

**Municipal Fire and Police
Retirement System of Iowa**

Actuarial Valuation Report

July 1, 2010

October 12, 2010

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, 2010 Actuarial Report

Dear Board Members:

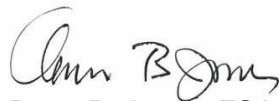
We are pleased to submit this actuarial report of the Municipal Fire and Police Retirement System of Iowa. The costs developed and presented in this report are based on asset values as of June 30, 2010, member census data as of July 1, 2010, and current System provisions, all of which were supplied by 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 necessary to render the actuarial opinion contained in this report.

Sincerely,



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



Glen C. Gahan, FSA
Principal
Member of American Academy
of Actuaries
Enrolled Actuary No. 08-4875

MSE/kj

Enclosure

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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.

	<u>As of July 1,</u>		
	<u>2008</u>	<u>2009</u>	<u>2010</u>
Cities Recommended Contribution	\$ 38,037,891	\$ 46,341,605	\$ 60,038,343
Normal Contribution Rate	17.00%	19.90%	24.76%
Plan Assets			
Market Value	1,885,733,999	1,434,583,769	1,534,412,575
Actuarial Value	1,891,172,380	1,897,930,971	1,862,629,908
Investment Return			
Market Value	-2.09%	-21.81%	10.95%
Actuarial Value	9.57%	2.75%	1.02%
Actuarial Present Value of Accrued Benefits			
Total Accrued Benefits	1,912,363,335	2,000,030,545	2,077,334,749
– Security Ratio	99%	72%	74%
Vested Accrued Benefits	1,884,440,642	1,972,332,436	2,049,878,269
– Security Ratio	100%	73%	75%
Annual Participating Payroll	223,752,299	232,872,388	242,481,190
Annual Pension Benefits			
Service Retirement	52,277,748	55,263,912	58,960,680
Disabled Retirement	32,997,828	34,904,592	35,823,420
Vested Retirement Beneficiaries	3,238,500	3,352,812	3,682,572
Total	<u>13,533,012</u>	<u>14,277,468</u>	<u>14,804,952</u>
	\$ 102,047,088	\$ 107,798,784	\$ 113,271,624
Number of Members			
Active	3,881	3,886	3,895
Disabled	1,073	1,088	1,090
Retirees & Beneficiaries	2,552	2,582	2,631
Vested Terminated	<u>306</u>	<u>315</u>	<u>302</u>
Total	7,812	7,871	7,918

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 \$60,038,343 be made for the 2010 plan year. This is equal to a contribution rate of 24.76% of payroll. This rate assumes that the State of Iowa will contribute approximately \$1,500,000 for the 2010 plan year.

The System's normal contribution rate increased from 19.90% for 2009 to 24.76% for 2010. The Retirement System's contribution rate before any adjustment to the minimum contribution rate changed as follows:

July 1, 2009 normal contribution rate	19.90%
• Increase in contribution rate due to decreased State contribution	0.46%
• Plan experience more favorable than assumed	(0.30%)
• Investment experience less favorable than assumed	4.70%
• Changes in System provisions	0.00%
• Change in actuarial asset method	0.00%
• Changes in actuarial assumptions	<u>0.00%</u>
Preliminary normal contribution rate	24.76%
• Increase necessary to meet minimum contribution rate	0.00%
July 1, 2010 normal contribution rate	24.76%

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:

	<u>Values as of July 1, 2010</u>	<u>Funded Ratio</u>		
		<u>2008</u>	<u>2009</u>	<u>2010</u>
Market Value of Plan Assets	\$1,534,412,575	--	--	--
Actuarial Present Value:				
Accrued Benefits	2,077,334,749	99%	72%	74%
Vested Accrued Benefits	2,049,878,269	100%	73%	75%
Interest Rate		7.5%	7.5%	7.5%

Changes in System Provisions

All System provisions remained unchanged from the prior year valuation except for:

- Various technical changes to the Chapter 411 statute, including modifications required by the Internal Revenue Code and to establish further compliance with the Internal Revenue Code requirement under USERRA for individuals who return from military service.

