



Cavanaugh Macdonald
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The City of Omaha Police & Fire Retirement System

Actuarial Valuation as of January 1, 2012





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

September 12, 2012

Board of Trustees
City of Omaha Police and Fire Retirement System
1819 Farnam Street
Omaha, NE 68183

RE: January 1, 2012 Actuarial Valuation

Members of the Board:

In accordance with your request, we have completed an Actuarial Valuation of the City of Omaha Police and Fire Retirement System as of January 1, 2012 for the plan year ending December 31, 2012. The major findings of the valuation are contained in this report. The plan provisions and assumptions are the same as the prior valuation.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the City's staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. We found this information to be reasonably consistent and comparable with information provided in prior years. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete, our calculations may need to be revised.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: experience differing from that anticipated by the economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts. Actuarial computations presented in this report under GASB Statements No. 25 and 27 are for purposes of fulfilling financial accounting requirements for the City. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the City's funding requirements and goals. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

The consultants who worked on this assignment are pension actuaries. CMC's advice is not intended to be a substitute for qualified legal or accounting counsel.

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Board of Trustees
September 12, 2012
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This is to certify that the independent consulting actuaries are members of the American Academy of Actuaries, have experience in performing valuations for public retirement plans, and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board and the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System. The Board of Trustees has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix B.

We respectfully submit the following report and look forward to discussing it with you.

Sincerely,

A handwritten signature in blue ink that reads 'Patrice Beckham'.

Patrice A. Beckham, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

A handwritten signature in blue ink that reads 'Brent A. Banister'.

Brent A. Banister, PhD, FSA, EA, FCA, MAAA
Chief Pension Actuary



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EXECUTIVE SUMMARY

This report presents the results of the January 1, 2012 actuarial valuation of the City of Omaha Police and Fire Retirement System. The primary purposes of performing the valuation are:

- to estimate the liabilities for the future benefits expected to be paid by the System;
- to determine the actuarial contribution level, based on the System's funding policy;
- to measure and disclose various asset and liability measures;
- to monitor any deviation between actual plan experience and experience predicted by the actuarial assumptions so that recommendations for assumption changes can be made when appropriate;
- to analyze and report on any significant trends in contributions, assets and liabilities over the past several years.

The actuarial assumptions and plan provisions reflected in this report are unchanged from last year's report. As of the date this report was issued, there was no contract with the fire union. Therefore, the same benefit structure as last year was used in this valuation. Based upon a study conducted earlier this year, if benefit changes similar to those made for police members are made for fire members, the System's long term funding outlook will be significantly improved assuming all actuarial assumptions are met in the future. Because the fire contract has not yet been settled, the pay amounts provided for 2011 were based on pay rates in effect in 2009. We updated these amounts to reflect the rates subsequently paid for 2010 following a ruling by the Court of Industrial Relations plus an additional 2% to reflect likely increases for 2011 over 2010.

The actuarial valuation results provide a "snapshot" view of the System's financial condition on January 1, 2012. The valuation results reflect net unfavorable experience for the past plan year as demonstrated by an unfunded actuarial liability that was higher than expected based on the actuarial assumptions used in the January 1, 2011 actuarial valuation. Unfavorable experience on the actuarial value of assets resulted in a loss of \$13.5 million and unfavorable experience on liabilities resulted in a loss of \$1.6 million. Net experience was an actuarial loss of \$15.1 million.

The System uses an asset smoothing method in the valuation process. As a result, the System's funded status and the recommended contribution rate are based on the actuarial (smoothed) value of assets – not the pure market value. The investment return on the market value of assets during 2011 was about -0.2%, as compared to the assumed rate of 8.0%. Due to the use of an asset smoothing method, the rate of return on the actuarial value of assets was about 5%. The investment return in 2011 resulted in an increase in the amount of the unrecognized investment loss from \$3.5 million at January 1, 2011 to \$27.0 million at January 1, 2012. The excess of the actuarial value over the market value of assets is \$27.0 million or 6.1% of the market value of assets at January 1, 2012. Actual returns over the next few years will determine the rate at which the \$27.0 million of deferred investment loss is recognized. For example, a return of about 14% on the market value of assets in 2012 would result in a return of 8.0% on the actuarial value of assets.

ASSETS

As of January 1, 2012, the System had total funds of \$440.4 million, when measured on a market value basis. This was a decrease of \$12.2 million from the prior year and represents an approximate rate of return of -0.2%.

The market value of assets is not used directly in the actuarial calculation of the System's funded status and the recommended contribution rate. An asset valuation method is used to smooth the



EXECUTIVE SUMMARY

effects of market fluctuations. The actuarial value of assets is equal to the expected asset value (based on last year's actuarial value of assets, net cash flows and a rate of return equal to the actuarial assumed rate of 8.0%) plus 1/3 of the difference between the actual market value and the expected asset value. See Exhibit 2 for the detailed development of the actuarial value of assets as of January 1, 2012. The rate of return on the actuarial value of assets was about 5%. The portion of deferred asset loss recognized during the calculation of the January 1, 2012 actuarial value of assets resulted in an actuarial loss of \$13.5 million.

The components of the change in the market value and actuarial value of assets are shown below:

	Market Value (\$M)	Actuarial Value (\$M)
Net Assets, January 1, 2011	\$ 452.6	\$ 456.2
• City and Member Contributions	+ 47.7	+ 47.7
• Benefit Payments and Refunds	- 58.8	- 58.8
• Investment Gain/(Loss)	+ (1.1)	+ 22.3
Net Assets, January 1, 2012	440.4	467.4
Estimated Net Rate of Return	(0.2%)	5.0%

The total investment loss that is not recognized as of January 1, 2012 is \$27.0 million, up from \$3.5 million in last year's valuation. These unrecognized losses will be reflected in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent they are not offset by the recognition of gains derived from future experience. This means that earning the assumed rate of investment return of 8.0% per year (net of investment expenses) on a market value basis will result in an actuarial loss on the actuarial value of assets in the next few years.

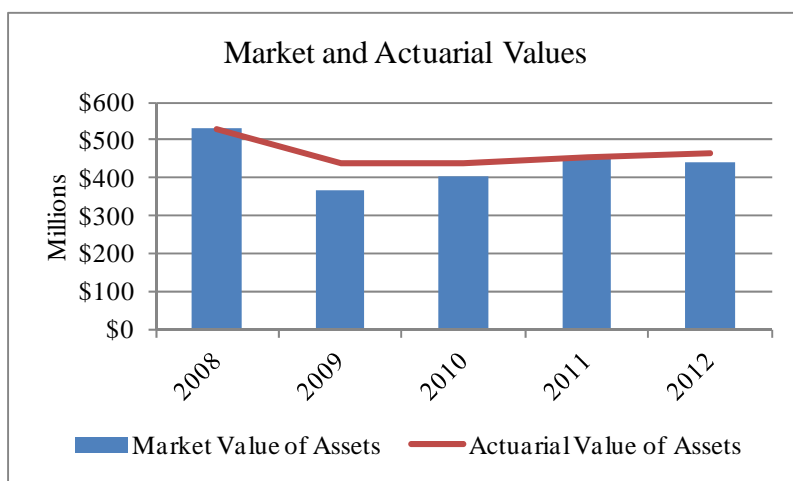
The unrecognized investment loss represents about 6.1% of the market value of assets at January 1, 2012. Unless offset by future investment gains or other favorable experience, the recognition of the \$27 million loss is expected to increase the future unfunded actuarial liability and the actuarial contribution requirement. If the deferred losses were recognized immediately in the actuarial value of assets, the unfunded actuarial liability would increase by \$27 million to \$637 million, the funded percentage would decrease from 43% to 41% and the actuarially determined contribution rate would increase from 65.257% to 66.979%.

A comparison of asset values on both a market and actuarial basis for the last five years is shown below.

	January 1 (\$M)				
	2012	2011	2010	2009	2008
Market Value of Assets	\$440	\$453	\$405	\$366	\$530
Actuarial Value of Assets	\$467	\$456	\$440	\$439	\$530
Actuarial Value/Market Value	106%	101%	109%	120%	100%



EXECUTIVE SUMMARY



An asset smoothing method is used to mitigate the volatility in the market value of assets. By using a smoothing method, the actuarial (or smoothed) value can be either above or below the pure market value. The significant investment losses in 2008 resulted in the actuarial value of assets being above the market value for the last four years.

LIABILITIES

The first step in determining the contribution level for the System is to calculate the liabilities for all expected future benefit payments. These liabilities represent the present value of future benefits (PVFB) expected to be earned by the current members, assuming that all actuarial assumptions are realized. Thus, the PVFB reflects service and salary increases that are expected to occur in the future before a benefit becomes payable. The PVFB components can be found in the liabilities portion of the valuation balance sheet (see Exhibit 3).

The other critical measurement of System liabilities in the valuation process is the actuarial liability (AL). This is the portion of the PVFB that will not be paid by the future normal costs (i.e. it is the portion of the PVFB that is allocated to past service). As of January 1, 2012, the actuarial liability for the System was \$1,077,607,299 and the actuarial value of assets was \$467,375,458. The unfunded actuarial liability was \$610,231,841.

The following chart compares the Actuarial Liability (AL) and assets for the current and prior valuation.

