

**THE PRISON OFFICERS' PENSION FUND  
OF NEW JERSEY  
ANNUAL REPORT  
OF THE ACTUARY  
PREPARED AS OF JULY 1, 2002**

March 12, 2003

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, 2002 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, 2002 and gives the basis for determining the required annual contribution for the plan year beginning July 1, 2002.

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,

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George M. Lovaglio  
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REPORT ON THE ANNUAL  
VALUATION OF  
THE PRISON OFFICERS' PENSION FUND  
OF NEW JERSEY  
PREPARED AS OF JULY 1, 2002

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, 2002 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, 2002</b>	<b>July 1, 2001</b>
<u>Participant Data</u>		
Active Members	0	0
Retired Members and Beneficiaries	<u>231</u>	<u>249</u>
Total Participants	231	249
Annual Compensation	\$ 0	\$ 0
Annual Retirement Allowances	\$ 1,620,172	\$ 1,741,218
<u>Assets</u>		
Market Value of Assets	\$ 17,908,452	\$ 18,269,899
Actuarial Value of Assets	\$ 17,908,452	\$ 18,269,899
<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, 2001 and July 1, 2002 is set forth in the following table.

**TABLE I  
COMPARATIVE BALANCE SHEET**

<b><u>ASSETS</u></b>	<b>2002</b>	<b>2001</b>
Market Value of assets of Fund	\$ 17,908,452	\$ 18,269,899
Unfunded accrued liability/(surplus)	(6,126,718)	(5,275,332)
Total Assets	\$ 11,781,734	\$ 12,994,567
<b><u>LIABILITIES</u></b>		
Present value of benefits to present beneficiaries payable from the Retirement Reserve Fund	\$ 11,781,734	\$ 12,994,567
Present value of benefits to present active members	0	0
Total Liabilities	\$ 11,781,734	\$ 12,994,567

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, 2001 and July 1, 2002 by various categories.

