Municipal Fire and Police Retirement System of Iowa

Actuarial Valuation Report

July 1, 2011

December 2, 2011

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, 2011 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, 2011, member census data as of July 1, 2011, 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. 11-2717

Glen C. Gahan, FSA
Principal
Member of American Academy of Actuaries
Enrolled Actuary No. 11-4875

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.

	As of July 1,		
	2009	2010	2011
Cities Recommended Contribution	$ 46,341,605	$ 60,038,343	$ 65,004,707
Normal Contribution Rate	19.90%	24.76%	26.12%
Plan Assets			
Market Value	1,434,583,769	1,534,412,575	1,829,405,667
Actuarial Value	1,897,930,971	1,862,629,908	1,867,281,454
Prior Year Investment Return			
Market Value	–21.81%	10.95%	23.15%
Actuarial Value	2.75%	1.02%	3.20%
Actuarial Accrued Liability	N/A	N/A	2,388,493,912
Security Ratio	N/A	N/A	77%
Actuarial Present Value of Accrued Benefits			
Total Accrued Benefits	2,000,030,545	2,077,334,749	2,164,122,359
– Security Ratio	72%	74%	85%
Vested Accrued Benefits	1,972,332,436	2,049,878,269	2,136,294,721
– Security Ratio	73%	75%	86%
Annual Participating Payroll	232,872,388	242,481,190	248,869,476
Annual Normal Cost	N/A	N/A	45,660,053
Percent of Payroll	N/A	N/A	18.35%
Annual Pension Benefits			
Service Retirement	55,263,912	58,960,680	62,437,848
Disabled Retirement	34,904,592	35,823,420	37,743,684
Vested Retirement	3,352,812	3,682,572	3,953,976
Beneficiaries	14,277,468	14,804,952	15,148,944
Total	107,798,784	113,271,624	119,284,452
Number of Members			
Active	3,886	3,895	3,908
Disabled	1,088	1,090	1,108
Retirees & Beneficiaries	2,582	2,631	2,645
Vested Terminated	315	302	298
Total	7,871	7,918	7,959

Comments on the Valuation

Cities Recommended Contribution

The recommended contribution to the System was determined using the Entry Age Normal actuarial cost method as adopted by the Board of Trustees for valuation years beginning July 1, 2011. The Aggregate actuarial cost method has been used in prior years to determine the contribution for the System.

We recommend a contribution of $65,004,707 be made for the 2011 plan year. This is equal to a contribution rate of 26.12% of payroll. This rate assumes that the State of Iowa will contribute approximately $750,000 for the 2011 plan year.

The System's normal contribution rate increased from 24.76% for 2010 to 26.12% for 2011. The System's contribution rate before any adjustment to the minimum contribution rate changed as follows:

July 1, 2010 normal contribution rate	24.76%
• Increase in contribution rate due to decreased State contribution	0.32%
• Plan experience more favorable than assumed	(0.02%)
• Investment experience less favorable than assumed	3.02%
• Changes in System provisions	0.00%
• Change in actuarial cost method	(1.96%)
• Changes in actuarial assumptions	0.00%
Preliminary normal contribution rate	26.12%
• Increase necessary to meet minimum contribution rate	0.00%
July 1, 2011 normal contribution rate	26.12%

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 July 1, 2011	Funded Ratio 2009	2010	2011
Market Value of Plan Assets	$1,829,405,667	--	--	--
Actuarial Present Value:				
Accrued Benefits	2,164,122,359	72%	74%	85%
Vested Accrued Benefits	2,136,294,721	73%	75%	86%
Interest Rate		7.5%	7.5%	7.5%

Comments on the Valuation

Changes in System Provisions

All System provisions remained unchanged from the prior year valuation.

Changes in Actuarial Assumptions

All actuarial assumptions remain unchanged from the prior year valuation.

Change in Actuarial Methods

The actuarial cost method changed from the Aggregate cost method to the Entry Age Normal cost method with a 25 year level dollar amortization of the unfunded actuarial accrued liability. All other 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 required for systems which use the Entry Age Normal cost method to determine the Annual Required Contribution (ARC). 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 $65,762,433 for 2011. This is the total ARC before any adjustment for minimum contribution rates or state contributions.

Comments on the Valuation

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 40.7 for the current year and 40.6 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 13.5 for the current year and 13.4 in the prior year.

Participating Compensation and Members—Total participating compensation increased from $242,481,190 to $248,869,476, a 2.6% increase. The number of active members increased from 3,895 in 2010 to 3,908 in 2011.

Average Annual Compensation—The average compensation of active members is more than the average compensation for the prior year. The average compensation was $62,254 for 2010 and $63,682 in 2011.

