



**CITY OF OMAHA  
POLICE AND FIREFIGHTERS  
RETIREMENT SYSTEM**

Actuarial Valuation Report  
as of January 1, 2005

CITY OF OMAHA POLICE & FIREFIGHTERS RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT

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August 17, 2005

Board of Trustees  
City of Omaha  
Police & Firefighters Retirement System  
Omaha/Douglas Civic Center  
1819 Farnam Street  
Omaha, NE 68183

**Re: January 1, 2005 Actuarial Report**

Dear Members of the Board:

At your request, we have conducted our actuarial valuation of the City of Omaha Police & Firefighters Retirement System as of January 1, 2005. The major findings of the valuation are contained in this report. Changes in plan provisions, actuarial assumptions, or methods from the prior valuation are noted in the report.

In preparing our report, we relied, without audit, on information (some oral and some written) supplied by the Retirement System. This information includes, but is not limited to, plan provisions, member data and financial information. 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 principles prescribed by the Actuarial Standards Board (ASB) and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

We hereby 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 internally consistent, individually reasonable (taking into account the experience of the Plan 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 Retirement System has the final decision regarding the appropriateness of the assumptions and has adopted them as disclosed in this report.



Actuarial computations presented in this report are for purposes of determining the actuarial contribution rate for funding the Plan. Determinations for purposes other than this may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes. Any distribution of this report must be in its entirety including this cover letter, unless prior written consent from Milliman, Inc. is obtained.

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.

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

Sincerely,  
MILLIMAN, Inc.

Gregg Rueschhoff, A.S.A.  
Principal and Consulting Actuary  
Member of the American Academy of Actuaries  
Enrolled Actuary No. 05-4349

## Board Summary

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This report presents the results of the January 1, 2005 actuarial valuation of the City of Omaha Police & Firefighters 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, 2005,
- Analyze and report on trends in System contributions, assets, and liabilities over the past two years,
- Determine the cost of various proposed benefit changes.

The valuation results provide a "snapshot" view of the System's financial condition on January 1, 2005 using updated System Asset values at December 31, 2004. The valuation results reflect a significant increase in the Unfunded Actuarial Liability and related Actuarial Contribution Rate. (Throughout this report we refer to the actuarially determined contribution rate as the Actuarial Contribution Rate). The reasons for the increase include a loss on the actuarial value of assets, contributions less than the actuarially recommended rate and benefit improvements. There was an actuarial gain due to demographic changes more favorable than expected. This gain partially offset the effect of the increase in the Actuarial Contribution Rate. Each component of change in the Actuarial Contribution Rate is identified in this Board Summary (see page 3).

There were several changes in benefit provisions that are reflected in this valuation. Plan improvements were made to the following provisions:

- Scheduled increases in the service retirement benefit percentage was increased
- The Cost of Living Adjustment (COLA) was modified
- The spouse's pension in the event of death to an active member was increased (For both In-line and Not-in line of duty)
- The percentage of benefit payable to the spouse after death of a retired member was increased to 90% (for Fire only).
- The lump sum death benefit for retired members was increased to \$5,000 (Fire only).

Many of these changes vary for Police versus Firefighters. See Appendix C for a summary of all plan provisions used for the preparation of this report.

## Board Summary

Several factors contributed to the change in the System's assets, liabilities and recommended contribution rate between January 1, 2003 and December 31, 2004.

### Assets

The market value of assets is not used directly in the actuarial calculation of the Plan's funded status and the recommended contribution. An asset valuation method is used to smooth the effects of market fluctuations. The actuarial value of assets is equal to 2/3 of 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 market value of assets. See page 7 for the detailed development of the actuarial value of assets as of January 1, 2005.

As of January 1, 2005, the System had total funds, when measured on an actuarial value basis, of \$422.9 million. This was an increase of \$48.6 million from the January 1, 2003 figure of \$374.3 million. However, based on the actuarial assumption, an increase of \$57.0 million was expected over that time period.

