

LEGISLATIVE SERVICE  
BUREAU

**MUNICIPAL FIRE AND POLICE  
RETIREMENT SYSTEM OF IOWA  
ACTUARIAL VALUATION REPORT  
JULY 1, 1998**

*Presented by:*

**MAMMEL & ASSOCIATES, INC.**  
*A SilverStone Group Company*

November 10, 1998

**PERSONAL & CONFIDENTIAL**

Board of Trustees  
Municipal Fire and Police Retirement System of Iowa  
2836 104th Street  
Des Moines, IA 50322

RE: July 1, 1998 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 provided in this report are based on asset values as of June 30, 1998, participant census data as of July 1, 1998, and current system provisions, all of which were supplied by the Municipal Fire and Police Retirement System of Iowa.

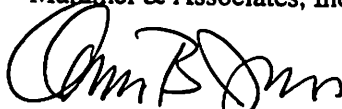
The purposes of the actuarial report are:

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. 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.

Sincerely,

Mammel & Associates, Inc.



Donn B. Jones, FSA  
Executive Vice President  
Member of American Academy  
of Actuaries  
Enrolled Actuary No. 96-2717



Glen C. Gahan, FSA  
Senior Vice President  
Member of American Academy  
of Actuaries  
Enrolled Actuary No. 96-4875

DJ/bd

Enclosure

## TABLE OF CONTENTS

	<u>Page</u>
<b>REPORT HIGHLIGHTS</b>	1
<b>COMMENTS ON THE VALUATION</b>	2
<b>ACTUARIAL VALUATION RESULTS</b>	4
<b>SYSTEM EXPERIENCE</b>	11
<b>SUMMARY OF ACTUARIAL ASSUMPTIONS</b>	12
<b>SUMMARY OF ACTUARIAL METHODS</b>	16
<b>SUMMARY OF SYSTEM PROVISIONS</b>	17
<b>SUMMARY OF SYSTEM MEMBERS</b>	22

## REPORT HIGHLIGHTS

This section compares results of the current and prior 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	
	1997	1998
<b>Cities Recommended Contribution</b>	\$24,030,778	\$25,042,531
<b>Normal Contribution Rate</b>	17.00%	17.00%
<b>Plan Assets</b>		
Market Value	959,323,108	1,057,097,465
Actuarial Value	884,113,265	989,914,242
<b>Investment Return</b>		
Market Value	14.2%	11.0%
Actuarial Value	11.1%	12.9%
<b>Actuarial Present Value of Accrued Benefits</b>		
Total Accrued Benefits (Security Ratio)	901,545,468 (106%)	993,720,785 (106%)
Vested Accrued Benefits (Security Ratio)	816,444,088 (118%)	900,724,585 (117%)
<b>Annual Participating Payroll</b>	141,410,783	147,361,328
<b>Annual Pension Benefits</b>		
Service Retirement	21,637,627	22,467,258
Disabled Retirement	16,570,771	17,587,625
Vested Retirement	866,076	1,036,785
Beneficiaries	6,338,292	6,961,169
Total	\$45,412,766	\$48,052,837
<b>Number of Members</b>		
Active	3,717	3,729
Retirees, Disabled & Beneficiaries	2,852	2,889
Vested Terminated	175	190
Total Participants	6,744	6,808

## COMMENTS ON THE VALUATION

### Cities Recommended Contribution

The recommended contributions for the Retirement System are determined using the Aggregate actuarial cost method as required by Chapter 411 of the Code of Iowa. The same method has been used in prior years to determine the contribution for the Retirement System.

We recommend a contribution of \$25,042,531 be made for the 1998 plan year. This is equal to a contribution rate of 17.00% of payroll. This rate assumes that the State of Iowa will contribute approximately \$2,943,000 for the 1998 plan year.

