

Ohio Police & Fire Pension Fund

Jan. 1, 2014 Actuarial Valuation of Retiree Health Care Benefits Under GASB 43

Oct. 2014





Larry Langer

Principal and Consulting Actuary

Buck Consultants, LLC. 123 North Wacker Drive Suite 1000 Chicago, IL 60606

larry.langer@xerox.com tel 312.846.3669 fax 312.846.3502

Robert Besenhofer

Director, Health and Productivity

Buck Consultants, LLC. 123 North Wacker Drive Suite 1000 Chicago, IL 60606

robert.besenhofer@xerox.com tel 312.846.3801 fax 312.846.3502

Oct. 17, 2014

Board of Trustees Ohio Police & Fire Pension Fund 140 East Town Street Columbus, Ohio 43215

Members of the Board:

This report presents the results of the Jan. 1, 2014 actuarial valuation of the Ohio Police & Fire Pension Fund (OP&F) retiree health care benefits. The valuation was prepared in accordance with, and for the purpose of financial disclosure under, Governmental Accounting Standards Board Statement No. 43 (GASB 43).

Plan benefits include medical and prescription drug benefits and OP&F's reimbursement of Medicare Part B premiums.

The actuarial assumptions and methods used in the valuation were selected in compliance with the requirements under GASB 43. The demographic assumptions are consistent with the assumptions used in the Jan. 1, 2014 actuarial valuation of OP&F's pension plan benefits. The discount rate (interest rate) is 4.25 percent, selected in accordance with GASB 43.

The results of our calculations and analysis indicate that the Annual Required Contribution (ARC) for 2014 is 18.15 percent of payroll. This can be compared to OP&F's allocation of employer contribution toward health care benefits equal to 0.50 percent of payroll. Thus, the contribution allocation is approximately 49 percent of the ARC for Dec. 31, 2013. The funded status (i.e., the ratio of assets to liabilities) of retiree health care benefits is 20.1 percent.

Detailed summaries of the financial results of the valuation are shown in this report. To the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and practice. It should be recognized, however, that significant differences between actual experience and these assumptions could occur. Moreover, other sets of reasonable assumptions can yield materially lesser or greater results.

Respectfully submitted,

Larry Langer, ASA, EA, MAAA Principal, Consulting Actuary

19428/C8318RET01-2014-HC-GASB43-Val.docx

Ro Bar

Bob Besenhofer, ASA, MAAA Director, Health and Productivity



Table of Contents

<u>Section</u>		<u>Page</u>
I.	Executive Summary	1
Ш	Summary of Valuation Results	4
Ш	Retiree Health Care Benefit Provisions	10
IV	Participant Data	13
V	Comprehensive Annual Financial Report Exhibits	18
VI	Assumptions and Methods	20
VII	Glossary of Terms	27



I - Executive Summary

Introduction

This report presents the results of the actuarial valuation of the Ohio Police & Fire Pension Fund's retiree health care benefits as of Jan. 1, 2014 under GASB 43. GASB 43 mandates a uniform accrual-based standard of measuring retiree health care and other postemployment benefits. Postemployment costs are recognized systematically over employees' years of service.

GASB 43 is applicable for large systems, such as Ohio Police & Fire, for fiscal years beginning after Dec. 15, 2005.

The principal valuation results include:

- The actuarially required contribution rate to fund health care benefits on a full reserve basis is 18.15 percent of payroll.
- The funded status of the plan as of Jan. 1, 2014, based on the accrued liability and the market value of assets as of that date, is 20.1 percent.

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

Changes Since Last Year's Valuation

There were no changes in the plan provisions since last year's valuation; however there were changes in the assumptions as well as per capita costs and short-term trend rates to reflect plan experience. Specifically, the 2014 dollar subsidies for the AARP participants and the 2014 Medicare Part B premium reimbursement amount have been replaced with the actual 2014 amounts. The assumed prescription drug and non-Medicare and non-AARP medical costs and dollar premium subsidies for 2015 have been replaced with actual amounts adopted by the Board in Jun. 2014. The trend rates for 2014, that is the assumed rates of increase from 2014 to 2015, have been adjusted to reflect the expected increases from the actual 2014 amounts to the actual or assumed amounts for 2015. The trend rates for increases after 2015 are have been updated from last year. The net effect of these changes is an experience gain.

Actuarial Assumptions and Methods

GASB 43 requires that the discount rate used in the valuation be the estimated long-term yield on investments that are expected to finance postemployment benefits. Depending on the method by which a plan is financed, the relevant investments could be plan assets, employer assets or a combination of plan and employer assets. The investment return should reflect the nature and the mix of both current and expected investments and the basis used to determine the actuarial value of assets.

