# THE STATE TEACHERS RETIREMENT SYSTEM OF OHIO

ACTUARIAL VALUATION JULY 1, 1999

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October 22, 1999

The Retirement Board State Teachers Retirement System of Ohio 275 East Broad Street Columbus, Ohio 43215

Ladies and Gentlemen:

This report presents the results of the annual actuarial valuation of the assets and liabilities of the State Teachers Retirement System of Ohio (STRS Ohio) as of July 1, 1999, prepared in accordance with Section 3307.20 of Chapter 3307 of the Ohio Revised Code. The valuation takes into account all of the promised benefits to which members are entitled, including pension and survivor benefits.

The valuation was based on the actuarial assumptions and methods as adopted by the Board of Trustees, including a valuation interest rate of 7½% per annum compounded annually. The assumptions and methods are unchanged from the prior valuation.

The actuarial assumptions and methods comply with the parameters set forth in Governmental Accounting Standards No. 25.

#### Assets and Membership Data

The individual data for members of the System as of the valuation date were reported to the actuary by STRS Ohio. While we did not verify the data at their source, we did perform tests for internal consistency and reasonableness. The amount of assets in the trust fund taken into account in the valuation was based on statements prepared for us by STRS Ohio.

#### Funding Adequacy

Historically, of the total contribution rate of 23.3% from employers and members, 2% is allocated to the health care fund with 21.3% remaining for pension and survivor benefits. For fiscal 1998 and fiscal 1999, additional employer contributions were allocated toward health care. The health care contributions for fiscal 1998 and fiscal 1999 were 3½% and 8%, respectively. For fiscal 2000, 8% of the total employer contribution rate will be deposited in the health care fund. The valuation indicates that the contribution rate of 21.3% is sufficient to provide for the payment of the promised pension and survivor benefits, while reducing the funding period of the unfunded accrued liability to 16.3 years, a reduction of 7.9 years from last year's funding period (i.e., reduced from 24.2 years to 16.3 years).

The Retirement Board State Teachers Retirement System of Ohio October 22, 1999 Page 2

The valuation indicates that for the fiscal year ending June 30, 1999, the actuarial experience of STRS Ohio was favorable and generated net actuarial gains of \$2,221 million. The Board elected to use \$49 million of the actuarial gain to fund the supplemental benefit payments to retirees to be made during December 1999. The Board elected to use the remainder of the gain to decrease the funding period to 16.3 years.

#### Financial Results and Membership Data

Detailed summaries of the financial results of the valuation and membership data used in preparing the valuation are shown in the valuation report. Supporting schedules included in the Actuarial and Statistical Section of STRS Comprehensive Annual Financial Report were prepared by the actuary.

To the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and practice.

Respectfully submitted,

Kim M. Nicholl, F.S.A. Consulting Actuary

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# THE STATE TEACHERS RETIREMENT SYSTEM OF OHIO

## ACTUARIAL VALUATION JULY 1, 1999

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#### Introduction

This report presents the results of the actuarial valuation as of July 1, 1999 for the State Teachers Retirement System of Ohio.

The principal valuation results include:

- The unfunded accrued liability funding period, which is 16.3 years.
- The funded status of the plan determined as of July 1, 1999 based on the accrued liability and the market-related value of assets as of that date, which is 89.7%.
- The determination of the gain or loss as of July 1, 1999, which is a gain of \$2.2 billion.
- Annual disclosure as of July 1, 1999 as required by Statement No. 25 of the Governmental Accounting Standards Board.

The valuation was completed based upon membership and financial data submitted by the Retirement System.

### Changes Since Last Year

#### Legislative and Administrative Changes

There was one legislative change that affects the funding of the System.

#### Benefit Improvement for Current Surviving Beneficiaries

House Bill 648 amended the Code to provide for the continuation of survivor benefits to a surviving spouse despite remarriage and for resumption of benefits to surviving spouses that were terminated prior to the effective date of the bill. This change did not have a material impact on the accrued liability of the System.

A summary of the benefits and contribution provisions reflected in the valuation is outlined in Table 10.

#### Actuarial Assumptions and Methods

The actuarial assumptions and methods used for this year's valuation are unchanged from last year.

The assumptions and methods are outlined in Table 9.

#### Health Care Contribution Rate

Historically, of the total employer contribution rate of 14%, the Board has allocated 2% for health care and 12% for pension and survivor benefits. For fiscal 1998 and fiscal 1999, additional employer contributions were allocated toward health care. The health care contributions for fiscal 1998 and fiscal 1999 were 3½% and 8%, respectively. For fiscal 2000, 8% is allocated for health care and 6% is allocated for pension benefits. After fiscal 2000, the allocation of the employer contribution to health and pension and survivor benefits is expected to revert to 2% and 12%, respectively.

## **Summary of Principal Results**

Summarized below are the principal financial results for the State Teachers Retirement System of Ohio based upon the actuarial valuation as of July 1, 1999. Comparable results from the July 1, 1998 valuation are also shown.

	- <del></del>	l .
Item	July 1, 1999	July 1, 1998
Membership Data		
Active Members		
> Number	170,854	170,126
> Annualized Salaries	\$ 7,040.9 Mil	\$ 6,834.1 Mil
> Average Pay	\$ 41,210	\$ 40,171
> Membership Payroll	\$ 7,444.2 Mil	\$ 7,112.1 Mil
Retirees and Beneficiaries		
> Number	95,796	91,999
➤ Annual Allowances	\$ 2,103.1 Mil	\$ 1,930.0 Mil
> Average Benefit Payment	\$ 21,954	\$ 20,978
Contribution Rates (as a Percentage of Payroll)		
Employer Contribution Rate:		
> Total Pension Contribution Rate		
Normal Rate	6.05%*	6.04% **
- Accrued Liability Rate	5.95	5.96
> Health Care Contribution Rate	2.00 *	<u>2.00</u> **
➤ Total	14.00%	14.00%
Member Contribution Rate	<u>9.30</u>	<u>9.30</u>
> Total	23.30%	23.30%
Actuarial Funded Status		
> Accrued Liability	\$ 54,763.3 Mil	\$ 51,128.1 Mil
> Valuation Assets	(49,124.8)	(43,865.9)
<ul> <li>Unfunded Accrued Liability</li> </ul>	\$ 5,638.5	\$ 7,262.2
> Funded Ratio	89.7%	85.8%
> Funding Period	16.3 years	24.2 years
<del>-</del>	<b>,</b> , , , , , , , , , , , , , , , , , ,	

<sup>\*</sup> For fiscal 2000, 8% is allocated to health care and .05% is allocated toward the normal pension rate.