The Retirement System's total contribution rate remained unchanged at the minimum allowed rate of 17.00%. However, the Retirement System's contribution rate before adjustment to the minimum contribution rate changed as follows:

July 1, 1997 normal contribution rate*	13.62%
<ul style="list-style-type: none"> <li>• Increase in contribution rate due to fixed state contribution</li> <li>• Plan experience more favorable than assumed</li> <li>• Asset investments more favorable than assumed</li> <li>• Plan change</li> </ul>	0.08% (0.32%) (2.94%) <u>3.16%</u>
Preliminary normal contribution rate	13.60%
<ul style="list-style-type: none"> <li>• Increase necessary to meet minimum contribution rate</li> </ul>	3.40%
July 1, 1998 normal contribution rate	17.00%

\* Before adjustment for minimum contribution rate

### 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</u> <u>July 1, 1998</u>	<u>Funded Ratio</u>	
		<u>1997</u>	<u>1998</u>
Market Value of Plan Assets	\$1,057,097,465	--	--
Actuarial Present Value:			
Accrued Benefits	993,720,785	106%	106%
Vested Accrued Benefits	900,724,585	118%	117%
Interest Rate		7.5%	7.5%

## **Change in System Provisions**

Effective July 1, 1998 for service, ordinary disability and accidental disability retirements, the percentage of average final compensation for service over 22 years increased from 0.6% to 1.5% per year (up to an additional 8 years). All other system provisions remained unchanged from the prior valuation. This change increased the preliminary normal contribution rate 3.16%.

## **Change in Actuarial Assumptions**

There were no changes in the actuarial assumptions from the prior valuation.

## **Government Accounting Standards Board Disclosure**

Measurements used to evaluate the funding 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 Retirement System uses the Aggregate Method to determine the ARC, this schedule has not been developed.
- 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 Retirement System, the ARC is equal to the normal contribution rate before any adjustment for minimum contribution rates or state contributions, multiplied by the covered payroll for the year or \$22,980,205 for 1998.

## **Covered Members**

*Ages of Active Members* — The average age of the active members has increased. The average age of members included in the valuation was 40.1 for the current year and 39.7 in the prior year.

*Service of Active Members* — The average service of the active members has increased. The average service of members included in the valuation was 13.8 for the current year and 13.5 in the prior year.

*Participating Compensation and Members* — Total participating compensation increased from \$141,410,783 to \$147,361,328, a 4.2% increase. The number of active members increased from 3,717 in 1997 to 3,729 in 1998.

*Average Annual Compensation* — The average compensation of active members is more than the average compensation for the prior year. The average compensation was \$38,044 for 1997 and \$39,518 in 1998.

## ACTUARIAL VALUATION RESULTS

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

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

***Retirement 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 Retirement System's contribution rate by statute cannot 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 multiplied by the covered payroll for the fiscal year.

***Present Value of Accrued Benefits*** —Another objective of preparing the actuarial valuation is to evaluate the funding status of the Retirement 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

## Retirement System Assets – Market Value

Year Ending June 30, 1998

		<u>Market Value</u>
<b>Assets at June 30, 1997</b>		<b>\$959,323,108</b>
<b>Receipts:</b>		
Member Contributions	\$ 13,141,764	
Cities Contributions	23,979,899	
State Contributions	2,942,724	
Investment Income	113,399,253	
Investment Expenses	(8,366,176)	
Other	<u>272,930</u>	
<b>Total Receipts</b>		<b>\$145,370,394</b>
<b>Disbursements:</b>		
Pensions Paid to Inactive Members	\$ (46,078,034)	
Termination Withdrawals	(541,199)	
Non-Investment Expenses	(870,941)	
Other	<u>(105,863)</u>	
<b>Total Disbursements</b>		<b>\$ (47,596,037)</b>
<b>Assets at June 30, 1998</b>		<b>\$1,057,097,465</b>



# ACTUARIAL VALUATION RESULTS

## Retirement System Assets – Actuarial Value

Year Ending June 30, 1998

1.	Actuarial Value of Assets at July 1, 1997	\$884,113,265
2.	Contributions for 1997 Plan Year (Members, Cities and State)	40,064,387
3.	Benefit distributions and refunds for 1997 plan year	(46,619,233)
4.	Noninvestment Expenses	(870,941)
5.	Expected return on Assets for year at 7.5%	71,675,800
6.	Asset gains/(losses) for prior four plan years	
	a. 1997	33,524,344
	b. 1996	56,141,074
	c. 1995	55,877,717
	d. 1994	<u>20,660,721</u>
	e. Total	166,203,856
7.	Asset gains/(losses) to be recognized, 25% x 6e.	41,550,964
8.	Actuarial Value of Assets at July 1, 1998 = 1 + 2 + 3 + 4 + 5 + 7	\$989,914,242

