# Municipal Fire and Police Retirement System of Iowa 

## Actuarial Valuation Report

July 1, 2008

October 28, 2008

## PERSONAL AND CONFIDENTIAL

Board of Trustees
Municipal Fire \& Police Retirement System of Iowa
7155 Lake Drive, Suite 201
West Des Moines, IA 50266
RE: July 1, 2008 Actuarial Report
Dear Board Members:
We are pleased to submit this actuarial report of the Municipal Fire and Police Retirement System of lowa. The costs developed and presented in this report are based on asset values as of June 30, 2008, member census data as of July 1, 2008, and current System provisions, all of which were supplied by the Municipal Fire \& Police Retirement System of Iowa.

The purposes of the actuarial report are:

1. To determine the normal contribution rate which is payable by the Cities under Chapter 411 of the Code of Iowa;
2. To determine the funded status of the System; and
3. To provide information relating to the disclosure requirements of the Governmental Accounting Standards Board (GASB) Statement No. 25 - Financial Reporting for Defined Benefit Pension Plans.

All costs and liabilities were determined in accordance with generally accepted actuarial principles and procedures. To the best of our knowledge, the information supplied in this report is complete and accurate and in my opinion the assumptions are reasonably related to the experience of the System and to reasonable expectations under the System. The amounts presented in the accompanying report have been determined appropriately according to the actuarial assumptions and methods stated herein, and fully and fairly disclose the actuarial position of the System. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Sincerelv,



Donn B. Jones, FSA
Principal
Member of American Academy of Actuaries
Enrolled Actuary No. 08-2717

## MSE/mc

## Enclosure

## Table of Contents

Page
Report Highlights ..... 1
Comments on the Valuation ..... 2
Actuarial Valuation Results ..... 5
System Demographic Experience ..... 12
Summary of Actuarial Assumptions ..... 13
Summary of Actuarial Methods ..... 17
Summary of System Provisions ..... 18
Summary of System Members ..... 24

## Report Highlights

This section compares results of the current and prior two actuarial valuations. Additional supporting detail is available in other sections of the report. The Table of Contents on the prior page identifies the location of the supporting detail.

|  |  | $\underline{2006}$ | As of July 1, 2007 |  | $\underline{2008}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cities Recommended Contribution | \$ | 52,586,919 | \$ | 39,944,873 | \$ | 38,037,891 |
| Normal Contribution Rate |  | 25.48\% |  | 18.75\% |  | 17.00\% |
| Plan Assets |  |  |  |  |  |  |
| Market Value |  | 1,658,428,273 |  | 1,953,613,434 |  | 1,885,733,999 |
| Actuarial Value |  | 1,528,572,608 |  | 1,752,134,783 |  | 1,891,172,380 |
| Investment Return |  |  |  |  |  |  |
| Market Value |  | 13.7\% |  | 18.9\% |  | -2.1\% |
| Actuarial Value |  | 12.7\% |  | 15.8\% |  | 10.6\% |
| Actuarial Present Value of |  |  |  |  |  |  |
| Total Accrued Benefits |  | 1,717,652,019 |  | 1,825,902,983 |  | 1,912,363,335 |
| - Security Ratio |  | 97\% |  | 107\% |  | 99\% |
| Vested Accrued Benefits |  | 1,682,681,228 |  | 1,795,474,533 |  | 1,884,440,642 |
| - Security Ratio |  | 99\% |  | 109\% |  | 100\% |
| Annual Participating Payroll |  | 206,385,084 |  | 213,039,324 |  | 223,752,299 |
| Annual Pension Benefits |  |  |  |  |  |  |
| Service Retirement |  | 45,695,400 |  | 49,204,956 |  | 52,277,748 |
| Disabled Retirement |  | 29,826,660 |  | 31,603,116 |  | 32,997,828 |
| Vested Retirement |  | 2,526,216 |  | 2,815,404 |  | 3,238,500 |
| Beneficiaries |  | 12,437,232 |  | 13,163,784 |  | 13,533,012 |
| Total | \$ | 90,485,508 | \$ | 96,787,260 | \$ | 102,047,088 |
| Number of Members |  |  |  |  |  |  |
| Active |  | 3,816 |  | 3,847 |  | 3,881 |
| Disabled |  | 1,052 |  | 1,068 |  | 1,073 |
| Retirees \& Beneficiaries |  | 2,479 |  | 2,532 |  | 2,552 |
| Vested Terminated |  | 286 |  | 293 |  | 306 |
| Total |  | 7,633 |  | 7,740 |  | 7,812 |

## Comments on the Valuation

## Cities Recommended Contribution

The recommended contributions for the System are determined using the Aggregate actuarial cost method as adopted by the Board of Trustees. The same method has been used in prior years to determine the contribution for the System.

We recommend a contribution of $\$ 38,037,891$ be made for the 2008 plan year. This is equal to a contribution rate of $17.00 \%$ of payroll. This rate assumes that the State of lowa will contribute approximately $\$ 2,745,784$ for the 2008 plan year.