**MEMBERSHIP - ACTIVE**

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

**RETIRED MEMBERS AND BENEFICIARIES**

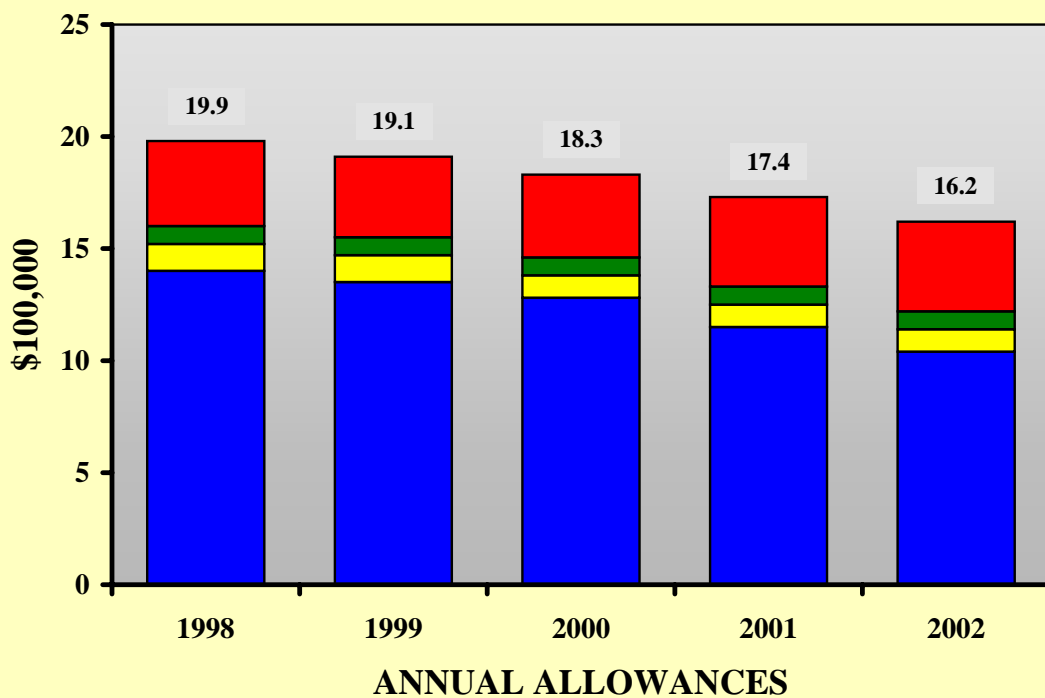
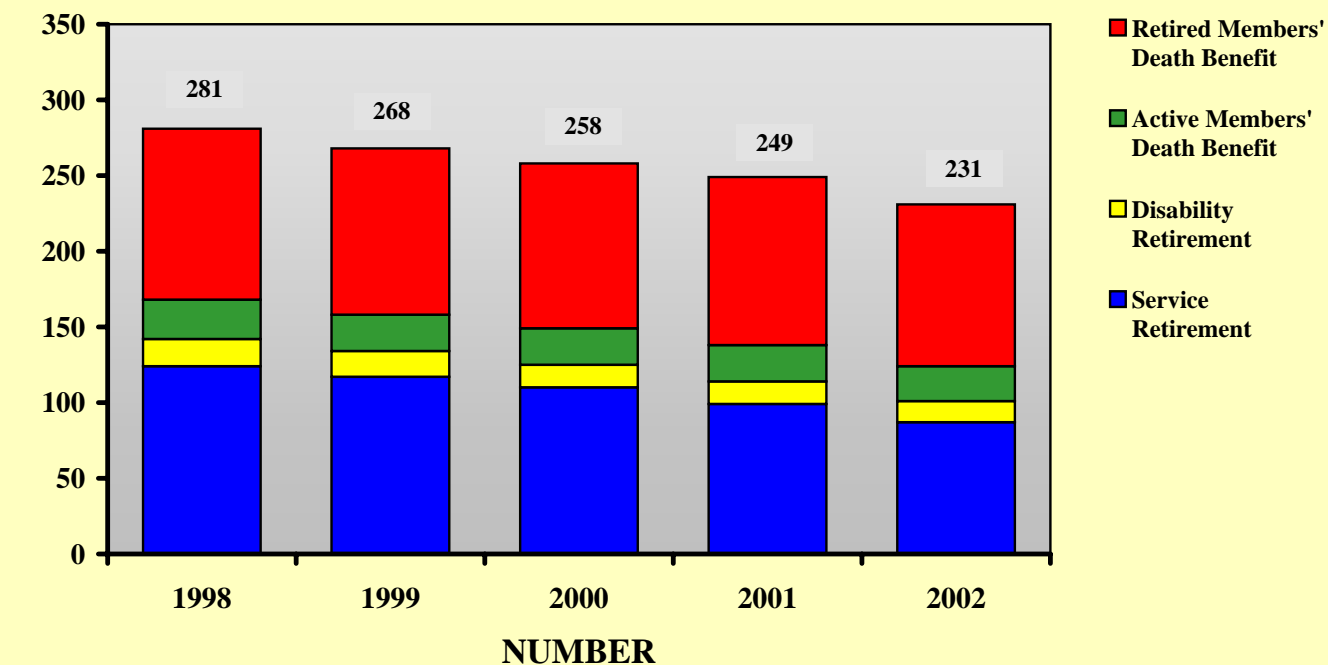
GROUP	2002		2001	
	Number	Annual Allowances	Number	Annual Allowances
Service Retirements	87	\$ 1,037,575	99	\$ 1,153,385
Ordinary Disability Retirements	10	\$ 65,928	11	\$ 71,036
Accidental Disability Retirements	4	\$ 33,554	4	\$ 33,555
Active Members' Death Benefits	23	\$ 78,888	24	\$ 80,488
Retired Members' Death Benefits	107	\$ 404,227	111	\$ 402,754

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, 2002**

1.	Assets		
	a.	Cash	\$ 42,332
	b.	Investment Holdings	17,826,682
	c.	Accrued Interest	186,258
	d.	Pension Adjustment Receivable	<u>108,262</u>
	e.	Total	\$ 18,163,534
2.	Liabilities		
	a.	Pension Payroll Payable	\$ 100,433
	b.	Pension Adjustment Payroll Payable	119,872
	c.	Withholdings Payable	33,332
	d.	Administrative Expense Payable	1,337
	e.	Other Accounts Payable	<u>108</u>
	f.	Total	\$ 255,082
3.	Receivable Contribution		\$ 0
4.	Market Value of Assets as of June 30, 2002 = 1(e) - 2(f) + 3		\$ 17,908,452