<sup>\*\*</sup> For fiscal 1999, 8% is allocated to health care and .04% is allocated to the normal pension rate.

# Five-Year History of Principal Financial Results

#### Net Gain (Loss)

The results of the valuation as of July 1, 1999 determine the net gain or loss for the year ended June 30, 1999. The net gain is \$2,221 million. The Board elected to use \$49 million to fund the supplemental benefit payments to retirees to be made during December, 1999. The remainder was used to reduce the funding period to 16.3 years.

The analysis of the net gain for fiscal year ended June 30, 1999 is shown in Table 5. The following table shows a five-year history of the net gains or losses.

Five-Year History of Gains or (Losses)
(\$ result reported in millions)

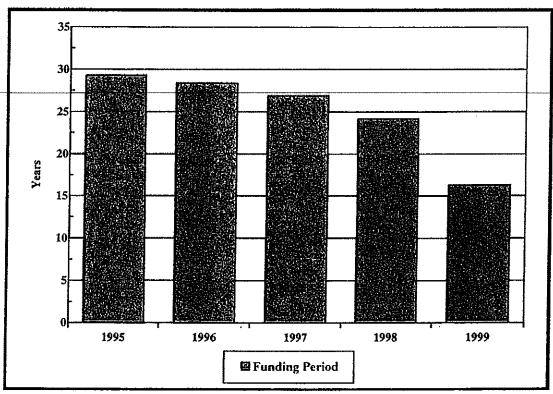
Fiscal Year Ended June 30	Net Gain or (Loss)
1999	\$ 2,221
1998	1,705
1997	1,111
1996	516
1995	739

## **Funding Period**

The funding period is the number of years required to liquidate the unfunded accrued liability. The following table shows a five-year history of the funding period along with the member and employer contribution rates:

Fiscal Year	Funding	Contribution Rate			
Ended June 30	Period	Member	Employer		
1999	16.3 years	9.30%	14.00%		
1998	24.2	9.30	14.00		
1997	26.9	9.30	14.00		
1996	28.4	9.30	14.00		
1995	29.3	9.30	14.00		

**Five-Year History of Funding Period** 



#### **Funded Ratio**

The System's funded status is measured by comparing the valuation assets with the accrued liability. The accrued liability is the present value of benefits accumulated to date under the System's funding method and reflects future pay increases for active employees.

On this basis, the System's funded ratio is 89.7% as of July 1, 1999. The funded ratio is based on a market-related value of assets of \$49.1 billion and an accrued liability of \$54.8 billion.

#### Reasons for Change in the Funded Ratio

The funded ratio increased from 85.8% as of July 1, 1998 to 89.7% as of July 1, 1999. The increase is due to the net effect of the benefit change and experience gains and losses.

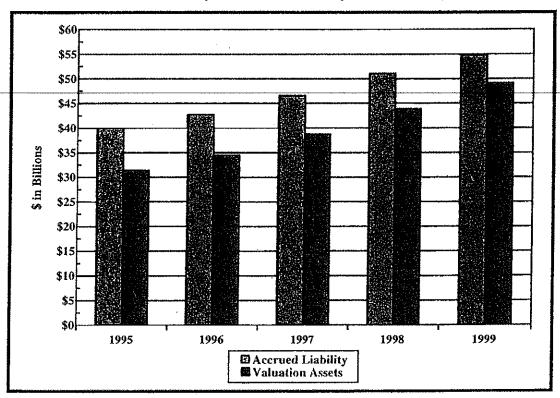
Five-Year History of Funded Ratio

(\$ results reported in millions)

Valuation as of July 1	Accrued Liability	Valuation Assets	Unfunded Accrued Liability	Funded Ratio
1999	\$ 54,763.3	\$ 49,124.8	\$ 5,638.5	89.7%
1998	51,128.1	43,865.9	7,262.2	85.8
1997	46,563.8	38,743.3	7,820.5	83.2
1996	42,766.9	34,569.6	8,197.3	80.8
1995	39,987.2	31,416.7	8,570.5	78.6

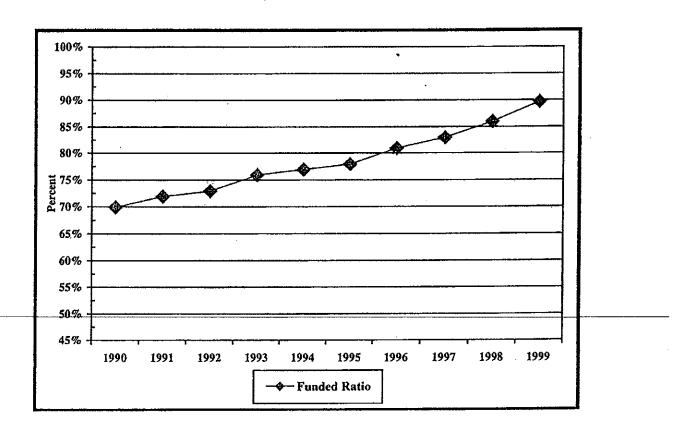
The following chart shows a five-year history of the accrued liability and the valuation assets:

Five-Year History of Accrued Liability and Valuation Assets



The following chart shows a 10-year history of the funded ratio:

Ten-Year History of Funded Ratio (1990 - 1999)



#### GASB No. 25 Disclosure

Statement Number 25 of the Governmental Accounting Standards Board established reporting standards for the annual financial reports of defined benefit pension plans. The statement requires disclosure of the "schedule of funding progress" and the "schedule of employer contributions" in the System's financial statements.

The "schedule of funding progress" shows historical trend information about the System's actuarial value of assets, the actuarial accrued liability and the unfunded actuarial accrued liability. The actuarial funded status is measured by comparing the actuarial value of assets (based on a 4-year moving market average value) with the accrued liability. For purposes of GASB Statement No. 25, the actuarial assets and accrued liability exclude assets in the Health Care Premium Stabilization Fund. The accrued liability is the present value of benefits accumulated to date under the System's funding method and reflects future pay increases for active employees. On this basis, the System's funded ratio is 89.2% as of July 1, 1999. The funded ratio is based on an actuarial value of assets of \$46.3 billion and an accrued liability of \$52.0 billion.