The System's normal contribution rate decreased from $18.75 \%$ for 2007 to $17.00 \%$ for 2008. The Retirement System's contribution rate before any adjustment to the minimum contribution rate changed as follows:

July 1, 2007 normal contribution rate
18.75\%

- Increase in contribution rate due to fixed State contribution 0.06\%
- Plan experience more favorable than assumed
- Investment experience more favorable than assumed
- Changes in System provisions 0.00\%
- Change in actuarial asset method 0.74\%
- Changes in actuarial assumptions
$0.40 \%$
Preliminary normal contribution rate
16.49\%
- Increase necessary to meet minimum contribution rate $0.51 \%$

July 1, 2008 normal contribution rate
17.00\%

## Actuarial Present Value of Accrued Benefits

The value of plan assets, the present value of vested accrued benefits, and the present value of accrued benefits are displayed and compared in this section of the report. Plan assets are valued at market value. The present value of vested accrued and accrued benefits is based on actuarial assumptions that anticipate the System will continue. Summarizing from this section of the report:

|  | Values as of | Funded Ratio |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | July 1, 2008 | $\underline{2006}$ | $\underline{2007}$ | 2008 |
| Market Value of Plan Assets | \$1,885,733,999 | -- | -- | -- |
| Actuarial Present Value: |  |  |  |  |
| Accrued Benefits | 1,912,363,335 | 97\% | 107\% | 99\% |
| Vested Accrued Benefits | 1,884,440,642 | 99\% | 109\% | 100\% |
| Interest Rate |  | 7.5\% | 7.5\% | 7.5\% |

## Changes in System Provisions

All System provisions remained unchanged from the prior valuation.

## Changes in Actuarial Assumptions

Based on the results of the recent ten-year experience study, the following actuarial assumptions were changed:

- Change salary increases for ages 20 to 34 to be $20 \%$ higher
- Lower ordinary disability rates for actives by $40 \%$
- Increase age 55 retirement rate for actives from $35 \%$ to $50 \%$
- Lower pre-retirement mortality rates for active members by $67 \%$
- Lower post-retirement mortality rates for disabled members from a six-year set forward to a three-year set forward

All other actuarial assumptions were reviewed based on the results of the recent ten-year experience study and remain unchanged from the prior valuation.

## Change in Actuarial Asset Method

The actuarial value of assets was changed from a four-year smoothing period to a five-year smoothing period. Any investment gains or losses prior to 2008 were previously being recognized over four years. Effective July 1, 2008, these remaining unrecognized investment gains or losses are recognized over a total of five years. This results in the actuarial value of assets recognizing the following percentages of any investment gains or losses prior to the 2008 plan year.

| 2007 | $20.000 \%$ |
| :--- | :--- |
| 2006 | 18.750 |
| 2005 | 16.667 |
| 2004 | 12.500 |

## Government Accounting Standards Board Disclosure

Measurements used to evaluate the funded status of the system are based on procedures set forth by GASB (Government Accounting Standards Board). 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, GASB has issued Statement No. 25-Financial Reporting for Defined Benefit Pension Plans.

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, the Schedule of Funding Progress and Schedule of Employer Contributions, and accompanying notes disclosing information relative to the funded status of the plan and historical contribution patterns.

- The Schedule of Funding Progress is not required for systems which use the Aggregate Method to determine the Annual Required Contribution (ARC). Since the System uses the Aggregate Method to determine the ARC, this schedule has not been developed in this report. However, GASB Statement No. 50 amended GASB Statement No. 25 to require the Schedule of Funding Progress be completed using the Entry Age Normal Method. This information is prepared in a separate report.
- The Schedule of Employer Contributions provides historical information about the Annual Required Contribution (ARC) and the percentage of the ARC that was actually contributed. For the System, the ARC is equal to the normal contribution rate multiplied by the covered payroll for the year or $\$ 39,648,907$ for 2008 . This is the total ARC before any adjustment for minimum contribution rates or state contributions.


## Covered Members

Ages of Active Members-The average age of the active members has remained unchanged. The average age of members included in the valuation was 40.2 for the current year and 40.2 in the prior year.

Service of Active Members-The average service of the active members has slightly decreased. The average service of members included in the valuation was 13.1 for the current year and 13.2 in the prior year.

Participating Compensation and Members-Total participating compensation increased from $\$ 213,039,324$ to $\$ 223,752,299$, a $5.0 \%$ increase. The number of active members increased from 3,847 in 2007 to 3,881 in 2008.

Average Annual Compensation-The average compensation of active members is more than the average compensation for the prior year. The average compensation was $\$ 55,378$ for 2007 and $\$ 57,653$ in 2008.

## Actuarial Valuation Results

This section of the report provides information concerning the valuation of System assets and liabilities. The following is a brief description of the exhibits and of how the information is organized.

System Assets-System assets are amounts that have accumulated and will be used to meet future benefit obligations. In the System Assets exhibit, trust fund transactions reported by the System are traced from the prior valuation date to the current valuation date. In addition, the actuarial value of assets is developed based on the adopted method.

System Liabilities and Contributions-The recommended annual contribution is defined by the rate of contribution and covered payroll. The rate of contribution is determined by dividing the present value of unfunded future benefits by the present value of future payroll of all members. The System's contribution rate by statute may not be less than $17 \%$ of covered payroll. GASB Statement No. 25 defines a term, the Annual Required Contribution which is equal to the Cities contribution rate (prior to adjustment for minimum contribution rates or state contributions) multiplied by the covered payroll for the fiscal year.

Actuarial Present Value of Accrued Benefits-Another objective of preparing the actuarial valuation is to evaluate the funding status of the System. A comparison of the market value of assets with the present value of accrued benefits is displayed for the current and prior year.