Changes in Actuarial Assumptions

All actuarial assumptions remain unchanged from the prior year valuation.

Change in Actuarial Methods

All actuarial methods remain unchanged from the prior year valuation.

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 \$61,541,726 for 2010. 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 slightly increased. The average age of members included in the valuation was 40.6 for the current year and 40.4 in the prior year.

Service of Active Members—The average service of the active members has slightly increased. The average service of members included in the valuation was 13.4 for the current year and 13.3 in the prior year.

Participating Compensation and Members—Total participating compensation increased from \$232,872,388 to \$242,481,190, a 4.1% increase. The number of active members increased from 3,886 in 2009 to 3,895 in 2010.

Average Annual Compensation—The average compensation of active members is more than the average compensation for the prior year. The average compensation was \$59,926 for 2009 and \$62,254 in 2010.

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
Year Ending June 30, 2010

	<u>Market Value</u>
Assets at June 30, 2009	\$1,434,583,769
 Receipts	
Member Contributions	\$ 21,874,015
Cities Contributions	39,852,678
State Contributions	2,253,158
Investment Income	164,970,504
Securities Lending Expenses	(6,635)
Investment Management Expenses	(10,847,977)
Other Income	<u>55,510</u>
 Total Receipts	 \$ 218,151,253
 Disbursements	
Benefit Payments to Members	\$ (114,788,679)
Termination Withdrawals	(1,943,313)
Administrative Expenses	(1,503,638)
Disability Expenses	(83,837)
Other Expenses	<u>(2,980)</u>
 Total Disbursements	 \$ (118,322,447)
 Assets at June 30, 2010	 \$1,534,412,575

Actuarial Valuation Results
System Assets – Actuarial Value
Year Ending June 30, 2010

1.	Actuarial Value of Assets at July 1, 2009	\$1,897,930,971																																										
2.	Contributions for 2009 Plan Year (Members, Cities and State)	63,979,851																																										
3.	Benefit distributions and refunds for 2009 plan year	(116,731,992)																																										
4.	Noninvestment Expenses																																											
	a. Administrative Expenses	(1,503,638)																																										
	b. Disability Expenses	(83,837)																																										
	c. Other Expenses	<u>(2,980)</u>																																										
	d. Total	(1,590,455)																																										
5.	Expected return on Market Value of Assets for year at 7.5%	105,592,776																																										
6.	Asset gains/(losses) for prior five plan years*																																											
	<table style="width: 100%; border-collapse: collapse; margin-left: 40px;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 15%; text-align: center;">(i) Asset gain or (loss)</th> <th style="width: 15%; text-align: center;">Years Recognized</th> <th style="width: 15%; text-align: center;">Years Remaining</th> <th style="width: 15%; text-align: center;">(ii) Recognition Percentage</th> <th style="width: 15%; text-align: center;">(i) x (ii) Recognized Amount</th> </tr> </thead> <tbody> <tr> <td>a. 2009</td> <td style="text-align: right;">\$ 48,578,626</td> <td style="text-align: center;">1</td> <td style="text-align: center;">4</td> <td style="text-align: right;">20.000%</td> <td style="text-align: right;">9,715,725</td> </tr> <tr> <td>b. 2008</td> <td style="text-align: right;">(546,369,608)</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: right;">20.000</td> <td style="text-align: right;">(109,273,922)</td> </tr> <tr> <td>c. 2007</td> <td style="text-align: right;">(186,103,897)</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: right;">20.000</td> <td style="text-align: right;">(37,220,779)</td> </tr> <tr> <td>d. 2006</td> <td style="text-align: right;">187,647,978</td> <td style="text-align: center;">4</td> <td style="text-align: center;">1</td> <td style="text-align: right;">18.750</td> <td style="text-align: right;">35,183,996</td> </tr> <tr> <td>e. 2005</td> <td style="text-align: right;">90,260,614</td> <td style="text-align: center;">5</td> <td style="text-align: center;">0</td> <td style="text-align: right;">16.667</td> <td style="text-align: right;"><u>15,043,737</u></td> </tr> <tr> <td>f. Total</td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">(86,551,243)</td> </tr> </tbody> </table>		(i) Asset gain or (loss)	Years Recognized	Years Remaining	(ii) Recognition Percentage	(i) x (ii) Recognized Amount	a. 2009	\$ 48,578,626	1	4	20.000%	9,715,725	b. 2008	(546,369,608)	2	3	20.000	(109,273,922)	c. 2007	(186,103,897)	3	2	20.000	(37,220,779)	d. 2006	187,647,978	4	1	18.750	35,183,996	e. 2005	90,260,614	5	0	16.667	<u>15,043,737</u>	f. Total					(86,551,243)	
	(i) Asset gain or (loss)	Years Recognized	Years Remaining	(ii) Recognition Percentage	(i) x (ii) Recognized Amount																																							
a. 2009	\$ 48,578,626	1	4	20.000%	9,715,725																																							
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f. Total					(86,551,243)																																							
7.	Asset gains/(losses) to be recognized = (6f)	(86,551,243)																																										
8.	Actuarial Value of Assets at July 1, 2010 = (1) + (2) + (3) + (4d) + (5) + (7)	\$1,862,629,908																																										