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

|  | <i>Actuarial Value</i> | <i>Market Value</i> |
|--|------------------------|---------------------|
| Assets, January 1, 2003                | \$ 374.3               | \$ 314.1            |
| • employer and member contributions    | + 55.4                 | + 55.4              |
| • benefit payments                     | - 60.0                 | - 60.0              |
| • net investment income (expected)     | + 61.6                 | + 56.6              |
| • net investment actuarial gain/(loss) | <u>- 8.4</u>           | <u>+ 54.2</u>       |
| Assets, December 31, 2004              | \$ 422.9               | \$ 420.3            |

### 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. 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 contributions exceed the 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, 2005 is shown below:

|   |                        |
|---|------------------------|
| Actuarial Liability                     | \$ 657,650,175         |
| Actuarial Value of Assets               | <u>\$(422,898,286)</u> |
| Unfunded Actuarial Liability (UAL)      | \$ 234,751,889         |
| Present Value of Prior Service Payments | <u>\$ (14,213,372)</u> |
| UAL for Funding Purposes                | \$ 220,538,517         |

## Board Summary

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The unfunded actuarial liability will be reduced if the contributions exceed the 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 components of change in the Unfunded Actuarial Liability (in millions) are set forth below:

|   |               |
|---|---------------|
| Unfunded Actuarial Liability, January 1, 2003 | \$192.3       |
| Plus  |               |
| Net Investment Actuarial (Gain)/Loss          | 8.3           |
| Net Liability Actuarial (Gain)/Loss           | (31.8)        |
| Normal Cost with interest                     | 51.4          |
| Benefit Improvements                          | 24.8          |
| Interest on Unfunded Actuarial Liability      | 32.0          |
| Less  |               |
| Employer Contributions with interest          | (33.2)        |
| Employee Contributions with interest          | <u>(23.3)</u> |
| Unfunded Actuarial Liability, January 1, 2005 | \$220.5       |

### 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 Actuarial Contribution Rate (payable as a % of member payroll) increased by 4.67% of pay, to 45.22% on January 1, 2005, from 40.55% on January 1, 2003. The primary components of this change are as follows:

|  | Rate   |
|--|--------|
| Total Actuarial Contribution Rate, January 1, 2003   | 40.55% |
| • Actuarial (Gain)/Loss – Investment Experience      | 0.55   |
| • Actuarial (Gain)/Loss – Demographic Experience     | (0.55) |
| • Benefit Improvements                               | 3.84   |
| • Contributing less than Actuarial Contribution Rate | 0.83   |
| Total Actuarial Contribution Rate, January 1, 2005   | 45.22% |

See page 9 for a detailed calculation of the Actuarial Contribution Rate as of January 1, 2005.

## Board Summary

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### Observations

Currently the Actuarial Contribution Rate is not contributed to the System. Both the member and City contribution rates are scheduled to increase each year, with the final increase scheduled in 2007. At that time, the City's contribution rate will be 20.55% of pensionable payroll plus a past service payment of approximately 1.57% of payroll. The member contribution rate will be 14.93% of payroll. Even with these scheduled contribution increases and the resulting total contribution rate of 37.05%, the actual contribution to the System will be 8.17% less than the Actuarial Contribution Rate developed in this valuation. In the 2003 valuation report we discussed the importance of closing this contribution shortfall. The situation still exists and without some action, 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 3 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 0.83% higher due to actual contributions less than the Actuarial Contribution Rate. 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. 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.

The contribution shortfall also has an impact on the Net Pension Obligation (NPO) as determined under Governmental Accounting Standard Number 27 (GASB27). On page 12 of our report we develop the history of the NPO. As of December 31, 2004 the NPO was \$12.5 million. The NPO will increase from year to year by interest on the NPO and by the shortfall between the actual contribution rate and the Actuarial Contribution Rate. If the currently scheduled contribution rates remain unchanged and all actuarial assumptions are met in the future, the NPO is projected to exceed \$100 million by 2015.

The purpose of the actuarial valuation is to analyze the resources needed to meet the current and future obligations of the System. The actuarial assumptions are the cornerstone of the valuation process. When GRS completed their actuarial audit of our 2003 report, they recommended that a comprehensive experience study be conducted. There may be recommended changes in the actuarial assumptions or methods as a result of the experience study. While we concur with GRS, we recommend that the study be delayed until 2006 so an additional year of experience can be included in the study. There have been several changes to the plan provisions, as well as changes to the internal policies regarding banking and accumulating unpaid comp time. We believe a better experience analysis can be conducted if another year passes and that experience is included. It is our recommendation that the experience study be completed for the five year period ending December 31, 2005. Any resulting changes in assumptions or methods would first be reflected in the January 1, 2006 valuation report.