	As of January 1	
	2012	2011
Actuarial Liability (AL)	\$1,077,607,299	\$1,028,866,353
Assets at Actuarial Value	\$467,375,458	\$456,158,774
Unfunded Actuarial Liability (AVA)	\$610,231,841	\$572,707,579
Funded Ratio (Actuarial Value)	43%	44%
Assets at Market Value	\$440,429,392	\$452,640,303
Unfunded Actuarial Liability (MVA)	\$637,177,907	\$576,226,050
Funded Ratio (Market Value)	41%	44%



EXECUTIVE SUMMARY

EXPERIENCE FOR THE 2011 PLAN YEAR

The difference between the actuarial liability and the actuarial value of assets at the same date is referred to as the unfunded actuarial liability (UAL). Benefit improvements, experience gains/losses, changes in the actuarial assumptions or methods, and actual contributions made will impact the amount of the unfunded actuarial liability.

Actuarial gains (or losses) result from actual experience that is more (or less) favorable than anticipated based on the actuarial assumptions. These “experience” (or actuarial) gains or losses are reflected in the unfunded actuarial liability and are measured as the difference between the expected unfunded actuarial liability and the actual unfunded actuarial liability, taking into account any changes due to assumption or benefit provision changes. The experience for 2011, in total, was unfavorable (a higher unfunded actuarial liability than expected). There was an actuarial loss of around \$13.5 million on the actuarial value of assets and an actuarial loss of about \$1.6 million on liabilities.

The change in the unfunded actuarial liability between January 1, 2011 and 2012 is shown below (in millions):

Unfunded Actuarial Liability, January 1, 2011	\$573
• Expected change in UAL	5
• Contribution shortfall in 2011	19
• Investment experience	13
• Demographic experience	2
• Other experience	(2)
• Changes in plan provisions	0
• Change in actuarial assumptions / methods	0
Unfunded Actuarial Liability, January 1, 2012	\$610

CONTRIBUTION LEVELS

The annual contribution to the System is composed of two parts:

- (1) The normal cost (which is the allocation of costs attributed to the current year’s membership service) and,
- (2) The amortization payment on the Unfunded Actuarial Liability.

The normal cost rate is independent of the System’s funded status and represents the cost, as a percent of payroll, of the benefits provided by the System which is allocated to the current year of service. The total normal cost for the System is 25.851% of pay, or about \$28 million this year. When offset by the expected employee contributions, the employer portion of the normal cost is 9.955% of pay, or about \$11 million. The normal cost represents the long-term cost of the benefit structure in the System.



EXECUTIVE SUMMARY

The System's total actuarially determined contribution rate (payable as a percent of member payroll) increased by 1.788% of pay to 65.257% on January 1, 2012, from 63.469% on January 1, 2011. The primary components of this change are as follows:

	Rate
Total Actuarial Contribution Rate, January 1, 2011	63.469 %
<ul style="list-style-type: none"> • Actuarial (Gain) / Loss - Investment Experience • Actuarial (Gain) / Loss - Demographic Experience • Other Experience • Contributions Less Than Actuarial Rate • Change in Normal Cost Rate 	0.861 0.103 (0.496) 1.305 0.015
Total Actuarial Contribution Rate, January 1, 2012	65.257 %

As the result of actual plan experience during 2011, the System has an unfunded actuarial liability of \$610 million (actuarial liability is greater than actuarial assets). The City makes scheduled payments of \$1,327,600 annually through the year 2028. The present value of these future contributions was applied to the Unfunded Actuarial Liability (UAL) to determine the amount of the UAL to be funded as a percent of payroll (through contribution rates). The adjusted unfunded actuarial liability to be financed by payroll contributions is funded over a closed 30-year period that began January 1, 2003. Twenty-one years remain as of the valuation data. The resulting payment is 39.406% of pay. As a result, the total contribution rate for 2012 is 65.257% of pay (25.851% + 39.406%). The scheduled contributions for the year are 44.723%. The resulting contribution shortfall is 20.534% of pay.

COMMENTS

The System's long term funding has been a grave concern for the past several years and a significant amount of time and effort has been expended to address the issue. Both the benefit structure and the contributions are determined as part of contract negotiations. The contract signed with the police union in September 2010 provided for significant increases to the future contributions to the System as well as significant reductions to the benefit provisions for both current and future police members. The changes in the plan provisions for police members, which lowered the cost of the System, were first reflected in the January 1, 2011 valuation and resulted in a significant reduction in the contribution shortfall. Some of the benefit changes are effective only for members hired after January 1, 2010 so the cost impact of future hires will unfold over time as current active members leave employment and are replaced by new hires. However, these changes alone are not sufficient to solve the System's funding problem.

As of the date this report was issued, a contract has not been finalized with the fire union, so the benefit structure used in this valuation remains unchanged from that used in the prior valuation. The positive impact of the changes in the pension provisions for police members on the System's funding is mitigated by the fire members continuing under the prior benefit structure and contribution rates. Without changes in the benefit structure and/or contributions for fire members, the System is still expected to run out of money in the long term. Prior studies have shown that the System will reach full funding in about 50 years if benefit and contribution changes similar to those made for police members are made for fire members.



EXECUTIVE SUMMARY

On January 1, 2012, the actuarial value of assets was \$467 million and the market value of assets was \$440 million, a difference of \$27 million up from a difference of \$3 million in 2011. Along with an investment loss for 2011, there was also a small net liability loss. The funded ratio of the system remains very low, and in fact, decreased from 44% on a market value basis in the 2011 valuation to 41% in the 2012 actuarial valuation.

The actual contributions to the System for 2011 of 44.759% of pay were significantly below the actuarial contribution rate of 63.469% of pay. This shortfall in the contribution rate of 18.710% of pay, or about \$19 million, resulted in an increase in the unfunded actuarial liability. The actuarial contribution rate in the 2012 valuation is 65.257% compared to the contribution rate of 45.082%, which will result in a shortfall of 20.534% of pay or about \$23 million. Absent contributions at the full actuarial contribution rate, the UAL is expected to increase by the dollar amount of the contribution shortfall, and the actuarial contribution rate is also expected to increase. The funded status is also expected to decline. As mentioned earlier, if pension provisions similar to those currently applicable to police members can be negotiated for fire members, the contribution shortfall will be reduced and eventually eliminated over time. Until such changes occur or other changes of a similar magnitude are made, the long term funding of the System will remain a major concern and System assets are expected to be exhausted at some point in the future, even if all assumptions are met. We strongly recommend that changes be made that will address the System's long term funding problem.

As mentioned earlier in this report, the System uses an asset smoothing method in the actuarial valuation. While this is a very common practice for public retirement systems, it is important to be aware of the potential impact of the unrecognized investment experience. The key valuation results from the 2012 valuation are shown below using both the actuarial and market value of assets to provide full disclosure of the impact of asset smoothing on the funding of the System:

	\$ Millions	
	Using Actuarial Value of Assets	Using Market Value of Assets
Actuarial Liability	\$1,077.6	\$1,077.6
Asset Value	467.4	440.4
Unfunded Actuarial Liability	610.2	637.2
Present Value of Prior Service Payments	12.6	12.6
Unfunded Actuarial Liability for Funding	\$597.6	\$624.6
Funded Ratio	43.4%	40.9%
Normal Cost Rate	25.851%	25.851%
UAL Contribution Rate	<u>39.406%</u>	<u>41.128%</u>
Actuarial Contribution Rate	65.257%	66.979%



SECTION I – VALUATION RESULTS

**THE CITY OF OMAHA POLICE AND FIRE RETIREMENT SYSTEM
PRINCIPAL VALUATION RESULTS**

	January 1, 2012	January 1, 2011	% Chg
MEMBERSHIP			
1. Active Membership			
- Number of Members	1,392	1,422	(2.1)
- Projected Payroll for Upcoming Fiscal Year	\$110,027,537	\$105,025,610	4.8
- Average Projected Payroll	\$79,043	\$73,858	7.0
- Average Attained Age	39.5	38.6	2.2
- Average Entry Age	28.4	28.5	(0.2)
2. Inactive Membership			
- Number of Retirees / Beneficiaries	1,213	1,214	(0.1)
- Number of Disabilities	240	240	0.0
- Number of Deferred Vesteds	8	9	(11.1)
- Average Annual Benefit	\$40,891	\$39,851	2.6
ASSETS AND LIABILITIES			
1. Net Assets			
- Market Value	\$440,429,392	\$452,640,303	(2.7)
- Actuarial Value	\$467,375,458	\$456,158,774	2.5
2. Projected Liabilities			
- Retired Members and Beneficiaries	\$610,830,468	\$605,177,340	0.9
- Disabled Members	79,738,228	77,493,728	2.9
- Other Inactive Members	2,281,200	3,080,341	(25.9)
- Active Members	661,650,761	619,615,592	6.8
- Total Liability	\$1,354,500,657	\$1,305,367,001	3.8
3. Actuarial Liability	\$1,077,607,299	\$1,028,866,353	4.7
4. Unfunded Actuarial Liability	\$610,231,841	\$572,707,579	6.6
5. Funded Ratios			
Actuarial Value Assets / Actuarial Liability	43.37%	44.34%	(2.2)
Market Value Assets / Actuarial Liability	40.87%	43.99%	(7.1)
CONTRIBUTIONS			
1. Normal Cost Rate	25.851%	25.836%	0.1
2. UAL Rate	<u>39.406%</u>	<u>37.633%</u>	4.7
3. Total Contribution Rate (1) + (2)	65.257%	63.469%	2.8
4. Less Employee Contribution Rate	(15.896%)	(15.913%)	(0.1)
5. Less City Contribution Per Ordinance	(27.620%)	(27.582%)	0.1
6. Less City Prior Service Payment	<u>(1.207%)</u>	<u>(1.264%)</u>	(4.5)
7. Contribution Shortfall	20.534%	18.710%	9.8



SECTION I – VALUATION RESULTS

EXHIBIT 1
SUMMARY OF FUND ACTIVITY
(Market Value Basis)
For Year Ended December 31, 2011

Assets at January 1, 2011	\$	452,640,303
Receipts:		
City Contributions		30,775,568
Employee Contributions		16,916,367
Investment Earnings		<u>1,581,692</u>
Total Receipts		49,273,627
Disbursements:		
Benefits Payments		58,753,633
Refund of Contributions		295,730
Investment Fees		2,435,175
Total Disbursements		61,484,538
Assets as of December 31, 2011	\$	440,429,392
Annualized Yield		
- Gross		0.4%
- Net of Expenses		(0.2%)



SECTION I – VALUATION RESULTS

EXHIBIT 2

DETERMINATION OF ACTUARIAL VALUE OF ASSETS

The actuarial value of assets is used to minimize the impact of annual fluctuations in the market value of investments on the contribution rate. The current asset valuation method is called the “Expected +33% Method.”