**ACTUARIAL VALUATION RESULTS**  
**Retirement System Liabilities and Contributions**

<b>Present Value of Unfunded Future Benefits</b>	<b>As of July 1</b>	
	<u>1997</u>	<u>1998</u>
1. Actuarial Present Value of all Future Benefits		
a. Active members		
Service retirements	\$440,494,533	\$500,245,176
Ordinary disability	52,734,876	58,647,534
Accidental disability	162,119,397	177,660,586
Ordinary death	23,248,259	22,150,870
Accidental death	21,286,036	23,548,951
Withdrawal	<u>16,146,013</u>	<u>16,318,846</u>
Total Active	716,029,114	798,571,963
b. Inactive members		
Members receiving benefits	553,578,439	578,838,969
Deferred vested terminations	12,966,370	13,486,183
Refund of member contributions due	<u>79,248</u>	<u>59,319</u>
Total inactive	566,624,057	592,384,471
c. Total Present Value of Future Benefits	1,282,653,171	1,390,956,434
2. Actuarial Value of Plan Assets	884,113,265	989,914,242
3. Actuarial Present Value of Future Member Contributions	158,781,049	150,280,724
4. Present value of unfunded future benefits (1) - (2) - (3)	249,758,857	250,761,468
<b>Determination of Preliminary Total Contribution</b>		
5. Present value of future payroll of all covered members	1,591,242,000	1,607,280,473
6. Total (Cities plus State) normal contribution (4) ÷ (5)	15.70%	15.60%
7. Covered payroll	141,357,516	147,309,007
8. Preliminary total contribution from Cities and State (6) x (7)	22,193,130	22,980,205

**ACTUARIAL VALUATION RESULTS**  
**Retirement System Liabilities and Contributions**  
**(continued)**

**Determination of Cities' Contribution**

9. Estimated State Contribution	2,943,000	2,943,000
10. Estimated State Contribution as a percent of payroll (9) ÷ (7)	2.08%	2.00%
11. Preliminary Cities' Contribution (8) – (9)	19,250,130	20,037,205
12. Cities' contribution as a percent of payroll (11) ÷ (7)	13.62%	13.60%
13. Minimum required contribution rate for Cities	17.00%	17.00%
14. Cities' contribution (Greater of 12 or 13) x (7)	\$24,030,778	\$25,042,531

## ACTUARIAL VALUATION RESULTS

### Actuarial Present Value of Accrued Benefits

	As of July 1	
	<u>1997</u>	<u>1998</u>
1. Present value of vested accrued benefits		
a. Present value of vested accrued benefits for active members	\$249,820,031	\$308,340,114
b. Present value of benefits for terminated members	13,045,618	13,545,502
c. Present value of benefits being paid to retirees and beneficiaries	<u>553,578,439</u>	<u>578,838,969</u>
Total	\$816,444,088	\$900,724,585
2. Present value of accrued nonvested benefits	<u>85,101,380</u>	<u>92,996,200</u>
3. Present value of all accrued benefits (1) + (2)	\$901,545,468	\$993,720,785
4. Market value of assets	\$959,323,108	\$1,057,097,465
5. Ratio of market value of assets to the present value of all accrued benefits (4) ÷ (3)	106.4%	106.4%
6. Ratio of market value of assets to the present value of vested accrued benefits (4) ÷ (1)	117.5%	117.4%

## 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, 1997	\$ 901,545,468
Change in present value of accrued benefits from July 1, 1997 to July 1, 1998 due to:	
• Additional benefits accumulated	\$ 60,061,260
• Interest due to decrease in discount period	65,899,294
• Benefits paid	(46,619,233)
• Change in assumptions	0
• Change in system provisions	<u>12,833,996</u>
Actuarial present value of accrued benefits on July 1, 1998	\$993,720,785

## SYSTEM EXPERIENCE

During the plan year July 1, 1997 to June 30, 1998, actual experience differed from that expected by the actuarial assumptions, as summarized below.