# Board Summary

## Summary of Principal Results

|  | <u>2001</u><br><u>Valuation</u> | <u>2003</u><br><u>Valuation</u> | <u>2005</u><br><u>Valuation</u> |
|--|---------------------------------|---------------------------------|---------------------------------|
| <b>1. Participant Data</b>                 |                                 |                                 |                                 |
| Number of:                                 |                                 |                                 |                                 |
| Active Members                             | 1,347                           | 1,395                           | 1,390                           |
| Service Retirements                        | 547                             | 566                             | 638                             |
| Surviving Spouses and Children             | 232                             | 253                             | 279                             |
| Disabled                                   | 261                             | 270                             | 265                             |
| Deferred Vested                            | 8                               | 5                               | 9                               |
| Annual Salaries of Active Members          | \$71,033,212                    | \$79,725,536                    | \$79,578,328                    |
| Average Salary                             | 52,734                          | 57,151                          | 57,251                          |
| Average Age of Active Members              | 38.7                            | 38.9                            | 39.0                            |
| <b>2. Assets and Liabilities</b>           |                                 |                                 |                                 |
| Total Actuarial Liability                  | N/A                             | \$581,187,364 <sup>1</sup>      | \$657,650,175 <sup>1</sup>      |
| Assets for Valuation Purposes              | N/A                             | 374,252,476                     | 422,898,286                     |
| Unfunded Actuarial Liability (UAL)         | N/A                             | 206,934,888                     | 234,751,889                     |
| Present Value of Prior Service Payments    | N/A                             | (14,593,006)                    | (14,213,372)                    |
| UAL for Funding Purpose                    | N/A                             | 192,341,882                     | 220,538,517                     |
| <b>3. Contribution Rates</b>               |                                 |                                 |                                 |
| Actuarial Contribution Rate                | 27.18%                          | 40.55% <sup>1</sup>             | 45.22% <sup>1</sup>             |
| Member Contribution Rate                   | 10.89%                          | 13.14%                          | 14.93% <sup>2</sup>             |
| Employer Contribution Rate                 | 16.50%                          | 18.75%                          | 20.55% <sup>2</sup>             |
| Employer "Past Service" payment            | 1.76%                           | 1.55%                           | 1.57%                           |
| <b>4. Shortfall/(Excess) Contributions</b> |                                 |                                 |                                 |
| Actuarial Contribution Rate                | 27.18%                          | 40.55% <sup>1</sup>             | 45.22%                          |
| Statutory Contribution Rate                | 29.15%                          | 33.44%                          | 37.05%                          |
| Shortfall/(Excess)                         | (1.97%)                         | 7.11%                           | 8.17%                           |
| Expected Payroll for year                  | \$72,778,326                    | \$85,820,469                    | \$84,765,936                    |
| Dollar Amount of Shortfall/(Overage)       | \$ (1,433,733)                  | \$ 6,101,835                    | \$ 6,925,377                    |

<sup>1</sup> Calculated using Entry Age Normal cost method.

<sup>2</sup> Blended Police and Fire rates effective in 2007.

**Plan Assets at Market Value  
Increases since January 1, 2003**

|   |                      |
|---|----------------------|
| <b>Assets at January 1, 2003</b>                  | <b>\$314,118,723</b> |
| <b>Receipts:</b>                                  |                      |
| City Contributions – Current                      | 31,177,173           |
| City Contributions – Past Service                 | 2,655,200            |
| Employee Contributions                            | 21,519,179           |
| Investment Income                                 | 115,267,575          |
| <b>Total Receipts</b>                             | <b>\$170,619,127</b> |
| <b>Disbursements:</b>                             |                      |
| Pensions Paid to Retirees                         | \$57,755,488         |
| Death Benefits                                    | 193,525              |
| Termination Withdrawals                           | 227,295              |
| Medical Fees                                      | 1,796,214            |
| Investment Fees                                   | 4,380,010            |
| Other Fees  | 36,827               |
| <b>Total Disbursements</b>                        | <b>\$64,389,359</b>  |
| <b>Assets at December 31, 2004 (Market Value)</b> | <b>\$420,348,491</b> |
| <b>Annualized Yield for the Two Year Period</b>   |                      |
| - Gross   | 17.0%                |
| - Net of Expenses                                 | 16.3%                |

## 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 ongoing 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 33%.
- Step 4:** Add the expected value of Step 1 and the product of Step 3 to determine the actuarial value of assets.

