

Municipal Fire and Police Retirement System of Iowa

Actuarial Valuation Report

July 1, 2009



October 6, 2009

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, 2009 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, 2009, member census data as of July 1, 2009, 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.

Sincerely,

Donn B. Jones

Principal Member of American Academy of Actuaries Enrolled Actuary No. 08-2717

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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,	
	<u>2007</u>	2008	2009
Cities Recommended Contribution	\$ 39,944,873	\$ 38,037,891	\$ 46,341,605
Normal Contribution Rate	18.75%	17.00%	19.90%
Plan Assets Market Value	1,953,613,434	1,885,733,999	1,434,583,769
Actuarial Value	1,752,134,783	1,891,172,380	1,897,930,971
Investment Return			
Market Value Actuarial Value	18.87% 15.77%	-2.09% 9.57%	–21.81% 2.75%
Actuarial Present Value of			
Accrued Benefits			
Total Accrued Benefits – Security Ratio	1,825,902,983 107%	1,912,363,335 99%	2,000,030,545 72%
-			
Vested Accrued Benefits – Security Ratio	1,795,474,533 109%	1,884,440,642 100%	1,972,332,436 73%
Annual Participating Payroll	213,039,324	223,752,299	232,872,388
Annual Pension Benefits			
Service Retirement	49,204,956	52,277,748	55,263,912
Disabled Retirement	31,603,116	32,997,828	34,904,592
Vested Retirement	2,815,404	3,238,500	3,352,812
Beneficiaries Total	<u>13,163,784</u> \$ 96,787,260	<u>13,533,012</u> \$ 102,047,088	<u>14,277,468</u> \$ 107,798,784
Iotai	φ 90,707,200	φ 102,047,000	φ 107,790,704
Number of Members			
Active	3,847	3,881	3,886
Disabled	1,068	1,073	1,088
Retirees & Beneficiaries Vested Terminated	2,532 293	2,552 <u>306</u>	2,582 315
Total	7,740	7,812	7,871

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 \$46,341,605 be made for the 2009 plan year. This is equal to a contribution rate of 19.90% of payroll. This rate assumes that the State of Iowa will contribute approximately \$2,503,510 for the 2009 plan year.

The System's normal contribution rate increased from 17.00% for 2008 to 19.90% for 2009. The Retirement System's contribution rate before any adjustment to the minimum contribution rate changed as follows:

July 1, 2008 normal contribution rate	16.49%
 Increase in contribution rate due to decreased State contribution 	0.15%
 Plan experience more favorable than assumed 	(0.30%)
 Investment experience less favorable than assumed 	3.57%
Changes in System provisions	(0.01%)
 Change in actuarial asset method 	0.00%
Changes in actuarial assumptions	0.00%
Preliminary normal contribution rate	19.90%
 Increase necessary to meet minimum contribution rate 	0.00%
July 1, 2009 normal contribution rate	19.90%

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		io
	<u>July 1, 2009</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Market Value of Plan Assets	\$1,434,583,769			
Actuarial Present Value:				
Accrued Benefits	2,000,030,545	107%	99%	72%
Vested Accrued Benefits	1,972,332,436	109%	100%	73%
Interest Rate		7.5%	7.5%	7.5%

Changes in System Provisions

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

- A change expanding eligible beneficiaries who receive a \$100,000 lump sum benefit upon an active member's death in the line of duty due to a traumatic injury to include adult children.
- A change establishing the presumption that cancer and infectious diseases are considered work-related for purposes of disability and death benefits of active members. The member's contribution rate increased from 9.35% to 9.40% of earnable compensation to pay for the benefit change.

Changes in Actuarial Assumptions

All actuarial assumptions remain unchanged from the prior year valuation except for a slight increase in accidental disability rates and slight decrease in ordinary disability rates resulting from the benefit provisions change of presumed cancer and infectious disease as work-related.

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 \$48,856,627 for 2009. 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 40.4 for the current year and 40.2 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 13.3 for the current year and 13.1 in the prior year.

Participating Compensation and Members—Total participating compensation increased from \$223,752,299 to \$232,872,388, a 4.1% increase. The number of active members increased from 3,881 in 2008 to 3,886 in 2009.

Average Annual Compensation—The average compensation of active members is more than the average compensation for the prior year. The average compensation was \$57,653 for 2008 and \$59,926 in 2009.

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.

