CITY OF OMAHA EMPLOYEES' RETIREMENT SYSTEM

Valuation Report as of January 1, 2008

CITY OF OMAHA EMPLOYEES' RETIREMENT SYSTEM ACTUARIAL VALUATION REPORT

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December 11, 2008

The Board of Trustees City of Omaha Employees' Retirement System Omaha/Douglas Civic Center 1819 Farnam Street Omaha, NE 68183

Re: January 1, 2008 Actuarial Report

Dear Members of the Board:

At your request, we have performed an annual actuarial valuation of the City of Omaha Employees' Retirement System as of January 1, 2008 for determining contributions for the year ended December 31, 2008. The major findings of the valuation are contained in this report. This report reflects the benefit provisions and contribution rates in effect as of January 1, 2008.

In preparing this report, we relied, without audit, on information (some oral and some written) supplied by the System's staff. This information includes, but is not limited to, plan provisions, member data and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted principles and practices which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board (ASB) and the applicable Guides to Professional Conduct, amplifying Opinions and Supporting Recommendations of American Academy of Actuaries.

We further certify that all costs, liabilities, rates of interest and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations of future experience); and which, in combination, offer our best estimate of anticipated experience under the Plan. Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions. The Board of Trustees has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix B.



Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in 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 plan'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 actuarial contribution rates for funding the System. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. Determinations for purposes other than these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

Milliman's work product was prepared exclusively for the City of Omaha Employees' Retirement System for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning the Employees' Retirement System operations, and used data from the Employees' Retirement System, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage professionals for advice appropriate to its own specific needs.

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

Respectfully Submitted,

MILLIMAN, Inc.

I, Gregg Rueschhoff, A.S.A. am a member of the American Academy of Actuaries and an Associate of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Gregg Rueschhoff, A.S.A.

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Principal & Consulting Actuary

This report presents the results of the January 1, 2008 actuarial valuation of the City of Omaha Employees' Retirement System (the "System"). The primary purposes of performing the valuation are to:

- Determine the employer contribution rates required to fund the System on an actuarially sound basis,
- Disclose asset and liability measures as of January 1, 2008,
- Analyze and report on trends in System contributions, assets, and liabilities over the past year.

The valuation results provide a "snapshot" view of the System's financial condition on January 1, 2008. There was an increase in the Actuarial Contribution Rate from the last valuation. (Throughout this report we refer to the actuarially determined contribution rate as the Actuarial Contribution Rate). There was no change in the actuarial assumptions or actuarial methods from the prior year. One reason for the increase is due to the fact that actual contributions were less than the actuarially recommended rate since the last valuation. Other reasons include actuarial losses on plan experience that were somewhat offset by actuarial gains on net investment return. Each component of change in the Actuarial Contribution Rate is identified later in this Board Summary (see page 4).



Assets

As of January 1, 2008, the System had total funds, when measured on an actuarial value basis, of \$283.2 million. This was an increase of \$11.7 million from the January 1, 2007 figure of \$271.5 million. We expected an increase of \$7.7 million over that time period.

The components of the change in the actuarial value of assets (in millions) are set forth below:

	Actuarial Value	Market Value
Assets, January 1, 2007	\$ 271.5	\$ 292.0
 employer and member contributions 	+ 9.2	+ 9.2
 benefit payments 	- 22.5	- 22.5
 net investment income (expected) 	+ 21.2	+ 22.8
 net investment actuarial gain/(loss) 	<u>+ 3.8</u>	<u>- 6.8</u>
Assets, December 31, 2007	\$ 283.2	\$294.7

The market value of assets is not used directly in the actuarial calculation of the Plan's funded status and the development of the Actuarial Contribution Rate. An asset valuation method is used to smooth the effects of market fluctuations. The actuarial value of assets is equal to the expected asset value (based on a rate of return equal to the actuarial assumed rate of 8.0%) plus 25% of the difference between the actual market value and the expected asset value. See page 7 for the detailed development of the actuarial value of assets as of January 1, 2008.



Liabilities

The actuarial liability (also referred to as past service liability) is the portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and asset values at the same date is referred to as the unfunded actuarial liability. The unfunded actuarial liability will be reduced if the employer's contributions exceed the employer's normal cost for the year, after allowing for interest earned on the previous balance of the unfunded actuarial liability. Benefit improvements, actuarial gains and losses, and changes in actuarial assumptions and procedures will also impact the total actuarial liability and the unfunded portion thereof.