|  | <u>2003</u>    | <u>2004</u>    |
|--|----------------|----------------|
| 1. Actuarial Value of Assets as of January 1                     | \$ 374,252,476 | \$ 397,816,393 |
| 2. Actual Receipts/Disbursements                                 |                |                |
| a. Total Contributions   | 28,086,797     | 27,264,755     |
| b. Benefit Payments  | (27,445,681)   | (32,526,841)   |
| c. Net Change  | 641,116        | (5,262,086)    |
| 3. Expected Investment Earnings                                  | 29,965,349     | 31,618,877     |
| 4. Expected Actuarial Value of Assets as of December 31          | 404,858,941    | 424,173,184    |
| 5. Market Value as of December 31                                | 383,731,297    | 420,348,491    |
| 6. Difference Between Market and Expected Values                 | (21,127,644)   | (3,824,693)    |
| 7. Actuarial Value of Assets as of December 31<br>(4 + 1/3 of 6) | \$ 397,816,393 | \$ 422,898,286 |

## 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. Entry Age Normal Actuarial Liability            | 657,650,175    |
| 2. Present Value of Prior Service Payments         | 14,213,372     |
| 3. Actuarial Value of Assets                       | 422,898,286    |
| 4. Unfunded Actuarial Liability<br>(3) - (4) - (5) | \$ 220,538,517 |

## 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 members and the City.

|  |                |
|--|----------------|
| 1. (a) Normal Cost (Adjusted to Mid-Year)  | \$ 24,676,301  |
| (b) Covered Payroll for Members Under<br>Assumed Retirement Age  | \$ 84,765,936  |
| (c) Normal Cost Rate<br>(a) / (b)  | 29.11%         |
| 2. Unfunded Actuarial Liability/(Surplus)<br>at Valuation Date   | \$ 220,538,517 |
| 3. Amortization Factor to Pay UAL as a<br>Level Percent of Payroll over 28 Years                                 | 18.59          |
| 4. Unfunded Actuarial Liability/(Surplus) Payment<br>(Adjusted to Mid-Year)<br>[(2) / (3)] x 1.08 <sup>1/2</sup> | \$ 12,328,750  |
| 5. Prior Service Payment   | \$ 1,327,600   |
| 6. Total Actuarial Contribution 1(a) + 4 + 5   | \$ 38,332,651  |
| 7. Total Projected Payroll for the Year  | \$ 84,765,936  |
| 8. Total Contribution as a Percent of Pay<br>(6) / (7)   | 45.22%         |

**Governmental Accounting Standards Board Disclosure  
SCHEDULE OF FUNDING PROGRESS**

In accordance with Statement No. 25 of the Governmental Accounting Standards Board  
(All Dollar Amounts in Millions)

| Actuarial Valuation Date | Market Value of Assets (a) | Actuarial Liability (AAL)* (b) | Unfunded AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll (P/R) (c) | UAAL as a Percentage of Covered P/R [(b-a)/c] |
|--------------------------|----------------------------|--------------------------------|---------------------------|--------------------|---------------------------|---|
| 6/30/91                  | \$142.4                    | \$203.6                        | \$61.2                    | 69.9%              | N/A                       | N/A   |
| 6/30/92                  | 163.9                      | 209.7                          | 45.8                      | 78.2%              | 49.0                      | 93.5%   |
| 6/30/93                  | N/A                        | 227.4                          | N/A                       | N/A                | N/A                       | N/A   |
| 6/30/94                  | 191.3                      | 244.1                          | 52.8                      | 78.4%              | 55.2                      | 95.7%   |
| 6/30/95                  | N/A                        | N/A                            | N/A                       | N/A                | N/A                       | N/A   |
| 6/30/96                  | 251.1                      | 313.3                          | 62.2                      | 80.1%              | 64.5                      | 96.4%   |
| 6/30/97                  | 300.0                      | 336.9                          | 36.9                      | 89.0%              | N/A                       | N/A   |
| 6/30/98                  | 349.2                      | 378.5                          | 29.4                      | 92.2%              | 67.4                      | 43.5%   |
| 12/31/98                 | 355.3                      | 386.2                          | 30.98                     | 92.0%              | 70.3                      | 44.0%   |
| 12/31/99                 | 356.9                      | 411.1                          | 54.2                      | 86.8%              | 70.8                      | 76.6%   |
| 12/31/00                 | 361.5                      | 425.1                          | 63.6                      | 85.0%              | 74.5                      | 85.4%   |
| 12/31/01                 | 350.4                      | 452.3                          | 101.9                     | 77.5%              | 76.7                      | 133%  |
| 12/31/02                 | 314.1                      | 481.6                          | 167.5                     | 65.2%              | 79.7                      | 210%  |
| 12/31/03                 | 383.7                      | 511.9                          | 128.2                     | 75.0%              | 85.1                      | 151%  |
| 12/31/04                 | 420.3                      | 543.9                          | 123.6                     | 77.3%              | 82.1                      | 151%  |