The Ohio Police & Fire retiree health care plan is partially funded. GASB outlines two reasonable methods of developing a blended discount rate when a plan is partially funded. These methods base the proportion of plan and employer asset returns on 1) the funded ratio and 2) the percentage of ARC actually being contributed to the plan. Ohio Police & Fire has utilized the second methodology to develop a discount rate of 4.25 percent as of Jan. 1, 2014. The development of this discount rate is summarized in Section V.



Separate trend rates are developed for pre-Medicare and post-Medicare medical benefits, prescription drug benefits and Medicare Part B premiums. Trend rates for medical and prescription drug plans have continued to outpace inflation for a number of years. The trend rates used in the valuation are our best estimate for future medical inflation based on the assumption that medical and prescription drug inflation will decline over time.

The actuarial assumptions and methods used for this year's valuation are outlined in Section V.



Medicare Part D

Based on GASB accounting rules, the retiree drug subsidy Ohio Police & Fire receives under Medicare Part D has not been recognized in the actuarial valuation.

Health Care Funded Status

As shown in Table 1, the actuarially determined accrued liability for retiree health care benefits is \$5,244,559,000. The value of assets in the Ohio Police & Fire Health Care Stabilization Fund as of Jan. 1, 2014 is \$1,053,534,000. The difference between the liability and assets is an unfunded accrued liability of \$4,191,025,000. As of Jan. 1, 2014 the ratio of assets to accrued liability is 20.1 percent, which can be compared to 22.1 percent as of Jan. 1, 2013.

Health Care Contribution Rate

Ohio Police & Fire allocates a portion of employer contributions to health care. The total estimated employer contribution for 2014 is 21.61 percent of payroll, of which 0.50 percent of payroll is allocated to the health care fund and the remainder is allocated to the pension fund.

The Annual Required Contribution (ARC) under GASB 43 is 18.15 percent of payroll. This amount consists of 10.54 percent for normal cost, plus 7.61 percent to amortize the unfunded accrued liability of \$4,191,025,000 as a level percentage of payroll over 30 years.

ACA Excise Tax

Health Care Reform legislation added a new High Cost Plan Excise Tax (also known as the "Cadillac Tax") starting in calendar year 2018. For valuation purposes, we examined the value of the tax in future years:

The tax is 40% of the excess of a) the cost of coverage over b) the limit. We calculated "a" (the cost of coverage), based on the gross costs listed in this report. We calculated "b" (the limit) starting with the statutory limits (\$10,200 single and \$27,500 family) adjusted for the following:

- Limits will increase from 2018 to 2019 by 4.0% (3.0% assumed CPI plus 1%);
- Limits will increase after 2019 by 3.0% (assumed CPI);
- For retirees over age 55 but not on Medicare, the limit is increased an additional dollar amount of \$1,650 for single coverage, \$3,450 for family coverage; and
- Accumulated non-Medicare eligible medical/drug trend for the period from 2010 through 2018 are being compared with the assumed 55% trend increase for the federal standard Blue Cross/Blue Shield option, with trend in excess of 55% applied on the base amount before the additional amount for "early" retirees.

Using the above methodology the Excise Tax was determined to add an additional 3.4% to the obligations and has been included in the results that follow.



II – Summary of Valuation Results

This section presents detailed results of the Jan. 1, 2014 GASB 43 actuarial valuation of the Ohio Police & Fire retiree health care benefits and consists of Tables 1 to 4, as described below. All liabilities and contribution rates reflect plan costs net of retiree premiums.

- **Table 1** presents a summary of the actuarial valuation results, including the number of active and inactive members, and members and dependents currently receiving benefits as of the valuation date, plan liabilities, assets and the annual contribution rate.
- **Table 2** shows the market value of assets in the Health Care Stabilization Fund available to pay benefits as of Dec. 31, 2013, reconciled with the value as of the end of the prior year. The actuarial value of assets is the market value.
- **Table 3** shows a reconciliation of the Unfunded Accrued Liability as of Jan. 1, 2014.
- **Table 4** shows the Schedule of Funding Progress under GASB 43. The Schedule of Funding Progress shows the history of the plan's funded status since the initial application of GASB 43. The initial application of GASB 43 for Ohio Police & Fire is the fiscal year beginning Jan. 1, 2006.
- **Table 5** shows the Schedule of Employer Contributions under GASB 43. The Schedule of Employer Contributions shows the history of employer contributions compared to the Annual Required Contribution for health care. The initial year is the fiscal year beginning Jan. 1, 2006.