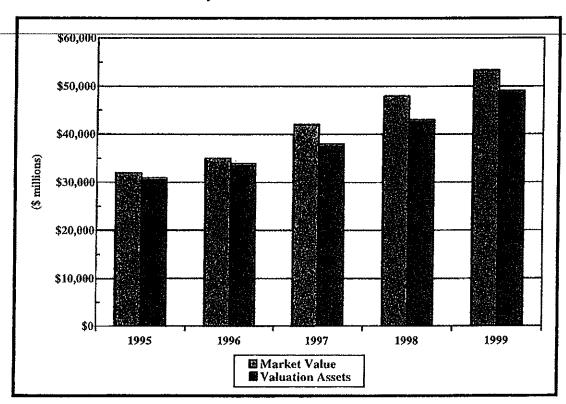
The "schedule of employer contributions" shows historical trend information about the annual required contributions (ARC) of the employer and the percentage of the ARC contributed to the System. The ARC is equal to the normal cost plus amortization of the unfunded actuarial accrued liability. The maximum period for amortizing the unfunded actuarial accrued liability permitted by GASB No. 25 is 40 years. The maximum amortization period decreases to 30 years in 2006. Of the total employer contribution rate of 14% of payroll, 12% is allocated for pension and survivor benefits. For fiscal 2000, an additional 6% of the contribution rate is allocated to health care, leaving 6% allocated to pension and survivor benefits provided by the System. The employer contributions to the System are equal to 100% of the ARC.

## Rate of Return

The investment return of the trust fund on a market value basis (i.e., total return including both realized and unrealized gains and losses) for fiscal years ended June 30, 1995 through 1999 is shown below. The return based on the valuation assets used for determining the System's funded status is also shown.

Fiscal Year	Rate of Return Based On				
Ended June 30	Market Value	Valuation Assets			
1999	12.5%	13.4%			
1998	14.2	14.3			
1997	16.8	12.7			
1996	12.3	10.1			
1995	16.6	9.9			

Five-Year History of Market Value and Valuation Assets



The remainder of the report comprises the following sections or schedules:

Table 1	<b>→</b>	Summary of Results of Actuarial Valuation as of July 1, 1999
Table 2 -		Summary of Market Value of Plan Assets as of June 30, 1999
Table 3	—	Derivation of Market-Related Value of Assets as of June 30, 1999
Table 4		Health Care Premium Stabilization Fund as of June 30, 1999
Table 5		Analysis of Gain as of July 1, 1999
Table 6		Schedule of Funding Progress - GASB Statement No. 25 Disclosure
Table 7		Schedule of Employer Contributions - GASB Statement No. 25
		Disclosure
Table 8		Solvency Test - Comparative Summary of Accrued Liability
		and Valuation Assets
Table 9		Description of Actuarial Assumptions and Methods
Table 10	_	Summary of Benefit and Contribution Provisions
Table 11	_	Summary of Membership Data as of July 1, 1999
Exhibit I		Active Membership Data as of July 1, 1999 - Number and Average
		Annual Salary
Exhibit II		Retiree and Beneficiary Membership Data as of July 1, 1999 -
		Number and Annual Retirement Allowances
Exhibit III		Retiree and Beneficiary Membership Data as of July 1, 1999 -
		Number and Average Annual Allowance
Exhibit IV	_	10-Year History of Membership Data
Exhibit V		Detailed Tabulations of the Data

# SUMMARY OF RESULTS OF ACTUARIAL VALUATION AS OF JULY 1, 1999

Item		July 1, 1999
	╁	July 1, 1777
Membership Data		
1. Number of Members		
a) Active Members		170,854
b) Reemployed Retirees		12,590
c) Inactive Members		
(i) Eligible for Allowances		17,408
(ii) Eligible for Refunds Only		101,707
d) Retirees and Beneficiaries e) Total		<u>95,796</u>
e) Total		398,355
2. Annualized Salaries	\$	7,040,902
3. Membership Payroll		
a) STRS Ohio Members	\$	7,338,305
b) Alternative Retirement Plan Members	Ψ	105,938
c) Total	\$	7,444,243
		, ,
4. Annual Allowances	\$	2,103,139
Valuation Results		
5. Accrued Liability		:
a) Active Members	\$	25,756,402
b) Reemployed Retirees		59,398
c) Inactive Members		1,011,548
d) Retirees and Beneficiaries*		
(i) Annuity and Pension Reserve Fund		24,558,652
(ii) Survivors' Benefit Fund	l —	<u>593,974</u>
(iii) Subtotal	\$	25,152,626
e) Total	\$	51,979,974
6. Health Care Premium Stabilization Fund	\$	2,783,366
7. Total Liability	\$	54,763,340

<sup>\*</sup>Includes \$94,500 attributable to the dedicated bond fund

# SUMMARY OF RESULTS OF ACTUARIAL VALUATION AS OF JULY 1, 1999

(\$ amounts in thousands)
(Continued)

Item			July 1, 1999		
8. Assets a) Market-Related Value of b) Present Value of Future S for House Bills 204 and 2	\$	49,100,836			
<ul> <li>i) Annuity and Pension Reserve Fund</li> <li>ii) Survivors' Benefit Fund</li> <li>c) Receivable from Employers for ERI Benefits</li> <li>d) Total</li> </ul>			7,128 425 16,413 49,124,802		
9. Unfunded Accrued Liability (7) - (8)			\$ 5,638,538		
10. Funding Period		16.3 Years			
11. Funded Status	89.7%				
12. Normal Contribution Rate			15.35%		
13. Member Contribution Rate			9.30%		
Allocation of Employer Contribu	tion Rate				
14. Employer Contribution Rate	Fiscal 2000	Af	ter Fiscal 2000		
<ul> <li>a) Normal Contribution</li> <li>b) Unfunded Liability</li> <li>c) Total Pension Rate</li> <li>d) Health Care</li> <li>e) Total</li> </ul>	.05% <u>5.95</u> 6.00% <u>8.00</u> 14.00%		6.05% 5.95 12.00% 2.00 14.00%		