\*This amount is based on the Projected Unit Credit method.

## SCHEDULE OF EMPLOYER CONTRIBUTIONS

(All Dollar Amounts in Millions)

| Fiscal<br>Year<br>Ending | Covered<br>Employee<br>Payroll <sup>(1)</sup> | Actual<br>Employer<br>Contributions | Actual Employer<br>Contribution<br>% <sup>(2)</sup> | Annual Required<br>Contribution<br>(ARC) % <sup>(3)</sup> | Annual<br>Pension Cost<br>(APC) | Percentage of<br>APC Contributed |
|--------------------------|---|-------------------------------------|---|---|---------------------------------|----------------------------------|
| 6/30/91                  | 45.9  | 6.02                                | 13.11   | 18.31   | 8.40                            | 72%                              |
| 6/30/92                  | 49.0  | 6.42                                | 13.11   | 18.31   | 8.97                            | 72                               |
| 6/30/93                  | 52.1  | 6.83                                | 13.11   | 18.31   | 9.54                            | 72                               |
| 6/30/94                  | 55.2  | 7.07                                | 12.81   | 16.47   | 9.09                            | 78                               |
| 6/30/95                  | 59.8  | 7.66                                | 12.81   | 16.47   | 9.85                            | 78                               |
| 6/30/96                  | 64.5  | 10.98                               | 17.02   | 20.22   | 13.04                           | 84                               |
| 6/30/97                  | 69.2  | 11.78                               | 17.02   | 20.22   | 13.99                           | 84                               |
| 6/30/98                  | 67.4  | 11.50                               | 17.06   | 15.77   | 10.63                           | 108                              |
| 12/31/98 <sup>(4)</sup>  | 70.3  | 12.70                               | 18.07   | 13.58   | 10.52                           | 121                              |
| 12/31/99                 | 70.8  | 13.01                               | 18.38   | 15.46   | 10.66                           | 122                              |
| 12/31/00                 | 74.5  | 13.61                               | 18.27   | 15.35   | 11.24                           | 121                              |
| 12/31/01                 | 76.7  | 13.98                               | 18.23   | 15.35   | 11.63                           | 120                              |
| 12/31/02                 | 79.7  | 15.32                               | 19.22   | 15.39   | 15.37                           | 99                               |
| 12/31/03                 | 85.1  | 17.28                               | 20.31   | 27.41   | 23.32                           | 74                               |
| 12/31/04                 | 82.1  | 16.72                               | 20.37   | 27.41   | 22.43                           | 75                               |

(1) Computed as the dollar amount of the actual employer contribution made as a percentage of payroll divided by the contribution rate, expressed as a percentage of payroll. Payroll is estimated for years where no valuation was done.

(2) The actual and required employer contributions are expressed as a percentage of payroll.

(3) The ARC (as a percentage of payroll) is assumed to remain the same as the prior year when no valuation was performed.

(4) Where applicable, these are annual amounts for the period 1/1/98 through 12/31/98.

**City of Omaha Police & Firefighters' Retirement System**  
**Development of the Net Pension Obligation in Accordance with Statement No. 27**  
**of the Governmental Accounting Standards Board**