*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

Present Value of Unfunded Future Benefits	As of July 1,	
	<u>2009</u>	<u>2010</u>
1. Actuarial Present Value of all Future Benefits		
a. Active members		
Service retirements/DROP	\$1,077,717,035	\$1,123,692,231
Ordinary disability	23,958,530	24,907,894
Accidental disability	222,013,931	231,022,473
Ordinary death	8,776,562	9,099,501
Accidental death	8,278,016	8,597,880
Withdrawal	<u>27,462,199</u>	<u>29,756,229</u>
Total Active	1,368,206,273	1,427,076,208
b. Inactive members		
Members receiving benefits	1,251,252,452	1,299,673,833
Deferred vested terminations	34,503,086	32,618,211
Refund of member contributions due	<u>86,004</u>	<u>160,612</u>
Total Inactive	1,285,841,542	1,332,452,656
c. Total Present Value of Future Benefits	2,654,047,815	2,759,528,864
2. Actuarial Value of Plan Assets	1,897,930,971	1,862,629,908
3. Actuarial Present Value of Future Member Contributions	233,969,851	242,385,663
4. Present Value of Unfunded Future Benefits = (1) – (2) – (3)	522,146,993	654,513,293
Determination of Preliminary Total Contribution		
5. Present value of future payroll of all covered members	2,489,040,963	2,578,570,887
6. Total (Cities plus State) normal contribution = (4) ÷ (5)	20.98%	25.38%
7. Covered payroll	232,872,388	242,481,190
8. Preliminary total contribution from Cities and State = (6) x (7)	48,856,627	61,541,726

Actuarial Valuation Results
System Liabilities and Contributions

Determination of Cities' Contribution	As of July 1,	
	<u>2009</u>	<u>2010</u>
9. Estimated State Contribution	\$ 2,503,510	\$ 1,500,000
10. Estimated State Contribution as a percent of payroll = (9) ÷ (7)	1.08%	0.62%
11. Preliminary Cities' Contribution = (8) – (9)	46,353,117	60,041,726
12. Cities' contribution as a percent of payroll = (11) ÷ (7)	19.90%	24.76%
13. Minimum required contribution rate for Cities	17.00%	17.00%
14. Cities' contribution = [Greater of (12) or (13)] x (7)	\$46,341,605	\$60,038,343