## Actuarial Valuation Results

System Assets - Market Value<br>Year Ending June 30, 2008

|  |  | Market Value |
| :---: | :---: | :---: |
| Assets at June 30, 2007 |  | \$1,953,613,434 |
| Receipts |  |  |
| Member Contributions | \$ 20,009,916 |  |
| Cities Contributions | 54,565,393 |  |
| State Contributions | 2,745,784 |  |
| Investment Income | $(26,416,696)$ |  |
| Securities Lending Expenses | (2,379,721) |  |
| Investment Management Expenses | $(11,861,841)$ |  |
| Other Income | 70,436 |  |
| Total Receipts |  | \$ 36,733,271 |
| Disbursements |  |  |
| Benefit Payments to Members | \$ (101,630,177) |  |
| Termination Withdrawals | $(1,359,515)$ |  |
| Administrative Expenses | $(1,362,543)$ |  |
| Disability Expenses | $(65,948)$ |  |
| Other Expenses | $(194.523)$ |  |
| Total Disbursements |  | \$ (104,612,706) |
| Assets at June 30, 2008 |  | \$1,885,733,999 |

# Actuarial Valuation Results <br> System Assets - Actuarial Value <br> Year Ending June 30, 2008 

1. Actuarial Value of Assets at July 1, 2007
2. Contributions for 2007 Plan Year
(Members, Cities and State)
3. Benefit distributions and refunds for 2007 plan year
(102,989,692)
4. Noninvestment Expenses
a. Administrative Expenses
b. Disability Expenses
c. Other Expenses
d. Total
5. Expected return on Market Value of Assets for year at 7.5\%
$145,516,075$
6. Asset gains/(losses) for prior five plan years*

| (i) <br> Asset gain <br> or (loss) | Years | Years | (ii) | (i) $x$ (ii) |
| :---: | :---: | :---: | :---: | :---: |
| Recognized | Remaining | Percentage | Recognized |  |
| Amount |  |  |  |  |

a. 2007
$\$(186,103,897)$
1
b. $2006 \quad 187,647,978$
c. $200590,260,614$
d. 2004 62,449,445
e. $2003123,741,929$
f. Total

2
3
4
4
7. Asset gains/(losses) to be recognized $=(6 f)$
20.000
(37,220,779)
18.750

35,183,996
16.667 15,043,737
$12.500 \quad 7,806,181$
N/A
$\frac{0}{20,813,135}$
8. Actuarial Value of Assets at July 1, 2008
\$1,891,172,380
$20,813,135$
*Effective July 1, 2008, the period over which asset gains or losses to be recognized increased from four to five years.

## Actuarial Valuation Results

## System Liabilities and Contributions

As of July 1,
Present Value of Unfunded Future Benefits
$\underline{2007}$
2008

1. Actuarial Present Value of all Future Benefits
a. Active members

Service retirements/DROP
Ordinary disability
Accidental disability
Ordinary death
Accidental death
Withdrawal
Total Active
b. Inactive members

Members receiving benefits
Deferred vested terminations
Refund of member contributions due Total Inactive
c. Total Present Value of Future Benefits
2. Actuarial Value of Plan Assets
3. Actuarial Present Value of Future Member Contributions
4. Present Value of Unfunded Future Benefits
(1) - (2) - (3)

Determination of Preliminary Total Contribution
5. Present value of future payroll of all covered members
6. Total (Cities plus State) normal contribution (4) $\div(5)$
7. Covered payroll
8. Preliminary total contribution from Cities and State
(6) $\times(7)$

\$1,035,115,488
43,463,662
193,503,653
8,492,848
8,099,558
27,623,787
1,316,298,996

| $1,127,069,804$ | $1,196,248,268$ |
| ---: | ---: |
| $29,533,268$ | $29,963,194$ |
| 157,929 | 110,862 |
| $1,156,761,001$ | $1,226,322,324$ |
| $2,399,646,314$ | $2,542,621,320$ |
| $1,752,134,783$ | $1,891,172,380$ |
| $205,984,237$ | $225,047,037$ |

$441,527,294 \quad 426,401,903$
$2,203,039,969 \quad 2,406,920,181$
20.04\%
17.72\%

223,752,299
42,693,081
$39,648,907$

## Actuarial Valuation Results

## System Liabilities and Contributions

|  | As of July 1, |  |
| :--- | ---: | ---: | ---: |
| Determination of Cities' Contribution | $\underline{2007}$ | $\underline{2008}$ |
| 9. Estimated State Contribution | $\$ 2,745,784$ | $\$ 2,745,784$ |
| 10. Estimated State Contribution as a percent of payroll (9) $\div(7)$ | $1.29 \%$ | $1.23 \%$ |
| 11. Preliminary Cities' Contribution (8) - (9) | $39,947,297$ | $36,903,123$ |
| 12. Cities' contribution as a percent of payroll (11) $\div(7)$ | $18.75 \%$ | $16.49 \%$ |
| 13. Minimum required contribution rate for Cities | $17.00 \%$ | $17.00 \%$ |
| 14. Cities' contribution (Greater of 12 or 13$) \times(7)$ | $\$ 39,944,873$ | $\$ 38,037,891$ |