The calculation of the Unfunded Actuarial Liability as of January 1, 2008 is shown below:

Actuarial Liability	\$ 374,918,443
Actuarial Value of Assets	\$ <u>(283,243,750)</u>
Unfunded Actuarial Liability (UAL)	\$ 91,674,693

Between January 1, 2007 and January 1, 2008 the change in the unfunded actuarial liabilities for the System was as follows (in millions):

	\$millions
Unfunded Actuarial Liability, January 1, 2007	\$ 85.6
	2.2
• effect of contribution shortfall in 2007	3.2
 expected increase due to amortization method 	1.7
• (gain)/loss from investment return	(3.8)
demographic experience-salary increases	2.3
demographic experience-retirements	1.9
• all other experience	0.8
• change in actuarial assumptions	0.0
 change in benefit provisions 	0.0
Unfunded Actuarial Liability, January 1, 2008	\$91.7



Contributions

Under the Entry Age Normal Method, contributions to the System consist of:

- a "normal cost" for the portion of projected liabilities attributable to service of members during the year following the valuation date, and
- an "unfunded actuarial liability" contribution for the excess of the portion of projected liabilities allocated to service to date over assets on hand.

The System's total actuarially determined contribution rate (payable as a % of member payroll) increased by **0.41**% of pay, to **24.66**% on January 1, 2008, from 24.25% on January 1, 2007. The primary components of this change are as follows:

	Rate
Total Actuarial Contribution Rate, January 1, 2007	24.25%
 Actuarial (Gain)/Loss – Investment Experience 	(0.46)
Actuarial (Gain)/Loss – Demographic Experience	0.53
Benefit Improvements	0.00
Assumption Changes	0.00
Contributions of less than Actuarial Rate	<u>0.34</u>
Total Actuarial Contribution Rate, January 1, 2008	24.66%

See page 10 for a detailed calculation of the Actuarial Contribution Rate as of January 1, 2008.

The Actuarial Contribution Rate increased from 24.25% of payroll on January 1, 2007 to 24.66% of payroll on January 1, 2008. This rate increased over the period by 0.41% of payroll due to demographic changes and contributions less than the actuarial rate in 2007. These factors were partially offset by a higher than assumed rate of return on the actuarial value of assets.



Observations

The actual contributions made to the System continue to be significantly less than the Actuarial Contribution Rate. The City's contribution rate is 9.525% of pensionable payroll. The member contribution rate is 8.325% of payroll. These result in a total contribution rate of 17.85%. The actual contribution to the System is 6.81% less than the Actuarial Contribution Rate developed in this valuation. In the last valuation report, we discussed the importance of closing this contribution shortfall. The situation still exists, and in fact is worse. If all actuarial assumptions are met and current benefit structure and contributions remain unchanged, we expect, the System's funded status in future years will decline and the Actuarial Contribution Rate will systematically increase.

The shortfall between the actual contribution rate (city and member) and the Actuarial Contribution Rate results in an increase in the Unfunded Actuarial Liability and a corresponding increase in the Actuarial Contribution Rate. Under the current schedule of contribution rates, the shortfall is expected to increase in future years. The table on page 4 provides a reconciliation of the change in the Actuarial Contribution Rate from the prior valuation. As that table illustrates, the Actuarial Contribution Rate in the current valuation is 0.34% higher due to actual contributions less than the Actuarial Contribution Rate (as measured from the January 1, 2007 report). If all actuarial assumptions are met in the future, the contribution shortfall will increase and its impact on the Actuarial Contribution Rate will also increase, possibly significantly. We strongly recommend that the contribution shortfall between the actual contribution rate and the Actuarial Contribution Rate be addressed and measures be taken to eliminate it. The longer action is delayed to address this funding shortfall, the higher the ultimate contribution rate will be.

As stated in this report, our analysis was prepared as of January 1, 2008 which is the most recent valuation date. As of this writing, the equity markets have declined significantly during 2008. If this trend holds through the remainder of the year, we expect the Unfunded Actuarial Liability (UAL) will increase significantly in 2009. For example, if the investment loss in 2008 is, say -15%, then the UAL would increase approximately \$44 million and the corresponding increase in the recommended annual contribution would increase by approximately 5.2% of payroll. We believe it is important to keep this in mind when considering plan changes.