The “expected value” of assets is determined by applying the investment return assumption to last year’s actuarial value of assets and the net difference of receipts and disbursements for the year. The actual market value is compared to the expected value and 33% of the difference (positive or negative) is added to the expected value to arrive at the actuarial value of assets for the current year.

1. Actuarial Value of Assets as of January 1, 2011	\$	456,158,774
2. Actual Receipts / Disbursements		
a. Total Contributions		47,691,935
b. Benefit Payments/Other		(59,049,363)
c. Net Change		(11,357,428)
3. Expected Actuarial Value of Assets as of January 1, 2012 { (1) * 1.08 } + { (2c) * 1.08 ^{1/2} }		480,848,491
4. Market Value of Assets as of January 1, 2012		440,429,392
5. Excess of Market Value over Expected Actuarial Value as of January 1, 2012		(40,419,099)
6. Preliminary Actuarial Value of Assets as of January 1, 2012 [(3) + 1/3 of (5)]		467,375,458
7. Calculation of 20% Corridor		
a. 80% of (4)		352,343,514
b. 120% of (4)		528,515,270
8. Final Actuarial Value of Assets as of January 1, 2012 (6), but not < (7a), nor > (7b)	\$	467,375,458
9. Rate of Return on Actuarial Value of Assets		5.0%

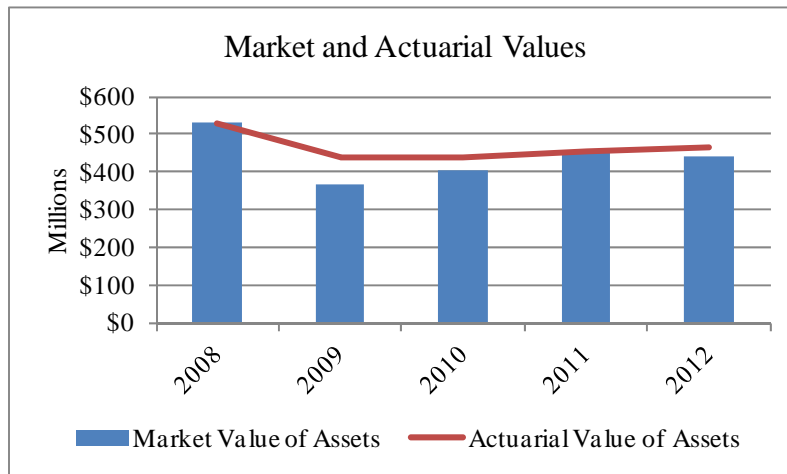


SECTION I – VALUATION RESULTS

EXHIBIT 2 (continued)

A historical comparison of the market and actuarial value of assets is shown below:

Date	Market Value of Assets (MVA)	Actuarial Value of Assets (AVA)	AVA / MVA
1/1/2008	\$529,923,390	\$530,493,413	100.1%
1/1/2009	365,923,877	439,108,652	120.0%
1/1/2010	405,390,038	440,478,409	108.7%
1/1/2011	452,640,303	456,158,774	100.8%
1/1/2012	440,429,392	467,375,458	106.1%





SECTION I – VALUATION RESULTS

EXHIBIT 3

ACTUARIAL BALANCE SHEET

An actuarial statement of the status of the plan in balance sheet form as of January 1, 2012 is as follows:

Assets

Current assets (actuarial value)	\$	467,375,458
Present value of future normal costs		276,893,358
Present value of future contributions to fund unfunded actuarial liability		<u>610,231,841</u>
Total Assets	\$	<u>1,354,500,657</u>

Liabilities

Present value of future retirement benefits for:

Active employees	\$	647,656,150
Retired employees, contingent annuitants and spouses receiving benefits		610,830,468
Estimated DROP balances		330,133
Deferred vested employees		1,757,207
Inactive employees due refunds		193,860
Inactive employees – disabled		<u>79,738,228</u>
Total	\$	1,340,506,046

Present value of future death benefits payable upon death of active members		8,326,151
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Present value of future benefits payable upon termination of active members		<u>5,668,460</u>
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Total Liabilities	\$	<u>1,354,500,657</u>
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SECTION I – VALUATION RESULTS

EXHIBIT 4

UNFUNDED ACTUARIAL LIABILITY

As of January 1, 2012

The actuarial liability is the portion of the present value of future benefits which will not be paid by future normal costs. The actuarial value of assets is subtracted from the actuarial liability to determine the unfunded actuarial liability.

The City makes scheduled payments of \$1,327,600 annually through the year 2028. The present value of these contributions was applied to the Unfunded Actuarial Liability (UAL) to determine the amount of the UAL to be funded as a percent of payroll (contribution rates).

1. Present Value of Future Benefits	\$	1,354,500,657
2. Present Value of Future Normal Costs		276,893,358
3. Actuarial Liability (1) – (2)		1,077,607,299
4. Actuarial Value of Assets		467,375,458
5. Unfunded Actuarial Liability (3) – (4)		610,231,841
6. Present Value of Prior Service Payments		12,584,963
7. Adjusted Unfunded Actuarial Liability (Payable from Payroll Related Contributions) (5) – (6)	\$	597,646,878



SECTION I – VALUATION RESULTS

EXHIBIT 5

CALCULATION OF ACTUARIAL GAIN / (LOSS)

For Plan Year Ending December 31, 2011

Liabilities

1. Actuarial liability less prior service payments as of January 1, 2011	\$ 1,015,936,125
2. Normal cost for 2011 (mid-year)	26,530,449
3. Interest at 8.00% on (1) and (2) to December 31, 2011	82,315,692
4. Benefit payments during 2011	59,049,363
5. Interest on benefit payments	2,316,535
6. Expected actuarial liability as of December 31, 2011	1,063,416,368
(1) + (2) + (3) - (4) - (5)	
7. Actuarial liability less prior service payments as of December 31, 2011	1,065,022,336

Assets

8. Actuarial value of assets as of January 1, 2011	456,158,774
9. Contributions during 2011	47,691,935
10. Benefit payments during 2011	59,049,363
11. Interest on items (8), (9) and (10)	36,047,145
12. Expected actuarial value of assets as of December 31, 2011	480,848,491
(8) + (9) - (10) + (11)	
13. Actual actuarial value of assets as of December 31, 2011	467,375,458

(Gain) / Loss

14. Expected unfunded actuarial liability / (surplus)	
(6) – (12)	582,567,877
15. Actual unfunded actuarial liability / (surplus)	
(7) – (13)	597,646,878
16. Actuarial Gain / (Loss)	
(15) – (14)	(15,079,001)
17. Actuarial Gain / (Loss) on Actuarial Assets	
(12) – (13)	(13,473,033)
18. Actuarial Gain / (Loss) on Actuarial Liability	
(7) – (6)	\$ (1,605,968)



SECTION I – VALUATION RESULTS

EXHIBIT 6

DEVELOPMENT OF 2012 ACTUARIAL CONTRIBUTION RATE

The actuarial cost method used to determine the required level of annual contributions to support the expected benefits is the Entry Age Normal Cost Method. Under this method, the total cost is comprised of the normal cost rate and the unfunded actuarial liability (UAL) payment. The System is financed by contributions from the employees and the City.

1. (a)	Normal Cost	\$	27,638,436
(b)	Expected Payroll in 2012 for Current Actives	\$	106,915,462
(c)	Normal Cost Rate (a) / (b)		25.851%
2.	Unfunded Actuarial Liability Payable from Payroll Related Contributions	\$	597,646,878
3.	Amortization Factor Level Percent of Payroll over 21 Years*		14.77736
4.	Unfunded Actuarial Liability (UAL) Payment [(2) / (3)] x 1.08 ^{1/2}	\$	42,030,028
5.	Prior Service Payment		1,327,600
6.	Total Projected Payroll for the Year	\$	110,027,537
7.	UAL and Prior Service Payments as Percent of Pay [(4) + (5)] / (6)		39.406%
8.	Total Contribution Rate (1c) + (7)		65.257%
9.	Employee Contribution Rate		15.896%
10.	City Ordinance Contribution Rate		27.620%
11.	City Prior Service Contribution Rate		1.207%
12.	Contribution Shortfall (8) – (9) – (10) – (11)		20.534%

*This assumes all actuarial assumptions are met in the future, including a 4% increase in total covered payroll.



SECTION I – VALUATION RESULTS

EXHIBIT 7

ANALYSIS OF EXPERIENCE

The purpose of conducting an actuarial valuation of a retirement plan is to estimate the costs and liabilities for the benefits expected to be paid from the plan, to determine the annual level of contribution for the current plan year that should be made to support these benefits and, finally, to analyze the plan's experience. The costs and liabilities of this retirement plan depend not only upon the benefit formula and plan provisions but also upon factors such as the investment return on the Fund, mortality rates among active and retired members, withdrawal and retirement rates among active members, rates at which salaries increase and the rate at which the cost of living increases.