<u>Table 1</u>

Retiree Health Care Benefits Summary of Results Of Actuarial Valuation As of Jan. 1, 2014 (\$ Amounts in Thousands)

Item	J	an. 1, 2014	J	an. 1, 2013
Membership Data				
 Number of Members Active Members Inactive Members Retirees, Spouses, and Beneficiaries Children of Current Retirees Waivers to Elect Coverage Total Membership Payroll 	\$	27,451 142 25,568 1,226 <u>3,008</u> 57,395 1,942,269	\$	27,289 137 25,427 1,296 2,708 56,857 1,912,459
Valuation Results				
 3. Present Value of Future Benefits a) Active Members b) Inactive Members c) Retirees, Spouses, and Beneficiaries d) Total 	\$	5,448,449 28,278 2,543,060 8,019,787	\$	3,709,659 23,066 2,256,951 5,989,676
 4. Accrued Liability a) Active Members b) Inactive Members c) Retirees, Spouses, and Beneficiaries d) Total 	\$	2,673,221 28,278 2,543,060 5,244,559	\$	1,954,750 23,066 <u>2,256,951</u> 4,234,767
5. Assets	\$	1,053,534	\$	935,592
6. Unfunded Liability	\$	4,191,025	\$	3,299,175
7. Funded Ratio		20.1%		22.1%
 8. Annual Required Contribution a) Normal Cost b) Unfunded Accrued Liability c) Total Cost 	\$	204,778 150,765 355,543	\$ \$	149,845 <u>132,204</u> 282,049
 9. Annual Required Contribution as a Percentage of Payroll a) Normal Cost Rate b) Unfunded Accrued Liability Amortization Rate c) Total Cost Rate 		10.54% <u>7.61%</u> 18.15%		7.84% <u>6.81%</u> 14.65%
10. Employer Contribution to Health Care Stabilization Fund		0.50%		3.62%



<u>Table 2</u>

Health Care Stabilization Fund As of Dec. 31, 2013 (\$ Amounts in Thousands)

	ltem		Amount
1.	Market Value as of Dec. 31, 2012	\$	935,605
2.	Contributions in 2013		
	(a) Employer (b) Member Premiums (c) Total	\$	68,721 66,565 135,286
3.	Benefits and Administrative Expenses in 2013	\$	192,047
4.	Investment Income in 2013	\$	159,124
5.	Other Income in 2013		
	(a) Recoveries and Rebates(b) Medicare Part D Reimbursements(c) Total	\$ \$	6,410 9,156 15,566
6.	Market Value as of Dec. 31, 2013 (1) + (2) - (3) + (4) + (5)	\$	1,053,534
7.	Rate of Return (per 2013 Comprehensive Financial Report)		16.01%



Analysis of Change in Unfunded Accrued Liability As of Jan. 1, 2014 (\$ Amounts in Thousands)

	Item		Amount
1.	Unfunded Accrued Liability at Jan. 1, 2013	\$	3,299,162
2.	Normal Cost		149,845
3.	Contributions*		77,877
4.	Interest Credit at 5.00% to Dec. 31, 2013		166,757
5.	Expected Unfunded Accrued Liability at Dec. 31, 2013 (1) + (2) - (3) + (4) + (5)	\$	3,537,887
6.	Actual Unfunded Accrued Liability at Jan. 1, 2014		4,191,025
7.	Net Loss (6) - (7)	\$	(653,138)
8.	Reasons for Net Loss		
	(a) Gain from Investment Return on Actuarial Value of Assets	\$	113,374
	(b) Loss from Demographic Change		(286,820)
	(c) Gain from Claim Experience		132,825
	(d) Loss from Discount Rate Change	_	(612,517)
	(e) Grand Total	\$	(653,138)

* Employer contribution and Medicare Part D reimbursement



Schedule of Funding Progress GASB Statement No. 43 Disclosure (\$ Amounts in Thousands)

Valuation as of Jan. 1	Valuation Assets	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liablity (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as a Percentage of Active Member Payroll
2014	\$1,053,534	\$5,244,559	\$4,191,025	20.1%	\$1,942,269	215.8%
2013	935,592	4,234,767	3,299,175	22.1%	1,912,459	172.5%
2012	780,142	3,698,777	2,918,635	21.1%	1,897,413	153.8%
2011	717,730	3,295,313	2,577,583	21.8%	1,868,502	137.9%
2010	573,399	3,232,391	2,658,992	17.7%	1,895,196	140.3%
2009	438,658	3,163,622	2,724,964	13.9%	1,900,935	143.3%
2008	526,999	3,623,484	3,096,485	14.5%	1,831,438	169.1%
2007	436,598	3,273,690	2,837,092	13.3%	1,782,851	159.1%
2006	343,040	3,334,861	2,991,821	10.3%	1,756,230	170.4%

The above information needs to be included in the GASB 43 disclosure as of Dec. 31, 2014.