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.

Assets **–** System assets are amounts that have accumulated and will be used to meet future benefit obligations. In the 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.

Actuarial Accrued Liability **–** The actuarial accrued liability is equal to the sum of the individual accrued liabilities for all System members. Each member's accrued liability equals the actuarial present value of all future benefits less the actuarial present value of all future normal costs.

Unfunded Actuarial Accrued Liability **–** The unfunded actuarial accrued liability on the valuation date is equal to the excess of the System's actuarial accrued liability over the System's actuarial value of assets.

Annual Normal Cost **–** The annual normal cost is the portion of total System costs assigned to the current plan year by the actuarial cost method.

Annual Contributions – The recommended annual contribution is defined by the rate of contribution and covered payroll. The System's contribution rate by statute may not be less than 17% of covered payroll. As of July 1, 2011 the determination changed from the Aggregate cost method to the Entry Age Normal cost method with a 25 year level dollar amortization of unfunded actuarial accrued liability on an open basis. The recommended contribution rate consists of the normal cost plus amortization of the unfunded actuarial accrued liability less member contributions less state contributions, divided by the covered payroll.

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 actuarial present value of accrued benefits is displayed for the current and prior year.

Actuarial Valuation Results

Assets – Market Value

Year Ending June 30, 2011

Assets at June 30, 2010		$1,534,412,575
Receipts		
Member Contributions	$ 22,328,836	
Cities Contributions	47,392,747	
State Contributions	1,500,000	
Investment Income	360,313,107	
Securities Lending Expenses	(0)	
Investment Management Expenses	(11,314,001)	
Other Income	25,492	
Total Receipts		$ 420,246,181
Disbursements		
Benefit Payments to Members	$ (121,624,351)	
Termination Withdrawals	(1,920,774)	
Administrative Expenses	(1,587,234)	
Disability Expenses	(120,730)	
Other Expenses	(0)	
Total Disbursements		$ (125,253,089)
Assets at June 30, 2011		$1,829,405,667

Actuarial Valuation Results

Assets – Actuarial Value

Year Ending June 30, 2011

1.	Actuarial Value of Assets at July 1, 2010	$1,862,629,908
2.	Contributions for 2010 Plan Year (Members, Cities and State)	71,221,583
3.	Benefit distributions and refunds for 2010 plan year	(123,545,125)
4.	Noninvestment Expenses	
	a. Administrative Expenses	(1,587,234)
	b. Disability Expenses	(120,730)
	c. Other Expenses	(0)
	d. Total	(1,707,964)
5.	Expected return on Market Value of Assets for year at 7.5%	113,091,391

6. Asset gains/(losses) for prior five plan years*

	(i) Asset gain or (loss)	Years Recognized	Years Remaining	(ii) Recognition Percentage	(i) x (ii) Recognized Amount
a. 2010	$ 235,933,207	1	4	20.000%	$ 47,186,641
b. 2009	48,578,626	2	3	20.000	9,715,725
c. 2008	(546,369,608)	3	2	20.000	(109,273,922)
d. 2007	(186,103,897)	4	1	20.000	(37,220,779)
e. 2006	187,647,978	5	0	18.750	35,183,996
f. Total					(54,408,339)

7.	Asset gains/(losses) to be recognized = (6f)	(54,408,339)
8.	Actuarial Value of Assets at July 1, 2011 = (1) + (2) + (3) + (4d) + (5) + (7)	$1,867,281,454

*Effective July 1, 2008, the period over which asset gains or losses to be recognized increased from four to five years.

Actuarial Valuation Results

Unfunded Actuarial Accrued Liability

The unfunded actuarial accrued liability is the amount the actuarial accrued liability exceeds the actuarial value of plan assets determined as of the actuarial valuation date. The unfunded actuarial accrued liability is reduced during a year when System funding exceeds the annual normal cost and interest accrued on the prior year unfunded accrued liability. The unfunded actuarial accrued liability is also reduced (increased) when the investment return on System assets exceeds (is less than) the assumed investment return. The actuarial accrued liability is increased if there are amendments that revise benefits payable from the System. The actuarial accrued liability may be increased or decreased as the result of System experience or if there are changes in the actuarial assumptions used to determine annual contributions.