| Fiscal Year End :                         | Fiscal Year Ended |              |              |             |              |              |              |              |              |              |
|---|-------------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
|   | 06/30/96          | 06/30/97     | 06/30/98     | 12/31/98    | 12/31/99     | 12/31/00     | 12/31/01     | 12/31/02     | 12/31/03     | 12/31/04     |
| <b>Assumptions and Methods</b>            |                   |              |              |             |              |              |              |              |              |              |
| Interest Rate                             | 8.50%             | 8.50%        | 8.50%        | 8.00%       | 8.00%        | 8.00%        | 8.00%        | 8.00%        | 8.00%        | 8.00%        |
| Amortization Period (years)               | 15                | 15           | 15           | 15          | 15           | 15           | 15           | 15           | 30           | 30           |
| Cost Method                               | Aggregate         | Aggregate    | Aggregate    | Aggregate   | Aggregate    | Aggregate    | Aggregate    | Aggregate    | Entry Age    | Entry Age    |
| <b>Annual Pension Cost :</b>              |                   |              |              |             |              |              |              |              |              |              |
| Annual Required Contribution (ARC)        | 11,645,537        | 13,372,313   | 12,130,894   | 9,545,452   | 10,943,105   | 11,439,320   | 11,738,696   | 15,392,189   | 23,329,940   | 22,487,399   |
| Interest on NPO                           | 399,399           | 582,664      | 744,035      | 741,784     | 622,503      | 434,172      | 244,243      | 56,158       | 59,689       | 543,111      |
| Adjustment to ARC                         | (565,834)         | (825,466)    | (1,054,082)  | (1,083,279) | (909,084)    | (634,052)    | (356,684)    | (82,012)     | (66,275)     | (603,040)    |
| Annual Pension Cost                       | 11,479,102        | 13,129,511   | 11,820,847   | 9,203,957   | 10,656,524   | 11,239,440   | 11,626,255   | 15,366,335   | 23,323,354   | 22,427,470   |
| <b>Employer Contribution for the Year</b> | 9,323,049         | 11,231,031   | 11,301,890   | 6,099,534   | 13,010,651   | 13,613,563   | 13,977,312   | 15,322,201   | 17,280,573   | 16,715,500   |
| <b>Net Pension Obligation (NPO):</b>      |                   |              |              |             |              |              |              |              |              |              |
| NPO at beginning of year                  | 4,698,816         | 6,854,869    | 8,753,349    | 9,272,306   | 7,781,283    | 5,427,156    | 3,013,032    | 701,976      | 746,110      | 6,788,891    |
| Annual Pension Cost for year              | 11,479,102        | 13,129,511   | 11,820,847   | 4,608,511   | 10,656,524   | 11,239,440   | 11,626,255   | 15,366,335   | 23,323,354   | 22,427,470   |
| Contributions for year                    | (9,323,049)       | (11,231,031) | (11,301,890) | (6,099,534) | (13,010,651) | (13,613,563) | (13,977,312) | (15,322,201) | (17,280,573) | (16,715,500) |
| NPO at end of year                        | 6,854,869         | 8,753,349    | 9,272,306    | 7,781,283   | 5,427,156    | 3,053,032    | 701,976      | 746,110      | 6,788,891    | 12,500,861   |



## POLICE

|  | <u>January 1</u> |              |
|--|------------------|--------------|
|  | <u>2003</u>      | <u>2005</u>  |
| <b>ACTIVE PARTICIPANTS</b>                             | 762              | 749          |
| <b>NON-ACTIVE PARTICIPANTS</b>                         |                  |              |
| Service Retirements                                    | 255              | 309          |
| Surviving Spouses                                      | 118              | 129*         |
| Surviving Children                                     | 12               | 12           |
| Vested Terminated                                      | 2                | 5            |
| Disabled   |                  |              |
| - In Line of Duty                                      | 145              | 143          |
| - Not in Line of Duty                                  | 15               | 16           |
| * includes ex-spouses                                  |                  |              |
| <br><b>ANNUAL COMPENSATION FOR ACTIVE PARTICIPANTS</b> |                  |              |
| Total Annual Compensation                              | \$43,184,378     | \$43,044,365 |
| Average Per Participant                                | 56,672           | 57,469       |
| <br><b>ANNUAL PENSION BENEFIT*</b>                     |                  |              |
| Service Retirements                                    | \$7,416,228      | \$10,810,080 |
| Surviving Spouses                                      | 1,108,935        | 1,382,913    |
| Disabled   |                  |              |
| - In Line of Duty                                      | 3,277,649        | 3,528,274    |
| - Not in Line of Duty                                  | 338,419          | 348,960      |

\* Pension Benefits paid from Pension Fund only.