Schedule of Employer Contributions GASB Statement No. 43 Disclosure (\$ Amounts in Thousands)

Year Ended Dec. 31	Annual Required Contribution	Percentage Contributed
2013	\$282,049	27.6%
2012	245,847	56.3%
2011	241,539	57.1%
2010	248,912	54.3%
2009	256,297	52.1%
2008	285,844	48.8%
2007	250,163	51.6%
2006	264,137	51.6%

The information presented above was determined as part of the actuarial valuation as of one year prior to the dates indicated (i.e., the contribution determined by the valuation completed as of Jan. 1, 2013 was contributed in the year ending Dec. 31, 2013). The actual percentage contributed includes employer contributions and Medicare Part D reimbursement that Ohio Police & Fire has elected to contribute to the Health Care Stabilization Fund.

Additional information as of the latest actuarial valuation follows:

Valuation date:		Jan. 1, 2014			
Actuarial Cost method:		Entry Age			
Amortization method:		Level	percent of payroll, open		
Remaining amortization	period:		30 years		
Asset valuation method:			Fair value		
Actuarial assumptions:					
 Investment return 	n (discount rate)		4.25%		
 Projected salary 	increases	4.25% - 11.00%			
 Payroll increases 	3	3.75%			
 Inflation assump 	tion	3.25%			
 Health care cost 	trend rates:				
	Initial Data 2 Vacro	Liltimata Data	Lilitimata Vaar		
 Non-Medicare 	Initial Rate 3 Years 3.50%, 7.00%, 6.50%	Ultimate Rate 4.50%	<u>Ultimate Year</u> 2020		
Non-AARP	3.50%, 7.00%, 6.50%	4.50%	2020		
	6.25%, 6.00%, 5.75%		2020		
		4.50%			
Rx Drug	1.90%, 7.00%, 6.50%	4.50%	2020		
 Medicare Part B 	5.50%, 5.40%, 5.30%	5.00%	2019		

The Ohio Police & Fire retiree health care plan is partially funded. The discount rate is a blended rate based on the plan and employer rates of return, using the plan rate times the percentage of the ARC contributed and the employer rate times the percentage not contributed.



III – Retiree Health Care Benefit Provisions

Eligibility for Coverage

All pension benefit recipients are eligible to enroll in the plan. Members who were hired prior to Jul. 1, 2013 are eligible to receive a pension at age 48 with 25 years of service or 62 with 15 years of service. Members who were hired after Jul. 1, 2013 are eligible to receive a pension at age 52 with 25 years of service or 62 with 15 years of service. In addition, a member is eligible to enroll in the plan if they are receiving a disability pension or they are the survivor of a member. A member may enroll a spouse, dependent children, generally until age 28, and sponsored dependents. Only benefit recipients are eligible for reimbursement of Medicare Part B reimbursement.

Coverage begins at the time of OP&F retirement or the first of the following month, if the member requests this effective date.

Types of Plans

For 2014, Ohio Police & Fire offers one medical plan for members not eligible for AARP coverage and one prescription drug plan as summarized below.

Medical Covera	ige	Prescription Drug Coverage		
In Network Coverage		Retail Option		
Deductible	\$500/\$1,000	Days Supply (as prescribed)	30	
Coinsurance	80%	Tier 1	\$5	
Out-of-Pocket Maximum	\$1,500/\$3,000	Tier 2	\$20	
Office Visit Copay	\$30	Tier 3	\$30	
Admission Copay	\$250			
Out-of-Network Coverage		Mail Service Option		
Deductible	\$1,000/\$2,000	Days Supply (as prescribed)	90	
Coinsurance	50%	Tier 1	\$10	
Out-of-Pocket Maximum	\$5,000/\$10,000	Tier 2	\$40	
Office Visit Copay	50%	Tier 3	\$60	
Admission Copay	\$250			



The prescription drug plan tiers are described below:

- Tier 1: Includes primarily generic drug; however, some generic drugs may fall into other tiers.
- Tier 2: Middle copay level includes many brand-name drugs.
- Tier 3: Includes several prescriptions with a Tier 1 or Tier 2 alternative.

Drugs are sorted into the 3 tiers, based on the overall clinical and pharmacoeconomic value of each particular drug and how it stacks up against other drugs in the same therapy class. Therefore, where each drug is placed within the 3 tiers is based on the effectiveness and cost of that drug.