# SUMMARY OF MARKET VALUE OF PLAN ASSETS AS OF JUNE 30, 1999

Item		Pension	Health Care	Total
1. Market Value of Assets as of June 30, 1998	\$	45,798,483	\$ 2,156,004	\$ 47,954,487
2. Contributions During Year		1,216,044	634,880	1,850,924
3. Disbursements During Year		2,100,737	297,748	2,398,485
4. Investment Return During Year (a) Gross Investment Return (b) Expenses (c) Net Investment Return (a) - (b)	<u>-</u> \$	5,726,706 62,305 5,664,401	\$ 293,415 3,186 290,229	6,020,121 65,491 \$ 5,954,630
<ul> <li>5. Market Value of Assets as of June 30, 1999         <ul> <li>(1) + (2) - (3) + (4)</li> </ul> </li> <li>6. Rate of Return</li> </ul>	\$	50,578,191	\$ 2,783,365	\$ 53,361,556 12.49%

# DERIVATION OF MARKET-RELATED VALUE OF ASSETS AS OF JUNE 30, 1999

2. Dete	rmination of De	ferred Gain (Loss)			
		Investm	ent Income		
<u>Year</u>	Actual	Expected	Difference	% Deferred	<u>Deferred</u> <u>Amount</u>
1999	\$ 5,664,401	\$ 3,092,570	\$ 2,571,831	75%	\$ 1,928,873
1998	5,730,421		• •	50	1,491,340
1997	5,823,834	2,461,806	3,362,028	25	840,507
1996	3,979,335	2,352,965	1,626,370	0	 0
					\$ 4,260,720
3. Mark	cet-Related Value	e of Pension Assets	s as of June 30, 199	9	
<del>(1)-</del>	(2)				 46,317,471
4. Healt	th Care Premium	Stabilization Fund	l		2,783,365
c ~	Market-Related	Value of Assets as	of June 30, 1999		
o. Total					

## HEALTH CARE PREMIUM STABILIZATION FUND AS OF JUNE 30, 1999

1. Balance as of June 30, 1998	\$ 2,156,004
2. Contributions During Year	
(a) Employer (b) Member Premiums (c) Total	\$ 587,061 <u>47,819</u> 634,880
3. Outgo During Year	\$ 297,748
4. Investment Income	\$ 290,229
5. Balance as of June 30, 1999 (1) + (2) - (3) + (4)	\$ 2,783,365
6. Rate of Return	12.49%

TABLE 5

# ANALYSIS OF GAIN AS OF JULY 1, 1999 (\$ amounts in thousands)

		li .
1. Expected Unfunded	d Accrued Liability at July 1, 1999	\$ 7,370,388
2. Unfunded Accrued	Liability at July 1, 1999	5,638,538
3. Increase Due to Re	tiree Supplemental Benefit	49,000
4. Increase Due to 6%	Allocation to Healthcare	440,000
5. Gain (1) – (2) + (3)	+ (4)	\$ 2,220,850
6. Analysis of Gain		
a) Investment Retu	ım Gain on Valuation Assets	2,432,975
• • •	ns and (Losses) Salary Increases Greater than Expected Retirement and Other Separation Experience	(368,504) 35,715
. ,	Retirees' Mortality Experience	120,664 \$ (212,125)
c) Net Gain as of J (a) + (b)	uly 1, 1999	\$ 2,220,850

# SCHEDULE OF FUNDING PROGRESS GASB STATEMENT NO. 25 DISCLOSURE

Valuation as of July 1	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	Unfunded Accrued Liability as a Percentage of Covered Payroll
1999	\$ 46,341,436	\$ 51,979,974	\$ 5,638,538	89.2%	\$ 7,444,243	76%
1998	41,709,903	48,972,084	7,262,181	85.2	7,112,124	102
1997	36,883,739	44,704,237	7,820,498	82.5	6,805,797	115
1996	32,930,801	41,128,062	8,197,261	80.1	6,553,642	125
1995	29,913,449	38,483,947	8,570,498	77.7	6,327,049	135
1994	27,713,810	36,042,209	8,328,399	76.9	6,060,828	137

# SCHEDULE OF EMPLOYER CONTRIBUTIONS GASB STATEMENT NO. 25 DISCLOSURE

(\$ amounts in thousands)

Fiscal Year Ended June 30	II	nual Required Contribution	Percentage Contributed
1999	\$	446,655	100%
1998		746,773	100
1997	816,696		100
1996		786,437	100
1995		759,246	100
1994		727,299	100

The information presented above was determined as part of the actuarial valuation as of one year prior to the dates indicated (i.e., the contribution determined by the valuation completed as of July 1, 1998 was contributed in a fiscal year ending June 30, 1999).

Additional information as of the latest actuarial valuation follows:

Valuation Date:

July 1, 1999

Actuarial Cost Method:

Entry Age

Amortization Method:

Level percent closed

Remaining Amortization Period:

16.3 years

Asset Valuation Method:

4-year smoothed market with

91%/109% corridor

#### Actuarial Assumptions:

Investment Rate of Return

7.5%

Projected Salary Increases

9.25% at age 20 to 3.25% at age 65

Inflation Assumption

3.50%

Cost of Living Adjustments

3% simple

SOLVENCY TEST
COMPARATIVE SUMMARY OF ACCRUED LIABILITY AND
VALUATION ASSETS

		Accrued Liability for:			Portion Covered	Portion of Accrued Liability. Covered by Valuation Assets	Liability.
Valuation as of July 1	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Member (Employer	Valuation Assets	0.20	(C)	6
1999	\$ 6,867,909,608	\$ 25,152,625,626	\$ 22,742,804,351	\$ 49,124,802,048	100%	100%	75%
1998	6,569,782,737	22,994,697,096	21,563,607,908	43,865,906,709	100	100	99
1997	6,222,724,726	20,249,628,154	20,091,417,650	38,743,272,256	100	100	61
1996	5,862,249,508	18,420,595,406	18,484,066,633	34,569,651,381	100	100	26
1995	5,533,683,844	16,745,089,502	17,708,401,240	31,416,676,685	100	100	52
1994	5,158,560,944	14,025,124,404	17,688,123,667	28,543,410,432	100	100	53
1993	4,798,350,225	12,869,722,653	16,820,903,527	26,259,447,414	100	100	51
1992	4,434,875,773	11,506,994,329	14,858,367,850	22,536,343,069	100	100	44
1991	4,076,989,530	10,440,583,940	13,591,786,886	20,094,848,781	100	100	41
1990	3,729,945,386	9,576,505,968	12,576,887,425	18,242,453,340	100	100	39
					1		i

#### DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS

#### **ASSUMPTIONS**

INTEREST RATE: 71/2% per annum, compounded annually.

