

**THE PRISON OFFICERS' PENSION FUND  
OF NEW JERSEY  
ANNUAL REPORT  
OF THE ACTUARY  
PREPARED AS OF JULY 1, 2003**

April 12, 2004

Board of Trustees  
Prison Officers' Pension  
Fund of New Jersey  
Trenton, New Jersey

Members of the Board:

The law governing the operation of the Prison Officers' Pension Fund of New Jersey provides for annual actuarial valuations of the Fund. The results of the July 1, 2003 valuation are submitted in this report which also includes a comparison with the preceding year's valuation.

The valuation shows the financial condition of the Fund as of July 1, 2003 and gives the basis for determining the required annual contribution for the plan year beginning July 1, 2003.

The valuation was prepared on the basis of the same assumptions as were employed for the previous valuation which include an interest rate of 5% per year.

The Table of Contents, which follows, highlights the Sections of the Report.

Respectfully submitted,

(Signed) GEORGE M. LOVAGLIO

George M. Lovaglio  
Principal, Consulting Actuary

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REPORT ON THE ANNUAL  
VALUATION OF  
THE PRISON OFFICERS' PENSION FUND  
OF NEW JERSEY  
PREPARED AS OF JULY 1, 2003

SECTION I - SUMMARY OF KEY RESULTS

The Prison Officer's Pension Fund of New Jersey was established under Chapter 220 of the Laws of 1941 and permitted prison officer members of the then State Employees' Retirement System to transfer to the new Fund. Effective January 1, 1960, the Fund was closed to new employees. This report, prepared as of July 1, 2003 presents the results of the annual actuarial valuation of the Fund.

For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized on the following pages.

<b>Valuation Date</b>	<b>July 1, 2003</b>	<b>July 1, 2002</b>
<u>Participant Data</u>		
Active Members	0	0
Retired Members and Beneficiaries	<u>214</u>	<u>231</u>
Total Participants	214	231
Annual Compensation	\$ 0	\$ 0
Annual Retirement Allowances	\$ 1,527,933	\$ 1,620,172
<u>Assets</u>		
Market Value of Assets	\$ 17,277,953	\$ 17,908,452
Actuarial Value of Assets	\$ 17,277,953	\$ 17,908,452
<u>Contribution Amounts</u>		
Normal Contribution	\$ 0	\$ 0
Accrued Liability Contribution	<u>0</u>	<u>0</u>
Total Contribution	\$ 0	\$ 0

The major benefit and contribution provisions of the statute as reflected in the valuation are summarized in Appendix A. There were no changes from the provisions used in the previous valuation.

The actuarial assumptions and methods used for valuing the Fund are summarized in Appendix B. There were no changes in actuarial assumptions and methods since the previous valuation.

The combination of the plan provisions, actuarial assumptions and member and beneficiary data is used to generate the overall required level of employer contributions. The required contribution is developed in Section III F.

The valuation also generates a balance sheet which summarizes in some detail the total present and prospective assets and liabilities of the Fund. A summary comparison of the balance sheets as of July 1, 2002 and July 1, 2003 is set forth in the following table.

**TABLE I  
COMPARATIVE BALANCE SHEET**

<u><b>ASSETS</b></u>	<b>2003</b>	<b>2002</b>
Market Value of assets of Fund	\$ 17,277,953	\$ 17,908,452
Unfunded accrued liability/(surplus)	(6,550,306)	(6,126,718)
Total Assets	\$ 10,727,647	\$ 11,781,734
<u><b>LIABILITIES</b></u>		
Present value of benefits to present beneficiaries payable from the Retirement Reserve Fund	\$ 10,727,647	\$ 11,781,734
Present value of benefits to present active members	0	0
Total Liabilities	\$ 10,727,647	\$ 11,781,734

Section V of the report provides information regarding the level of funding for the Fund. Please refer to that Section for a discussion of this topic.

SECTION II - EMPLOYEE DATA

The data employed for the valuation was furnished to the actuary by the Division of Pensions and Benefits. Appendix C contains summary tables which present the number and retirement allowances of members classified by age. The following summarizes and compares the Fund membership as of July 1, 2002 and July 1, 2003 by various categories.