	As of July 1, 2010	As of July 1, 2011
1. Actuarial Accrued Liability		
a. Active members		
Service retirements/DROP	N/A	$815,506,172
Ordinary disability	N/A	13,600,075
Accidental disability	N/A	138,436,309
Ordinary death	N/A	4,753,623
Accidental death	N/A	5,044,251
Withdrawal	N/A	22,238,388
Total Active	N/A	999,578,818
b. Inactive members		
Members receiving benefits	N/A	1,355,182,225
Deferred vested terminations	N/A	33,636,779
Refund of member contributions due	N/A	96,090
Total Inactive	N/A	1,388,915,094
c. Total Actuarial Accrued Liability	N/A	2,388,493,912
2. Actuarial Value of Plan Assets	N/A	1,867,281,454
3. Unfunded Actuarial Accrued Liability before changes =[Excess of (1) over (2)]	N/A	521,212,458
4. Change in Unfunded Actuarial Accrued Liability		
a. Plan Amendment	N/A	0
b. Change in Actuarial Assumptions	N/A	0
5. Unfunded Actuarial Accrued Liability after changes	N/A	521,212,458
6. 25-Year Level Dollar, Open Basis Amortization of Unfunded Actuarial Accrued Liability	N/A	43,496,111

Actuarial Valuation Results

Annual Normal Cost

The annual normal cost is the portion of the total System costs assigned to the current year by the Actuarial Cost Method.

	As of July 1, 2010	2011
1. Annual Normal Cost		
Benefit Normal Cost	N/A	$45,660,053
Other	N/A	0
Total	N/A	45,660,053
2. Annual Participating Payroll	N/A	248,869,476
3. Annual Normal Cost as a Percentage of Participating Payroll = (1) / (2)	N/A	18.35%

Actuarial Valuation Results

Annual Contributions

Preliminary Total Contribution	As of July 1, 2010	2011
1. Annual Normal Cost	N/A	$45,660,053
2. Estimated Member Contributions	N/A	23,393,731
3. 25-Year Amortization of Unfunded Actuarial Accrued Liability	N/A	43,496,111
4. Total (Cities plus State) Contribution = (1) – (2) + (3)	N/A	65,762,433

Cities' Contribution		
5. Preliminary Total Contribution = (4)	N/A	65,762,433
6. Estimated State Contribution	N/A	750,000
7. Preliminary Cities' Contribution = (5) – (6)	N/A	65,012,433
8. Covered Payroll	N/A	248,869,476
9. Cities' Contribution as a percent of payroll = (7) / (8)	N/A	26.12%
10. Minimum required contribution rate for Cities	N/A	17.00%
11. Cities' Contribution = [Greater of (9) or (10)] x (8)	N/A	65,004,707

Actuarial Valuation Results

Annual Contributions

Present Value of Unfunded Future Benefits	As of July 1, 2010
1. Actuarial Present Value of all Future Benefits	
a. Active members	
Service retirements/DROP	$ 1,123,692,231
Ordinary disability	24,907,894
Accidental disability	231,022,473
Ordinary death	9,099,501
Accidental death	8,597,880
Withdrawal	29,756,229
Total Active	1,427,076,208
b. Inactive members	
Members receiving benefits	1,299,673,833
Deferred vested terminations	32,618,211
Refund of member contributions due	160,612
Total inactive	1,322,452,656
c. Total Present Value of Future Benefits	2,759,528,864
2. Actuarial Value of Plan Assets	1,862,629,908
3. Actuarial Present Value of Future Member Contributions	242,385,663
4. Present Value of Unfunded Future Benefits = (1) – (2) – (3)	654,513,293
Determination of Preliminary Total Contribution	
5. Present value of future payroll of all covered members	2,578,570,887
6. Total (Cities plus State) normal contribution = (4) / (5)	25.38%
7. Covered payroll	242,481,190
8. Preliminary total contribution from Cities and State = (6) x (7)	61,541,726

Actuarial Valuation Results

Annual Contributions

Determination of Cities' Contribution	As of July 1, 2010
9. Estimated State Contribution	$ 1,500,000
10. Estimated State Contribution as a percent of payroll = (9) ÷ (7)	0.62%
11. Preliminary Cities' Contribution = (8) – (9)	60,041,726
12. Cities' contribution as a percent of payroll = (11) ÷ (7)	24.76%
13. Minimum required contribution rate for Cities	17.00%
14. Cities' contribution = [Greater of (12) or (13)] x (7)	$60,038,343

Actuarial Valuation Results

Actuarial Present Value of Accrued Benefits

	As of July 1, 2010	As of July 1, 2011
1. Present value of vested accrued benefits		
a. Present value of vested accrued benefits for active members	$ 717,425,613	$ 747,379,627
b. Present value of benefits for terminated members	32,778,823	33,732,869
c. Present value of benefits being paid to retirees and beneficiaries	1,299,673,833	1,355,182,225
Total	$2,049,878,269	$2,136,294,721
2. Present value of accrued nonvested benefits	27,456,480	27,827,638
3. Present value of all accrued benefits = (1) + (2)	$2,077,334,749	$2,164,122,359
4. Market value of assets	$1,534,412,575	$1,829,405,667
5. Ratio of market value of assets to the present value of all accrued benefits = (4) ÷ (3)	74%	85%
6. Ratio of market value of assets to the present value of vested accrued benefits = (4) ÷ (1)	75%	86%