Members who enroll in an Ohio Police & Fire health care plan are responsible for paying all or part of the cost of health care coverage through a monthly premium deduction, copayments/coinsurance and deductibles. Ohio Police & Fire pays the remaining cost. The monthly premium rates differ depending on the person's date of retirement and Medicare status. Member premiums are a percentage of the OP&F full cost premiums. The applicable percentage is 25 percent for members, 50 percent for spouses and children of members who retired on or before Jul. 24, 1986 and 75 percent for spouses and children of members who retired after Jul. 24, 1986.

	Monthly Member Premiums								
	Pre	-7/25/86 Retir	ees	Post-7/24/86 Retirees					
Plan	Benefit Recipient	Spouse	Child(ren)	Benefit Recipient	Spouse	Child(ren)			
Medical 2014 –									
Non-Medicare Eligible	\$ 207.69	\$ 274.99	\$ 143.73	\$ 207.69	\$ 412.49	\$ 215.59			
Non-AARP Eligible	67.31	113.48	113.48	67.31	170.22	170.22			
Prescription Drug 2014	66.85	125.93	37.43	66.85	188.90	56.14			
Medical 2015 –									
Non-Medicare Eligible	\$ 214.97	\$ 284.62	\$ 148.75	\$ 214.97	\$ 426.92	\$ 223.13			
Non-AARP Eligible	69.66	117.45	117.45	69.66	176.17	176.17			
Prescription Drug 2015	68.11	128.33	38.14	68.11	192.49	57.21			

Effective Jan. 1, 2008, Ohio Police & Fire replaced its self-insured medical plan for members and dependents age 65 or older and enrolled in Medicare Parts A and B with a choice of the B, F, or L fully insured MediGap plans offered by AARP/UHC. Ohio Police & Fire subsidizes the participant's premiums by an amount equal to a percentage of the AARP/UHC Plan L premium for the State of Ohio. The applicable percentage is 75 percent for members, 50 percent for spouses and children of members who retired on or before Jul. 24, 1986 and 25 percent for spouses and children of members up after Jul. 24, 1986.

For members who have been enrolled in Medicare Part B for less than 3 years, AARP/UHC applies a 30 percent discount to the base premium (3-6 year level) upon initial enrollment. This discount will decrease by 3 percent each year for 10 years until the premium is equal to the base premium level.



Members who have been enrolled in Medicare Part B for more than 6 years upon initial coverage with AARP/UHC receive a 10 percent surcharge to the base premium. This surcharge will continue to be applied for the full time the member is covered under the AARP/UHC plans.

There are 16 states in which AARP/UHC does not vary its premium rates by length of Medicare Part B coverage at initial enrollment. For these states, the OP&F subsidy will be set at the subsidy for the 6+ year level.

		2014 Monthly Subsidy for AARP/UHC									
	State of Ol Monthly I		OP&F S Pre-7/25/8		OP&F Subsidy Post-7/24/86 Retirees						
Time from Medicare Part B Effective Date	Benefit Recipient	Spouse	Benefit Recipient	Spouse	Benefit Recipient	Spouse					
< 3 Years *	\$ 94.15	\$ 94.15	\$ 94.15	\$ 67.25	\$ 94.15	\$ 33.63					
3-6 Years	134.50	134.50	100.88	67.25	100.88	33.63					
6+ Years	147.95	147.95	100.88	67.25	100.88	33.63					

* Illustrated rates reflect 30 percent discount for a new retiree in 2014

Medicare Part B Premium Reimbursement

For service and disability retirements, as well as survivors, Ohio Police & Fire reimburses the standard Medicare Part B premium (\$104.90 per month for 2014) provided the retiree is not eligible for reimbursement from any other sources.



IV – Participant Data

The participant data as of Jan. 1, 2014 is summarized in the following tables:

- **Table 6** summarizes the number of participants by status.
- Table 7 summarizes the number of active members by age and years of service.
- **Table 8** summarizes the number of retired members including spouses and surviving spouses of retirees by health care plan enrollment (for those participants currently enrolled in retiree health care coverage).



<u>Table 6</u>

Number of Participants As of Jan. 1, 2014

Status	Number
Active Members	27,451
Inactive Members	
Eligible for Allowances	142
Retirees and Beneficiaries	
Retirees and Spouses Retirees Spouses Total Disability Retirees Retirees Spouses Total	10,020 5,148 15,168 4,338 1,847 6,185
Children of Current Retirees	1,226
Survivors	4,181
Orphans	34
Waivers to Elect Coverage	3,008
Total	29,802
Grand Total	57,395

There are also 1,108 participants who receive Medicare Part B reimbursements only.