**MEMBERSHIP - ACTIVE**

- There have been no active participants in the Plan since July 1, 1994.

**RETIRED MEMBERS AND BENEFICIARIES**

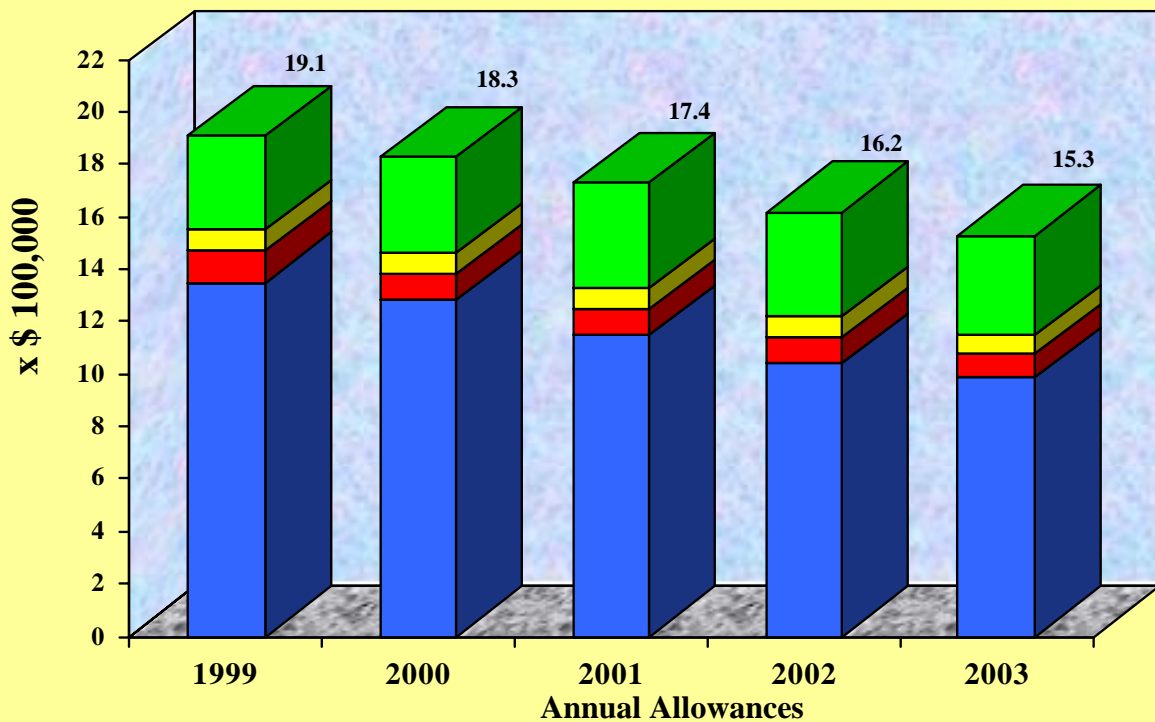
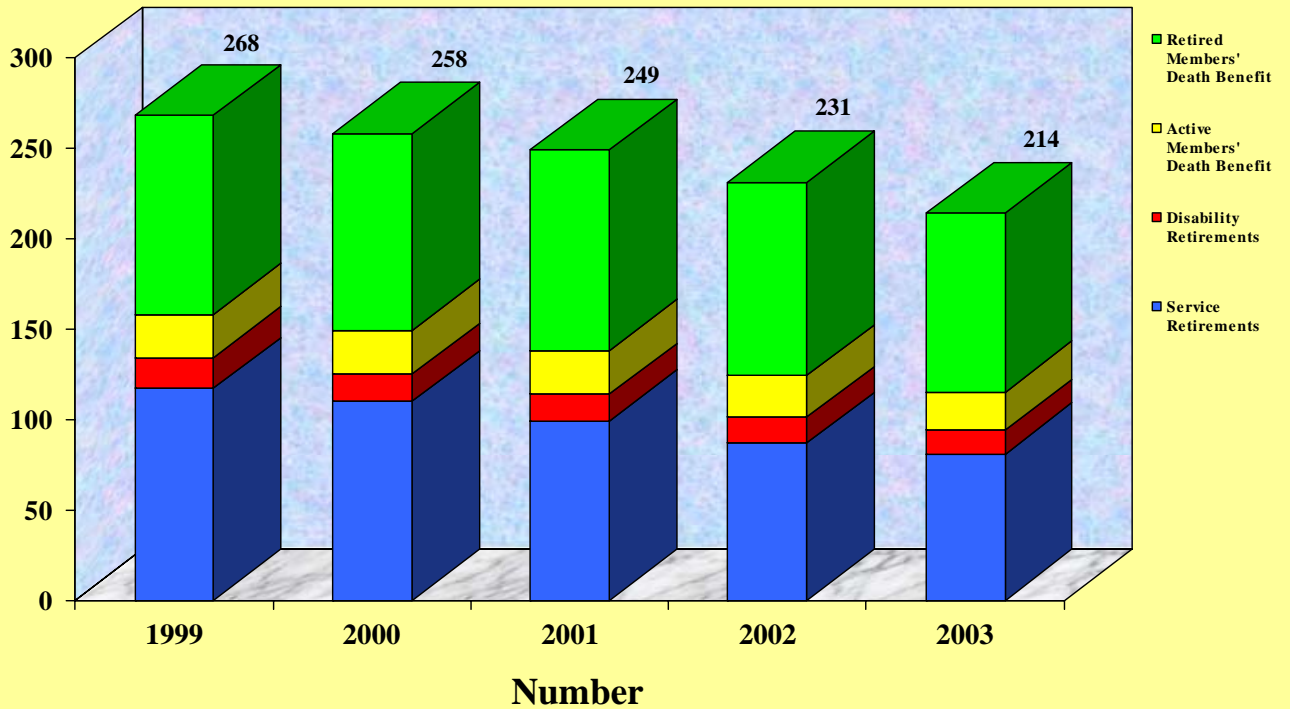
GROUP	2003		2002	
	Number	Annual Allowances	Number	Annual Allowances
Service Retirements	81	\$ 987,069	87	\$ 1,037,575
Ordinary Disability Retirements	9	\$ 59,721	10	\$ 65,928
Accidental Disability Retirements	4	\$ 33,554	4	\$ 33,554
Active Members' Death Benefits	21	\$ 71,877	23	\$ 78,888
Retired Members' Death Benefits	99	\$ 375,712	107	\$ 404,227