## FIREFIGHTERS

|  | January 1    |              |
|--|--------------|--------------|
|  | 2003         | 2005         |
| <b>ACTIVE PARTICIPANTS</b>                             | 633          | 641          |
| <b>NON-ACTIVE PARTICIPANTS</b>                         |              |              |
| Service Retirements                                    | 311          | 329          |
| Surviving Spouses                                      | 113          | 126*         |
| Surviving Children                                     | 10           | 12           |
| Vested Terminated                                      | 3            | 4            |
| Disabled   |              |              |
| - In Line of Duty                                      | 97           | 97           |
| - Not in Line of Duty                                  | 13           | 9            |
| * includes ex-spouses                                  |              |              |
| <br><b>ANNUAL COMPENSATION FOR ACTIVE PARTICIPANTS</b> |              |              |
| Total Annual Compensation                              | \$36,541,158 | \$36,533,963 |
| Average Per Participant                                | 57,727       | 56,995       |
| <br><b>ANNUAL PENSION BENEFIT*</b>                     |              |              |
| Service Retirements                                    | \$9,950,381  | \$11,823,024 |
| Surviving Spouses                                      | 1,017,879    | 1,289,544    |
| Disabled   |              |              |
| - In Line of Duty                                      | 2,171,937    | 2,418,504    |
| - Not in Line of Duty                                  | 193,266      | 153,612      |

\* Pension Benefits paid from Pension Fund only.

## POLICE AND FIREFIGHTERS

|  | <u>January 1</u> |              |
|--|------------------|--------------|
|  | <u>2003</u>      | <u>2005</u>  |
| <b>ACTIVE PARTICIPANTS</b>                         | 1,395            | 1,390        |
| <b>NON-ACTIVE PARTICIPANTS</b>                     |                  |              |
| Service Retirements                                | 566              | 638          |
| Surviving Spouses                                  | 231              | 255*         |
| Surviving Children                                 | 22               | 24           |
| Vested Terminated                                  | 5                | 9            |
| Disabled   |                  |              |
| - In Line of Duty                                  | 242              | 240          |
| - Not in Line of Duty                              | 28               | 25           |
| * includes ex-spouses                              |                  |              |
| <b>ANNUAL COMPENSATION FOR ACTIVE PARTICIPANTS</b> |                  |              |
| Total Annual Compensation                          | \$79,725,536     | \$79,578,328 |
| Average Per Participant                            | 57,151           | 57,251       |
| <b>ANNUAL PENSION BENEFIT*</b>                     |                  |              |
| Service Retirements                                | \$17,366,609     | \$22,633,104 |
| Surviving Spouses                                  | 2,126,814        | 2,672,457    |
| Disabled   |                  |              |
| - In Line of Duty                                  | 5,449,586        | 5,946,778    |
| - Not in Line of Duty                              | 531,685          | 502,572      |

\* Pension Benefits paid from Pension Fund only.

# Appendix A

# Plan Statistics Comparison

|   | January 1            |                      |
|---|----------------------|----------------------|
|   | <u>2003</u>          | <u>2005</u>          |
| <b>ACTIVE MEMBERS</b>                           |                      |                      |
| Average Attained Age                            | 38.9                 | 39.0                 |
| Average Hire Age                                | 27.7                 | 28.1                 |
| Average Past Service                            | 11.2                 | 10.9                 |
| Average Annual Compensation                     | \$57,151             | \$57,251             |
| <b>NON-ACTIVE MEMBERS</b>                       |                      |                      |
| <i>Average Attained Age</i>                     |                      |                      |
| Service Retirees                                | 63.3                 | 62.9                 |
| Disability Retirees                             |                      |                      |
| - In Line of Duty                               | 62.0                 | 62.8                 |
| - Not in Line of Duty                           | 64.5                 | 63.6                 |
| Surviving Spouses                               | 74.4                 | 77.4                 |
| <i>Average Monthly Benefit</i>                  |                      |                      |
| Service Retirees                                | \$2,557              | \$2,956              |
| Disability Retirees                             |                      |                      |
| - In Line of Duty                               | 1,876                | 2,064                |
| - Not in Line of Duty                           | 1,582                | 1,675                |
| Surviving Spouses                               | 767                  | 873                  |
| <b>VALUE OF PLAN ASSETS<br/>MARKET VALUE</b>    | <b>\$314,118,723</b> | <b>\$420,348,491</b> |
| <b>VALUE OF PLAN ASSETS<br/>ACTUARIAL VALUE</b> | <b>\$374,252,476</b> | <b>\$422,898,286</b> |

## 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 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 costs.

The value of future costs attributable to past employment of participants, which is called the accrued liability is equal to the present value of benefits less the present value of future normal costs. The unfunded accrued liability is equal to the excess of the accrued liability over assets. The unfunded accrued liability is amortized as a level percent of pay over 30 years beginning 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 accrued liability as of the valuation date.