## Actuarial Valuation Results

## Actuarial Present Value of Accrued Benefits

As of July 1, $\underline{2007}$
$\underline{2008}$

1. Present value of vested accrued benefits
a. Present value of vested accrued benefits for active members
$\$ 638,713,532 \$ 658,118,318$
b. Present value of benefits for terminated members
c. Present value of benefits being paid to retirees and beneficiaries
Total
2. Present value of accrued nonvested benefits
$30,428,450 \quad 27,922,693$
3. Present value of all accrued benefits
(1) $+(2)$
\$1,825,902,983
\$1,912,363,335
4. Market value of assets \$1,953,613,434 \$1,885,733,999
5. Ratio of market value of assets to the present value of all accrued benefits (4) $\div(3)$
107\%
99\%
6. Ratio of market value of assets to the present value of vested accrued benefits $(4) \div(1)$
109\%
$100 \%$

## Actuarial Valuation Results

## Change in Actuarial Present Value of Accrued Benefits

The change in actuarial present value of accrued benefits due to various factors including benefits accumulated, the passage of time, benefits paid, changes in assumptions and changes in System provisions is displayed below.

Actuarial present value of accrued benefits on July 1, 2007
\$1,825,902,983
Change in present value of accrued benefits from July 1, 2007 to July 1, 2008 due to:

- Additional benefits accumulated
\$ 49,358,561
- Interest due to passage of time

133,150,430

- Benefits paid
(102,989,692)
- Change in assumptions

6,941,053

- Changes in System provisions

Actuarial present value of accrued benefits on July 1, 2008
\$1,912,363,335

## System Demographic Experience

During the plan year July 1, 2007 to June 30, 2008, actual demographic experience differed from that expected by the actuarial assumptions, as summarized below.

## Decrement Type

Expected
Actual

## Actives

Service Retirement $50 \quad 55$
$\begin{array}{lll}\text { Accidental Disability } & 34 & 29\end{array}$
$\begin{array}{lll}\text { Ordinary Disability } & 15 & 4\end{array}$
$\begin{array}{lll}\text { Accidental Death } & 6 & 1\end{array}$
Ordinary Death 7
Withdrawal 77
95
DROP Participation 9137
$\begin{array}{lll}\text { DROP Premature Withdrawal } & 3\end{array}$
DROP Retirement 2
Inactives
Beneficiary Death $42 \quad 60$
$\begin{array}{lll}\text { Disabled Death } & 37 & 28\end{array}$
Retirement Death $53 \quad 47$
Vested Termination Death 1

## Summary of Actuarial Assumptions

Interest Rate
Salary Increase Rates

Mortality Rates
Pre-retirement Mortality

- Ordinary
- Accidental
7.5\%

Rates varying based on age. Annual rates at sample ages are displayed below:

| Age | Rate |
| :---: | :---: |
|  |  |
| 20 | $15.11 \%$ |
| 25 | $10.41 \%$ |
| 30 | $7.14 \%$ |
| 35 or Over | $4.50 \%$ |

Rates varying by age - Sample rates:

| Age | Rate |
| :--- | :--- |
|  |  |
| 20 | $0.02 \%$ |
| 25 | 0.02 |
| 30 | 0.03 |
| 35 | 0.04 |
| 40 | 0.05 |
| 45 | 0.07 |
| 50 | 0.10 |
| 55 | 0.13 |
| 60 | 0.19 |
| 65 | 0.25 |

Rates varying by age - Sample rates:

| Age | Rate |
| :--- | :--- |
|  |  |
| 20 | $0.04 \%$ |
| 25 | 0.02 |
| 30 | 0.02 |
| 35 | 0.02 |
| 40 | 0.02 |
| 45 | 0.03 |
| 50 | 0.08 |
| 55 | 0.16 |
| 60 | 0.25 |
| 65 | 0.46 |

## Summary of Actuarial Assumptions (continued)

Post-retirement Mortality

- Ordinary
- Disabled

Disability Rates

- Ordinary
- Accidental

A weighting equal to $4 / 12$ of the 1971 Group Annuity Mortality Table, Male and Female and 8/12 of the 1994 Group Annuity Mortality Table, Male and Female.

A weighting equal to $4 / 12$ of the 1971 Group Annuity Mortality Table - Male, set forward three years and $8 / 12$ of the 1994 Group Annuity Mortality Table - Male, set forward three years.

Rates varying by age - Sample rates:

| Age | Rate |
| :--- | :--- |
|  |  |
| 20 | $0.07 \%$ |
| 25 | 0.07 |
| 30 | 0.07 |
| 35 | 0.09 |
| 40 | 0.15 |
| 45 | 0.22 |
| 50 | 0.36 |
| 55 | 0.66 |
| 60 | 1.25 |
| 65 | 2.04 |

Rates varying by age - Sample rates:

| Age | Rate |
| :--- | :--- |
|  |  |
| 20 | $0.11 \%$ |
| 25 | 0.11 |
| 30 | 0.11 |
| 35 | 0.11 |
| 40 | 0.30 |
| 45 | 0.68 |
| 50 | 1.31 |
| 55 | 2.97 |
| 60 | 6.19 |
| 65 | 7.09 |

## Summary of Actuarial Assumptions (continued)

## Turnover Rates

## Retirement Age

## DROP

- Participation
- Period of Participation
- Investment Return on Accounts
- Benefit Distribution
- Retirement Age

Rates varying by age - Sample rates:

| Age | Rate |
| :--- | :--- |
|  |  |
| 20 | $7.11 \%$ |
| 25 | 5.81 |
| 30 | 4.51 |
| 35 | 2.71 |
| 40 | 1.08 |
| 45 | 0.20 |
| 50 | 0.20 |
| 55 | 0.00 |
| 60 | 0.00 |
| 65 | 0.00 |

Rates varying by age for those not eligible for DROP - Sample rates:

| Age | Rate |
| :---: | :--- |
| $55-56$ | $50 \%$ |
| $57-60$ | 25 |
| 61 | 30 |
| 62 | 35 |
| 63 | 40 |
| 64 | 45 |
| 65 | $100 \%$ |

All members initially eligible for DROP at age 62 or younger elect to participate. No member initially eligible for DROP after age 62 would elect to participate.