Graphic presentations of the statistical data on membership for the five preceding years are shown on the following page.



# THE PRISON OFFICERS' PENSION FUND OF NEW JERSEY

## SUMMARY OF RETIRED PARTICIPATION



SECTION III - ASSETS, LIABILITIES AND CONTRIBUTIONS

**A. Market Value of Assets as of June 30, 2003**

1.	Assets		
	a.	Cash	\$ 52,363
	b.	Investment Holdings	17,170,028
	c.	Accrued Interest	178,316
	d.	Pension Adjustment Receivable	104,370
	e.	Total	<u>\$ 17,505,077</u>
2.	Liabilities		
	a.	Pension Payroll Payable	\$ 93,022
	b.	Pension Adjustment Payroll Payable	116,987
	c.	Withholdings Payable	15,792
	d.	Administrative Expense Payable	1,093
	e.	Other Accounts Payable	230
	f.	Total	<u>\$ 227,124</u>
3.	Receivable Contribution		\$ 0
4.	Market Value of Assets as of June 30, 2003 = (1(e)) – (2(f)) + (3)		\$ 17,277,953

**B. Reconciliation of Market Value of Assets from June 30, 2002 to June 30, 2003**

1.	Market Value of Assets as of June 30, 2002		\$ 17,908,452
2.	Increases		
	a.	Members' Contributions @ 6%	\$ 0
	b.	State Appropriations	0
	c.	Investment Income	930,257
	d.	Total	<u>\$ 930,257</u>
3.	Decreases		
	a.	Retirement Allowances	\$ 1,550,051
	b.	Administrative Expenses	10,705
	c.	Total	<u>\$ 1,560,756</u>
4.	Receivable Contribution		\$ 0
5.	Market Value of Assets as of June 30, 2003 = (1) + (2(d)) – (3(c)) + (4)		\$ 17,277,953