The actuarial assumptions employed as to these and other contingencies in the current valuation are set forth in Appendix B of this report.

Since the overall results of the valuation will reflect the choice of assumptions made, periodic studies of the various components of the plan's experience are conducted in which the experience for each component is analyzed in relation to the assumption used for that component (called an experience study). This summary is not intended to be an actual "experience study" but rather an analysis of sources of gain and loss in the past plan year.

Gain/(Loss) By Source

The System experienced a net actuarial loss on liabilities of \$1.6 million during the plan year ended December 31, 2011, and an actuarial loss on assets of \$13.5 million. The total actuarial loss was \$15.1 million. The major components of this net actuarial experience gain are shown below:

Liability Sources	Gain/(Loss)
Salary Increases	\$ 624,000
Mortality	(1,547,000)
Terminations	(508,000)
Retirements	(411,000)
Disability	(202,000)
New Entrants/Rehires	0
Miscellaneous	438,000
Total Liability Gain/(Loss)	\$ (1,606,000)
Asset Gain/(Loss)	\$ (13,473,000)
Net Actuarial Gain/(Loss)	\$ (15,079,000)



SECTION II – SYSTEM ACCOUNTING INFORMATION

SECTION II SYSTEM ACCOUNTING INFORMATION

In an effort to enhance the understandability and usefulness of the pension information that is included in the financial reports of pension plans for state and local governments, the Governmental Accounting Standards Board (GASB) has issued Statement No. 25 – Financial Reporting for Defined Benefit Pension Plans and Statement No. 27 – Accounting for Pension by State and Local Governmental Employers.

GASB Statement No. 25 establishes a financial reporting framework for defined benefit plans. In addition to two required statements regarding plan assets, the statement requires two schedules and accompanying notes disclosing information relative to the funded status of the plan and historical contribution patterns.

- The Schedule of Funding Progress provides historical information about the funded status of the plan and the progress being made in accumulating sufficient assets to pay benefits when due.
- The Schedule of Employer Contributions provides historical information about the annual required contribution (ARC) and the percentage of the ARC that was actually contributed.

GASB Statement No. 27 establishes standards for the measurement, recognition, and display of pension expense and related liabilities. Annual pension cost is measured and disclosed on the accrual basis of accounting. In general, the annual pension cost is equal to the ARC with adjustments for past under-contributions or over-contributions. These adjustments are based on the net pension obligation (NPO) that represents the cumulative difference since 1987 between the annual pension cost and the actual contributions to the plan. The first adjustment is equal to interest on the NPO which is added to the ARC. The second adjustment is an amortization of the NPO which is deducted from the ARC. Effective January 1, 2003, the System uses the Entry Age Normal method to determine the ARC and the unfunded actuarial liability (or surplus) is amortized as a level percentage of payroll.

In July 2012, GASB issued new statements that will significantly change the accounting for pension benefits provided by governmental employers. The new statements, Numbers 67 and 68, will not be effective for the City of Omaha until fiscal years beginning in 2014 and 2015 respectively. The new Statements have no impact on the accounting information provided in this report, but are mentioned here because of their significance and applicability in future years.



SECTION II – SYSTEM ACCOUNTING INFORMATION

EXHIBIT 8

SCHEDULE OF EMPLOYER CONTRIBUTIONS

In accordance with Statement No. 25 of the Governmental Accounting Standards Board

Fiscal Year Ending	Annual Required Contribution* (a)	Total Employer Contribution* (b)	Percentage of ARC Contributed (b/a)
12/31/2006	\$ 31,102,053	\$ 20,171,610	64.86%
12/31/2007	34,842,280	20,699,211	59.41%
12/31/2008	38,073,021	21,700,806	57.00%
12/31/2009	50,507,561	22,701,608	44.95%
12/31/2010	55,488,062	24,183,493	43.58%
12/31/2011	49,945,979	30,775,568	61.62%

*Information prior to 2011 was provided by the prior actuary and has not been reviewed or verified by Cavanaugh Macdonald Consulting.

Notes to the Required Schedules:

- The traditional Entry Age Normal cost method is used.
- The actuarial value of assets is determined based on a method that smoothes the effects of short term volatility in the market value investments. The actuarial value is equal to the expected value, based on the assumed rate of return, plus 1/3 of the difference between market and expected values. A corridor of 80% to 120% of market value is also applied.
- Economic assumptions are as follows:
 - Investment return rate: 8.00%
 - Salary increase rates: from 6.5% at 1 year of service to 4% at 30 years of service
 - Inflation rate: 3.5%
 - Payroll growth: 4.00%
 - Post-retirement benefit increases: the lesser of 3% or \$50 (\$65 for Fire retirements after June 30, 2007). The increase will be made annually, beginning in the 13th month of retirement.
- The amortization method is a closed 30 year period, level percentage of payroll (the unfunded actuarial liability is amortized over 22 years as of January 1, 2011).



SECTION II – SYSTEM ACCOUNTING INFORMATION

EXHIBIT 9

**DEVELOPMENT OF THE NET PENSION OBLIGATION
IN ACCORDANCE WITH GASB STATEMENT NO. 27**

Fiscal Year End:	12/31/2005	12/31/2006	12/31/2007	12/31/2008	12/31/2009	12/31/2010	12/31/2011	12/31/2012
Assumptions and Methods								
Interest Rate	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
Payroll Growth	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Amortization Period (years)	30	30	30	30	30	30	22	21
Cost Method	EA Normal	EA Normal	EA Normal	EA Normal	EA Normal	EA Normal	EA Normal	EA Normal
Annual Pension Cost								
Annual Required Contribution (ARC)	\$26,255,804	\$31,102,053	\$34,842,280	\$38,073,021	\$50,507,561	\$55,488,062	\$49,945,979	\$54,310,693
Interest on NPO	1,000,069	1,670,728	2,530,416	3,639,524	4,917,174	7,098,244	9,539,950	11,185,815
Adjustment to ARC	(1,110,419)	(1,855,081)	(2,809,629)	(4,041,120)	(5,459,749)	(7,881,485)	(8,137,044)	(9,833,151)
Annual Pension Cost	\$26,145,454	\$30,917,700	\$34,563,067	\$37,671,425	\$49,964,986	\$54,704,821	\$51,348,885	\$55,663,357
Contribution for the Year	\$17,762,209	\$20,171,610	\$20,699,211	\$21,700,806	\$22,701,608	\$24,183,493	\$30,775,568	TBD
Net Pension Obligation (NPO)								
NPO at beginning of year	\$12,500,861	\$20,884,105	\$31,630,195	\$45,494,051	\$61,464,670	\$88,728,048	\$119,249,376	\$139,822,693
Annual Pension Cost for Year	26,145,454	30,917,700	34,563,067	37,671,425	49,964,986	54,704,821	51,348,885	55,663,357
Contributions for year	(17,762,209)	(20,171,610)	(20,699,211)	(21,700,806)	(22,701,608)	(24,183,493)	(30,775,568)	TBD
NPO at end of year	\$20,884,105	\$31,630,195	\$45,494,051	\$61,464,670	\$88,728,048	\$119,249,376	\$139,822,693	TBD

Note: All information prior to 2011 in this exhibit was provided by the prior actuary and has not been reviewed or verified by Cavanaugh Macdonald Consulting, LLC.



SECTION II – SYSTEM ACCOUNTING INFORMATION

EXHIBIT 10

SCHEDULE OF FUNDING PROGRESS

In Accordance with Statement No. 25 of the Governmental Accounting Standards Board

Actuarial Valuation Date ¹	Market Value of Assets ² (a)	Actuarial Liability (AAL) (b)	Unfunded AAL (UAAL) ³ (b-a)	Funded Ratio (a / b)	Covered Payroll (P / R) (c)	UAAL as a Percentage of Covered P / R [(b-a) / c]
12/31/2006	\$507,600,000	\$ 801,100,000	\$293,500,000	63.4%	\$ 91,700,000	320.1%
12/31/2007	530,800,000	882,700,000	351,900,000	60.1%	99,600,000	353.3%
12/31/2008	365,900,000	947,600,000	581,700,000	38.6%	99,500,000	584.6%
12/31/2009	405,400,000	1,026,200,000	620,800,000	39.5%	103,900,000	597.5%
12/31/2010	452,600,000	1,093,300,000	640,700,000	41.4%	111,200,000	576.2%
1/1/2011	456,158,774	1,028,866,353	572,707,579	44.3%	105,025,610	545.3%
1/1/2012	467,375,458	1,077,607,299	610,231,841	43.4%	110,027,537	554.6%

1. Results prior to 2011 were provided by the prior actuary and were reported at the end of the year rather than the valuation date. All information prior to 2011 in this exhibit was provided by the prior actuary and has not been reviewed or verified by Cavanaugh Macdonald Consulting, LLC
2. The prior actuary reported the market value of assets in column (a). Our understanding of GASB 25/27 is that the valuation methodology should be used for GASB calculations to the extent it complies with GASB 25 parameters. Information reported as of 1/1/2011 and later reflects the valuation methodology, including the actuarial value of assets.
3. As of 1/1/2011 the Unfunded AAL is not reduced by the Present Value of Prior Service Payments. For the calculation of the Unfunded AAL used for funding purposes, please refer to Exhibit 4 of this report.



SECTION II – SYSTEM ACCOUNTING INFORMATION

EXHIBIT 11

THREE-YEAR TREND INFORMATION

Fiscal Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation
12/31/2009	\$49,964,986	45%	\$ 88,728,048
12/31/2010	54,704,821	44%	119,249,376
12/31/2011	51,348,885	60%	139,822,693

*All information prior to 2011 in this exhibit was provided by the prior actuary and has not been reviewed or verified by Cavanaugh Macdonald Consulting, LLC.