Summary of Principal Results

		January 1, 2007 Valuation	January 1, 2008 Valuation
1.	Participant Data	<u> </u>	<u>*************************************</u>
	Number of:		
	Active Members	1,101	1,125
	Service Retirements	815	845
	Surviving Spouses and Children	251	253
	Disabled	126	125
	Deferred Vested Total	<u>81</u> 2,374	<u>79</u> 2,427
	Annual Salaries of Active Members	\$48,684,642	\$52,278,938
	Average Per Member	44,219	46,470
2.	Assets and Liabilities		
	Total Actuarial Liability	\$357,060,698	\$374,918,443
	Market Value of Assets	292,040,611	294,658,022
	Actuarial Value of Assets	271,494,526	283,243,750
	Unfunded Actuarial Liability	85,566,172	91,674,693
	Funded Ratios:		
	On Market Value	81.8%	78.6%
	On Actuarial Value	76.0%	75.5%



Change in Net Plan Assets at Market Value Increases since January 1, 2007

Assets at January 1, 2007	\$292,040,611
Receipts:	
City Contributions	4,975,039
Employee Contributions	4,262,326
Other	3,549
Investment Income	17,916,546
Total Receipts	\$27,157,460
Disbursements:	
Pensions Paid to Retirees	\$22,496,006
Investment Fees	2,044,043
Total Disbursements	\$24,540,049
Assets at December 31, 2007 (Market Value)	\$294,658,022
Annualized Yield	
- Gross - Net of Expenses	6.3% 5.6%



Actuarial Value of Assets

Neither the market value of assets, representing a "cash-out" value of Plan assets, nor the book values of assets, representing the cost of investments, may be the best measure of the System's <u>ongoing</u> ability to meet its obligations.

To arrive at a suitable value for the actuarial valuation, a technique for determining the actuarial value of assets is used which dampens swings in the market value while still indirectly recognizing market values. The specific technique follows:

- Step 1: Determine the expected value of plan assets at the current valuation date using the actuarial assumption for investment return and the actual receipts and disbursements of the fund since the previous actuarial valuation.
- Step 2: Subtract the expected value determined in Step 1 from the total market value of the Fund at the current valuation date.
- **Step 3:** Multiply the difference between market and expected values determined in Step 2 by 25%.
- **Step 4:** Add the expected value of Step 1 and the product of Step 3 to determine the actuarial value of assets.

1.	Actuarial Value of Assets as of January 1, 2007	\$ 271,494,525
2.	Actual Receipts/Disbursements a. Total Contributions b. Benefit Payments c. Net Change	9,240,914 (22,496,006) (13,255,092)
3.	Expected Investment Earnings	21,199,558
4.	Expected Actuarial Value of Assets as of January 1, 2008	279,438,992
5.	Market Value as of January 1, 2008	294,658,022
6.	Difference Between Market and Expected Values	15,219,030
7.	Actuarial Value of Assets as of January 1, 2008 (4 + 25% of 6)	\$ 283,243,750



Actuarial Valuation Detail Actuarial Balance Sheet

An actuarial statement of the status of the plan in balance sheet form as of January 1, 2007 and January 1, 2008 is as follows:

	January 1, 2007	January 1, 2008
Assets		
Fund	\$271,494,526	\$283,243,750
Present Value of Future Normal Costs	45,184,630	48,810,602
Unfunded Actuarial Liability	85,566,172	91,674,693
Total	\$402,245,328	\$423,729,045
Liabilities		
Inactive Members:		
Service Retirements	\$179,393,311	\$191,689,283
Disability Retirements	22,877,682	22,477,102
Surviving Spouses and Children	18,684,279	19,675,072
Lump Sum Death Benefits	1,698,174	1,743,129
Terminated Vested	5,567,958	5,756,725
Total Inactives	\$228,221,404	\$241,341,311
Active Members:		
Service Retirements	\$157,992,774	\$165,498,451
Disability Retirements	7,671,420	8,081,171
Death Benefits	2,107,585	2,190,581
Withdrawal Benefits	6,252,145	6,617,531
Total Active	\$174,023,924	\$182,387,734
Total	\$402,245,328	\$423,729,045



Actuarial Valuation Detail

UNFUNDED ACTUARIAL LIABILITY

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.