**B. Reconciliation of Market Value of Assets from June 30, 2001 to June 30, 2002**

1.	Market Value of Assets as of June 30, 2001		\$ 18,269,899
2.	Increases		
	a.	Members' Contributions @ 6%	\$ 0
	b.	State Appropriations	0
	c.	Investment Income	<u>1,292,601</u>
	d.	Total	\$ 1,292,601
3.	Decreases		
	a.	Retirement Allowances	\$ 1,641,736
	b.	Administrative Expenses	<u>12,312</u>
	c.	Total	\$ 1,654,048
4.	Receivable Contribution		\$ 0
5.	Market Value of Assets as of June 30, 2002 = 1 + 2(d) - 3(c) + 4		\$ 17,908,452

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

1.	Actuarial Value of Assets (Retirement Reserve Fund)	\$	17,908,452
2.	Pension Adjustment Fund: A(2)(b) - A(1)(d)		<u>11,610</u>
3.	Total Ledger Assets	\$	17,920,062

**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	\$	7,978,329
3.	Disability Retirees	\$	683,246
4.	Beneficiaries	\$	<u>3,120,159</u>
5.	Total: 1(d) + 2 + 3 + 4	\$	11,781,734

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

1.	Unfunded Accrued Liability/(Surplus) as of July 1, 2001	\$	(5,275,332)
2.	Interest on 1 at 5.00%		(263,767)
3.	Contributions received		0
4.	Interest on 3 at 5.00%		<u>0</u>
5.	Expected Unfunded Accrued Liability/(Surplus) as of July 1, 2002 = 1 + 2 - 3 - 4	\$	(5,539,099)
6.	Actual Unfunded Accrued Liability/(Surplus) as of July 1, 2002	\$	<u>(6,126,718)</u>
7.	Actuarial Loss (Gain) = 6 - 5	\$	(587,619)

**F. Development of Required Contribution**

1.	Present Value of Benefits as of July 1, 2002	\$	11,781,734
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, 2002	\$	17,908,452
4.	Actuarial Surplus: 1 - 2(d) - 3	\$	(6,126,718)
5.	Amortization of Loss (Gain)	\$	0
6.	State Appropriations from prior valuation	\$	0
7.	State Appropriations Payable July 1, 2003: 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. (An initial unfunded accrued liability was determined as of July 1, 1988 and was to be amortized over the 14-year period beginning July 1, 1989 and ending on July 1, 2002. This section presents anticipated Fund activity over the balance of that initial period.) 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
2002	17,908,452	0	0	1,576,862	856,482

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, 2002.

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 7.41% for the period July 1, 2001 through June 30, 2002.

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)	\$ (419,953)
• Other Loss (Gain), including mortality, changes in employee data	<u>(167,666)</u>
• Total Actuarial Loss (Gain)	\$ (587,619)

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, 2004:**

1. Actuarial Value of Plan Assets as of June 30, 2002		
(a) Valuation Assets as of June 30, 2002	\$	17,908,452
(b) Adjustment for Receivable Contributions included in (a)		0
(c) Valuation Assets as of June 30, 2002 for GASB Disclosure = (a) - (b)	\$	17,908,452

2.	Actuarial Accrued Liability as of June 30, 2002 for GASB Disclosure	\$	11,781,734
3.	Unfunded Actuarial Accrued Liability/(Surplus) as of June 30, 2002 = 2 - 1 (c)	\$	(6,126,718)
4.	Amortization of Unfunded Actuarial Accrued Liability/(Surplus) over 1 year	\$	(6,126,718)
5.	Normal Cost as of June 30, 2002	\$	0
6.	Annual Required Contribution as of June 30, 2004		
(a)	Annual Required Contribution as of June 30, 2002 = 4. + 5.	\$	(6,126,718)
(b)	Interest Adjustment to June 30, 2004		<u>(627,989)</u>
(c)	Annual Required Contribution as of June 30, 2004 = (a) + (b)	\$	(6,754,707)
<b>(B)</b>	<b><u>Development of the Net Pension Obligation (NPO) as of June 30, 2004:</u></b>		
1.	Annual Required Contribution as of June 30, 2004	\$	(6,754,707)
2.	Interest on Net Pension Obligation		(290,803)
3.	Adjustment to Annual Required Contribution		<u>6,106,857</u>
4.	Annual Pension Cost = 1. + 2. + 3.	\$	(938,653)
5.	Expected Employer Contributions For Fiscal Year 2004	\$	0
6.	Increase in Net Pension Obligation = 4. - 5.	\$	(938,653)
7.	Net Pension Obligation at June 30, 2003		<u>(5,816,054)</u>
8.	Net Pension Obligation at June 30, 2004 = 6. + 7.	\$	(6,754,707)