System Assets – Market Value

Year Ending June 30, 2009

		Market Value
Assets at June 30, 2008		\$1,885,733,999
Receipts		
Member Contributions	\$ 20,909,488	
Cities Contributions	42,112,894	
State Contributions	2,704,597	
Investment Income	(389,379,686)	
Securities Lending Expenses	(296,987)	
Investment Management Expenses	(16,907,305)	
Other Income	3,277	
Total Receipts		\$ (340,853,722)
Disbursements		
Benefit Payments to Members	\$ (107,808,853)	
Termination Withdrawals	(884,052)	
Administrative Expenses	(1,499,243)	
Disability Expenses	(92,073)	
Other Expenses	(12,287)	
Total Disbursements		\$ (110,296,508)
Assets at June 30, 2009		\$1,434,583,769

System Assets – Actuarial Value

Year Ending June 30, 2009

1.	Actuarial Value of Assets at July 1, 2008	\$1,891,172,380
2.	Contributions for 2008 Plan Year (Members, Cities and State)	65,726,979
3.	Benefit distributions and refunds for 2008 plan year	(108,692,905)
4.	Noninvestment Expensesa. Administrative Expensesb. Disability Expensesc. Other Expensesd. Total	(1,499,243) (92,073) <u>(12,287)</u> (1,603,603)
5.	Expected return on Market Value of Assets for year at 7.5%	139,788,907

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

7.

8.

		(i) Asset gain <u>or (loss)</u>	Years <u>Recognized</u>	Years <u>Remaining</u>	(ii) Recognition <u>Percentage</u>	(i) x (ii) Recognized <u>Amount</u>
a.	2008	\$(546,369,608)	1	4	20.000%	(109,273,922)
b.	2007	(186,103,897)	2	3	20.000	(37,220,779)
C.	2006	187,647,978	3	2	18.750	35,183,996
d.	2005	90,260,614	4	1	16.667	15,043,737
e.	2004	62,449,445	5	0	12.500	7,806,181
f.	Total					(88,460,787)
Asset gains/(losses) to be recognized = (6f) (88,460,787)						
Actuarial Value of Assets at July 1, 2009 \$1,897,930,971 = (1) + (2) + (3) + (4d) + (5) + (7)						

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

System Liabilities and Contributions

Present Value of Unfunded Future Benefits	As o <u>2008</u>	f July 1, <u>2009</u>
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	\$ 1,035,115,488 43,463,662 193,503,653 8,492,848 8,099,558 <u>27,623,787</u> 1,316,298,996	\$1,077,717,035 23,958,530 222,013,931 8,776,562 8,278,016 <u>27,462,199</u> 1,368,206,273
 b. Inactive members Members receiving benefits Deferred vested terminations Refund of member contributions due Total Inactive 	1,196,248,268 29,963,194 <u>110,862</u> 1,226,322,324	1,251,252,452 34,503,086 <u>86,004</u> 1,285,841,542
c. Total Present Value of Future Benefits	2,542,621,320	2,654,047,815
2. Actuarial Value of Plan Assets	1,891,172,380	1,897,930,971
3. Actuarial Present Value of Future Member Contributions	225,047,037	233,969,851
 4. Present Value of Unfunded Future Benefits = (1) - (2) - (3) 	426,401,903	522,146,993
Determination of Preliminary Total Contribution		
5. Present value of future payroll of all covered members	2,406,920,181	2,489,040,963
6. Total (Cities plus State) normal contribution = $(4) \div (5)$	17.72%	20.98%
7. Covered payroll	223,752,299	232,872,388
 8. Preliminary total contribution from Cities and State = (6) x (7) 	39,648,907	48,856,627

System Liabilities and Contributions

	As o	of July 1,
Determination of Cities' Contribution	<u>2008</u>	<u>2009</u>
9. Estimated State Contribution	\$ 2,745,784	\$ 2,503,510
10. Estimated State Contribution as a percent of payroll = (9) \div	(7) 1.23%	1.08%
11. Preliminary Cities' Contribution = $(8) - (9)$	36,903,123	46,353,117
12. Cities' contribution as a percent of payroll = $(11) \div (7)$	16.49%	19.90%
13. Minimum required contribution rate for Cities	17.00%	17.00%
14. Cities' contribution = [Greater of (12) or (13)] x (7)	\$38,037,891	\$46,341,605