Actuarial Valuation Results

Actuarial Present Value of Accrued Benefits

	<u>As of July 1,</u>	
	<u>2009</u>	<u>2010</u>
1. Present value of vested accrued benefits		
a. Present value of vested accrued benefits for active members	\$ 686,490,894	\$ 717,425,613
b. Present value of benefits for terminated members	34,589,090	32,778,823
c. Present value of benefits being paid to retirees and beneficiaries	1,251,252,452	1,299,673,833
Total	\$1,972,332,436	\$2,049,878,269
2. Present value of accrued nonvested benefits	27,698,109	27,456,480
3. Present value of all accrued benefits = (1) + (2)	\$2,000,030,545	\$2,077,334,749
4. Market value of assets	\$1,434,583,769	\$1,534,412,575
5. Ratio of market value of assets to the present value of all accrued benefits = (4) ÷ (3)	72%	74%
6. Ratio of market value of assets to the present value of vested accrued benefits = (4) ÷ (1)	73%	75%

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, 2009	\$2,000,030,545
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Change in present value of accrued benefits from July 1, 2009 to July 1, 2010 due to:

- | | |
|-----------------------------------|---------------|
| • Additional benefits accumulated | \$ 48,332,218 |
| • Interest due to passage of time | 145,703,978 |
| • Benefits paid | (116,731,992) |
| • Change in assumptions | 0 |
| • Changes in System provisions | <u>0</u> |

Actuarial present value of accrued benefits on July 1, 2010	\$2,077,334,749
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System Demographic Experience

During the plan year July 1, 2009 to June 30, 2010, actual demographic experience differed from that expected by the actuarial assumptions, as summarized below.

Decrement Type	Expected	Actual
Actives		
Service Retirement	60	44
Accidental Disability	40	20
Ordinary Disability	5	2
Accidental Death	2	1
Ordinary Death	2	0
Withdrawal	77	57
DROP Participation	76	32
DROP Premature Withdrawal	6	4
DROP Retirement	28	27
Inactives		
Beneficiary Death	42	36
Disabled Death	30	20
Retirement Death	56	39
Vested Termination Death	1	0

Summary of Actuarial Assumptions

Interest Rate 7.5%.

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

<u>Age</u>	<u>Rate</u>
20	15.11%
25	10.41%
30	7.14%
35 or Over	4.50%

Mortality Rates

Pre-retirement Mortality

- Ordinary

Rates varying by age – Sample rates:

<u>Age</u>	<u>Rate</u>
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

- Accidental

Rates varying by age – Sample rates:

<u>Age</u>	<u>Rate</u>
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

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.

- Disabled

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.

Disability Rates

- Ordinary

Rates varying by age – Sample rates:

<u>Age</u>	<u>Rate</u>
20	0.06%
25	0.06
30	0.06
35	0.08
40	0.11
45	0.13
50	0.19
55	0.27
60	0.55
65	1.11

- Accidental

Rates varying by age – Sample rates:

<u>Age</u>	<u>Rate</u>
20	0.12%
25	0.12
30	0.12
35	0.12
40	0.34
45	0.77
50	1.48
55	3.36
60	6.89
65	8.01

Summary of Actuarial Assumptions (continued)

Turnover Rates

Rates varying by age – Sample rates:

<u>Age</u>	<u>Rate</u>
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

Retirement Age

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

<u>Age</u>	<u>Rate</u>
55	50%
56	35
57-60	25
61	30
62	35
63	40
64	45
65	100%

DROP

- Participation
 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.

- Period of Participation
 3 years.

- Investment Return on Accounts
 1.0%.

- Benefit Distribution
 Lump Sum.

- Retirement Age
 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.

- Voluntary Premature Withdrawal
 5% per year while participating in DROP.

Summary of Actuarial Assumptions (continued)

Administrative Expenses	None explicitly assumed.
Percentage Married	85%.
Spouses' Age	Wives are three years younger than husbands.
Number of Children	2.5 per couple.
Participating Payroll	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 Iowa 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, 2010 are reflected in this summary.

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

Contributions

Members

The following percentages of Earnable Compensation:

<u>Effective Date</u>	<u>Percentage</u>
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
July 1, 2009	9.40

Cities

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.

State

The annual appropriation from the State of Iowa to fund benefits is \$1,500,000 for the fiscal year ending June 30, 2011, \$750,000 for the fiscal year ending June 30, 2012 and \$0 thereafter.