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, 2010	$2,077,334,749
Change in present value of accrued benefits from July 1, 2010 to July 1, 2011 due to:	
• Additional benefits accumulated	$ 59,081,816
• Interest due to passage of time	151,250,919
• Benefits paid	(123,545,125)
• Change in assumptions	0
• Changes in System provisions	0
Actuarial present value of accrued benefits on July 1, 2011	$2,164,122,359

System Demographic Experience

During the plan year July 1, 2010 to June 30, 2011, actual demographic experience differed from that expected by the actuarial assumptions, as summarized below.

Decrement Type	Expected	Actual
Actives		
Service Retirement	56	32
Accidental Disability	41	29
Ordinary Disability	5	8
Accidental Death	2	0
Ordinary Death	2	0
Withdrawal	75	62
DROP Participation	73	43
DROP Premature Withdrawal	6	4
DROP Retirement	21	28
Inactives		
Beneficiary Death	44	50
Disabled Death	32	19
Retirement Death	59	44
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:

Age	Rate
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:

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

- Accidental — 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 — 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:

Age	Rate
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:

Age	Rate
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:

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

Retirement Age

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

Age	Rate
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 Entry Age Normal Actuarial Cost Method was used to determine recommended contributions. Using this method, the annual contribution consists of a normal cost and an unfunded accrued liability payment.

The normal cost is determined as the sum of the individual normal costs for each active System member. A normal cost accrual rate is determined for each member. The accrual rate is equal to the actuarial present value of future benefits determined as of the member's entry age, divided by the actuarial present value of the assumed salaries paid to the member from entry age to retirement age. The normal cost accrual rate is multiplied by current salary to provide the member's individual normal cost.

The actuarial accrued liability is the sum of the individual actuarial accrued liabilities for all System members. Each member's actuarial accrued liability equals the actuarial present value of future benefits, less the actuarial present value of the member's normal costs payable in the future. These present values are calculated at the member's attained age. The unfunded actuarial accrued liability equals the total actuarial accrued liability less the actuarial value of plan assets. The unfunded actuarial accrued liability payment is the amount payable toward the amortization of the unfunded actuarial accrued liability. The unfunded actuarial accrued liability is amortized over 25 years on a level dollar, open basis.

At the end of each year, a determination of actuarial gains and losses is made. Actuarial gains and losses indicate the extent to which actual experience is deviating from that expected on the basis of the actuarial assumptions. Actuarial gains result from experience more favorable than assumed and reduce the unfunded actuarial accrued liability. Actuarial losses result from experience less favorable than assumed and increase the unfunded actuarial accrued liability.

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, 2011 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:

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
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 $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.

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.

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:

(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

Joint and 50% Survivor Annuity.

Single

Life Only Annuity.

Summary of System Members

	July 1, 2009	2010	2011
Active Members			
Number	3,886	3,895	3,908
Average Attained Age	40.4	40.6	40.7
Average Past Service	13.3	13.4	13.5
Total Annual Compensation	$232,872,388	$242,481,190	$248,869,476
Average Annual Compensation	59,926	62,254	63,682
Non-Active Members in Pay Status			
Number	3,670	3,721	3,753
Average Age (excluding children)	68.2	68.5	68.7
Total Annual Benefits	$107,798,784	$113,271,624	$119,284,452
Average Annual Benefit	29,373	30,441	31,784
Non-Active Members with Deferred Benefits			
Number*	315	302	298
Average Age	44.6	44.9	45.2
Total Annual Benefits	$ 4,989,960	$ 4,686,972	$ 4,740,000
Average Annual Benefit	15,841	15,520	15,906

* Excludes 23, 37 and 19 terminated nonvested members who had not yet received a refund of contributions as of 2009, 2010 or 2011 respectively.

