9,517
Total	98	\$ 348,279	3,288	\$ 34,310,317	3,386	\$ 34,658,595



Exhibit VI-13
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Total
Service Retirees

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
48	25	\$ 944,796	3	\$ 131,761	28	\$ 1,076,557
49	50	2,234,636	5	194,438	55	2,429,074
50	63	2,622,622	8	348,476	71	2,971,097
51	83	3,391,181	11	485,266	94	3,876,447
52	106	4,739,559	8	357,112	114	5,096,671
53	126	5,589,669	20	862,758	146	6,452,427
54	143	6,314,510	5	227,604	148	6,542,114
55	183	8,482,949	10	513,805	193	8,996,754
56	292	14,679,431	17	865,291	309	15,544,722
57	397	19,531,166	24	1,025,961	421	20,557,127
58	464	23,132,444	27	1,280,206	491	24,412,650
59	526	26,110,527	24	1,172,311	550	27,282,838
60	555	27,706,537	32	1,500,894	587	29,207,431
61	512	25,230,439	26	1,225,383	538	26,455,823
62	549	26,997,004	23	1,121,531	572	28,118,535
63	591	29,389,265	20	975,816	611	30,365,081
64	583	27,880,307	17	808,153	600	28,688,460
65	576	27,756,207	19	871,435	595	28,627,642
66	605	29,698,644	13	625,161	618	30,323,805
67	699	33,660,762	16	807,037	715	34,467,799
68	605	28,019,892	5	226,044	610	28,245,936
69	413	19,119,041	11	476,943	424	19,595,984
70	447	20,574,524	9	441,731	456	21,016,255
71	484	21,380,324	3	109,795	487	21,490,119
72	501	21,736,840	6	257,714	507	21,994,554
73	433	18,424,561	3	143,664	436	18,568,225
74	370	15,301,612	3	103,098	373	15,404,710
75	324	13,032,598			324	13,032,598
76	315	12,482,375			315	12,482,375
77	264	10,596,429			264	10,596,429
78	225	8,575,050	3	83,052	228	8,658,101
79	234	8,167,251	1	38,432	235	8,205,683
80	196	6,781,346			196	6,781,346
81	187	6,439,007	2	36,303	189	6,475,309
82	153	4,557,911	5	134,803	158	4,692,713
83	172	5,163,105	1	21,310	173	5,184,414
84	163	4,768,193	1	25,703	164	4,793,895
85	131	3,717,596			131	3,717,596
86	142	3,915,485	1	22,505	143	3,937,990
87	151	4,141,910			151	4,141,910

Exhibit VI-13
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Total
Service Retirees
(Continued)

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
88	123	3,319,337			123	3,319,337
89	82	2,091,147			82	2,091,147
90	61	1,512,230			61	1,512,230
91	45	1,046,876			45	1,046,876
92	20	467,733			20	467,733
93	21	569,156			21	569,156
94	18	395,105	1	18,739	19	413,844
95	6	147,240			6	147,240
96	6	130,461			6	130,461
97	4	81,805			4	81,805
98	3	71,839			3	71,839
99	2	43,904			2	43,904
100						
101	1	28,115			1	28,115
102						
103						
104						
105	1	20,274			1	20,274
Total	13,431	\$ 592,912,927	383	\$ 17,540,236	13,814	\$ 610,453,163

Exhibit VI-14
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Total
Disability Retirees

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
29	1	\$ 35,385			1	\$ 35,385
30						
31	2	47,664			2	47,664
32	2	77,561	2	57,042	4	134,604
33	6	184,691	2	28,601	8	213,292
34	4	129,348	1	27,156	5	156,504
35	7	217,137	2	27,677	9	244,813
36	13	397,492	1	26,822	14	424,315
37	10	313,450	5	190,035	15	503,486
38	9	344,612	2	28,966	11	373,578
39	21	769,034	5	144,162	26	913,197
40	26	919,519	6	214,975	32	1,134,494
41	25	845,802	11	410,949	36	1,256,751
42	44	1,552,582	8	203,201	52	1,755,782
43	60	2,276,726	10	347,514	70	2,624,240
44	71	2,788,802	16	598,669	87	3,387,471
45	60	2,250,429	17	590,896	77	2,841,325
46	83	3,251,310	19	716,936	102	3,968,246
47	106	4,009,162	14	453,385	120	4,462,547
48	90	3,612,249	18	624,720	108	4,236,969
49	118	4,755,624	22	830,450	140	5,586,074
50	116	4,653,686	33	1,145,466	149	5,799,152
51	101	4,009,868	19	759,308	120	4,769,176
52	98	3,920,911	23	882,698	121	4,803,609
53	131	5,092,199	19	663,245	150	5,755,444
54	118	4,882,544	15	592,256	133	5,474,800
55	118	4,794,757	15	603,718	133	5,398,475
56	145	5,957,056	24	949,534	169	6,906,589
57	174	7,445,445	38	1,440,503	212	8,885,949
58	153	6,264,591	34	1,112,754	187	7,377,345
59	155	6,459,836	24	928,293	179	7,388,129
60	193	8,069,552	22	767,583	215	8,837,134
61	197	8,472,482	30	1,154,784	227	9,627,266
62	209	8,447,243	23	891,451	232	9,338,694
63	213	8,528,876	13	540,426	226	9,069,303
64	196	7,872,365	17	632,593	213	8,504,958
65	212	8,506,788	19	717,214	231	9,224,002
66	215	8,499,777	15	582,391	230	9,082,168
67	282	11,264,216	12	380,575	294	11,644,790
68	223	8,478,781	11	381,791	234	8,860,571