<u>Table 7</u>

Active Membership Data As of Jan. 1, 2014

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
Under 25	524 \$43,799									524 \$43,799
25-29	1,889 \$50,401	477 \$66,212								2,366 \$53,588
30-34	1,268 \$52,063	1,692 \$67,383	533 \$70,901	3 \$65,064						3,496 \$62,361
35-39	507 \$51,155	1,011 \$66,907	1,863 \$71,242	659 \$74,200	4 \$72,714					4,044 \$68,123
40-44	228 \$51,953	602 \$65,241	1,464 \$69,319	2,547 \$73,705	802 \$78,743	15 \$79,988				5,658 \$71,524
45-49	77 \$49,786	192 \$61,787	538 \$68,533	1,484 \$72,209	2,107 \$76,954	856 \$82,016	12 \$74,536			5,266 \$74,624
50-54	43 \$48,033	68 \$61,229	160 \$65,257	477 \$70,815	1,045 \$75,177	1,426 \$79,279	481 \$82,577	8 \$88,625		3,708 \$76,183
55-59	18 \$49,940	31 \$61,422	54 \$63,767	157 \$67,726	356 \$71,292	561 \$77,350	562 \$81,568	81 \$86,637	1 \$101,550	1,821 \$76,119
60-64	8 \$58,070	4 \$55,670	13 \$66,459	39 \$67,021	107 \$70,332	121 \$77,084	148 \$75,593	45 \$78,537	14 \$84,100	499 \$73,982
Over 64	3 \$ 61,083	2 \$ 64,775	7 \$ 58,867	8 \$ 62,219	9 \$ 68,875	16 \$ 70,198	9 \$ 85,039	7 \$ 74,812	8 \$ 89,909	69 \$ 72,086
Total	4,565 \$50,252	4,079 \$66,388				2,995 \$79,566		141 \$83,577		27,451 \$69,356



Current Enrollment Of Retired Participants As of Jan. 1, 2014

(excludes those non-Medicare eligible retirees who waived coverage who will return when Medicare èligible)

	UHC	AARP	Prescription Drug Only	Total
Not Eligible For Medicare Benefit Recipients Spouses Children	5,512 1,726 1,190	91 92 -	120 22 5	5,723 1,840 1,195
Eligible For Medicare Benefit Recipients Spouses Children	518 989 29	12,053 4,085 1	279 81 1	12,850 5,155 31
Total	9,964	16,322	508	26,794



V – Comprehensive Annual Financial Report Exhibits

Table 9

Retirees and Beneficiaries Added to and Removed From Rolls Health Care Trust Fund (Dollars in Thousands)

	Added to	rolls	Removed f	rom rolls	Rolls end c	of year		
Year Beginning		Annual		Annual		Annual	Average Annual	Increase in Average
Jan. 1	Number	Subsidy	Number	Subsidy	Number	Subsidy	Subsidy	Subsidy
2013	1,710	\$8,008	1,639	\$7,540	26,794	\$125,482	\$ 4.683	\$ 0.083
2012	2,361	10,862	1,682	7,397	26,723	122,943	4.601	0.203
2011	2,241	9,855	1,593	6,378	26,044	114,528	4.397	0.394
2010	1,579	6,322	1,491	6,497	25,396	101,679	4.004	(0.354)
2009	1,568	6,833	1,626	6,244	25,308	110,286	4.358	0.517
2008	1,218	4,678	2,638	9,345	25,366	97,414	3.840	0.298
2007	1,496	5,300	1,497	6,861	26,786	94,889	3.542	(1.041)
2006	1,291	5,917	3,063	12	26,787	122,767	4.583	0.711



<u>Table 10</u>

Analysis of Financial Experience – Health Care Trust Fund Gains and Losses as of Jan. 1, 2014 and Jan. 1, 2013