<b>Decrement Type</b>	<b>Expected</b>	<b>Actual</b>
<b>Actives</b>		
Service Retirement	41	32
Accidental Disability	28	32
Ordinary Disability	13	10
Accidental Death	5	0
Ordinary Death	7	2
Withdrawal	76	88
<b>Inactives</b>		
Beneficiary Death	29	28
Disabled Death	30	24
Retirement Death	50	42
Vested Termination Death	1	0

## SUMMARY OF ACTUARIAL ASSUMPTIONS

**Interest Rate** 7.5%

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

Age	Rate
20	12.59%
25	8.67%
30	5.95%
35 or Over	5.00%

**Mortality Rates**

Pre-retirement Mortality

• Ordinary

Rates varying by age – Sample rates:

Age	Rate
20	0.06%
25	0.07
30	0.08
35	0.12
40	0.16
45	0.20
50	0.29
55	0.38
60	0.56
65	0.75

• Accidental

Rates varying by age – Sample rates:

Age	Rate
20	0.11%
25	0.07
30	0.06
35	0.06
40	0.06
45	0.09
50	0.24
55	0.47
60	0.75
65	1.38

## SUMMARY OF ACTUARIAL ASSUMPTIONS

### Post-retirement Mortality

- Ordinary

1971 Group Annuity Mortality Table, Male and Female.

- Disabled

1971 Group Annuity Mortality Table – Male, set forward six years.

### Disability Rates

#### Pre-retirement Mortality

- Ordinary

Rates varying by age – Sample rates:

Age	Rate
20	0.12%
25	0.12
30	0.12
35	0.15
40	0.24
45	0.37
50	0.59
55	1.09
60	2.08
65	3.39

- Accidental

Rates varying by age – Sample rates:

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



## SUMMARY OF ACTUARIAL ASSUMPTIONS

### 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 - Sample rates:

Age	Rate
55 - 60	25 %
61	30
62	35
63	40
64	45
65	100 %

## SUMMARY OF ACTUARIAL ASSUMPTIONS

<b>Administrative Expense</b>	None assumed.
<b>Percentage Married</b>	85%
<b>Spouses' Age</b>	Wives are three years younger than husbands.
<b>Number of Children</b>	2.5 per couple.
<b>Participating Payroll</b>	Actual earnable compensation reported for prior plan year increased for 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 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 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 increased by 25% of any investment gains or (losses) during the four prior plan years.

## SUMMARY OF SYSTEM PROVISIONS

The System was first 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, 1998 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:

<b>Effective Date</b>	<b>Percentage</b>
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

#### **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 \$2,943,000 a year.

## SUMMARY OF SYSTEM PROVISIONS

### **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.

### **Retirement Benefit**

#### **Eligibility**

After age 55 and completion of 22 years of service.

#### **Benefit**

Monthly annuity equal to 60.0% of Average Final Compensation plus 1.5% of Average Final Compensation for each year of service in excess of 22 years (up to 8 additional years). The maximum benefit is 72.0% of Average Final Compensation.

### **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.

#### **Benefit**

Monthly annuity payable at age 55 or current age, if later, equal to 60.0% of Average Final Compensation plus 1.5% 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.

## SUMMARY OF SYSTEM PROVISIONS

### Ordinary Disability Benefit

**Eligibility**

Any age and any length of service.

**Benefit**

Monthly annuity payable upon disability equal to either (a) or (b) below, plus (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, 25% of average final compensation; plus
- (c) If service at disability exceeds 22 years, an additional 1.5% of average final compensation for each year of service over 22 years (up to 8 additional years).

### Accidental Disability Benefit

**Eligibility**

Any age and any length of service.

**Benefit**

A monthly annuity equal to 60% of Average Final Compensation, plus 1.5% of Average Final Compensation for each year of service over 22 years (up to 8 additional years).