Actuarial Present Value of Accrued Benefits

		As o	f July 1,
1.	Present value of vested accrued benefits	<u>2008</u>	2009
	a. Present value of vested accrued benefits for active members	\$ 658,118,318	\$ 686,490,894
	 Present value of benefits for terminated members 	30,074,056	34,589,090
	c. Present value of benefits being paid to retirees and beneficiaries	1,196,248,268	1,251,252,452
	Total	\$1,884,440,642	\$1,972,332,436
2.	Present value of accrued nonvested benefits	27,922,693	27,698,109
3.	Present value of all accrued benefits $= (1) + (2)$	\$1,912,363,335	\$2,000,030,545
4.	Market value of assets	\$1,885,733,999	\$1,434,583,769
5.	Ratio of market value of assets to the present value of all accrued benefits = $(4) \div (3)$	99%	72%
6.	Ratio of market value of assets to the present value of vested accrued benefits = $(4) \div (1)$	100%	73%

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, 2008	\$1,912,363,335
Change in present value of accrued benefits from July 1, 2008 to July 1, 2009 due to:	
 Additional benefits accumulated Interest due to passage of time Benefits paid Change in assumptions Changes in System provisions 	\$ 54,790,501 139,424,953 (108,692,905) 0 2,144,661
Actuarial present value of accrued benefits on July 1, 2009	\$2,000,030,545

System Demographic Experience

During the plan year July 1, 2008 to June 30, 2009, actual demographic experience differed from that expected by the actuarial assumptions, as summarized below.

Decrement Type	Expected	Actual	
Actives			
Service Retirement	56	46	
Accidental Disability	35	32	
Ordinary Disability	9	7	
Accidental Death	2	0	
Ordinary Death	2	3	
Withdrawal	78	72	
DROP Participation	95	43	
DROP Premature Withdrawal	4	5	
DROP Retirement	5	8	
Inactives			
Beneficiary Death	41	38	
Disabled Death	29	23	
Retirement Death	55	48	
Vested Termination Death	1	1	

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>Rate</u>
0.02%
0.02
0.03
0.04
0.05
0.07
0.10
0.13
0.19
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)

Turno	ver Rates	Rates varying by age – Sample rates:	
		Age 20 25 30 35 40 45 50 55 60 65	Rate 7.11% 5.81 4.51 2.71 1.08 0.20 0.20 0.00 0.00 0.00 0.00
Retire	ment Age	Rates varying by age for those DROP – Sample rates:	not eligible for
		Age 55 56 57-60 61 62 63 64 65	Rate 50% 35 25 30 35 40 45 100%
DROF •	Participation	All members initially eligible for younger elect to participate. No eligible for DROP after age 62 v participate.	o member initially
•	Period of Participation	3 years.	
•	Investment Return on Accounts	1.0%.	
•	Benefit Distribution	Lump Sum.	
•	Retirement Age	All members initially eligible for younger enter DROP when first change in retirement age for me become eligible for DROP after	eligible. No embers who initially
•	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, 2009 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 DatePercentageOctober 16, 19926.10%July 1, 19937.10July 1, 19948.10January 1, 19958.35July 1, 19959.35July 1, 20099.40
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 about \$2,503,510 a year.

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.

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.

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.

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 \$15Years of Retirement Less than 5 5-9 25205-9 253010-14 15-19 353520 or More		
Normal Form of Benefit			
Married	Joint and 50% Survivor Annuity.		
Single	Life Only Annuity.		

		July 1,	
	<u>2007</u>	<u>2008</u>	<u>2009</u>
Active Members			
Number	3,847	3,881	3,886
Average Attained Age	40.2	40.2	40.4
Average Past Service	13.2	13.1	13.3
Total Annual Compensation	\$213,039,324	\$223,752,299	\$232,872,388
Average Annual Compensation	55,378	57,653	59,926
Non-Active Members in Pay Status			
Number	3,600	3,625	3,670
Average Age (excluding children)	67.8	67.9	68.2
Total Annual Benefits	\$ 96,787,260	\$102,047,088	\$107,798,784
Average Annual Benefit	26,885	28,151	29,373
Non-Active Members with Deferred Benefit	S		
Number*	293	306	315
Average Age	44.3	44.0	44.6
Total Annual Benefits	\$ 4,325,868	\$ 4,497,552	\$ 4,989,960
Average Annual Benefit	14,764	14,698	15,841

* Excludes 24, 22 and 25 terminated nonvested members who had not yet received a refund of contributions as of 2007, 2008 or 2009 respectively.

Reconciliation of Participant Counts

		Terminated In Pay Status				
	Active	Vested	Beneficiaries	Disabled	Retirees	Total
Number as of July 1, 2008	3,881	306	914	1,073	1,638	7,812
Change due to:						
New hires and rehires	190	(5)	0	(1)	0	184
Terminations	(54)*	35	0	0	0	(19)
Retirement	(59)	(10)	0	0	69	0
Disability	(39)	0	0	39	0	0
Death without Beneficiary	(0)	0	(38)	(8)	(16)	(62)
Death with Beneficiary	(3)	(1)	54	(15)	(32)	3
Refund Paid Out	(30)**	(10)	0	0	0	(40)
Benefit Aged Out	0	0	(5)	0	0	(5)
Other	0	0	(2)	0	0	(2)
Number as of July 1, 2009	3,886***	315	923	1,088	1,659	7,871

* Ten of the Terminations are from new hires during the period July 1, 2008 to June 30, 2009.