**C. Reconciliation of Actuarial Value of Assets and Ledger Assets**

1.	Actuarial Value of Assets (Retirement Reserve Fund)	\$	17,277,953
2.	Pension Adjustment Fund: A(2)(b) - A(1)(d)		<u>12,617</u>
3.	Total Ledger Assets	\$	17,290,570

**D. Present Value of Benefits**

1.	Active Members		
	a. Service Retirement	\$	0
	b. Death Before Retirement		0
	c. Death After Retirement		<u>0</u>
	d. Total	\$	0
2.	Service Retirees	\$	7,309,328
3.	Disability Retirees	\$	622,825
4.	Beneficiaries	\$	<u>2,795,494</u>
5.	Total = (1(d)) + (2) + (3) + (4)	\$	10,727,647

**E. Tracking of Unfunded Accrued Liability/(Surplus)**

1.	Unfunded Accrued Liability/(Surplus) as of July 1, 2002	\$	(6,126,718)
2.	Interest on 1 at 5.00%		(306,336)
3.	Contributions received		0
4.	Interest on 3 at 5.00%		<u>0</u>
5.	Expected Unfunded Accrued Liability/(Surplus) as of July 1, 2003 = (1) + (2) - (3) - (4)	\$	(6,433,054)
6.	Actual Unfunded Accrued Liability/(Surplus) as of July 1, 2003	\$	<u>(6,550,306)</u>
7.	Actuarial Loss/(Gain) = (6) - (5)	\$	(117,252)

**F. Development of Required Contribution**

1.	Present Value of Benefits as of July 1, 2003	\$	10,727,647
2.	Present Value of Future Contributions:		
	a. Future State Appropriations	\$	0
	b. Future Employee Contributions		0
	c. Future State Normal Contributions		0
	d. Total	\$	0
3.	Actuarial Value of Assets as of July 1, 2003	\$	17,277,953
4.	Actuarial Surplus: (1) – (2(d)) – (3)	\$	(6,550,306)
5.	Amortization of Loss (Gain)	\$	0
6.	State Appropriations from prior valuation	\$	0
7.	State Appropriations Payable July 1, 2004: (5) + (6); not less than zero	\$	0

**G. Fund Projection**

The following is an estimate of the expected receipts and disbursements for the Fund over the next year. The projection is based on the assumptions set forth in Appendix B. All receipts and disbursements are assumed to occur mid-year.

Year	July 1 Fund Balance	State Appropriations	Member Contributions	Pension Payments	Interest
2003	17,277,953	0	0	1,484,436	827,239

SECTION IV - COMMENTS CONCERNING THE VALUATION

The variation in liabilities and contributions reflects the Fund's actual experience during the year. The Fund experienced a net actuarial gain during the year that ended June 30, 2003.

The actuarial gain was due to a better than expected return on Fund assets. For valuation purposes, a 5.00% per annum rate of return on investments was assumed. The actual return on the Fund's actuarial value of assets was approximately 5.43% for the period July 1, 2002 through June 30, 2003.

There was also an experience gain due to mortality experience among the retired participants. The actual accrued liability released due to deaths among retired participants and beneficiaries was more than anticipated by the present mortality assumptions.

The following outlines the effect of the primary actuarial experience components:

• Investment Loss (Gain)	\$ (73,377)
• Other Loss (Gain), including mortality, changes in employee data	<u>(43,875)</u>
• Total Actuarial Loss (Gain)	\$ (117,252)

SECTION V - ACCOUNTING INFORMATION

Statement No. 5 of the Governmental Accounting Standards Board, issued November 1986, established standards of disclosure of pension information by public retirement systems. Statement No. 25 of the Governmental Accounting Standards Board, issued November 1994, established financial reporting standards for defined benefit pension plans and for the notes to the financial statements of defined contribution plans of state and local governmental liabilities and superseded Statement No. 5 effective for periods beginning after June 15, 1996. Statement No. 27, Accounting for Pensions by State and Local Governmental Employers superseded Statement 5 for employers participating in pension plans and is effective for periods beginning after June 15, 1997.