1.	Present Value of Future Benefits	\$ 423,729,045
2.	Present Value of Future Normal Costs	48,810,602
3.	Actuarial Liability $(1) - (2)$	374,918,443
4.	Actuarial Value of Assets	283,243,750
5.	Unfunded Actuarial Liability (3) – (4)	\$ 91,674,693



Actuarial Valuation Detail

DEVELOPMENT OF 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 payment. The Plan is financed by contributions from the employees and the City.

1. (a) Normal Cost	\$ 7,081,195
(b) Covered Payroll for Members Under	\$ 51,838,909
(a) / (b)	13.66%
2. Unfunded Actuarial Liability/(Surplus) at Valuation Date	\$ 91,674,693
3. Amortization Factor to Pay UAL as a Level Percent of Payroll over 24 Years	16.086
4. Unfunded Actuarial Liability/(Surplus) Payment (Adjusted to Mid-Year) [(2) / (3)] x 1.08 ^{1/2}	\$ 5,922,612
5. Total Projected Payroll for the Year	\$ 53,835,951
6. Unfunded Actuarial Liability Payment as a Percent of Payroll [(4) / (5)]	11.00%
7. Total Contribution as a Percent of Pay [(1c) + (6)]	24.66%



	January 1, 2007	<u>January 1, 2008</u>
ACTIVE MEMBERS		
Total Reported Annual Compensation	\$48,684,642	\$52,278,938
Average Per Member	44,219	46,470
Average Attained Age	47.0	47.1
Average Hire Age	35.6	35.9
Average Past Service	11.5	11.2
NON-ACTIVE MEMBERS		
Service Retirements	815	845
Surviving Spouses & Children	251	253
Deferred Vested	81	79
Disabled	126	125
Annual Pension Benefit		
Service Retirements	\$ 17,459,537	\$ 18,790,315
Surviving Spouses	2,351,276	2,522,606
Disabled	2,159,828	2,169,412
Average Attained Age		
Service Retirees	67.3	67.3
Disability Retirees	58.9	59.6
Surviving Spouses	78.9	79.0



Summary of Plan Provisions

Effective Date: Section 22-21 January 1, 1949.

Active Member: Section 22-24 & 25 All City employees except: policemen; firemen; persons paid on a contractual or fee basis; seasonal, temporary and part-time employees; and elective officials who do not make written application.

Average Final Monthly Compensation Section 22-23 The member's highest consecutive 26 pay periods of compensation during the final 130 pay periods of service as a member, divided by 12.

Member Contributions: Section 22-26(a) Effective January 1, 2008, each member will contribute 8.325% of total compensation. Interest is currently credited at 3.0% on member contributions.

City of Omaha Contributions Section 22-26(e) Effective January 1, 2008, the City will contribute an amount equal to 9.525% of each member's total compensation.

Service Credits: Section 22-28 and 29 The member shall receive membership service credit for each full pay period of employment. Intervening periods of military service in time of emergency shall be counted provided the member is honorably discharged and returns to work within 90 days after such discharge.

Membership credits shall be earned by those receiving a disability pension. However, the total credited service will not exceed 30, unless more than 30 years were earned as an active member.

Service Retirement Eligibility: Section 22-30

Effective June 19, 2001, a member is eligible to retire after age 50 if their age plus service is 80 or more. Otherwise, a member is eligible to retire after age 55 and 5 years of service. The pension is reduced 8% for years prior to age 60. No reduction applies if age plus service is 80 or more.



Service Retirement Pension: Section 22-32 A monthly pension equal to 2.25% of Average Final Monthly Compensation times years of credited service.

Disability Benefits: Section 22-35 If permanently disabled with five years of service, the member shall receive 60% of final monthly compensation offset by Social Security and workers' compensation benefits. Payment for all medical, surgical and hospital expenses incurred is made if disability is service related. Not payable while full salary continues.

Spouse's Pension:

1. Death of Active Member: Section 22-36

A monthly pension equal to 75% of the member's accrued pension is paid to the surviving spouse until death or remarriage. The member must have had five years of service or had a service-connected death and six months of service.