Summary of System Provisions (continued)

Average Final Compensation	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.
Service Retirement Benefit	
Eligibility	After age 55 and completion of 22 years of service.
Benefit	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.
DROP Benefit	
Eligibility	After age 55 and completion of 22 years of service.
Participation Date	First day of the month following the month in which a member applies for participation.
Participation Period	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.
Chapter 411 Benefit	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.
DROP Account	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	Member's contributions will be contributed to the general System assets during the member's participation period.
City Contributions	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.
Investment Return	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.
Benefit Escalation	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.
Benefit Distributions	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.
Premature Withdrawal and Accrual of Benefit	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.
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Ordinary Disability Benefit

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

Death from causes sustained in the line of duty.

Benefit

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

Annual Escalator Benefit

Eligibility	All retired members, except for vested retirements, and for beneficiaries, except for beneficiaries of vested retirements.
Benefit	The monthly pension benefit is increased each July 1 by the sum of (a) plus (b) below: <ul style="list-style-type: none"> (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.

<u>Amount</u>	<u>Years of Retirement</u>
\$15	Less than 5
20	5-9
25	10-14
30	15-19
35	20 or More

Normal Form of Benefit

Married	Joint and 50% Survivor Annuity.
Single	Life Only Annuity.

Summary of System Members

	<u>2008</u>	<u>July 1, 2009</u>	<u>2010</u>
Active Members			
Number	3,881	3,886	3,895
Average Attained Age	40.2	40.4	40.6
Average Past Service	13.1	13.3	13.4
Total Annual Compensation	\$223,752,299	\$232,872,388	\$242,481,190
Average Annual Compensation	57,653	59,926	62,254
Non-Active Members in Pay Status			
Number	3,625	3,670	3,721
Average Age (excluding children)	67.9	68.2	68.5
Total Annual Benefits	\$102,047,088	\$107,798,784	\$113,271,624
Average Annual Benefit	28,151	29,373	30,441
Non-Active Members with Deferred Benefits			
Number*	306	315	302
Average Age	44.0	44.6	44.9
Total Annual Benefits	\$ 4,497,552	\$ 4,989,960	\$ 4,686,972
Average Annual Benefit	14,698	15,841	15,520

* Excludes 22, 25 and 37 terminated nonvested members who had not yet received a refund of contributions as of 2008, 2009 or 2010 respectively.

Summary of System Members

Reconciliation of Participant Counts

	Active	Terminated Vested	In Pay Status			Total
			Beneficiaries	Disabled	Retirees	
Number as of July 1, 2009	3,886	315	923	1,088	1,659	7,871
Change due to:						
New hires and rehires	176	(1)	0	0	0	175
Terminations	(42)*	20	0	0	0	(22)
Retirement	(75)	(18)	0	0	93	0
Disability	(22)	0	0	22	0	0
Death without Beneficiary	(0)	0	(36)	(13)	(19)	(68)
Death with Beneficiary	(1)	0	39	(7)	(20)	11
Refund Paid Out	(27)**	(9)	0	0	0	(36)
Benefit Aged Out	0	0	(6)	0	0	(6)
Other	0	(5)	(2)	0	0	(7)
Number as of July 1, 2010	3,895***	302	918	1,090	1,713	7,918

* Nine of the Terminations are from new hires during the period July 1, 2009 to June 30, 2010.