The information required by Statements No. 25 and No. 27 is presented in the following tables. These include the development of the Annual Required Contribution (ARC), the development of the Net Pension Obligation (NPO), the Schedule of Funding Progress and the Schedule of Employer Contributions.

**(A) Development of the Annual Required Contribution (ARC) as of June 30, 2005:**

1. Actuarial Value of Plan Assets as of June 30, 2003		
(a) Valuation Assets as of June 30, 2003	\$	17,277,953
(b) Adjustment for Receivable Contributions included in (a)		0
(c) Valuation Assets as of June 30, 2003 for GASB Disclosure = (a) - (b)	\$	17,277,953

2.	Actuarial Accrued Liability as of June 30, 2003 for GASB Disclosure	\$	10,727,647
3.	Unfunded Actuarial Accrued Liability/(Surplus) as of June 30, 2003 = (2) – (1 (c))	\$	(6,550,306)
4.	Amortization of Unfunded Actuarial Accrued Liability/(Surplus) over 1 year	\$	(6,550,306)
5.	Normal Cost as of June 30, 2003	\$	0
6.	Annual Required Contribution as of June 30, 2005		
(a)	Annual Required Contribution as of June 30, 2003 = (4) + (5)	\$	(6,550,306)
(b)	Interest Adjustment to June 30, 2005		<u>(671,406)</u>
(c)	Annual Required Contribution as of June 30, 2005 = (a) + (b)	\$	(7,221,712)
<b>(B)</b>	<b><u>Development of the Net Pension Obligation (NPO) as of June 30, 2005:</u></b>		
1.	Annual Required Contribution as of June 30, 2005	\$	(7,221,712)
2.	Interest on Net Pension Obligation		(337,735)
3.	Adjustment to Annual Required Contribution		<u>7,092,442</u>
4.	Annual Pension Cost = (1) + (2) + (3)	\$	(467,005)
5.	Expected Employer Contributions For Fiscal Year 2005	\$	0
6.	Increase in Net Pension Obligation = (4) – (5)	\$	(467,005)
7.	Net Pension Obligation at June 30, 2004		<u>(6,754,707)</u>
8.	Net Pension Obligation at June 30, 2005 = (6) + (7)	\$	(7,221,712)

**(C) Schedule of Funding Progress**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (b)</b>	<b>Unfunded Actuarial Accrued Liability (b-a)</b>	<b>Funded Ratio (a/b)</b>	<b>Covered Payroll (c)</b>	<b>Unfunded Actuarial Accrued Liability as a Percentage of Covered Payroll <u>(b-a)</u> c</b>
6/30/98	\$ 20,096,072	\$ 16,430,313	\$ (3,665,759)	122.3%	N/A	N/A
6/30/99	\$ 19,137,919	\$ 15,292,629	\$ (3,845,290)	125.1%	N/A	N/A
6/30/00	\$ 18,268,489	\$ 14,216,588	\$ (4,051,901)	128.5%	N/A	N/A
6/30/01	\$ 18,269,899	\$ 12,994,567	\$ (5,275,332)	140.6%	N/A	N/A
6/30/02	\$ 17,908,452	\$ 11,781,734	\$ (6,126,718)	152.0%	N/A	N/A
6/30/03	\$ 17,277,953	\$ 10,727,647	\$ (6,550,306)	161.1%	N/A	N/A

**(D) Schedule of Employer Contributions**

<b>Fiscal Year</b>	<b>Annual Required Contribution</b>	<b>Employer Contribution</b>	<b>Percentage Contributed</b>
2000	\$ 0	\$ 0	100.0%
2001	\$ 0	\$ 0	100.0%
2002	\$ 0	\$ 0	100.0%
2003	\$ 0	\$ 0	100.0%
2004	\$ 0	\$ 0	100.0%
2005	\$ 0	\$ 0	100.0%

**(E) The information presented in the required supplementary schedules was determined as part of the actuarial valuation. Additional information follows:**