APPENDIX A

SUMMARY OF PLAN PROVISIONS

Average Final Monthly Compensation:

Section 22 - 63

Fire: Highest average monthly compensation during any consecutive twenty-six (26) pay periods out of the last five years of service as a member of the system for which service credit had been earned.

Police: Pensionable pay excludes certain overtime pay. For those hired before January 1, 2010, an adjustment is made to include a career average of overtime pay. For those who were age 45 and had at least twenty years of service as of January 1, 2010, highest average monthly compensation is calculated using the highest consecutive twenty-six (26) pay periods out of the last five years of service as a member of the system for which service credit had been earned. All others use the highest seventy-eight (78) pay periods with the final 130 pay periods of service.

Career Overtime Average (COTA):

Police only: Each hour an employee earns for overtime is computed back to their date of hire or 1991 (whichever is later) and divided by the number of years the employee worked after December 31, 1990. This amount shall be included in the member's pension calculation.

Member Contributions:

Section 22 – 73(a)

Section 22 - 68

Rates effective January 1, 2011

Police: 16.35% of total monthly salary for police, scheduled to reduce to 15.35% on January 1, 2014

Fire: 15.40% of total monthly salary for fire.

City of Omaha Contributions:

Section 22 – 73(b)

Rates effective January 1, 2011

Police: 33.17% of each members total monthly salary for police, increasing to 33.67% in 2012.

Fire: 21.015% of each members total monthly salary for fire.

In addition, the City shall make contributions of \$1,327,600 annually through the year 2028.

Service Retirement Eligibility

Section 22 - 75

Police: After age 55 and 10 years of service or age 45 and 20 years of service. Members hired after January 1, 2010 must be 50 rather than 45. If retiring with less than 30 years of service a 7% reduction is applied for each year prior to age 55.

Fire: Age 55 and 10 years of service or age 50 and 20 years of service. Age 45 and 25 years of service.



APPENDIX A

SUMMARY OF PLAN PROVISIONS
(continued)

Service Retirement Pension
Section 22 - 76

For Police with at least 20 years of service as of latest contract effective date and all Fire members, the following schedule applies.

<u>Years of Service</u>	<u>Minimum Age</u>	<u>Percentage of Average Final Monthly Compensation</u>
10 but less than 15	55	20%
15 but less than 20	55	30%
20 but less than 25	45**	55%*
25 years	45	75%

*55% at 20 years of service, plus 2% for each additional six months of service after 20 years and before 25 years.

** The minimum retirement age with less than 25 years is 50 for Fire.

For police who did not have 20 years of service as of the latest contract effective date, the following schedule applies:

<u>Years of Service</u>	<u>Minimum Age</u>	<u>Percentage of Average Final Monthly Compensation</u>
10 but less than 15	55	20%
15 but less than 20	55	30%
20 but less than 25	45	50%*
25 but less than 30	45	70%**
30 years	45	75%

*50% at 20 years of service, plus 2% for each additional six months of service after 20 years and before 25 years.

**70% at 25 years of service, plus 1% for each additional six months of service after 25 years and before 27 years, with an additional 0.5% 29 and 30 years, for a maximum of 75%.



APPENDIX A

SUMMARY OF PLAN PROVISIONS
(continued)

For police hired after January 1, 2010, the following schedule applies:

Years of Service	Minimum Age	Percentage of Average Final Monthly Compensation
10 but less than 15	55	20%
15 but less than 20	55	30%
20 but less than 25	50	50%*
25 but less than 30	50	65%**
30 years	50	75%

*50% at 20 years of service, plus 1.5% for each additional six months of service after 20 years and before 25 years. Early retirement reduction applies if less than 30 years of service.

**65% at 25 years of service, plus 1% for each additional six months of service after 25 years and before 30 years. Early retirement reduction applies if less than 30 years of service.

Cost of Living Adjustment (COLA):

The monthly pension shall be increased by the lesser of 3% or \$50 (\$65 for Fire retirements after June 30, 2007). The increase will be made annually, beginning in the 13th month of retirement.

Deferred Retirement Option Program (DROP):

Police only: A DROP program was instituted with the last contract. After three years, this will be reviewed to determine if it is cost neutral before continuing it. Members may participate in the DROP for three to five years once they reach retirement eligibility with a minimum of 25 years of service (certain current members have a service threshold of 22.5 years). Members continue to make contributions to the system during the DROP period. During the DROP period, the member is credited with the benefits that would have been paid if the member had retired at the start of the DROP period, along with interest at the end of the year. At the end of the DROP period, the member ends employment, receives the DROP account balance, and begins to receive payments as though retirement had occurred at the beginning of the DROP period.



APPENDIX A

SUMMARY OF PLAN PROVISIONS
(continued)

Disability Retirement

1. In Line of Duty
Section 22 - 78

A member shall become entitled to the following benefits while permanently disabled.

<u>Years of Service</u>	<u>Percentage of Average Final Monthly Compensation</u>
Less than 20	50%*
20 or more	Same as Service Retirement Pension, without any reduction for early commencement

* 55% for Fire after June 30, 2007

2. Not in Line of Duty
Section 22 - 79

A member shall become entitled to the following benefits while permanently disabled.

<u>Years of Service</u>	<u>Percentage of Average Final Monthly Compensation</u>
Up to 10 years	10%
10 but less than 15	20%
15 but less than 20	30%
20 or more	Greater of 45% or the Service Retirement Pension without any reduction for early commencement

Not payable while full salary continues

Spouse's pension:

1. Death of Active member in Line of Duty:

A monthly pension equal to 49% (52% Fire) of the member's average final monthly compensation is paid to the surviving spouse if death occurs while the active member has less than 25 years of service. A monthly pension equal to 69% (72% Fire) of the member's average final monthly compensation is paid to the surviving spouse if death occurs after the active member has 25 years or more of service.



APPENDIX A

SUMMARY OF PLAN PROVISIONS
(continued)

2. **Death of Active member Not in Line of Duty:**

The following monthly pension is paid to the surviving spouse.

<u>Years of Service at Death</u>	<u>Percentage of Average Final Monthly Compensation*</u>
0-3	0%
3-10	35.0%
11	36.4%
12	37.8%
13	39.2%
14	40.6%
15	42.0%
16	43.4%
17	44.8%
18	46.2%
19	47.6%
20-25	49.0%
25+	69%

* add 3% to each number for Fire effective July 1, 2007

Benefit terminates upon remarriage of spouse.

3. **Death of Member Eligible for Retirement or Death of Retired Member:**
Section 22 - 82

75% (90% for Fire retirements after June 30, 2007) of the pension the member was receiving or was eligible to receive at the time of death. 50% of the pension the member was receiving for Police members hired after January 1, 2010. Upon spouse's remarriage, all benefits cease.

Children's Pension
Section 22 - 82

Upon the death of an active or retired member, the following benefit will be paid to the surviving children until age 18.

<u>Number of Dependent Children</u>	<u>Percentage of Average Final Monthly Compensation</u>
1	15%
2	30%
3	45%
4 or more	50%



APPENDIX A

SUMMARY OF PLAN PROVISIONS
(continued)

Lump Sum Death Benefits

1. **Active Member without Eligible Dependents:**
Section 22 – 84(a) Accumulated member’s contributions, or \$500 if greater.

2. **Retired Member without Eligible Dependents:**
Section 22 – 84(b) Accumulated member’s contributions, less previous pension payments made, or \$500 if greater.

3. **Active Member with Eligible Dependents:**
Section 22 – 84(c) An amount payable immediately, equal to one year’s salary computed on the basis of the maximum monthly rate for patrolmen and firefighters, plus the decreased member’s accumulated contributions less pension payments to his dependents, payable to the dependent who last ceases to receive pension benefits.

4. **Retired Member with Eligible Dependents:**
Section 22 – 84(c) \$1,000 (\$5,000 for Fire retirements after June 30, 2005) payable immediately, plus the excess over \$1,000 (\$5,000 for Fire retirements after June 30, 2005) if any, of the deceased member’s accumulated contributions less pension payments to the member and his dependents, payable to the dependent who last ceases to receive pension benefits.

Vesting:
Section 22 - 86 Upon severance of employment by a member with less than 10 years of service and prior to obtaining eligibility under Section 22 – 75, a refund of such member’s accumulated contributions.

Section 22 - 86 Upon severance of employment by a member before age 45 with more than 10 years of service and prior to obtaining eligibility under Section 22 – 75, the member may elect, in lieu of receiving a refund of contributions, to receive a monthly pension, according to the table below, commencing at age 55. Such deferred pension shall be based on service credited to the date of severance.

<u>Years of Service</u>	<u>Minimum Age</u>	<u>Percentage of Average Final Monthly Compensation</u>
10 but less than 15	55	26%
15 but less than 20	55	36%
20 but less than 25	50	55%
25 or more	45	75%

For police, the schedules shown under service retirement apply as appropriate.



APPENDIX B

ACTUARIAL METHOD AND ASSUMPTIONS

Actuarial Method

Valuations of the plan use the “*entry age-normal*” cost method. Under this actuarial method, the value of future costs attributable to future employment of participants is determined. This is called present value of future normal costs. The following steps indicate how this is determined for benefits expected to be paid upon normal retirement.

1. The expected pension benefit at normal retirement is determined for each participant.
2. A normal cost, as a level percent of pay, is determined for each participant assuming that such level percent is paid from the employee’s entry age into employment to his normal retirement. This normal cost is determined so that its accumulated value at normal retirement is sufficient to provide the expected pension benefits.
3. The sum of the normal costs for all participants for one year determines the total normal cost of the plan for one year.
4. The value of future payments of normal cost in future years is determined for each participant based on his years of service to normal retirement age.
5. The sum of the value of future payments of normal cost for all participants determines the present value of future normal costs.