SEPARATION FROM ACTIVE SERVICE: Illustrative rates of assumed separation from service are as follows:

ļ			Vesti	ng & Early Ret	irement		
			25-29 U		Under 25		
ı			30 Years	Years	Years		
Į	Age	Termination	Service	Service	Service	Death	Disability
				MALES			
	20	9.00%	[			.03%	
ı	30	4.00				.05	.04%
_	40	1.75	28.00%		1	.08	.18
	50	.85	28.00			.23	.49
ı	55	.85	31.00	6.00%	ļ	.39	.62
ı	60	.85	36.00	6.00	13.00%	.61	
- 1	65	.85	52.00	18.00	22.00	.94	
	70		42.00	25.00	20,00	1.68	
<u>FEMALES</u>							
ı	20	4.50%				.02%	
İ	30	4.80				.03	.05%
ł	40	1.65	27.00%			.05	.18
ł	50	1.25	27.00			.12	.36
-	55	1.25	29.00	10.00%		.19	.58
1	60	1.25	40.00	16.00	22.00%	.32	
-	65	1.25	49.00	31.00	21.00	.53	
1	70		50.00	35.00	20.00	.90	•

# DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS (Continued)

SALARY INCREASE: Effective average of 5% per annum, compounded annually. Representative values are as follows:

Age	Annual Rate of Salary Increase
20	9.25%
30	7.25
40	5.25
50	4.05
55	3.75
60	3.50
65	3.25
70	3.25

DEATH AFTER RETIREMENT: According to the 1983 Group Annuity Mortality Table (Projection 1994 - Scale H) with one-year setback in age for males and one-year set forward in age for females. Special mortality tables are used for the period after disability retirement.

FUTURE EXPENSES: The assumed interest rate is net of the anticipated future administrative expenses of the fund.

#### **METHODS**

ACTUARIAL COST METHOD: Projected benefit method with level percentage entry age normal cost and open-end unfunded accrued liability. Gains and losses are reflected in the accrued liability.

ASSET VALUATION METHOD: A 4-year moving market average value of assets that spreads the difference between the actual investment income and the expected income (based on the valuation interest rate) over a period of 4 years. The actuarial value shall not be less than 91% or more than 109% of market value.

PAYROLL GROWTH: 41/2% per annum compounded annually.

REPLACEMENT OF RETIRING MEMBERS: The majority of members who retire do so effective July 1. These members are replaced by new members who are hired after July 1. As a result, new members are not reported on the census data. To compensate for this, assumed payroll for these new members is equal to the difference between actual total System payroll for the fiscal year just ended and reported payroll for members reported on the valuation date.

# **DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS** (Continued)

#### **DATA**

CENSUS AND ASSETS: The valuation was based on members of the System as of July 1, 1999 and does not take into account future members. All census and asset data was supplied by the System.

## SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

Eligibility for Membership Service Retirement Immediate upon commencement of employment.

vice Retireme Eligibility

Age 60 with 5 years of service, or age 55 with 25 years of service, or 30 years of service regardless of age.

Amount

Annual amount equal to the greater of (a) 2.1% of final average salary for the three highest paid years, multiplied by years of total Ohio service credit, except that for years of Ohio contributing service credit in excess of 30 the following formula percentage will apply:

<u>Year</u>	Percentage
31	2.5%
32	2.6
33	2.7
34	2.8
35	2.9
36	3.0
37	3.1
38	3.2
39	3.3
40	3.4
41	3.5
42	3.6
43	3.7

or b) \$86 multiplied by years of service credit; and adjusted by the following percentage:

Attained	1	Years of Ohio	% of Base
_ Age	or	Service Credit	<u>Amount</u>
58		25	75%
59		26	80
60		27	85
61			88
		28	90
62			91
63			94
		29	95
64			97
65		30 or more	100

Annual salary is subject to a limit of \$200,000, as adjusted under Section 401(a)(17).

# SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS (Continued)

Maximum benefit - The lessor of a) 100% of average annual salary for three highest paid years or b) the limit as established by Section 415 of the Internal Revenue Code.

Minimum benefit - the sum of the annuity provided by a) the member's contributions with interest, b) a pension equal to the annuity, and c) an additional pension of \$40 multiplied by the number of years of prior and military service.

#### Disability Retirement Eligibility

Membership before July 30, 1992 and election of this benefit, completion of 5 or more years of service, under age 60 and permanently incapacitated for the performance of duty.

#### Amount

- (1) Annuity with a reserve equal to the member's accumulated contributions, plus
- (2) The difference between (1) and the greater of 2% of the average salary during the 3 highest paid years or \$86 times total service plus years and months from date of disability to age 60. Maximum allowance is 75% of final average salary. Minimum allowance is 30% of final average salary.

# SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS (Continued)

Disability Allowance

Eligibility

Membership after July 29, 1992, or membership before July 30, 1993 and election of this benefit, completion of 5 or more years of service and permanently

incapacitated for the performance of duty.

Amount

The greater of 2.1% of the average salary during the 3 highest paid years or \$86 times total service. Maximum allowance is 60% of final average salary. Minimum allowance is 45% of final average salary. The disability allowance payment terminates at age 65 (or later if payment begins after age 60). After termination of the disability allowance, the member may apply for service

retirement.

Death after Retirement

Lump sum payment of \$1,000 upon death after service

or disability retirement.

# SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS (Continued)

#### Survivor's Benefit

Eligibility

Upon death after at least 1½ years of credit for Ohio service with at least 1/4 year of such service in the 2½ years preceding death or upon death of a disability retiree.

Amount

If member is eligible for retirement, spouse or other sole dependent beneficiary may elect to receive Option 1 benefit in lieu of return of contributions.

If member is not eligible for retirement, certain designated beneficiaries may elect to receive the following benefits in lieu of return of contributions.

	Number	% of Average	
	of Qualified	Annual Salary for 3	Minimum
	Dependents	Highest Paid Years	Annual Benefit
	1	25%	\$ 1,152
_	2	40	2,232
	3	50	2,832
	4	55	2,832
	5 or more	60	2,832

A minimum benefit of a percentage of final average salary based on years of credited service ranging from 25% with 19 years of service to 60% with 29 years of service.

Qualified beneficiaries are spouse, dependent children and/or dependent parents over age 65.

# SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS (Continued)

#### **Lump Sum Withdrawal Option**

In lieu of any other pension or survivor benefits, a member who leaves the System can receive his member contributions with interest in a lump sum according to the following schedule:

Credited Service	Lump Sum					
Less Than 3 Years	Member Contributions with 4% Interest					
3 or More Years and Less than 5 Years	Member Contributions with 5% Interest					
5 Years or More	150% of Member Contributions with 5% Interest					
The Board has the authorit	y to modify the interest					

#### **Optional Forms of Benefit**

Option 1 - 100% joint and survivorship. Reduced retirement allowance payable to the member continuing for life to the member's sole beneficiary named at retirement after the member's death.

credited to member contributions.

Option 2 - A joint and survivorship annuity payable during the lifetime of the member, with the member's sole beneficiary named at retirement to receive some other portion of the member's annuity after the member's death.

Option 3 - The member's reduced retirement allowance provided under Option 1 or Option 2 is to be paid for life to the member's sole beneficiary named at retirement after the member's death, except that in the event of the death of the sole beneficiary or termination of marriage between the retiree and the sole beneficiary, the retiree may elect to return to his single lifetime benefit equivalent which would be available for an actuarially computed charge as determined by the Board. In the case of termination of marriage, the election may be made with the written consent of the beneficiary or by court order.

# SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

(Continued)

Option 4 - A life annuity payable during the lifetime of the member, with a guarantee that upon the member's death before the expiration of a certain period, his benefit will continue for the remainder of such period to his beneficiary. Joint beneficiaries may receive the present value of any remaining payments in a lump sum settlement. If all beneficiaries die before the expiration of the certain period, the present value of all remaining payments is to be paid to the estate of the beneficiary last receiving payments.

Option 5 - A plan of payment established by the Board combining any of the features of Option 1, 2, and 4.

Refund of Contributions

A member's contributions with 4% interest are refunded upon termination of employment where no other benefit is payable. Upon death after retirement or upon death of a survivor in receipt of benefits, the member's contributions with 4% interest at retirement less payments made are returned to the designated beneficiary.

Cost-of-living Benefits

The basic benefit is increased by the increase in the Consumer Price Index each year, but not to exceed 3% of the original base benefit.

Health Care

Retirees, their spouses and dependents are eligible for a comprehensive medical expense health care plan as may be offered by the Retirement Board and which is subject to changes in terms and conditions from time to time.

Contribution

By Members

9.30% of salary effective July 1, 1994.

By Employers

14.00% of salaries of their employees who are

members.

## SUMMARY OF MEMBERSHIP DATA AS OF JULY 1, 1999

(\$ amounts in thousands)

## **ACTIVE MEMBERS**

Item	Male	Female	Total
Number of Members Annual Salaries Average Age Average Service	\$ 53,022 2,483,692 44.54 14.27	\$ 117,832 4,557,211 43.14 12.61	\$ 170,854 7,040,902 43.57 13.12

## **INACTIVE MEMBERS**

Number	Male	Female	Total
Eligible for Allowances Eligible for Refunds Only	4,576 <u>36,951</u>	12,832 <u>64,756</u>	17,408 <u>101,707</u>
Total	41,527	77,588	119,115

#### RETIREES AND BENEFICIARIES

Item	Number	Annual Allowances	Average Allowances	
Retirees Beneficiaries Receiving	78,341	\$ 1,822,085	\$ 23,258	
Optional Allowances Survivors' Benefit Fund	5,948	77,510	13,031	
Beneficiaries Disability Retirees	5,248 <u>6,259</u>	56,281 147,263	10,724 23,528	
Total	95,796	\$ 2,103,139	\$ 21,954	

EXHIBIT I

ACTIVE MEMBERSHIP DATA AS OF JULY 1, 1999

#### NUMBER AND AVERAGE ANNUAL SALARY

		Years of Service								
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
Under 25	5,347						•			5,347
	\$22,032									\$22,032
25-29	14,418	4,236								18,654
	\$25,776	\$33,177								\$27,457
30-34	6,927	8,058	2,774	1						17,760
	\$25,194	\$35,794	\$40,954	\$50,025						\$32,467
35-39	4,852	3,941	5,893	2,619	1					17,306
	\$24,147	\$38,093	\$44,058	\$46,616	\$52,627					\$37,505
40-44	5,276	4,151	4,153	5,743	4,678	3				24,004
	\$23,311	\$38,679	<b>\$46,552</b>	\$48,386	\$49,826	\$49,765				\$41,159
45-49	4,891	4,470	4,911	4,498	9,846	7,975	13			36,604
	_\$23,157	\$38,307	\$46,640	\$50,805	\$51,318	\$52,868	\$50,045			\$45,613
50-54	2,915	2,898	3,805	3,722	4,729	9,881	3,528	10		31,488
	\$23,221	\$38,779	\$47,143	\$50,348	\$53,484	\$54,529	\$56,784	\$62,217		\$48,893
55-59	1,167	1,144	1,543	1,894	2,431	2,704	2,340	508	I	13,732
	\$20,857	\$37,216	\$46,166	\$50,603	\$53,024	\$56,603	\$60,282	\$58,980	\$32,548	\$50,029
60-64	533	371	435	534	722	941	582	316	62	4,496
	\$19,881	\$37,625	\$50,206	\$54,150	\$54,276	\$56,853	\$65,590	\$66,367	\$61,117	\$51,364
Over 64	312	135	141	128	155	202	209	104	77	1,463
	\$ 11,255	\$ 29,883	\$ 53,069	\$ 59,477	\$ 58,638	\$ 60,868	\$ 67,428	\$ 67,608	\$ 65,507	
Total	46,638	29,404	23,655	19,139	22,562	21,706	6,672	938	140	170,854
	\$24,090	\$36,860	\$45,468	\$49,548	\$51,792	\$54,336	\$59,100	\$62,460	\$63,327	

In addition, there are 12,590 reemployed retirees.