Valuation Date	June 30, 2003
Actuarial Cost Method	Projected Unit Credit
Amortization Method	Level Dollar, closed
Remaining Amortization Period	1 year
Asset Valuation Method	Market Value
Actuarial Assumptions:	
Investment Rate of Return	5.00%



APPENDIX A

BRIEF SUMMARY OF THE BENEFIT AND  
CONTRIBUTION PROVISIONS AS INTERPRETED  
FOR VALUATION PURPOSES

Eligibility for Membership

Employees of State penal institutions, employed prior to January 1, 1960 who did not transfer to the Police & Firemen's Retirement System in accordance with Chapter 205 of Public Law 1989. The System no longer accepts new members.

1. Definitions

Plan Year	The 12-month period beginning on July 1 and ending on June 30.
Service	A year is credited for each year an employee is a member of the retirement system.
Average Final Compensation (AFC)	Average annual compensation (or base salary) for 3 years of Service immediately preceding retirement. (Effective June 30, 1996, Chapter 113, P.L. 1997 provided that the amount of compensation used for employer and member contributions and benefits under the program cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code.)
Accumulated Deductions	The sum (without interest) of all required amounts deducted from the compensation of a member or contributed by him or on his behalf.

2. Benefits

Service Retirements	25 years of service, or age 55 and 20 years of service. The benefit is a life annuity equal to the greater of (A), (B), and (C) below:
	(A) 2% of AFC up to 30 years of service plus 1% for each year in excess of 30 and prior to age 65;
	(B) 50% of final pay; and
	(C) For a member with 25 years of service, 2% of AFC up to 30 years of service plus 1% for each year in excess of 30.

Vested Retirements                      Eligible upon termination of employment. Benefits are summarized as follows:

Termination with 10 or more years of service: Benefit is a deferred life annuity equal to 2% of AFC for service up to 30 years plus 1% for service over 30 years.

Termination with less than 10 years of service: Refund of accumulated deductions.

Ordinary Disability Retirement

Permanent and total disability for causes other than as a direct result of a traumatic event occurring during the performance of regular or assigned duties. Benefit is an immediate life annuity equal to 1/2 of AFC.

Accidental Disability Retirement

Permanent and total disabled as a direct result of a traumatic event occurring while performing regular or assigned duties. Benefit is an immediate life annuity equal to 2/3 of AFC.

Death Benefits

Death of member of system. Spouse must be married to member prior to retirement, or at least five years before member's death. Benefit is an annuity equal to 25% of member's AFC plus an additional 15% (25%) for one (two or more) surviving dependent child (children). If there is no spouse or if the spouse dies or remarries, 20% (35%, 50%) of AFC to one (two, three or more) surviving child (children). If there is no surviving spouse or children, 25% (40%) of AFC to one (two) dependent parent(s). The provision for a survivor annuity payable to dependent parents does not apply in the death of a retired member of the system.

Minimum benefits: Minimum spousal annuity is \$1,600 per annum. If no other benefit is payable prior to retirement, the member's beneficiary shall receive the accumulated deductibles.

3. Employee Contributions

Each member contributes 6% of compensation.

APPENDIX B

## OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

VALUATION INTEREST RATE: 5.0% per annum, compounded annually.

DEATHS AFTER RETIREMENT: Representative values of the Assumed Annual rates of mortality for current retirees are as follows:

Age	Service Retirement	Disability Retirement	Widows
40	.21%	.90%	.56%
45	.34	1.10	.68
50	.56	1.42	.87
55	.90	1.93	1.18
60	1.42	2.72	1.67
65	2.17	3.97	2.43
70	2.75	5.91	3.63
75	4.46	8.91	5.50
80	7.41	13.46	8.39
85	11.48	20.22	12.80

MARRIAGE: Husbands are assumed to be 3 years older than wives.

VALUATION METHOD:

The unfunded accrued liability (the difference between the present value of benefits and the valuation assets) was determined as of July 1, 1988 and was amortized over the 14-year period beginning July 1, 1989, and ending on July 1, 2002. Each year the amortization payments were adjusted to reflect any experience gains or losses that occurred during the previous plan year. All gains and losses were amortized over the remaining original amortization period. (Without any guidance, we have assumed that any unfunded accrued liability that develops after the July 1, 2001 valuation will be amortized over 1 year).