** Three of the Refunds Paid Out are from new hires during the period July 1, 2009 to June 30, 2010.

*** One hundred-sixteen (116) of the Actives have elected to participate in DROP as of July 1, 2010.

Summary of System Members
Active Members—As of July 1, 2010

Age	Years of Service								Total	Average Annual Salary
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+		
Under 25	130	0	0	0	0	0	0	0	130	\$47,467
25-29	388	97	0	0	0	0	0	0	485	\$53,290
30-34	244	283	100	0	0	0	0	0	627	\$56,742
35-39	94	206	323	72	0	0	0	0	695	\$60,543
40-44	43	113	211	233	72	1	0	0	673	\$63,678
45-49	16	34	78	151	173	78	0	0	530	\$66,834
50-54	3	10	33	60	98	136	122	4	466	\$72,273
55-59	3	0	7	21	35	45	96	30	237	\$72,648
60+	0	0	1	5	9	6	11	20	52	\$69,925
Total	921	743	753	542	387	266	229	54	3,895	
Average Annual Salary	\$51,295	\$59,055	\$62,858	\$66,041	\$68,581	\$74,540	\$77,194	\$77,573		\$62,254

Summary of System Members

Inactive Members—As of July 1, 2010

Service Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
55-59	209	\$10,941,060	\$52,350
60-64	341	16,678,560	48,911
65-69	277	11,463,804	41,386
70-74	235	8,402,244	35,754
75-79	168	5,051,136	30,066
80-84	131	3,712,416	28,339
Over 84	<u>107</u>	<u>2,711,460</u>	<u>25,341</u>
Total	1,468	\$58,960,680	\$40,164

Vested Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
55-59	78	\$1,462,056	\$18,744
60-64	77	1,204,632	15,645
65-69	33	500,040	15,153
70-74	22	248,568	11,299
75-79	27	225,180	8,340
80-84	6	36,900	6,150
Over 84	<u>2</u>	<u>5,196</u>	<u>2,598</u>
Total	245	\$3,682,572	\$15,031

Summary of System Members

Inactive Members—As of July 1, 2010

Accidental Disability Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	15	\$ 453,216	\$30,214
40-44	23	720,156	31,311
45-49	33	1,063,776	32,236
50-54	93	3,212,580	34,544
55-59	157	5,904,984	37,611
60-64	189	6,732,576	35,622
65-69	162	5,439,372	33,576
70-74	113	3,568,644	31,581
75-79	109	3,220,392	29,545
80-84	13	351,228	27,018
Over 84	<u>8</u>	<u>209,388</u>	<u>26,174</u>
Total	915	\$30,876,312	\$33,745

Ordinary Disability Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	4	\$ 77,196	\$19,299
40-44	11	267,144	24,286
45-49	11	272,424	24,766
50-54	18	509,832	28,324
55-59	36	1,186,200	32,950
60-64	39	1,182,696	30,326
65-69	24	689,496	28,729
70-74	17	425,916	25,054
75-79	10	223,956	22,396
80-84	4	87,864	21,966
Over 84	<u>1</u>	<u>24,384</u>	<u>24,384</u>
Total	175	\$ 4,947,108	\$28,269

Summary of System Members

Inactive Members—As of July 1, 2010

Beneficiaries (Spouse)

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	4	\$ 97,452	\$24,363
40-44	11	210,780	19,162
45-49	9	164,772	18,308
50-54	27	536,412	19,867
55-59	47	1,008,576	21,459
60-64	74	1,512,540	20,440
65-69	71	1,332,204	18,763
70-74	117	2,001,384	17,106
75-79	139	2,186,400	15,729
80-84	149	2,250,816	15,106
Over 84	<u>216</u>	<u>3,238,056</u>	<u>14,991</u>
Total	864	\$14,539,392	\$16,828

Beneficiaries (Children)

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 3	0	\$ 0	\$ 0
3-5	2	7,368	3,684
6-8	3	12,912	4,304
9-11	5	24,720	4,944
12-14	7	32,304	4,615
15-17	7	29,940	4,277
18-20	13	62,628	4,818
Over 20	<u>17</u>	<u>95,688</u>	<u>5,629</u>
Total	54	\$265,560	\$4,918

Summary of System Members

Inactive Members—As of July 1, 2010

Terminated Vested

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	74	\$ 673,380	\$ 9,100
40-44	49	725,436	14,805
45-49	77	1,236,048	16,053
50-54	101	2,050,884	20,306
Over 54	<u>1</u>	<u>1,224</u>	<u>1,224</u>
Total	302	\$4,686,972	\$15,520