2. Death of Member Eligible for Retirement or Death of Retired Member Section 22-36 If legally married to the member for at least one year, surviving spouse shall be entitled to 75% of the pension the member was receiving or was eligible to receive at the time of death. Upon the spouse's remarriage, all benefits cease.

Children's Pension: Section 22-36 Upon the death of an active or retired member, the following benefit will be paid to the surviving children until age 18 or prior to death or marriage, except that if a child is totally disabled, the full pension continues until the cessation of total disability or dependency for support, whichever occurs first:

Number of	Percentage
Dependent Children	of Accrued Benefit
1	5%
2	10%
3	15%
4 or more	20%



Lump Sum Death Benefits:

1. Active Member without Eligible Dependents: Section 22-37

Accumulated member's contributions, plus \$5,000.

2. Retired Member Without Eligible Dependents: Section 22-37 Accumulated member's contribution less previous pension payments made, plus \$5,000.

3. Active Member with Eligible Dependents: Section 22-37

\$5,000.

4. Retired Member with Eligible Dependents: Section 22-37

\$5,000.

Vesting:

Section 22-39

Upon severance of employment by a member with less than 5 years of service and prior to obtaining eligibility under Section 22-30, a refund of such member's accumulated contributions, including credited interest, will be paid.

Section 22-40

Upon severance of employment by a member with more than 5 years of service and prior to obtaining eligibility for retirement, the member may elect, in lieu of receiving a refund of contributions, to receive a monthly pension, reduced for early retirement if applicable, commencing at or above age 55. Such deferred pension shall be based on service credited to the date of severance.

Supplemental Pension: Section 22-123 Retirees (including widows, widowers and children) receive a supplemental pension (Cost of Living Adjustment - COLA) after five years equal to the lesser of 3% or \$50 per month. The COLA is granted for the full remaining period that benefits are payable. No COLA's will be available for members who retire after January 28, 1998.



ACTUARIAL METHOD

Valuation 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 <u>present value of future normal costs</u>. 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 <u>normal cost</u>, 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 costs.

The value of future costs attributable to past employment of participants, which is called the <u>accrued liability</u>, is equal to the present value of benefits less the present value of future normal costs. The <u>unfunded accrued liability</u> is equal to the excess of the accrued liability over assets. The unfunded accrued liability is amortized as a level percent of pay over the 30 year period beginning January 1, 2002 and ending January 1, 2032.

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 accrued liability as of the valuation date.



ACTUARIAL ASSUMPTIONS

Interest: 8.0% per year, net of investment expenses.

Inflation: 3.5% per year, net of investment expenses.

Salary Increases:

Annual Rate of Increase For Sample Years

	1 of cumple 1 cuis			
Years of			Merit &	Total
<u>Service</u>	Inflation	Productivity	Longevity	Increase
1	3.5%	.5%	6.0%	10.0%
5	3.5%	.5%	2.5%	6.5%
10	3.5%	.5%	1.0%	5.0%
15	3.5%	.5%	0.5%	4.5%
20+	3.5%	.5%	0.0%	4.0%

Payroll Growth Assumption: 4.0%

Service Retirement Age:

Eligible for Unreduced Retirement

	1st Year	Subsequent
<u>Age</u>	Eligible	Years
50	25%	20%
52-53	25%	20%
54-55	35%	25%
56-57	45%	30%
58-59	50%	25%
60	25%	25%
61		25%
62		35%
63		25%
64		25%
65-69		50%
70		100%

Members eligible for Early, but not Unreduced Retirement are assumed to retire at a rate of 5% per year from age 55 to 59.

Mortality:

Active Members RP-2000 Employee Table with generational

improvements, set forward one year.

RP-2000 Healthy Annuitant Table with generational

improvements, set forward one year.

Disabled RP-2000 Disabled Table with generational

improvements.



Pensioners

Appendix C

Actuarial Methods and Assumptions

Disability:

<u>Age</u>	Annual Rate
20	0.11%
30	0.14%
40	0.19%
50	0.41%
60	1.48%

Percent Married at Death

75%

or Retirement:

0

Number of Children per Married Member:

Turnover:

SAMPLE RATES

Years of Service	Annual Rate
1	15%
5	7%
10	3%
11+	2.5%

.

Assets:

Actuarial value of assets equals ³/₄ of Expected Value, plus ¹/₄ of Market Value.