#### EXHIBIT II

# RETIREE AND BENEFICIARY MEMBERSHIP DATA AS OF JULY 1, 1999

#### NUMBER AND ANNUAL RETIREMENT ALLOWANCES

			Annual	Allo	wances as of Ju	ly 1	, 1999
Group	Number		Basic	, (	Cost-of-Living Increases		Total
	Number	╫╴	Dasic	<del>                                     </del>	MICICASCS		A 0141
Superannuation Retirees Males	20 171	s	726 270 007	\$	140,290,833	\$	876,561,740
Females	30,171 48,170	3	736,270,907 789,830,115	D.	155,693,623	•	945,523,738
remates	40.170	-	707,030,113	-	133,073,023		743,323,136
Subtotal	78,341	\$	1,526,101,022	\$	295,984,456	\$	1,822,085,478
Beneficiaries Receiving Optional Allowances							
Males	1,314	\$	8,396,554	\$	3,100,072	\$	11,496,626
Females	4,634	<b> </b> _	46,306,064	l	19,707,341		66,013,405
Subtotal	5,948	\$	54,702,618	\$	22,807,413	\$	77,510,031
Survivors' Benefit Fund Beneficiaries							
Males	1,997	\$	14,413,152	\$	3,238,554	\$	17,651,706
Females	<u>3,251</u>	<u></u>	29,513,305		9,115,394	<u> </u>	<u> 38,628,699</u>
Subtotal	5,248	s	43,926,457	\$	12,353,948	s	56,280,405
Cuciotal	5,2.0		10,720,157	*	.2,555,5	*	30,200,100
Disability Retirees	•						
Males	2,324	\$	51,457,119	\$	11,300,387	\$	62,757,506
Females	<u>3,935</u>	<b> </b>	70,213,506	<b> </b>	14,291,751		84 <u>,505,257</u>
Subtotal	6,259	\$	121,670,625	\$	25,592,138	\$	147,262,763
	-						
Grand Total	<u>95,796</u>	<u>\$_</u>	1,746,400,722	\$	<u>356,737,955</u>	<u>\$</u>	2,103,138,677

Included above are 222 beneficiaries of deceased active members entitled to annual deferred allowances of \$917,102.

### **EXHIBIT III**

## RETIREE AND BENEFICIARY MEMBERSHIP DATA AS OF JULY 1, 1999

## NUMBER AND AVERAGE ANNUAL ALLOWANCE

Age Last Birthday	Number	Annual Allowance (Thousands)	Average Annual Allowance
Retired Annuitants			
Under 60	14,167	\$ 463,062	\$ 32,686
60 - 64	13,858	376,665	27,180
65 - 69	14,105	345,064	24,464
70 - 74	12,507	269,292	21,531
75 - 79	9,153	164,567	17,980
Over 79	14,551	203,435	13,981
Total	78,341	\$ 1,822,085	\$ 23,258
Beneficiaries Receiving			
Optional Allowances			
Under 60	376	\$ 6,531	\$ 17,370
60 - 64	334	7,129	21,344
65 - 69	642	11,829	18,425
70 - 74	993	14,412	14,514
75 - 79	1,084	13,282	12,253
Over 79	<u>2,519</u>	24,327	9,657
Total	5,948	\$ 77,510	\$ 13,031
Survivors' Benefit Fund			
Beneficiaries			
Under 60	2,306	\$ 22,475	\$ 9,746
60 - 64	570	7,696	13,502
65 - 69	607	7,746	12,761
70 - 74	691	7,957	11,515
75 - 79	490	5,165	10,541
Over 79	<u>584</u>	5,242	8,976
Total	5,248	\$ 56,281	\$ 10,724
Disability Retirees			
Under 60	3,272	\$ 88,603	\$ 27,079
60 - 64	982	23,029	23,451
65 - 69	745	15,692	21,063
70 - 74	629	11,126	17,688
75 - 79	393	5,917	15,056
Over 79	<u>238</u>	2,896	12,168
Total	6,259	\$ 147,263	\$ 23,528

#### **EXHIBIT IV**

#### 10-YEAR HISTORY OF MEMBERSHIP DATA

#### **ACTIVE MEMBERS**

Valuation as of July 1	Number of Active Members	Percentage Change in Membership	Total Annuat Payroll	Average Annual Pay	Percentage Increase in Average Pay
1999	170,854	0%	\$ 7,040,901,676	\$ 41,210	3%
1998	170,126	1%	6,834,059,613	40,171	3%
1997	168,943	1%	6,564,294,037	38,855	3%
1996	166,927	.2%	6,307,142,481	37,784	3%
1995	166,623	(1%)	6,110,218,037	36,670	3%
1994	167,770	1%	5,986,083,803	35,680	3%
1993	165,711	2%	5,742,576,720	34,654	2%
1992	162,898	2%	5,509,947,223	33,825	3%
1991	160,012	1%	5,237,832,049	32,734	4%
1990	157,650	2%	4,941,916,397	31,347	4%

#### RETIREES AND BENEFICIARIES

Valuation as of July 1	Number	Percentage Change in Membership	Annual Allowances	Percentage Change in Allowances	Average Annual Annuity
1999	95,796	4%	\$ 2,103,138,677	9%	\$ 21,954
1998	91,999	4%	1,929,988,446	12%	20,978
1997	88,718	3%	1,722,036,619	9%	19,410
1996	86,132	4%	1,579,770,943	10%	18,341
1995	83,136	7%	1,434,031,830	17%	17,249
1993	74,230	2%	1,120,770,053	9%	15,099
1992	72,599	3%	1,029,951,849	10%	14,187
1991	70,583	3%	938,137,399	10%	13,291
1990	68,739	3%	854,536,192	10%	12,432