## Appendix B

## Actuarial Assumptions

---

|  |   |
|--|---|
| Interest:  | 8.0% (net of investment expenses)   |
| Salary Increases:                                  | Merit increases based on age plus an inflation increase.                            |
| Service Retirement Age:                            | Graduated Rates based on service.   |
| Mortality:   |   |
| Active Members                                     | 1983 GAM Table.   |
| Service Pensioners and Beneficiaries               | 1983 GAM Table.   |
| Disabled   | 1983 GAM, set forward 10 years.   |
| Disability:  | Graduated rates by age.   |
| Percent of Disabilities in Line of Duty:           | 85%   |
| Medical Expenses for Disabilities in Line of Duty: | 5% load on liability.   |
| Percent Married at Death or Retirement:            | 75%   |
| Percent with Dependents at Death:                  | 77%   |
| Average Number of Children per Married Member:     | 1   |
| Turnover:  | Graduated rates by age.   |
| Assets:  | Actuarial value of assets equal to 1/3 of market value, plus 2/3 of expected value. |

SAMPLE RATES

| Age | Mortality |         | Annual Rate | Turnover |
|-----|-----------|---------|-------------|----------|
|     |           |         | Disability  |          |
|     | Males     | Females |             |          |
| 20  | .04%      | .02%    | .52%        | 1.41%    |
| 30  | .06       | .03     | .59         | 1.69     |
| 40  | .12       | .07     | 1.04        | .63      |
| 50  | .39       | .16     | 1.90        | .00      |
| 60  | .92       | .42     | 2.89        | .00      |

Salary Progression

| Age | Average Annual % Increase |
|-----|---------------------------|
| 25  | 9.9%                      |
| 30  | 7.6                       |
| 35  | 6.8                       |
| 40  | 6.0                       |
| 45  | 5.8                       |
| 50  | 5.6                       |
| 55  | 5.5                       |
| 60  | 5.4                       |

Service Retirements

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%          |
| 25               | 50           | 50          |
| 26               | 25           | 50          |
| 27               | 15           | 60          |
| 28               | 5            | 50          |
| 29               | 5            | 100         |

Also, 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.

## Appendix C

## Summary of Plan Provisions

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**Average Final Monthly Compensation:**

Section 22-63

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.

**Member Contributions:**

Section 22-73(a)

Section 22-68

Ultimate rates effective July 1, 2007:  
14.545% of total monthly salary for police.  
15.40% of total monthly salary for fire.

**City of Omaha Contributions:**

Section 22-73(b)

Ultimate rates effective July 1, 2007:  
20.16% of each members total monthly salary for police.  
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

Available after age 55 and 10 years of service or age 45 and 20 years of service.

**Service Retirement Pension:**

Section 22-76

Beginning July 1, 2007, lifetime monthly annuity as follows:

| <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.

**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 13<sup>th</sup> month of retirement.



**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 25            | 50%**   |
| 25                      | *   |

\* Same as Service Retirement Pension  
 \*\* 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 but less than 25     | *   |
| 25 or more              | *   |

Not payable while full salary continues.

\* Same as Service Pension.

**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 C

## Summary of Plan Provisions

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%  |
| 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. Upon spouse's remarriage, all benefits cease.

**Children's Pension:**  
Section 22-83

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%   |

**Lump Sum Death Benefits:**

1. **Active Member without Eligible Dependents:**  
Section 22-84(a)

Accumulated member's contributions, or \$500 if greater.

## Appendix C

## Summary of Plan Provisions

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2. **Retired Member without Eligible Dependents:**  
Section 22-84(b)  
Accumulated member's contribution 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 deceased 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 Fire) payable immediately, plus the excess over \$1,000 (\$5,000 Fire) 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 22-90

Upon severance of employment by a member before age 45 with more than 20 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                 | 20%   |
| 15 but less than 20     | 55                 | 30%   |
| 20 but less than 25     | 45                 | 55%   |
| 25 or more              | 45                 | 75%   |