3 years
1.0\%

Lump Sum
All members initially eligible for DROP at age 62 or younger enter DROP when first eligible. No change in retirement age for members who initially become eligible for DROP after age 62.

5\% per year while participating in DROP.

## Summary of Actuarial Assumptions (continued)

## Administrative Expenses

Percentage Married

Spouses' Age

Number of Children

Participating Payroll

None explicitly assumed.

85\%

Wives are three years younger than husbands.
2.5 per couple.

Actual annualized earnable compensation reported for prior plan year increased to the current plan year based on the System's assumed salary increase rate.

## Summary of Actuarial Methods

## Actuarial Cost Method

The Aggregate Actuarial Cost Method was used to determine recommended contributions. Using this method, the present value of projected benefits to be funded by future contributions is determined by subtracting the actuarial value of plan assets and the actuarial present value of future member contributions from the actuarial present value of projected benefits. This result, the present value of unfunded future benefits, is divided by the present value of future salaries of active members included in the valuation to determine a normal cost accrual rate. The normal cost accrual rate is multiplied by the total of current annual salaries of members in the valuation to determine the recommended contribution.

Using the Aggregate Method, gains and losses that arise due to actual experience are not directly determined and recognized each year. Gains and losses are included in the present value of unfunded future benefits and affect the normal cost accrual rate. As a result, gains and losses are spread over the remaining period to retirement of members in the valuation and are recognized as a portion of future annual contributions.

## Actuarial Asset Valuation Method

The preliminary actuarial value is equal to the prior year's actuarial value (starting with the market value as of July 1, 1992) adjusted for contributions, disbursements and expected return on investments. The preliminary value is then adjusted by $20 \%$ of any investment gains or losses during the five prior plan years.

However, any investment gains or losses prior to 2008 were previously being recognized over four years. Effective July 1, 2008, these remaining unrecognized investment gains or losses are recognized over a total of five years. This results in the preliminary value of assets adjusted by the following percentages of any investment gains or losses prior to the 2008 plan year.

| 2007 | $20.000 \%$ |
| :--- | :--- |
| 2006 | 18.750 |
| 2005 | 16.667 |
| 2004 | 12.500 |

## Summary of System Provisions

The System was established, effective January 1, 1992, by Chapter 411 of the Code of lowa by combining each city's fire retirement system and police retirement system into a single statewide retirement system for fire fighters and police officers. Plan amendments through July 1, 2008 are reflected in this summary.

| Participation | Each person who becomes a permanent full-time <br> police officer or fire fighter in a participating city. |
| :--- | :--- |
| Membership Service | From date of employment to date of separation <br> from employment. |
| Earnable Compensation | The annual compensation which a member <br> receives for services rendered as a police officer or <br> fire fighter in the course of employment with a <br> participating City, except for amounts received for <br> overtime, meal or travel expenses, uniform <br> allowances, fringe benefits, severance pay, <br> mandatory deferred compensation, and <br> accumulated sick leave or vacation pay. |

## Contributions

Members

Cities

State
The following percentages of Earnable Compensation:

Effective Date Percentage

| October 16, 1992 | $6.10 \%$ |
| :---: | :--- |
| July 1, 1993 | 7.10 |
| July 1, 1994 | 8.10 |
| January 1, 1995 | 8.35 |
| July 1, 1995 | 9.35 |

The amount actuarially determined necessary to fund the benefits in accordance with accepted actuarial principles but not less than $17 \%$ of the Earnable Compensation of the active members.

The annual appropriation from the State of lowa to fund benefits is about $\$ 2,745,784$ a year.

## Summary of System Provisions (continued)

## Average Final Compensation

## Service Retirement Benefit

Eligibility
Benefit

DROP Benefit
Eligibility
Participation Date

Participation Period

Chapter 411 Benefit

DROP Account

The average Earnable Compensation of the member during the three years of service the member earned their highest salary as a police officer or fire fighter.

After age 55 and completion of 22 years of service.
Monthly annuity equal to $66.0 \%$ of Average Final Compensation plus 2.0\% of Average Final
Compensation for each year of service in excess of 22 years (up to 8 additional years). The maximum benefit is $82.0 \%$ of Average Final Compensation.

After age 55 and completion of 22 years of service.
First day of the month following the month in which a member applies for participation.

A three, four or five year participation period except during the 24 months immediately following April 1, 2007, members between ages 62 and 64 with at least 22 years of service may enroll for a one or two year participation period.

Monthly benefit determined based on the period of service and Average Final Compensation through the quarter of membership service immediately preceding the DROP participation date elected.