** Two of the Refunds Paid Out are from new hires during the period July 1, 2008 to June 30, 2009.

*** One hundred-fifteen of the Actives have elected to participate in DROP as of July 1, 2009.

Active Members—As of July 1, 2009

Years of Service

Average

Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total	Annual Salary
Under 25	143	0	0	0	0	0	0	0	143	\$45,651
25-29	393	92	0	0	0	0	0	0	485	\$51,280
30-34	236	322	84	0	0	0	0	0	642	\$54,841
35-39	108	236	323	59	0	0	0	0	726	\$58,285
40-44	49	105	180	221	78	0	0	0	633	\$60,904
45-49	14	38	83	140	169	65	4	0	513	\$65,219
50-54	2	11	25	47	105	143	124	0	457	\$69,824
55-59	2	1	10	17	40	37	92	34	233	\$70,080
60+	0	1	2	4	6	7	12	22	54	\$68,554
Total	947	806	707	488	398	252	232	56	3,886	
Average Annual Salary	\$49,753	\$56,515	\$60,612	\$63,932	\$66,993	\$71,016	\$74,212	\$78,175		\$59,926

Inactive Members—As of July 1, 2009

Service Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
55-59	219	\$11,009,460	\$50,272
60-64	316	15,075,072	47,706
65-69	290	11,515,188	39,708
70-74	208	6,951,012	33,418
75-79	164	4,836,912	29,493
80-84	137	3,700,008	27,007
Over 84	94	2,176,260	<u>23,152</u>
Total	1,428	\$55,263,912	\$38,700

Vested Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
55-59	84	\$1,463,676	\$17,425
60-64	60	922,296	15,372
65-69	33	491,532	14,895
70-74	28	281,580	10,056
75-79	18	151,632	8,424
80-84	8	42,096	5,262
Over 84	0	0	0
Total	231	\$3,352,812	\$14,514

Inactive Members—As of July 1, 2009

Accidental Disability Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	16	\$ 466,596	\$29,162
40-44	22	648,564	29,480
45-49	42	1,320,252	31,435
50-54	94	3,251,784	34,593
55-59	169	6,120,516	36,216
60-64	183	6,405,000	35,000
65-69	159	5,179,716	32,577
70-74	106	3,308,568	31,213
75-79	69	1,945,128	28,190
80-84	32	886,428	27,701
Over 84	_17	430,596	25,329
Total	909	\$29,963,148	\$32,963

Ordinary Disability Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	5	\$ 97,320	\$19,464
40-44	10	240,180	24,018
45-49	13	319,548	24,581
50-54	24	704,544	29,356
55-59	35	1,109,604	31,703
60-64	34	1,037,388	30,511
65-69	24	675,432	28,143
70-74	18	424,920	23,607
75-79	7	140,844	20,121
80-84	6	131,436	21,906
Over 84	<u>3</u>	60,228	20,076
Total	179	\$ 4,941,444	\$27,606

Inactive Members—As of July 1, 2009

Beneficiaries (Spouse)

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	4	\$ 94,260	\$23,565
40-44	11	205,944	18,722
45-49	8	125,952	15,744
50-54	32	606,132	18,942
55-59	52	1,089,144	20,945
60-64	63	1,205,796	19,140
65-69	95	1,673,388	17,615
70-74	103	1,651,404	16,033
75-79	149	2,283,804	15,328
80-84	145	2,052,948	14,158
Over 84	207	3,031,200	14,643
Total	869	\$14,019,972	\$16,133

Beneficiaries (Children)

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 3	0	\$ O	\$ O
3-5	1	4,272	4,272
6-8	1	4,176	4,176
9-11	7	31,344	4,478
12-14	8	33,732	4,217
15-17	7	32,100	4,586
18-20	14	68,292	4,878
Over 20	_16	83,580	5,224
Total	54	\$257,496	\$4,768

Inactive Members—As of July 1, 2009

Terminated Vested

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	83	\$ 788,256	\$ 9,497
40-44	54	818,580	15,159
45-49	80	1,383,636	17,295
50-54	97	1,998,264	20,601
Over 54	1	1,224	1,224
Total	315	\$4,989,960	\$15,841