Summary of System Members

Reconciliation of Participant Counts

	Active	Terminated Vested	In Pay Status Beneficiaries	In Pay Status Disabled	In Pay Status Retirees	Total
Number as of July 1, 2010	3,895	302	918	1,090	1,713	7,918
Change due to:						
New hires and rehires	186	0	0	(1)	0	185
Terminations	(40)*	27	0	0	0	(13)
Retirement	(64)	(18)	0	0	82	0
Disability	(37)	0	0	37	0	0
Death without Beneficiary	(0)	0	(50)	(13)	(23)	(86)
Death with Beneficiary	(0)	0	36	(6)	(21)	9
Refund Paid Out	(32)**	(13)	0	0	0	(45)
Benefit Aged Out	0	0	(9)	0	0	(9)
Other	0	0	0	1	(1)	0
Number as of July 1, 2011	3,908***	298	895	1,108	1,750	7,959

* Four of the Terminations are from new hires during the period July 1, 2010 to June 30, 2011.

** Six of the Refunds Paid Out are from new hires during the period July 1, 2010 to June 30, 2011.

*** One hundred-twenty-seven (127) of the Actives have elected to participate in DROP as of July 1, 2011.

Summary of System Members

Active Members—As of July 1, 2011

	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	107	1	0	0	0	0	0	0	108	$47,867
25-29	391	113	1	0	0	0	0	0	505	$53,697
30-34	209	328	100	0	0	0	0	0	637	$58,111
35-39	89	178	304	62	0	0	0	0	633	$61,773
40-44	43	120	226	246	78	0	0	0	713	$65,266
45-49	15	33	84	129	226	65	0	0	552	$68,735
50-54	4	11	36	65	110	119	116	2	463	$72,543
55-59	2	0	6	16	41	47	93	30	235	$75,799
60+	0	1	2	5	10	5	16	23	62	$73,993
Total	860	785	759	523	465	236	225	55	3,908	
Average Annual Salary	$51,534	$60,517	$64,180	$67,920	$70,119	$76,327	$78,948	$80,509		$63,682

Summary of System Members

Inactive Members—As of July 1, 2011

Service Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
55-59	191	$10,213,584	$53,474
60-64	347	17,641,584	50,840
65-69	287	12,651,156	44,081
70-74	253	9,629,148	38,060
75-79	173	5,447,676	31,489
80-84	136	4,026,144	29,604
Over 84	107	2,828,556	26,435
Total	1,494	$62,437,848	$41,792

Vested Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
55-59	76	$1,480,188	$19,476
60-64	79	1,291,536	16,349
65-69	44	665,004	15,114
70-74	22	238,764	10,853
75-79	25	225,372	9,015
80-84	7	42,276	6,039
Over 84	3	10,836	3,612
Total	256	$3,953,976	$15,445

Summary of System Members

Inactive Members—As of July 1, 2011

Accidental Disability Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	14	$ 434,172	$31,012
40-44	27	882,060	32,669
45-49	30	1,017,708	33,924
50-54	82	2,963,976	36,146
55-59	159	6,144,948	38,647
60-64	181	6,772,260	37,416
65-69	174	6,126,600	35,210
70-74	121	3,941,640	32,576
75-79	82	2,538,612	30,959
80-84	38	1,131,792	29,784
Over 84	23	631,920	27,475
Total	931	$32,585,688	$35,001

Ordinary Disability Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	5	$ 77,412	$15,482
40-44	9	237,276	26,364
45-49	12	291,144	24,262
50-54	14	405,264	28,947
55-59	38	1,287,708	33,887
60-64	38	1,195,740	31,467
65-69	27	793,428	29,386
70-74	17	475,932	27,996
75-79	11	255,060	23,187
80-84	3	66,804	22,268
Over 84	3	72,228	24,076
Total	177	$ 5,157,996	$29,141

Summary of System Members

Inactive Members—As of July 1, 2011

Beneficiaries (Spouse)

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	3	$ 78,168	$26,056
40-44	12	231,864	19,322
45-49	10	191,628	19,163
50-54	20	414,564	20,728
55-59	49	1,105,476	22,561
60-64	75	1,594,248	21,257
65-69	72	1,369,428	19,020
70-74	116	2,118,648	18,264
75-79	126	2,058,120	16,334
80-84	145	2,310,156	15,932
Over 84	221	3,434,820	15,542
Total	849	$14,907,120	$17,558

Beneficiaries (Children)

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 3	0	$ 0	$ 0
3-5	2	7,848	3,924
6-8	3	13,956	4,652
9-11	3	13,800	4,600
12-14	6	31,740	5,290
15-17	7	33,468	4,781
18-20	9	46,140	5,127
Over 20	16	94,872	5,930
Total	46	$241,824	$5,257

Summary of System Members

Inactive Members—As of July 1, 2011

Terminated Vested

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	68	$ 646,824	$ 9,512
40-44	53	746,472	14,084
45-49	74	1,277,304	17,261
50-54	101	2,024,616	20,046
Over 54	2	44,784	22,392
Total	298	$4,740,000	$15,906