An account established for each member enrolled which will have a portion of the Chapter 411 Benefit credited to it for the duration of the selected participation period. The portion shall be equal to the sum of:
(a) A "minimum percentage" of $52 \%$ multiplied by the Chapter 411 Benefit, plus
(b) An "adjustment percentage" of $2 \%$ for each month up to 24 months between the date the member elects to participate in DROP and the date the member was initially eligible to participate, multiplied by the Chapter 411 Benefit.

## Summary of System Provisions (continued)

## DROP Benefit (continued)

Member Contributions

City Contributions

Investment Return

Benefit Escalation

Benefit Distributions

Premature Withdrawal and Accrual of Benefit

Member's contributions will be contributed to the general System assets during the member's participation period.

Cities' contributions equal to the normal contribution rate determined annually but never less than $17 \%$ of Earnable Compensation will be contributed to the general System assets during the member's participation period.

Earnings and capital gains or losses on the investments shall be credited to the general System assets and not to the individual member DROP Accounts.

The applicable escalator provisions apply from the member's actual date of retirement at the end of the DROP participation period. No escalation will occur during the DROP participation period.

At the actual date of retirement, the member's DROP Account will be payable, upon application by the member, in the form of a lump sum distribution or rollover to an eligible plan. The regular Chapter 411 Benefit will commence on the member's actual date of retirement.

An amount equal to $75 \%$ of the member's DROP benefit shall accrue to the benefit of the member for each month of DROP participation. An amount equal to $25 \%$ of the member's accumulated DROP benefit shall accrue to the benefit of the member upon either: (1) completion of the selected participation period, or (2) termination of participation due to becoming eligible for a disability benefit, or (3) death prior to completion of the selected participation period.

Termination Benefit
Eligibility

At least 4 years of service upon termination of membership before age 55 , or at least 4 , but less than 22 years of service upon termination of membership after age 55 .

# Summary of System Provisions (continued) 

## Termination Benefit (continued)

Benefit
Monthly annuity payable at age 55 or current age, if later, equal to $66.0 \%$ of Average Final Compensation plus 2.0\% of Average Final Compensation for each year of service in excess of 22 years (up to 8 additional years), if any, times a ratio equal to service at termination divided by 22 (ratio not to exceed 1.0).

Effective July 1, 1990, members who terminate service, other than by death or disability, can elect to withdraw their accumulated contributions with interest in lieu of any benefits to which the member may be entitled to from the System.

Ordinary Disability Benefit
Eligibility

Benefit
A member in good standing at any age and any length of service.

Monthly annuity payable upon disability equal to either (a) or (b) below, but no less than (c):
(a) If service at disability is greater than or equal to 5,50\% of Average Final Compensation; or
(b) If service at disability is less than 5 years, $25 \%$ of Average Final Compensation;
(c) The benefit determined using the Service Retirement formula based on service and Average Final Compensation at the date of disability.

Accidental Disability Benefit
Eligibility

Benefit
A member in good standing at any age and any length of service.

A monthly annuity equal to $60 \%$ of Average Final Compensation but no less than the benefit determined using the Service Retirement formula based on service and Average Final Compensation at the date of disability.

# Summary of System Provisions (continued) 

Ordinary Death Benefit

Eligibility
For members in service: any age and any length of service.

For member not in service: 4 years of service.
Benefit
Upon death of the member, either (a) or (b) below:
(a) A lump sum equal to $50 \%$ of Earnable Compensation during the last year of employment; or
(b) A monthly annuity equal to $40 \%$ of average final compensation but not less than $20 \%$ of the average Earnable Compensation of an active member of the System, as reported by the actuary. For a member not in service, the monthly annuity is payable on the date the member would have reached age 55 , except if there is a dependent child, it is paid immediately upon death of the member.

For each dependent child, an additional benefit equal to $6 \%$ of the average Earnable Compensation of an active member of the System, as reported by the actuary. This benefit is payable until the child reaches age 18 or 22 (if a full-time student) or payable for life if the child is disabled.

## Accidental Death Benefit

Eligibility

## Benefit

Death from causes sustained in the line of duty.
A monthly annuity equal to $50 \%$ of Average Final Compensation payable to surviving spouse, dependent child or dependent parents. In addition, a lump sum of $\$ 100,000$ is payable to the surviving spouse, dependent child or dependent parents if death is due to a traumatic personal injury incurred in the line of duty.

For each dependent child, an additional benefit equal to $6 \%$ of the average Earnable Compensation of an active member of the System, as reported by the actuary.

## Summary of System Provisions (continued)

## Death After Retirement

Eligibility

Benefit

Annual Escalator Benefit
Eligibility

Benefit

Death of member while receiving a service (basic benefit only), ordinary, accidental or vested (basis benefit only) retirement.

To surviving spouse, $50 \%$ of the gross monthly benefit of the retired member but not less than 20\% of the average Earnable Compensation of an active member of the System, as reported by the actuary.

For each dependent child, an additional benefit equal to $6 \%$ of the average Earnable Compensation of an active member of the System, as reported by the actuary.

All retired members, except for vested retirements, and for beneficiaries, except for beneficiaries of vested retirements.