**(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 <math>\frac{(b-a)}{c}</math></b>
6/30/97	\$ 20,977,035	\$ 17,479,545	\$ (3,497,490)	120.0%	N/A	N/A
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

**(D) Schedule of Employer Contributions**

<b>Fiscal Year</b>	<b>Annual Required Contribution</b>	<b>Employer Contribution</b>	<b>Percentage Contributed</b>
1999	\$ 0	\$ 0	100.0%
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%

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

Valuation Date	June 30, 2002
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. This liability is to be amortized over the 14-year period beginning July 1, 1989, and ending on July 1, 2002. Each year the amortization payments are adjusted to reflect any experience gains or losses that have occurred during the previous plan year. All gains and losses will be 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 2002 VALUATION**

The following tables give the number and retirement allowances of retired members and beneficiaries classified by age as of July 1, 2002

TABLE 1

**THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF RETIRED MEMBERS DISTRIBUTED  
BY AGE AS OF JULY 1, 2002**

**SERVICE RETIREMENTS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
68	1	\$ 25,660		
69	1	12,752		
70	4	63,333		
71	4	57,601		
72	6	95,395		
73	7	82,521		
74	5	54,362		
75	7	74,423		
76	4	67,256		
77	2	24,147		
78	3	35,675		
79	4	60,045		
80	4	74,264		
81	6	69,456		
82	6	58,686		
83	5	46,192	1	\$ 7,389
84	4	44,337		
85	1	5,591		
86	1	11,417		
87	2	13,807		
88	3	22,621		
89	1	6,570		
90	1	4,474		
92	1	6,474		
94	2	10,701		
101	1	2,424		
TOTAL	86	\$ 1,030,186	1	\$ 7,389

TABLE 2

**THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF RETIRED MEMBERS DISTRIBUTED  
BY AGE AS OF JULY 1, 2002**

**ORDINARY DISABILITY RETIREMENTS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
67	1	\$ 7,701		
70	1	7,655		
72	1	6,124		
73	1	5,716		
74	2	14,829		
75	1	7,208		
77	1	6,207		
82	1	5,430		
83	1	5,058		
TOTAL	10	\$ 65,928	0	\$ 0

TABLE 3

**THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF RETIRED MEMBERS DISTRIBUTED  
BY AGE AS OF JULY 1, 2002**

**ACCIDENTAL DISABILITY RETIREMENTS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
74	1	\$ 7,258		
75	1	8,751		
76	1	12,391		
81			1	\$ 5,155
TOTAL	3	\$ 28,399	1	\$ 5,155

TABLE 4

**THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF BENEFICIARIES DISTRIBUTED  
BY AGE AS OF JULY 1, 2002**

**ACTIVE MEMBERS' DEATH BENEFITS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
49			1	\$ 5,174
68	1	\$ 2,976		
69			1	7,622
70			1	3,535
72	1	3,268	1	2,798
73			1	5,431
74			2	9,922
76			1	5,714
77			4	9,359
78			1	3,604
79			1	1,600
80			1	2,672
81			2	6,603
82			1	1,600
83			2	5,410
85			1	1,600
<b>TOTAL</b>	<b>2</b>	<b>\$ 6,244</b>	<b>21</b>	<b>\$ 72,644</b>



TABLE 5

**THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF BENEFICIARIES DISTRIBUTED  
BY AGE AS OF JULY 1, 2002**

**RETIRED MEMBERS' DEATH BENEFITS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
51	1	\$ 1,001		
61			1	\$ 6,817
62			1	7,533
64			1	3,894
65			2	7,897
66			1	9,745
67			1	2,355
68			2	10,687
70			2	10,016
71			3	16,470
72			3	16,870
73			5	20,210
74			4	25,662
75			5	16,062
76			3	12,645
77			7	31,201
78			5	26,876
79			6	23,865
80			7	24,660
81			3	13,205
82			7	21,295
83			6	18,037
84			4	15,148
85			5	13,990
86			2	3,957
87			5	12,943
88			3	6,005
89			1	2,487
90			1	1,695
91			2	5,600
92			1	1,600
93			2	5,657
94			1	1,600
96			1	1,600
100			1	1,743
101			1	1,600
104			1	1,600
<b>TOTAL</b>	<b>1</b>	<b>\$ 1,001</b>	<b>106</b>	<b>\$ 403,226</b>