Exhibit VI-14
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Total
Disability Retirees
(Continued)

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
69	165	6,388,870	3	87,034	168	6,475,904
70	153	5,729,436	4	146,704	157	5,876,140
71	185	6,692,538	1	33,299	186	6,725,837
72	162	5,751,045	3	81,397	165	5,832,442
73	140	5,097,292	1	37,509	141	5,134,801
74	122	4,399,083	1	42,374	123	4,441,457
75	124	4,468,520			124	4,468,520
76	110	3,500,989	3	132,506	113	3,633,496
77	91	2,845,346			91	2,845,346
78	83	2,622,408			83	2,622,408
79	77	2,274,919			77	2,274,919
80	55	1,650,639			55	1,650,639
81	42	1,136,157			42	1,136,157
82	34	941,595			34	941,595
83	28	756,403			28	756,403
84	37	955,850			37	955,850
85	26	682,984			26	682,984
86	33	826,021			33	826,021
87	32	756,495			32	756,495
88	25	609,701			25	609,701
89	20	437,429			20	437,429
90	13	287,340			13	287,340
91	4	85,054			4	85,054
92	4	74,337	1	21,658	5	95,995
93	3	53,575			3	53,575
94	1	16,671			1	16,671
Total	5,776	\$ 219,440,249	584	\$ 21,231,220	6,360	\$ 240,671,469

Exhibit VI-15
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Total
Survivors and Beneficiaries

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
1	1	\$ 2,596	2	\$ 5,191	3	\$ 7,787
2	3	7,787	1	2,596	4	10,382
3	1	2,596			1	2,596
4	1	2,596	3	7,787	4	10,382
5	1	2,596	1	2,596	2	5,191
6	3	7,787	3	7,787	6	15,574
7	6	15,574	4	10,382	10	25,956
8	6	15,574	6	15,574	12	31,147
9	7	18,169	7	18,169	14	36,338
10	4	10,382	5	12,978	9	23,360
11	5	12,978	9	23,360	14	36,338
12	11	32,143	9	23,360	20	55,503
13	13	33,649	10	25,956	23	59,605
14	10	25,956	16	41,249	26	67,205
15	11	28,552	13	33,703	24	62,255
16	21	66,589	13	33,649	34	100,238
17	16	41,450	16	45,081	32	86,532
18	23	58,351	18	46,494	41	104,845
19	7	18,115	11	28,552	18	46,667
20	10	25,823	8	20,671	18	46,494
21	5	12,978	18	69,465	23	82,443
22	6	29,597	6	23,678	12	53,275
23						
24	2	19,079	1	9,517	3	28,596
25	1	2,596	2	5,191	3	7,787
26			1	46,103	1	46,103
27	1	2,596	1	9,517	2	12,113
28	1	24,813	2	20,217	3	45,031
29	1	28,747	2	12,113	3	40,860
30			1	10,700	1	10,700
31			2	7,516	2	7,516
32	1	2,596	3	28,552	4	31,147
33			1	9,517	1	9,517
34	2	138,519	5	36,067	7	174,586
35	2	5,191	1	4,920	3	10,111
36			2	44,972	2	44,972
37	1	2,596	3	28,833	4	31,429
38			5	73,189	5	73,189
39	1	27,012	10	93,162	11	120,174
40	1	2,596	9	105,909	10	108,505

Exhibit VI-15
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Total
Survivors and Beneficiaries
(Continued)