	Gain (Loss)
Type of Activity	Jan. 1, 2014	Jan. 1, 2013
Plan experience: Turnover If more liabilities are released by withdrawal separations from active membership than assumed, there is a gain. If smaller releases, a loss.	\$ (2,485,621)	\$ 312,371
Retirement If members retire at older ages than assumed, there is a gain. If younger, a loss.	(11,491,271)	(1,556,992)
Disability Retirement If disability claims are less than assumed, there is a gain. If more claims, a loss.	16,462,068	10,672,859
New Entrants If new entrants join OP&F, there is a loss.	(1,819,245)	(4,017,317)
Deaths If more deaths occur than assumed, there is a gain. If fewer deaths, a loss.	64,735,083	53,910,320
Claims Costs If per capita costs or trend rates are less than assumed, there is a gain. Otherwise there is a loss.	132,825,323	174,287,593
Investment If there is greater investment return than assumed, there is a gain. If less return, a loss.	111,629,684	78,769,442
Other Experience If all other experience, including but not limited to data changes, increases the unfunded liability, there is a loss. If a decrease, there is a gain.	(350,477,198)	102,976,351
Net gain (or loss) during the year due to plan experience	(40,621,177)	415,354,627
Change assumptions effective Jan. 1, 2014:	(612,516,661)	(648,202,636)
Total net gain (or loss)	\$ (653,137,838)	\$ (232,848,009)



VI – Assumptions and Methods

ASSUMPTIONS

DISCOUNT RATE: 4.25 percent per annum, compounded annually.

The development of the discount rate used in the valuation is summarized below:

Investment Returns

Plan Assets (Long-Term Return)	=	8.25%
Employer Assets (Estimated Short-Term Return)	=	4.00%
Based on Percentage of ARC Contributed		
1. Contribution Allocated to Health Care	=	0.50%
2. Annual Required Contribution (2013)	=	14.65%
3. Portion of ARC Contributed: (1) / (2)	=	3.41%
4. Multiplied by long-term investment return	=	0.28%
5. Portion of ARC not Contributed: 100% - (3)	=	96.59%
6. Multiplied by short-term investment return	=	3.86%
7. Total: (4) + (6)	=	4.15%

Based on the methodology above, Ohio Police & Fire has selected a discount rate of 4.25 percent.

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%



HEALTH CARE COST TREND RATES: The trend rate is the annual rate at which the cost of covered medical services is assumed to increase from the current year to the next year. The valuation reflects costs and premiums established for 2014 and 2015 for Non-Medicare, Non-AARP and Rx. Thus, the trend rates for 2014 and 2015 for those benefits reflect actual increases from 2014 to 2015 and expected increases from 2015 to 2016. Beginning in 2014, the per-capita costs are assumed to increase by the following percentages each year.

•

Year	Non- Medicare	Non- AARP	AARP	Rx Drug	Medicare Part B
2014	3.50%	3.50%	6.25%	1.90%	5.50%
2015	7.00%	7.00%	6.00%	7.00%	5.40%
2016	6.50%	6.50%	5.75%	6.50%	5.30%
2017	6.00%	6.00%	5.50%	6.00%	5.20%
2018	5.50%	5.50%	5.25%	5.50%	5.10%
2019	5.00%	5.00%	5.00%	5.00%	5.00%
2020+	4.50%	4.50%	4.50%	4.50%	5.00%



PER CAPITA HEALTH CARE COSTS: Average costs for the self-insured medical and prescription drug plans were developed based on claims experience and current enrollment, taking into consideration trend and any changes in the plans. Retiree contributions were calculated based on the average costs and the applicable subsidy percentages under the plan. For the valuation, age-specific per capita gross costs were used. Shown below are sample age-specific amounts.

	Non-Medicare Eligible Medical			Non-AARP Eligible Medical			Prescription Drugs		
Age	Benefit Recipient	Spouse	Child(ren)	Benefit Recipient	Spouse	Child(ren)	Benefit Recipient	Spouse	Child(ren)
20			\$ 287			\$ 219			\$ 74
50	\$ 620	\$ 430		\$ 103	\$ 132		\$ 141	\$ 141	
55	725	503		121	154		165	165	
60	857	595		143	183		195	195	
65				308	397		233	234	
70				361	461		273	274	
75				406	519		307	309	
80				444	568		336	337	
85				473	606		359	360	

2014 Age-Specific Monthly Gross Costs

AARP/UHC OUT-OF-STATE PERCENTAGE: There are 20 states in which AARP/UHC does not vary its premium rates by length of Medicare Part B coverage at initial enrollment. For these states, the OP&F subsidy will be set at the subsidy for the 6+ year level. Based on current retiree demographics, it is assumed that 10 percent of new retirees will reside in one of these states.



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

Polic	е										_
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%

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.

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%

9 percent of non-Medicare eligible disabled members are assumed to become Medicare eligible prior to reaching the age of 65.



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%

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

•

DEFERRED RETIREMENT OPTION PLAN (DROP) 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.

Police									
	Years in DROP								
Age	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%

Police



	Years in DROP								
Age	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%

Firefighters

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.