ASSET VALUATION METHOD

Assets are valued at book value which is equivalent to market value.

**APPENDIX C**

**TABULATIONS USED AS A BASIS FOR THE 2003 VALUATION**

The following tables give the number and retirement allowances of retired members and beneficiaries classified by age as of July 1, 2003.

**TABLE 1****THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF RETIRED MEMBERS DISTRIBUTED  
BY AGE AS OF JULY 1, 2003****SERVICE RETIREMENTS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
69	1	\$ 25,660		
70	1	12,752		
71	4	63,333		
72	3	48,045		
73	5	85,691		
74	7	82,521		
75	5	54,362		
76	7	74,423		
77	4	67,256		
78	2	24,147		
79	3	35,675		
80	4	60,045		
81	4	74,264		
82	4	47,206		
83	6	58,686		
84	5	46,192	1	\$ 7,389
85	4	44,337		
86	1	5,591		
87	1	11,417		
88	2	13,807		
89	3	22,621		
91	1	4,474		
93	1	6,474		
95	2	10,701		
101				
TOTAL	80	\$ 979,680	1	\$ 7,389

**TABLE 2**

**THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF RETIRED MEMBERS DISTRIBUTED  
BY AGE AS OF JULY 1, 2003**

**ORDINARY DISABILITY RETIREMENTS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
68	1	\$ 7,701		
71	1	7,655		
73	1	6,124		
74	1	5,716		
75	2	14,829		
76	1	7,208		
83	1	5,430		
84	1	5,058		
TOTAL	9	\$ 59,721	0	\$ 0

**TABLE 3**

**THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF RETIRED MEMBERS DISTRIBUTED  
BY AGE AS OF JULY 1, 2003**

**ACCIDENTAL DISABILITY RETIREMENTS**

<b>AGE</b>	<b>MEN</b>		<b>WOMEN</b>	
	<b>NUMBER</b>	<b>AMOUNT</b>	<b>NUMBER</b>	<b>AMOUNT</b>
75	1	\$ 7,258		
76	1	8,751		
77	1	12,391		
82			1	\$ 5,155
<b>TOTAL</b>	<b>3</b>	<b>\$ 28,399</b>	<b>1</b>	<b>\$ 5,155</b>

**TABLE 4**

**THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF BENEFICIARIES DISTRIBUTED  
BY AGE AS OF JULY 1, 2003**

**ACTIVE MEMBERS' DEATH BENEFITS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
50			1	\$ 5,174
69	1	\$ 2,976		
70			1	7,622
71			1	3,535
73	1	3,268	1	2,798
74			1	5,431
75			2	9,922
77			1	5,714
78			4	9,359
80			1	1,600
81			1	2,672
82			1	3,196
83			1	1,600
84			2	5,410
86			1	1,600
TOTAL	2	\$ 6,244	19	\$ 65,633



**TABLE 5**

**THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF BENEFICIARIES DISTRIBUTED  
BY AGE AS OF JULY 1, 2003**

**RETIRED MEMBERS' DEATH BENEFITS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
52	1	\$ 1,001		
62			1	\$ 6,817
63			1	7,533
65			1	3,894
66			1	1,600
67			1	9,745
68			1	2,355
69			2	10,687
70			1	4,762
71			2	10,016
72			3	16,470
73			2	11,722
74			5	20,210
75			4	25,662
76			5	16,062
77			3	12,645
78			7	31,201
79			3	18,998
80			6	23,865
81			7	24,660
82			3	13,205
83			6	18,346
84			5	14,823
85			3	10,931
86			4	10,508
87			3	7,065
88			5	12,943
89			3	6,005
90			1	2,487
91			1	1,695
92			2	5,600
93			1	1,600
94			2	5,657
97			1	1,600
101			1	1,743
102			1	1,600
<b>TOTAL</b>	<b>1</b>	<b>\$ 1,001</b>	<b>98</b>	<b>\$ 374,711</b>