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
41	1	2,596	14	176,765	15	179,361
42	1	14,159	11	147,367	12	161,526
43	2	30,244	11	107,101	13	137,345
44	2	5,191	20	401,183	22	406,374
45	4	37,755	19	222,898	23	260,653
46	3	14,708	19	182,269	22	196,977
47	6	47,150	26	401,789	32	448,940
48	3	28,214	30	348,178	33	376,392
49			38	497,403	38	497,403
50	2	5,191	47	580,586	49	585,777
51	4	17,304	39	566,923	43	584,227
52	3	7,787	46	551,852	49	559,638
53	4	18,760	42	545,311	46	564,072
54	3	14,708	54	626,281	57	640,989
55	7	95,316	50	665,256	57	760,572
56	2	12,113	71	861,589	73	873,702
57	4	45,713	95	1,267,490	99	1,313,202
58	4	36,269	70	846,779	74	883,047
59	1	2,596	80	912,160	81	914,755
60	1	9,517	84	990,872	85	1,000,389
61	1	9,517	112	1,395,528	113	1,405,046
62			149	1,896,176	149	1,896,176
63	1	9,517	138	1,794,628	139	1,804,145
64	3	49,583	124	1,391,738	127	1,441,321
65	3	21,630	174	2,156,200	177	2,177,830
66	3	28,552	197	2,358,316	200	2,386,868
67	1	2,596	191	2,169,017	192	2,171,612
68	1	9,517	167	1,930,035	168	1,939,552
69	1	29,118	125	1,325,805	126	1,354,923
70	1	2,596	199	2,198,154	200	2,200,750
71			206	2,249,948	206	2,249,948
72	2	12,113	220	2,286,316	222	2,298,429
73	1	9,517	224	2,438,966	225	2,448,483
74	1	2,596	211	2,217,961	212	2,220,557
75	1	25,061	210	2,144,377	211	2,169,438
76			210	2,142,003	210	2,142,003
77			226	2,273,489	226	2,273,489
78			200	1,960,027	200	1,960,027
79			254	2,500,400	254	2,500,400
80	2	19,034	243	2,471,841	245	2,490,875

Exhibit VI-15
Retiree and Beneficiary Membership Data as of Jan. 1, 2015
Number and Annual Retirement Allowances
Distributed by Age

Total
Survivors and Beneficiaries
(Continued)

Age	Male		Female		Totals	
	Number	Annuities	Number	Annuities	Number	Annuities
81			262	2,539,236	262	2,539,236
82	1	2,596	226	2,175,846	227	2,178,442
83			218	2,118,253	218	2,118,253
84			292	2,838,778	292	2,838,778
85			240	2,342,328	240	2,342,328
86	1	2,596	230	2,318,128	231	2,320,724
87			248	2,381,806	248	2,381,806
88			200	1,836,895	200	1,836,895
89			170	1,671,761	170	1,671,761
90			159	1,507,811	159	1,507,811
91			113	1,062,747	113	1,062,747
92			60	520,199	60	520,199
93			72	631,129	72	631,129
94	1	9,517	48	461,280	49	470,797
95			35	320,436	35	320,436
96			20	175,264	20	175,264
97			17	151,188	17	151,188
98			15	134,066	15	134,066
99			9	85,655	9	85,655
100			4	38,069	4	38,069
101			6	57,103	6	57,103
102			1	9,517	1	9,517
103			1	9,517	1	9,517
Total	267	\$ 1,419,122	7,522	\$ 78,632,263	7,789	\$ 80,051,385

Glossary of Terms

Note that the first definitions given are the “official” definitions of the term. For some terms there is a second definition, in italics.

Actuarial Accrued Liability (AAL). The portion of the Present Value of Projected Benefits (PVFB) allocated to past service. Also difference between (i) the actuarial present value of future benefits, and (ii) the present value of future normal cost. Sometimes referred to as “accrued liability” or “past service liability.” *The amount of money that should be in the Fund. The funding target.*

Actuarial Assumptions. Estimates of future plan experience with respect to rates of mortality, disability, retirement, investment income and salary increases. Demographic (“people”) assumptions (rates of mortality, separation, and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic (“money”) assumptions (salary increases and investment income) consist of an underlying rate appropriate in an inflation-free environment plus a provision for a long-term average rate of inflation. *Estimates of future events used to project what we know now- current member data, assets, and benefit provisions – into an estimate of future benefits.*

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the Present Value of Projected Benefits (PVFB) between the normal costs to be paid in the future and the actuarial accrued liability. Sometimes referred to as the “actuarial funding method.”

Actuarial Methods. The collective term for the Actuarial Cost Method, the Amortization Payment for UAAL Method, and the Asset Valuation Method used to develop the contribution requirements for the Retirement System. *The Funding Policy.*

Actuarial Equivalent. Benefits whose actuarial present values are equal.