The monthly pension benefit is increased each July 1 by the sum of (a) plus (b) below:
(a) The previous monthly benefit multiplied by $1.5 \%$, and
(b) An additional dollar amount from the table below based on the number of years the member has been retired.

| Amount | Years of Retirement |
| :---: | :---: |
| $\$ 15$ | Less than 5 |
| 20 | $5-9$ |
| 25 | $10-14$ |
| 30 | $15-19$ |
| 35 | 20 or More |

Normal Form of Benefit

Married
Single

Joint and 50\% Survivor Annuity.
Life Only Annuity.

## Summary of System Members

2006

> July 1, $\underline{2007}$
$\underline{2008}$
Active Members

| Number | 3,816 | 3,847 | 3,881 |
| :--- | ---: | ---: | ---: |
| Average Attained Age | 40.2 | 40.2 | 40.2 |
| Average Past Service | 13.3 | 13.2 | 13.1 |
| Total Annual Compensation | $\$ 206,385,084$ | $\$ 213,039,324$ | $\$ 223,752,299$ |
| Average Annual Compensation | 54,084 | 55,378 | 57,653 |
| Non-Active Members in Pay Status |  |  |  |
| Number |  | 3,531 | 3,600 |
| Average Age (excluding children) | 67.7 | 67.8 | 3,625 |
| Total Annual Benefits | $\$ 90,485,508$ | $\$ 96,787,260$ | $\$ 102,047,088$ |
| Average Annual Benefit | 25,626 | 26,885 | 28,150 |
| Non-Active Members with Deferred Benefits |  |  | 67.9 |
| Number* |  | 286 | 293 |
| Average Age |  | 44.7 | 44.3 |

* Excludes 38, 24 and 22 terminated nonvested members who had not yet received a refund of contributions as of 2006, 2007 or 2008 respectively.


## Summary of System Members

## Reconciliation of Participant Counts

|  | Active | Terminated Vested | In Pay Status |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Beneficiaries | Disabled | Retirees |  |
| Number as of July 1, 2007 | 3,847 | 293 | 932 | 1,068 | 1,600 | 7,740 |
| Change due to: |  |  |  |  |  |  |
| New hires and rehires | 247 | (2) | 0 | 0 | 0 | 245 |
| Terminations | (61)* | 45 | 0 | 0 | 0 | (16) |
| Retirement | (64) | (21) | 0 | 0 | 85 | 0 |
| Disability | (33) | 0 | 0 | 33 | 0 | 0 |
| Death without Beneficiary | (1) | 0 | (60) | (14) | (20) | (95) |
| Death with Beneficiary | (2) | 0 | 48 | (14) | (27) | 5 |
| Refund Paid Out | $(52)^{\star *}$ | (9) | 0 | 0 | 0 | (61) |
| Benefit Aged Out | 0 | 0 | (6) | 0 | 0 | (6) |
| Other | 0 | 0 | 0 | 0 | 0 | 0 |
| Number as of July 1, 2008 | $3,881^{* * *}$ | 306 | 914 | 1,073 | 1,638 | 7,812 |

* Six of the Terminations are from new hires during the period July 1, 2007 to June 30, 2008.
** Twelve of the Refunds Paid Out are from new hires during the period July 1, 2007 to June 30, 2008.
*** Eighty-five of the Actives have elected to participate in DROP as of July 1, 2008.


## Summary of System Members

## Active Members—As of July 1, 2008

| Years of Service |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35+ | Total | Average Annual Salary |
| Under 25 | 158 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 158 | \$43,227 |
| 25-29 | 380 | 113 | 0 | 0 | 0 | 0 | 0 | 0 | 493 | \$49,045 |
| 30-34 | 210 | 321 | 68 | 0 | 0 | 0 | 0 | 0 | 599 | \$53,127 |
| 35-39 | 115 | 271 | 307 | 75 | 0 | 0 | 0 | 0 | 768 | \$55,995 |
| 40-44 | 52 | 93 | 171 | 243 | 71 | 1 | 0 | 0 | 631 | \$58,879 |
| 45-49 | 10 | 47 | 85 | 130 | 146 | 68 | 4 | 0 | 490 | \$62,696 |
| 50-54 | 2 | 9 | 19 | 53 | 106 | 184 | 121 | 0 | 494 | \$67,210 |
| 55-59 | 2 | 3 | 8 | 17 | 27 | 41 | 80 | 23 | 201 | \$67,030 |
| $60+$ | 0 | 1 | 3 | 3 | 4 | 2 | 10 | 24 | 47 | \$71,652 |
| Total | 929 | 858 | 661 | 521 | 354 | 296 | 215 | 47 | 3,881 |  |
| Average Annual |  |  |  |  |  |  |  |  |  |  |
| Salary | \$47,075 | \$54,740 | \$58,614 | \$61,518 | \$64,661 | \$69,038 | \$71,788 | \$74,431 |  | \$57,653 |

## Summary of System Members

Inactive Members—As of July 1, 2008

Service Retirements

| Age | Number | Total <br> Annual Benefit | Average <br> Annual Benefit |
| :---: | :---: | :---: | :---: |
| $55-59$ | 221 | $\$ 10,824,228$ | $\$ 48,978$ |
| $60-64$ | 317 | $14,396,928$ | 45,416 |
| $65-69$ | 287 | $10,950,060$ | 38,154 |
| $70-74$ | 197 | $6,078,048$ | 30,853 |
| $75-79$ | 168 | $4,694,136$ | 27,941 |
| $80-84$ | 131 | $3,337,728$ | 25,479 |
| Over 84 | 91 | $1,996,620$ | $\underline{21,941}$ |
| Total | 1,412 | $\$ 52,277,748$ | $\$ 37,024$ |