The value of future costs attributable to past employment of participants, which is called the actuarial liability, is equal to the present value of benefits less the present value of future normal costs. The unfunded actuarial liability is equal to the excess of the actuarial liability over assets. The unfunded actuarial liability is funded as a level percent of payroll over a 30 year closed period that began January 1, 2003.

As experience develops with the plan, actuarial gains and actuarial losses result. These actuarial gains and losses indicate the extent to which actual experience is deviating from that expected on the basis of the actuarial assumptions. In each year, as they occur, actuarial gains and losses are recognized in the unfunded actuarial liability as of the valuation date.



APPENDIX B

**ACTUARIAL METHOD AND ASSUMPTIONS
(continued)**

Interest:	8.00% per year, (net of investment expenses).
Salary Increases:	Merit increases based on service plus a general wage increase.
Service Retirement Age:	Graduated rates based on service.
Mortality:	
Active Members	RP-2000 Employee Table with generational improvements, set forward one year
Service Pensioners and Beneficiaries	RP-2000 Healthy Annuitant Table with generational improvements, set forward one year
Disabled	RP-2000 Disabled Retiree Mortality Table with generational improvements
Disability:	Graduated Rates by age. See table on next page
Percent of Disabilities in Line of Duty:	85%
Medical Expenses for Disabilities in Line of Duty:	5% load on liability for current and future disabled members.
Percent Married at Death or Retirement:	75%
Turnover	Graduated rates by age. See table on next page
Assets:	Actuarial value of assets equal to 1/3 of market value, plus 2/3 of expected value. Actuarial value of assets cannot exceed 120% of Market value of assets.
Load on Active Member liability to reflect final wage adjustments	10% for fire members, 0% for police members
Increase in total annual payroll	4.0%
Assumed annual rate of inflation	3.5%



APPENDIX B

**ACTUARIAL METHOD AND ASSUMPTIONS
(continued)**

SAMPLE RATES

Age on 1/1/2010	Annual Rates			
	Mortality		Disability	Turnover
	Males	Females		
20	.03%	.02%	.26%	1.41%
30	.05	.03	.30	1.69
40	.10	.07	.52	.63
50	.19	.15	.95	.00
60	.46	.41	1.45	.00

Years of Service	Salary Progression			
	Inflation	Productivity	Merit & Longevity	Total Increase
1	3.5%	0.5%	2.5%	6.5%
5	3.5%	0.5%	2.5	6.5
10	3.5%	0.5%	2.0	6.0
15	3.5%	0.5%	1.0	5.0
20	3.5%	0.5%	0.5	4.5
25	3.5%	0.5%	0.0	4.0
30	3.5%	0.5%	0.0	4.0

Service Requirements

Assumed retirement rates are based on the number of years of credited service as follows:

Years of Service	Distribution	Annual Rate
Less than 25	0.0%	0.0%
25	100.0	100.0

If a member was hired after age 37, then it is assumed that member would retire at the later of age 62 or 10 years of service.



APPENDICES

MEMBERSHIP DATA FOR VALUATION

The summary of employee characteristics presented below covers the employee group as of January 1, 2012. The schedules at the end of the report show the distribution of the various employee groups by present age along with other pertinent data.

Total number of employees in valuation:*

(a) Active employees	1,392
(b) Deferred vested employees	8
(c) Disabled employees	240
(d) Retired employees, spouses and children receiving benefits	<u>1,213</u>
(e) Total employees in valuation	2,853

Average age of employees in valuation:

(a) Active employees	
Attained Age	39.5
Hire Age	28.4
(b) Deferred vested employees	46.9
(c) Disabled employees	65.8
(d) Retired employees	63.1
(e) Spouses and children receiving benefits	69.1

Active employees eligible for vested benefits as of January 1, 2012:

(a) Employees under age 45 with 10 or more years of service or under age 55 with less than 20 years of service – eligible for deferred vested benefits	585
(b) Employees age 55 and over with 10 or more years of service or age 45 with 20 or more years of service eligible for early or normal retirement benefits	150
(c) Employees eligible for refund of contributions only	<u>657</u>
(d) Total	1,392

*9 DROP members included in retiree counts



MEMBERSHIP DATA RECONCILIATION

January 1, 2011 to January 1, 2012

The number of members included in the valuation, as summarized in the table below, is in accordance with the data submitted by the City for eligible employees as of the valuation date.

	<u>Active Members</u>	<u>Deferred Vested</u>	<u>Disabled</u>	<u>Retirees*</u>	<u>Beneficiaries</u>	<u>Total</u>
Members as of 1/1/2011	1,422	9	240	939	275	2,885
New Members	0	0	0	0	0	0
Terminations						
Rehired	0	0	0	0	0	0
Refunded	(8)	0	0	0	0	(8)
Deferred Vested	(2)	2	0	0	0	0
Disabled	(8)	0	8	0	0	0
Data Corrections (and Benefits Expired)	0	0	0	0	(5)	(5)
Retirements	(12)	(3)	0	15	0	0
Alternate Payees (QDRO)	0	0	0	0	3	3
Deaths						
With Beneficiary	0	0	(4)	(6)	10	0
Without Beneficiary	0	0	(4)	(6)	(12)	(22)
Total Members 1/1/2012	1,392	8	240	942	271	2,853

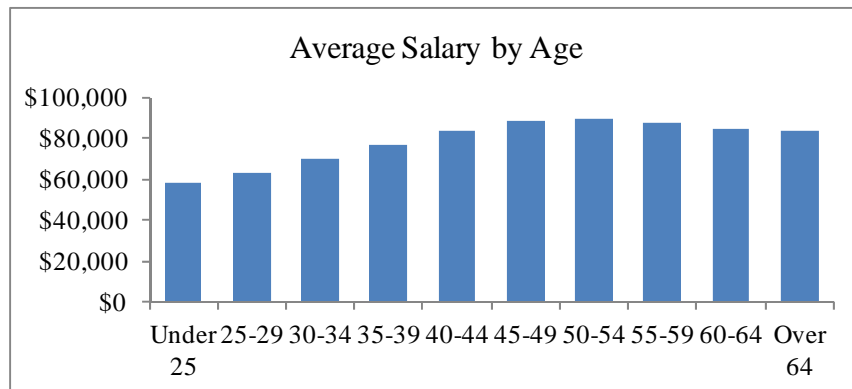
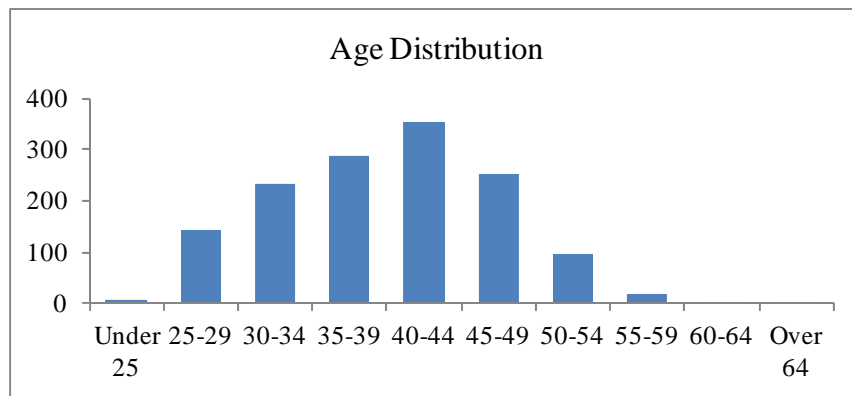
*9 DROP members included in retiree counts



SCHEDULE I

**ACTIVE MEMBERS AS OF JANUARY 1, 2012
Total**

<u>Age</u>	<u>Count of Members</u>			<u>Valuation Salaries of Members</u>		
	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Under 25	6	0	6	348,404	0	348,404
25-29	127	15	142	8,038,037	940,615	8,978,652
30-34	201	31	232	13,978,892	2,175,254	16,154,147
35-39	252	36	288	19,246,798	2,717,255	21,964,053
40-44	304	48	352	25,445,120	4,110,728	29,555,849
45-49	219	33	252	19,446,395	2,881,322	22,327,717
50-54	88	9	97	7,900,628	809,782	8,710,410
55-59	15	2	17	1,302,721	180,597	1,483,318
60-64	3	1	4	260,095	77,375	337,470
Over 64	1	1	2	84,575	82,944	167,519
Total	1,216	176	1,392	96,051,665	13,975,873	110,027,538