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

Actuarial Value of Assets (AVA). The value of assets used to determine the contribution requirement and funded ratio. The AVA can be thought of as the average value of assets over a period of years. This smoothed value of assets is used to limit contribution volatility. Also known as the funding value of assets. *Smoothed value of assets.*

Glossary of Terms (Continued)

Amortization Payment for UAAL. Payment of the unfunded actuarial accrued liability by means of periodic contributions of interest and principal, as opposed to a lump sum payment. The components of the amortization payment for UAAL includes:

- Amortization Period Length – Generally amortization periods up to 30 years are allowed, although more recent white papers regarding public sector actuarial practice favor reducing the period to 15 to 20 years. Similar to a mortgage, the shorter the amortization period, the higher the payment and the faster the UAAL is paid off.
- Amortization payment increases – Future payments can be level dollar, like a mortgage, or as a level percent of pay. Most PERS amortize UAAL as a level percent of pay which when combined with the employer normal cost that is developed as a level percent of pay can result in contributions that are easier to budget.
- Amortization schedule can be closed or open. A closed amortization schedule is similar to a mortgage – at the end of the amortization period the UAAL is designed to be paid off. An open amortization period is similar to refinancing the UAAL year after year.
- Amortization schedule UAAL can be amortized over a single amortization period, or it can be amortized over a schedule, also known as layered amortization.

The amortization payment for UAAL can be thought of as the UAAL mortgage payment.

Asset Valuation Method. The components of how the actuarial value of assets is to be developed. Typical components are the averaging period and the corridor. The averaging period tends to be 3 to 5 years but can be longer. The corridor limits the actuarial value of assets to within a percent, say 20%, of the actual market value. Corridors are more common with longer averaging periods; white papers on the subject suggest that no corridor is needed for averaging periods of five years or less because the period is short enough to recognize asset gains and losses over a sufficiently small period and because corridors provide for excessive contribution volatility.

Experience Gain Loss. A measure of the difference between actual experience and experience anticipated by a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used. *The experience Gain (Loss) represents how much the actuary missed the mark in a given year.*

Fiduciary Net Position (FNP). Used for GASB 67, it represents the assets, measured at fair value, held in trust to provide benefits.

Funded Ratio. The percent of the actuarial accrued liabilities covered by the actuarial value of assets. Also known as the funded status. *The ratio of how much money you actually have in the fund to the amount you should have in the fund.*

Net Pension Liability (NPL). Used for GASB 67, it is the difference between the total pension liability (TPL) and fiduciary net position (FNP). It is similar to the UAAL. It represents the liability of employers and nonemployer contributing entities to plan members for benefits provided through a defined benefit pension plan.

Glossary of Terms (Continued)

Normal Cost. The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as “current service cost.” An amortization payment toward the unfunded actuarial accrued liability is paid in addition to the normal cost to arrive at the total contribution in a given year. *The cost of benefits accruing during the year.*

PERS. A generic term given to a Public Employees Retirement System

Present Value of Future Normal Cost (PVFNC). The portion of the Present Value of Future Benefits (PVFB) allocated to future service. *The value in today’s dollars of the amount of contribution to be made in the future for benefits accruing for members in the Retirement System as of the valuation date. Note that in practice, this number is rarely discussed.*

Present Value of Future Benefits (PVFB). The projected future benefit payments of the plan are discounted into today’s dollars using an assumed rate of investment return assumption to determine the Present Value of Future Benefits (PVFB) of the Retirement System. The PVFB is the discounted value of the projected benefits promised to all members as of a valuation date, including future pay and service for members which has not yet been earned. *If the Retirement System held assets equal to the PVFB and all the assumptions were realized, there would be sufficient funds to pay off all the benefits to be paid in the future for members in the Retirement System as of the valuation date.*

Reserve Account. An account used to indicate that funds have been set aside for a specific purpose and is not generally available for other uses.

Service Cost. Used for GASB 67, it is the annual cost assigned, using the cost method (entry age normal) and assumptions under GASB 67, to current and subsequent plan years. It is similar to normal cost.

Total Pension Liability (TPL). Used for GASB 67, it is the portion of the Present Value of Future Benefits (PVFB) allocated to past service using the cost method (entry age normal) and assumptions under GASB 67. It is similar to the actuarial accrued liability.

Unfunded Actuarial Accrued Liability (UAAL). The difference between the actuarial accrued liability (AAL) and actuarial value of assets (AVA). The UAAL is sometimes referred to as “unfunded accrued liability.” *Funding shortfall, pension debt or prefunded amount if negative.*

Valuation Date. The date that the actuarial valuation calculations are performed as of. *Also known as the “snapshot date”.*