Vested Retirements

| Age | Number | Total <br> Annual Benefit | Average <br> Annual Benefit |
| :---: | :---: | :---: | :---: |
| $55-59$ | 83 | $\$ 1,503,936$ | $\$ 18,120$ |
| $60-64$ | 59 | 839,700 | 14,232 |
| $65-69$ | 32 | 461,472 | 14,421 |
| $70-74$ | 33 | 332,544 | 10,077 |
| $75-79$ | 10 | 56,304 | 5,630 |
| $80-84$ | 9 | 44,544 | 4,949 |
| Over 84 | 0 | 0 | 0 |
| Total | 226 | $\$ 3,238,500$ | $\$ 14,330$ |

## Summary of System Members

Inactive Members—As of July 1, 2008

Accidental Disability Retirements

| Age | Number | Total <br> Annual Benefit | Average <br> Annual Benefit |
| :---: | :---: | ---: | ---: |
| Under 40 | 13 | $\$ \quad 356,196$ | $\$ 27,400$ |
| $40-44$ | 22 | 611,220 | 27,783 |
| $45-49$ | 50 | $1,558,836$ | 31,177 |
| $50-54$ | 95 | $3,050,172$ | 32,107 |
| $55-59$ | 163 | $5,737,248$ | 35,198 |
| $60-64$ | 188 | $6,383,988$ | 33,957 |
| $65-69$ | 143 | $3,358,580$ | 30,480 |
| $70-74$ | 104 | $1,941,584$ | 29,900 |
| $75-79$ | 70 | 815,160 | 27,738 |
| $80-84$ | 31 | 365,748 | 26,295 |
| Over 84 | 15 | $\$ 24,288,380$ |  |
| Total | 894 |  | $\$ 31,642$ |

Ordinary Disability Retirements

| Age | Number | Total <br> Annual Benefit | Average <br> Annual Benefit |
| :---: | :---: | :---: | :---: |
| Under 40 | 7 | $\$ 145,332$ | $\$ 20,762$ |
| $40-44$ | 8 | 178,800 | 22,350 |
| $45-49$ | 14 | 324,180 | 23,156 |
| $50-54$ | 19 | 479,652 | 25,245 |
| $55-59$ | 41 | $1,286,868$ | 31,387 |
| $60-64$ | 32 | 933,708 | 29,178 |
| $65-69$ | 24 | 644,304 | 26,846 |
| $70-74$ | 19 | 426,216 | 22,432 |
| $75-79$ | 7 | 126,108 | 18,015 |
| $80-84$ | 6 | 40,492 | 20,632 |
| Over 84 | 2 | $\underline{20,244}$ |  |
| Total | 179 | $\$ 4,709,448$ | $\$ 26,310$ |

## Summary of System Members

## Inactive Members—As of July 1, 2008

Beneficiaries (Spouse)

| Age | Number | Total <br> Annual Benefit | Average <br> Annual Benefit |
| :---: | :---: | :---: | :---: |
| Under 40 | 6 | $\$ 125,460$ | $\$ 20,910$ |
| $40-44$ | 10 | 178,284 | 17,828 |
| $45-49$ | 10 | 164,352 | 16,435 |
| $50-54$ | 28 | 499,128 | 17,826 |
| $55-59$ | 53 | $1,031,160$ | 19,456 |
| $60-64$ | 64 | $1,131,972$ | 17,687 |
| $65-69$ | 105 | $1,771,056$ | 16,867 |
| $70-74$ | 95 | $2,482,900$ | 15,609 |
| $75-79$ | 147 | $2,045,952$ | 14,477 |
| $80-84$ | 147 | $2,718,852$ | 13,918 |
| Over 84 | 192 | $\$ 13,277,292$ | 14,161 |
| Total |  |  | $\$ 15,493$ |

Beneficiaries (Children)

| Age | Number | Total <br> Annual Benefit | Average <br> Annual Bene |
| :---: | :---: | :---: | ---: |
| Under 3 | 0 | $\$ 0$ | $\$$ |
| $3-5$ | 2 | 0,668 | $\$ 0$ |
| $6-8$ | 3 | 11,328 | 3,776 |
| $9-11$ | 6 | 25,284 | 4,214 |
| $12-14$ | 7 | 27,744 | 3,963 |
| $15-17$ | 8 | 34,224 | 4,278 |
| $18-20$ | 18 | 81,228 | 4,513 |
| Over 20 | 13 | 68,244 | 5,250 |
| Total | 57 | $\$ 255,720$ | $\$ 4,486$ |

## Summary of System Members

Inactive Members—As of July 1, 2008

Terminated Vested

| Age | Number | Total <br> Annual Benefit | Average <br> Annual Benefit |
| :---: | :---: | ---: | :---: |
| Under 40 | 92 | $\$ 815,112$ | $\$ 8,860$ |
| $40-44$ | 53 | 679,068 | 12,813 |
| $45-49$ | 75 | $1,385,700$ | 18,476 |
| $50-54$ | 86 | $1,617,672$ | 18,810 |
| Over 54 | - | 0 | 0 |
| Total | 306 | $\$ 4,497,552$ | $\$ 14,698$ |