### 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

## SUMMARY OF SYSTEM PROVISIONS

- (b) A monthly annuity equal to 40% of average final compensation but not less than 20% of the earnable compensation of an active member having the highest grade in the rank of a police patrol officer or fire fighter (whichever is applicable). 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 Earnable Compensation of an active member having the highest grade in the rank of a police patrol officer or fire fighter (whichever is applicable). This benefit is payable until the child reaches age 18 or 22.

### 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 or dependent parents.

For each dependent child, an additional benefit equal to 6% of the Earnable Compensation of the active member having the highest grade in the rank of a police patrol office or fire fighter (whichever is applicable).

### Death After Retirement

#### Eligibility

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

## SUMMARY OF SYSTEM PROVISIONS

**Benefit** To surviving spouse, 50% of the gross monthly benefit of the retired member but not less than 20% of Earnable Compensation of an active member having the highest grade in the rank of a police patrol officer or fire fighter (whichever is applicable).

For each dependent child, an additional benefit equal to 6% of the Earnable Compensation of the active member having the highest grade in the rank of a police patrol officer or fire fighter (whichever is applicable).

### Annual Escalator Benefit

**Eligibility** All retired members, except for vested retirements, and for beneficiaries.

**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

Active Members	July 1	
	1997	1998
Number	3,717	3,729
Average Attained Age	39.7	40.1
Average Past Service	13.5	13.8
Total Annual Compensation	\$141,410,783	\$147,361,328
Average Annual Compensation	38,044	39,518
<b>Non-Active Members in Pay Status</b>		
Number	2,852	2,889
Average Age (excluding children)	66.3	66.6
Total Annual Benefits	\$45,412,766	\$48,052,837
Average Annual Benefit	15,906	16,633
<b>Non-Active Members with Deferred Benefits</b>		
Number*	175	190
Average Age	45.3	44.8
Total Annual Benefits	\$2,029,476	\$2,204,245
Average Annual Benefit	11,731	11,601

\* Excludes 34 and 35 terminated nonvested members who have not yet received a refund of contributions for 1997 and 1998 respectively.

## SUMMARY OF SYSTEM MEMBERS

### Reconciliation of Participant Counts

	Active	Terminated Vested	In Pay Status			Total
			Beneficiaries	Disableds	Retirees	
Number as of July 1, 1997	3,717	175	774	856	1,222	6,744
Change due to:						
New hires and rehires	190	0	0	(1)	0	189
Terminations	(59)*	35	0	0	0	(24)
Retirement	(32)	(12)	2	0	42	0
Disability	(42)	0	0	42	0	0
Death without Beneficiary	0	0	(28)	0	(20)	(48)
Death with Beneficiary	(2)	0	52	(24)	(22)	4
Refund Paid Out	(42)**	(7)	(1)	0	0	(50)
Other	(1)	(1)	(5)	0	0	(7)
Number as of July 1, 1998	3,729	190	794	873	1,222	6,808

\* Ten of the Terminations are from new hires during the period July 1, 1997 to June 30, 1998.

\*\* Three of the Refunds Paid Out are from new hires during the period July 1, 1997 to June 30, 1998.

## SUMMARY OF SYSTEM MEMBERS

Active Members — As of July 1, 1998

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	111	0	0	0	0	0	0	0	111	\$30,419
25-29	440	100	0	0	0	0	0	0	540	\$33,657
30-34	239	303	86	1	0	0	0	0	629	\$36,523
35-39	111	168	192	92	4	0	0	0	567	\$38,416
40-44	29	70	139	236	159	0	0	0	633	\$41,254
45-49	12	26	58	122	298	106	0	0	622	\$42,655
50-54	4	7	9	23	111	248	75	0	477	\$44,731
55-59	0	1	2	4	8	39	67	8	129	\$47,269
60+	0	0	0	0	1	2	9	9	21	\$46,462
<b>Total</b>	<b>946</b>	<b>675</b>	<b>486</b>	<b>478</b>	<b>581</b>	<b>395</b>	<b>151</b>	<b>17</b>	<b>3,729</b>	
<b>Average Annual Salary</b>	<b>\$33,098</b>	<b>\$37,597</b>	<b>\$39,689</b>	<b>\$41,698</b>	<b>\$43,401</b>	<b>\$45,596</b>	<b>\$48,679</b>	<b>\$51,480</b>		<b>\$39,518</b>