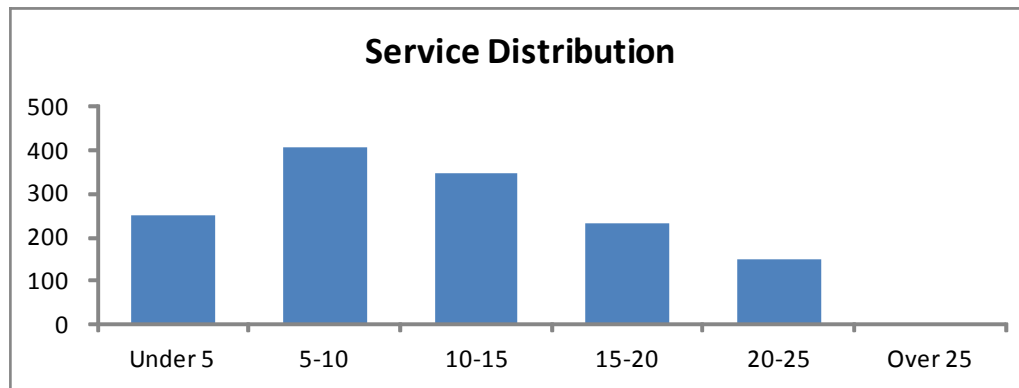


SCHEDULE I

ACTIVE MEMBERS AS OF JANUARY 1, 2012

Total

<u>Age</u>	Service									Total
	Under 5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	Over 40	
Under 25	6	0	0	0	0	0	0	0	0	6
25-29	106	36	0	0	0	0	0	0	0	142
30-34	79	137	16	0	0	0	0	0	0	232
35-39	45	118	114	11	0	0	0	0	0	288
40-44	12	77	134	112	17	0	0	0	0	352
45-49	1	31	53	80	86	1	0	0	0	252
50-54	0	8	26	22	37	4	0	0	0	97
55-59	0	1	3	7	6	0	0	0	0	17
60-64	0	0	0	1	3	0	0	0	0	4
Over 64	0	0	2	0	0	0	0	0	0	2
Total	249	408	348	233	149	5	0	0	0	1,392



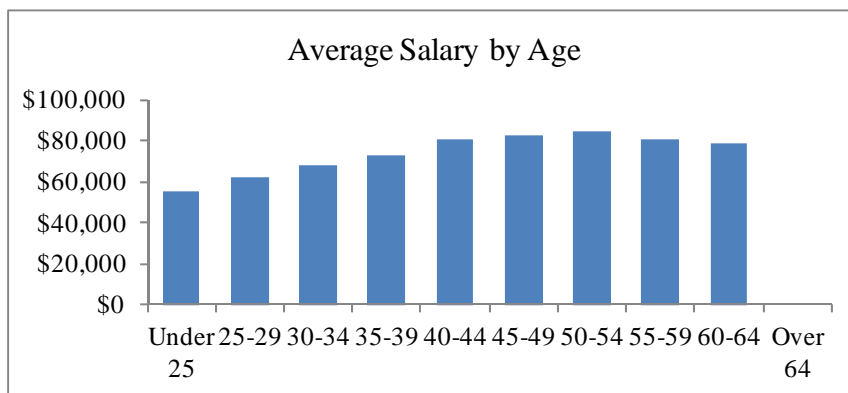
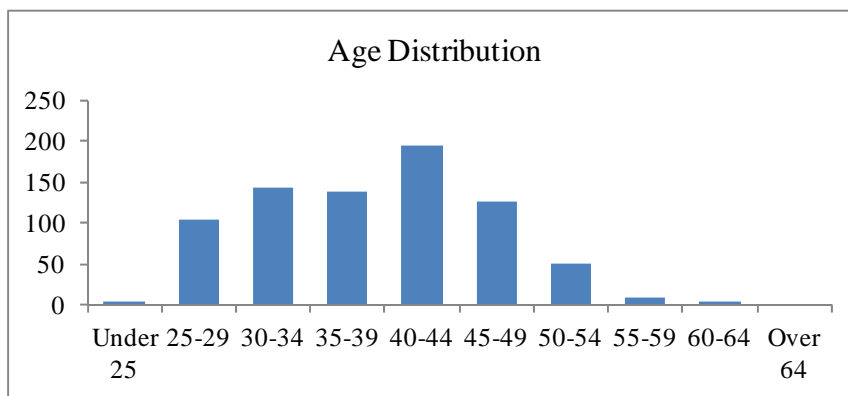


SCHEDULE I (continued)

ACTIVE MEMBERS AS OF JANUARY 1, 2012

Police

<u>Age</u>	<u>Count of Members</u>			<u>Valuation Salaries of Members</u>		
	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Under 25	4	0	4	219,539	0	219,539
25-29	89	14	103	5,508,757	872,437	6,381,194
30-34	116	26	142	7,845,462	1,802,130	9,647,592
35-39	109	29	138	7,887,025	2,171,149	10,058,174
40-44	155	39	194	12,369,501	3,257,230	15,626,730
45-49	99	26	125	8,084,607	2,209,782	10,294,389
50-54	42	8	50	3,517,778	716,340	4,234,117
55-59	7	2	9	547,970	180,597	728,567
60-64	2	1	3	158,073	77,375	235,448
Over 64	0	0	0	0	0	0
Total	623	145	768	46,138,711	11,287,040	57,425,751



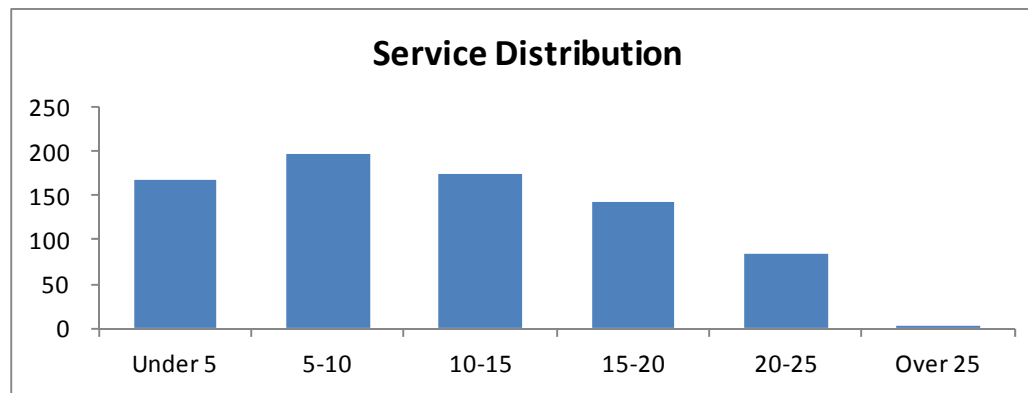


SCHEDULE I (continued)

ACTIVE MEMBERS AS OF JANUARY 1, 2012

Police

Age	Service									Total
	Under 5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	Over 40	
Under 25	4	0	0	0	0	0	0	0	0	4
25-29	78	25	0	0	0	0	0	0	0	103
30-34	49	82	11	0	0	0	0	0	0	142
35-39	30	40	63	5	0	0	0	0	0	138
40-44	6	33	69	78	8	0	0	0	0	194
45-49	1	11	24	41	47	1	0	0	0	125
50-54	0	4	8	13	24	1	0	0	0	50
55-59	0	1	0	4	4	0	0	0	0	9
60-64	0	0	0	1	2	0	0	0	0	3
Over 64	0	0	0	0	0	0	0	0	0	0
Total	168	196	175	142	85	2	0	0	0	768





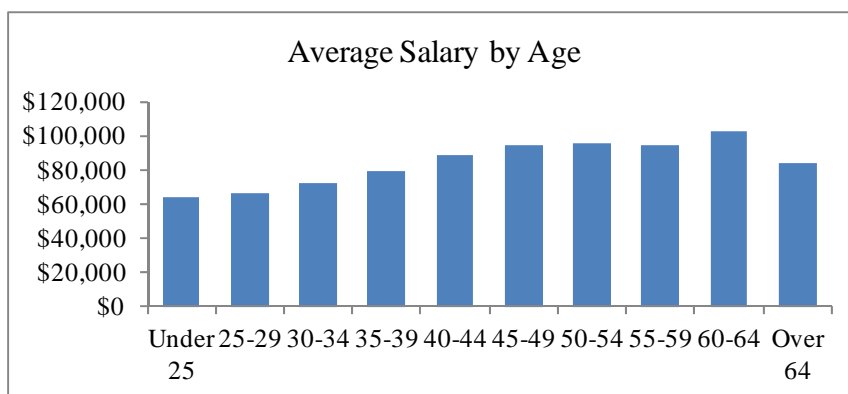
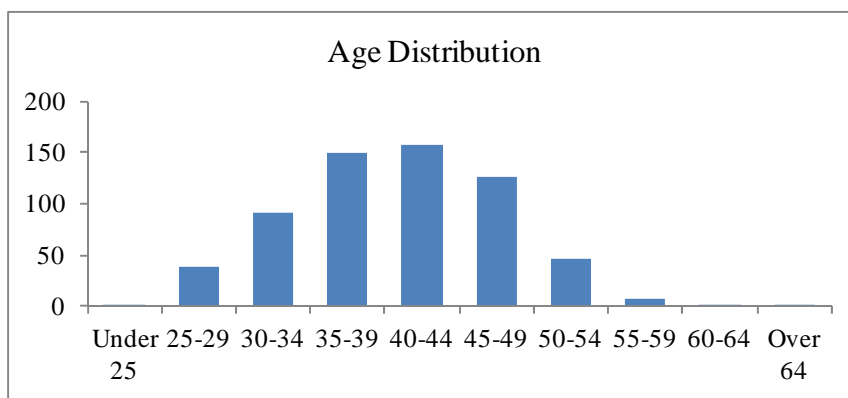
SCHEDULE I (continued)

ACTIVE MEMBERS AS OF JANUARY 1, 2012

Fire

<u>Age</u>	<u>Count of Members</u>			<u>Valuation Salaries of Members*</u>		
	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Under 25	2	0	2	128,865	0	128,865
25-29	38	1	39	2,529,280	68,178	2,597,458
30-34	85	5	90	6,133,430	373,125	6,506,555
35-39	143	7	150	11,359,774	546,106	11,905,879
40-44	149	9	158	13,075,620	853,499	13,929,118
45-49	120	7	127	11,361,787	671,540	12,033,326
50-54	46	1	47	4,382,850	93,443	4,476,293
55-59	8	0	8	754,752	0	754,752
60-64	1	0	1	102,022	0	102,022
Over 64	1	1	2	84,575	82,944	167,519
Total	593	31	624	49,912,953	2,688,834	52,601,786