MEMBER PARTICIPATION: 60 percent of eligible non-Medicare members are assumed to elect coverage and 90 percent of Medicare eligible members are assumed to elect coverage. 50 percent of non-Medicare members who elect coverage are assumed to elect coverage for their spouses and children, and 70 percent of Medicare members who elect coverage are assumed to elect coverage for their spouses and children. 88 percent of future Medicare eligible members are assumed to elect the Medicare Part B benefit. Additionally, 75 percent of all non-Medicare members who waived coverage are assumed to elect plan coverage once they become Medicare eligible.

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

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

ADMINISTRATIVE EXPENSE: Per-capita costs include administrative expenses.

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

METHODS

ACTUARIAL COST METHOD: Projected benefit method with level percentage entry age normal cost and openend unfunded accrued liability. Gains and losses are reflected in the accrued liability. Normal cost is expressed as a mid-year amount.

ASSET VALUATION METHOD: Market value of assets.

PAYROLL GROWTH: Inflation rate of 3.25 percent plus productivity increase rate of 0.50 percent.

DATA

CENSUS AND ASSETS: The valuation was based on members of OP&F as of Jan. 1, 2014 and does not take into account future members. All census and asset data was supplied by OP&F.



VII – Glossary of Terms

Accrued Liability	The present value as of the valuation date of all of the prior normal costs of the plan. It is the portion of the present value of future plan benefits attributable to service accrued as of the valuation date. If all assumptions were realized and contributions equal to the normal cost were made annually from the inception of the plan, the accrued liability would equal the plan assets. Mathematically, the accrued liability is equal to the difference between (a) the present value of future plan benefits, and (b) the present value of future normal cost. Sometimes referred to as "actuarial accrued liability."
Actuarial Assumptions	Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.
Actuarial Cost Method	The cost of a pension or retiree health care plan should be recognized during the working lifetime of the members who are ultimately going to receive benefits, preferably by actually funding amounts sufficient to provide completely for each member's benefit at the time of retirement. The mathematical budgeting procedure for allocating the cost of benefits is called the "actuarial cost method." The cost method allocates the dollar amount of the "present value of future plan benefits" between the "present value of future normal cost" and the "accrued liability." Sometimes referred to as the "actuarial funding method."
Actuarially Required Contribution Rate	The contribution rate necessary to advance fund benefits. In this valuation, that rate is equal to the normal cost plus amortization of the unfunded accrued liability over a 30-year period.
Advance Funding	Funding on a full reserve basis. See definition of full reserve basis.
Amortization	Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.
Entry Age Normal Cost Method	A funding method based upon the premise that if all assumptions are realized, the annual contribution as a percentage of payroll will remain level from year to year. This premise means that the present value of all future normal costs at a member's hire age (i.e., entry age) is exactly equal to the present value of all future benefits.
Experience Gain (Loss)	A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.
Full Reserve Basis	The philosophy behind every proper funding method is that benefits should be funded during the working lifetime of the members. This means that at retirement, contributions plus interest on those



	contributions are sufficient to provide completely for the benefits expected to be paid out. This advance funding is called funding on a full reserve basis.
Funded Status	The percentage of the total accrued liability that the assets represent.
Market Value of Assets	The value of assets segregated in the trust fund to provide benefits. The market value is the amount that the plan could reasonably expect to receive for its investments as of the valuation date in a current sale between a willing buyer and a willing seller, that is, other than in a forced or liquidation sale.
Normal Cost	The annual cost of the benefits that accrue during the year. The normal cost is the amount necessary to be contributed to pay for the benefits that are earned during the year. It is the cost of keeping the fund at the desired level if the assumptions are realized and if the assets equal the accrued liability (i.e., the cost under "normal" circumstances). Sometimes referred to as "current service cost."
Present Value	The amount of funds presently required to provide a payment or series of payments in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.
Present Value of Future Plan Benefits	The value as of the valuation date of all of the benefits expected to be paid in the future based upon the actuarial assumptions.
Present Value of Future Normal Cost	The value as of the valuation date of all of the future normal costs of the plan based upon the actuarial assumptions.
Set Back in Age	Used in applying rates of mortality. Set back in age means assuming that the age of a member is younger than it actually is. For example, if the male mortality is setback by one year that means a male age 50 is assumed to be age 49 for purposes of applying the mortality table.
Set Forward in Age	Used in applying rates of mortality. Set forward in age means assuming that the age of a member is older than it actually is. For example, if the female mortality is set forward by one year that means a female age 50 is assumed to be age 51 for purposes of applying the mortality table.
Trend Rates	The annual rates at which the cost of covered medical services and prescription drugs are assumed to increase.
Unfunded Accrued Liability	The difference between the actuarial accrued liability and the valuation assets.