## SUMMARY OF SYSTEM MEMBERS

### Inactive Members — As of July 1, 1998

#### Service Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
55 – 59	176	\$4,788,412	\$27,207
60 – 64	210	4,924,243	23,449
65 – 69	217	4,561,357	21,020
70 – 74	204	3,713,168	18,202
75 – 79	158	2,419,235	15,312
80 - 84	81	1,199,999	14,815
Over 84	<u>63</u>	<u>860,844</u>	<u>13,664</u>
Total	1,109	\$22,467,258	\$20,259

#### Vested Retirements

Age	Number	Total Annual Benefit	Average Annual Benefit
55 – 59	32	\$ 433,472	\$13,546
60 – 64	38	379,923	9,998
65 – 69	20	115,365	5,768
70 – 74	15	79,290	5,286
75 – 79	3	18,397	6,132
80 - 84	2	7,092	3,546
Over 84	<u>3</u>	<u>3,246</u>	<u>1,082</u>
Total	113	\$1,036,785	\$ 9,175

## SUMMARY OF SYSTEM MEMBERS

### Inactive Members — As of July 1, 1998

#### Accidental Disability

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	14	\$ 291,075	\$ 20,791
40 - 44	34	707,537	20,810
45 - 49	56	1,179,147	21,056
50 - 54	122	2,669,688	21,883
55 - 59	149	3,311,069	22,222
60 - 64	119	2,578,013	21,664
65 - 69	101	2,112,022	20,911
70 - 74	61	1,174,947	19,261
75 - 79	34	630,276	18,538
80 - 84	23	402,598	17,504
Over 84	<u>8</u>	<u>145,703</u>	<u>18,213</u>
Total	721	\$15,202,075	\$ 21,085

#### Ordinary Disability

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	7	\$ 118,727	\$16,961
40 - 44	11	144,871	13,170
45 - 49	21	377,356	17,969
50 - 54	22	403,518	18,342
55 - 59	24	422,560	17,607
60 - 64	29	454,704	15,679
65 - 69	10	115,056	11,506
70 - 74	14	187,669	13,405
75 - 79	7	84,086	12,012
80 - 84	5	50,808	10,162
Over 84	<u>2</u>	<u>26,195</u>	<u>13,098</u>
Total	152	\$2,385,550	\$15,694

## SUMMARY OF SYSTEM MEMBERS

### Inactive Members — As of July 1, 1998

#### Beneficiaries (Spouse)

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	7	\$ 82,969	\$11,853
40 – 44	14	156,841	11,203
45 – 49	30	351,904	11,730
50 – 54	22	266,925	12,133
55 – 59	85	815,811	9,598
60 – 64	44	452,249	10,278
65 – 69	80	754,746	9,434
70 – 74	95	850,234	8,950
75 – 79	138	1,221,734	8,853
80 – 84	104	883,047	8,491
Over 84	<u>110</u>	<u>937,556</u>	<u>8,523</u>
<b>Total</b>	<b>729</b>	<b>\$6,774,016</b>	<b>\$ 9,292</b>

#### Beneficiaries (Children)

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 3	1	\$ 2,639	\$ 2,639
3 – 5	0	0	0
6 – 8	1	2,621	2,621
9 – 11	6	15,018	2,503
12 – 14	9	28,254	3,139
15 – 17	15	40,651	2,710
18 – 20	17	49,901	2,935
Over 20	<u>16</u>	<u>48,069</u>	<u>3,004</u>
<b>Total</b>	<b>65</b>	<b>\$187,153</b>	<b>\$ 2,879</b>

## SUMMARY OF SYSTEM MEMBERS

Inactive Members — As of July 1, 1998

### Terminated Vested

Age	Number	Total Annual Benefit	Average Annual Benefit
Under 40	40	\$ 328,148	\$ 8,204
40 – 44	39	425,587	10,912
45 – 49	57	784,772	13,768
50 – 54	54	665,738	12,328
Over 54	<u>0</u>	<u>0</u>	<u>0</u>
Total	190	\$2,204,245	\$11,601