*Estimated since a contract was not in place

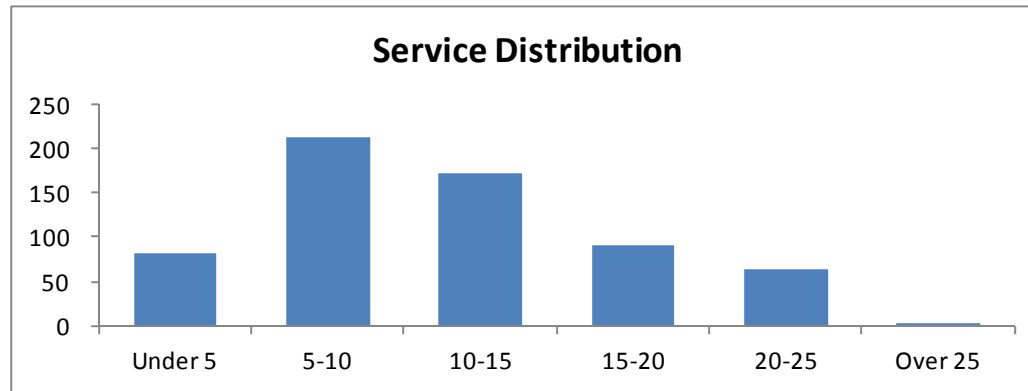




SCHEDULE I (continued)

ACTIVE MEMBERS AS OF JANUARY 1, 2012
Fire

Age	Service									Total
	Under 5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	Over 40	
Under 25	2	0	0	0	0	0	0	0	0	2
25-29	28	11	0	0	0	0	0	0	0	39
30-34	30	55	5	0	0	0	0	0	0	90
35-39	15	78	51	6	0	0	0	0	0	150
40-44	6	44	65	34	9	0	0	0	0	158
45-49	0	20	29	39	39	0	0	0	0	127
50-54	0	4	18	9	13	3	0	0	0	47
55-59	0	0	3	3	2	0	0	0	0	8
60-64	0	0	0	0	1	0	0	0	0	1
Over 64	0	0	2	0	0	0	0	0	0	2
Total	81	212	173	91	64	3	0	0	0	624

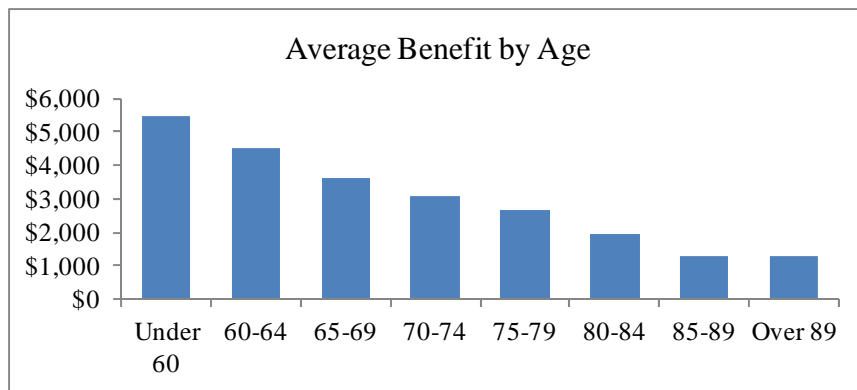
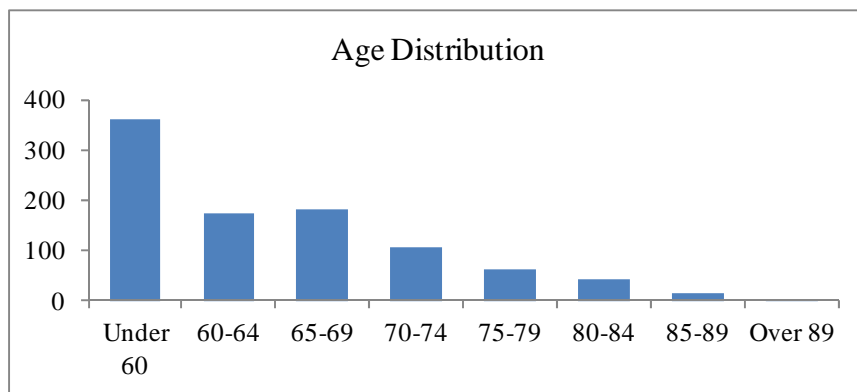




SCHEDULE II

RETIRED MEMBERS* AS OF JANUARY 1, 2012

Age	Count of Retirees			Current Monthly Benefits		
	Males	Females	Total	Males	Females	Total
Under 60	326	35	361	\$1,805,867	\$172,806	\$1,978,672
60-64	168	4	172	756,195	18,603	774,797
65-69	178	3	181	644,897	12,375	657,272
70-74	105	2	107	319,696	7,086	326,782
75-79	61	1	62	163,211	3,055	166,266
80-84	42	0	42	80,722	0	80,722
85-89	14	0	14	17,900	0	17,900
Over 89	3	0	3	3,845	0	3,845
Total	897	45	942	\$3,792,332	\$213,924	\$4,006,256



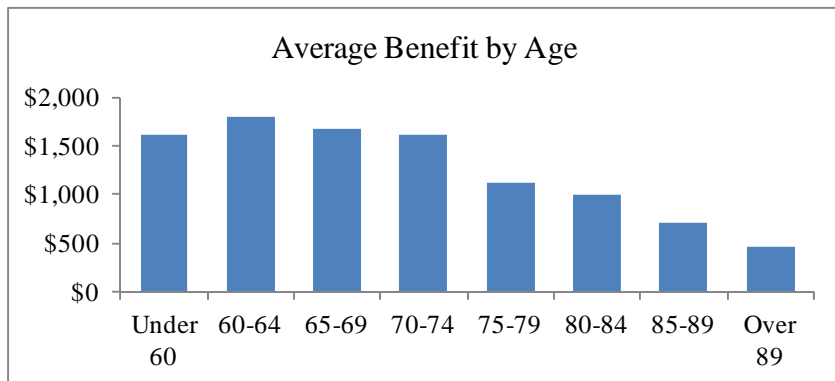
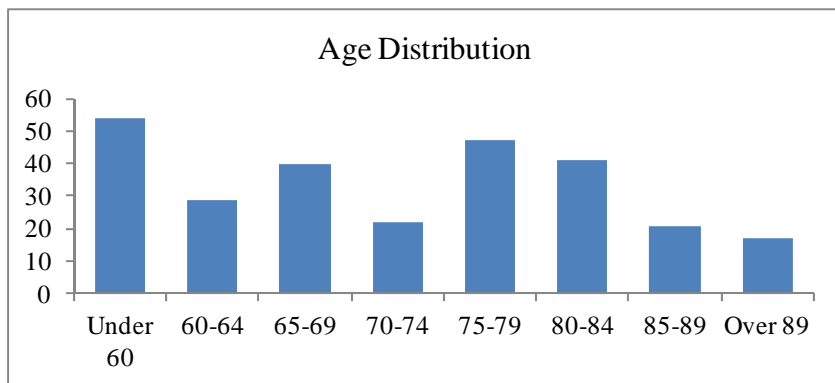
*9 DROP members included in retiree counts



SCHEDULE III

BENEFICIARIES RECEIVING BENEFITS AS OF JANUARY 1, 2012

Age	Count of Beneficiaries			Current Monthly Benefits		
	Males	Females	Total	Males	Females	Total
Under 60	6	48	54	\$5,202	\$ 81,522	\$ 86,724
60-64	0	29	29	0	52,120	52,120
65-69	0	40	40	0	67,328	67,328
70-74	0	22	22	0	35,554	35,554
75-79	0	47	47	0	52,983	52,983
80-84	0	41	41	0	40,669	40,669
85-89	0	21	21	0	14,922	14,922
Over 89	0	17	17	0	7,864	7,864
Total	6	265	271	\$5,202	\$352,962	\$358,164





SCHEDULE IV

DEFERRED VESTED FORMER MEMBERS AS OF JANUARY 1, 2012

<u>Age</u>	<u>Count of Members</u>			<u>Expected Monthly Benefit</u>		
	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Under 25	0	0	0	\$ 0	\$ 0	\$ 0
25-29	0	0	0	0	0	0
30-34	1	0	1	1,950	0	1,950
35-39	0	0	0	0	0	0
40-44	1	0	1	1,268	0	1,268
45-49	3	0	3	4,354	0	4,354
50-54	2	1	3	6,044	843	6,888
55-59	0	0	0	0	0	0
Over 59	0	0	0	0	0	0
Total	7	1	8	\$13,617	\$843	\$14,460



SCHEDULE V

DISABLED MEMBERS AS OF JANUARY 1, 2012

<u>Age</u>	<u>Count of Members</u>			<u>Current Monthly Benefits</u>		
	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Under 30	0	0	0	\$ 0	\$ 0	\$ 0
30-34	1	0	1	2,747	0	2,747
35-39	2	2	4	6,351	5,255	11,606
40-44	5	1	6	14,344	2,761	17,105
45-49	13	5	18	42,201	11,936	54,137
50-54	10	6	16	28,620	16,308	44,928
55-59	13	2	15	43,449	2,933	46,381
60-64	25	0	25	78,802	0	78,802
65-69	61	0	61	161,310	0	161,310
70-74	40	0	40	89,856	0	89,856
75-79	22	0	22	49,289	0	49,289
80-84	24	0	24	34,359	0	34,359
85-89	8	0	8	9,080	0	9,080
Over 89	0	0	0	0	0	0
Total	224	16	240	\$560,408	\$39,192	\$599,600