# EXHIBIT V DETAILED TABULATIONS OF THE DATA

TABLE 1

THE NUMBER AND ANNUAL SALARIES
OF ACTIVE MEMBERS DISTRIBUTED BY
AGE AS OF JULY 1, 1999

		Male		Female		Totals
Age	Number	Compensation	Number	Compensation	Number	Compensation
21	4	\$ 107,632	33	\$ 514,356	37	\$ 621,987
22	81	1,590,096	394	7,756,709	475	9,346,805
23	418	8,782,846	1,556	32,588,045	1,974	41,370,891
24	690	15,881,307	2,171	50,582,664	2,861	66,463,971
25	853	21,254,407	2,406	59,716,205	3,259	80,970,612
26	872	23,092,394	2,542	66,622,512	3,414	89,714,907
27	1,010	28,799,705	2,751	74,264,396	3,761	103,064,101
28	1,138	33,609,067	3,115	86,906,109	4,253	120,515,176
29	1,081	32,897,632	2,886	85,011,997	3,967	117,909,629
30	1,093	34,764,948	2,777	83,089,915	3,870	117,854,863
31	1,053	35,208,868	2,796	84,131,839	3,849	119,340,707
32	1,058	36,101,906	2,457	79,476,473	3,515	115,578,379
33	1,071	38,294,594	2,238	74,144,368	3,309	112,438,962
34	992	36,699,429	2,225	74,697,539	3,217	111,396,968
35	1,064	39,896,436	2,249	78,818,056	3,313	118,714,492
36	1,077	42,597,232	2,276	81,599,212	3,353	124,196,444
37	1,076	44,706,509	2,286	83,004,725	3,362	127,711,234
38	1,119	46,855,923	2,570	93,210,375	3,689	140,066,297
39	1,116	47,716,064	2,473	90,649,584	3,589	138,365,649
40	1,194	53,039,967	2,655	99,542,824	3,849	152,582,791
41	1,289	58,419,998	3,125	118,300,265	4,414	176,720,263
42	1,508	68,581,869	3,332	129,497,819	4,840	198,079,689
43	1,503	71,189,842	3,648	144,848,309	5,151	216,038,151
44	1,667	79,103,466	4,083	165,466,973	5,750	244,570,438
45	1,748	85,000,710	4,382	179,244,696	6,130	264,245,406
46	2,059	102,679,369	4,769	202,052,296	6,828	304,731,665
47	2,267	115,220,767	5,255	228,684,285	7,522	343,905,052
48	2,445	129,218,168	5,613	246,581,423	8,058	375,799,592
49	2,569	135,389,152	5,497	245,543,236	8,066	380,932,388
50	2,662	143,442,346	5,287	237,935,229	7,949	381,377,575
51	2,663	145,678,295	4,921	224,934,807	7,584	370,613,102
52	2,634	145,239,310	4,770	217,331,264	7,404	362,570,574
53	1,584	89,205,827	3,009	139,033,782	4,593	228,239,610
54	1,363	77,852,477	2,595	118,874,550	3,958	196,727,027
55	1,189	69,563,833	2,360	108,245,454	3,549	177,809,287
56	1,201	71,407,407	2,398	109,664,627	3,599	181,072,035
57	898	53,643,505	1,783	79,874,236	2,681	133,517,741
58	720	42,608,735	1,387	63,213,644	2,107	105,822,379
59	587	34,413,891	1,209	54,366,075	1,796	88,779,966
60	481	29,512,730	910	41,128,198	1,391	70,640,928

TABLE 1

THE NUMBER AND ANNUAL SALARIES
OF ACTIVE MEMBERS DISTRIBUTED BY
AGE AS OF JULY 1, 1999

	Male			Female		Totals		
Age	Number	Compensation	Number	Compensation	Number	Compensation		
61	400	24,395,125	710	32,261,816	1,110	56,656,942		
62	340	21,153,622	489	22,191,140	829	43,344,762		
63	259	16,458,146	385	17,032,157	644	33,490,303		
64	220	13,407,745	302	13,391,401	522	26,799,146		
65	157	9,791,409	190	8,518,944	347	18,310,352		
66	126	7,198,538	145	5,931,286	271	13,129,824		
67	100	5,620,022	117	4,973,994	217	10,594,017		
68	76	4,170,340	94	4,010,863	170	8,181,203		
69	69	4,172,261	60	2,185,329	129	6,357,590		
70	48	2,629,596	45	1,774,241	93	4,403,837		
71	45	2,199,802	39	1,519,167	84	3,718,969		
72	28	1,211,033	28	1,044,272	56	2,255,305		
73	19	529,746	15	425,792	34	955,538		
74	23	1,087,378	12	364,422	35	1,451,801		
75	15	398,417	11	392,082	26	790,499		
90			<u>l</u>	44,584	1_	44,584		
Total	53,022	\$ 2,483,691,838	117,832	\$ 4,557,210,563	170,854	\$ 7,040,902,401		

IN ADDITION TO THE ABOVE, THERE ARE THE FOLLOWING REHIRED ANNUITANTS:

NUMBER
ACCUMULATED CONTRIBUTIONS PLUS INTEREST

12,590 \$ 29,698,997

TABLE 2

THE NUMBER AND ANNUAL SALARIES
OF ACTIVE MEMBERS DISTRIBUTED BY
YEARS OF SERVICE AS OF JULY 1, 1999

Years of		Male		Female		Totals
Service	Number	Compensation	Number	Compensation	Number	Compensation
0	2,563	\$ 36,231,725	5,255	\$ 72,750,419	7,818	\$ 108,982,144
1	3,892	88,635,795	9,253	203,336,007	13,145	291,971,801
2	2,974	81,532,731	7,185	184,845,542	10,159	266,378,272
3	2,453	75,743,747	5,868	161,307,683	8,321	237,051,430
4	2,027	68,484,896	5,168	150,642,001	7,195	219,126,897
5	1,884	69,065,325	4,840	152,461,881	6,724	221,527,206
6	1,783	71,430,822	4,567	152,408,990	6,350	223,839,812
7	1,442	61,410,159	4,038	141,407,644	5,480	202,817,803
8	1,493	68,104,123	3,824	140,398,887	5,317	208,503,010
9	1,443	69,600,510	4,090	157,541,831	5,533	227,142,342
10	1,328	66,336,607	3,728	150,294,755	5,056	216,631,362
11	1,328	69,502,880	3,378	140,620,033	4,706	210,122,912
12	1,248	65,968,569	3,392	144,869,092	4,640	210,837,660
13	1,293	69,757,508	3,368	147,977,083	4,661	217,734,592
14	1,358	75,117,449	3,234	145,109,129	4,592	220,226,578
15	1,234	67,332,920	3,236	147,429,869	4,470	214,762,789
16	1,064	61,374,808	2,851	132,330,538	3,915	193,705,346
17	896	51,421,731	2,440	112,612,697	3,336	164,034,428
18	944	54,926,981	2,427	115,398,386	3,371	170,325,367
19	1,207	69,304,806	2,840	136,168,987	4,047	205,473,793
20	1,293	74,343,495	3,133	151,376,607	4,426	225,720,102
21	1,371	78,070,134	3,245	159,315,542	4,616	237,385,676
22	1,360	78,324,374	3,265	161,060,161	4,625	239,384,535
23	1,438	82,291,891	2,970	147,846,680	4,408	230,138,571
24	1,480	84,889,613	3,007	151,004,247	4,487	235,893,860
25	1,549	89,408,086	2,990	152,228,023	4,539	241,636,110
26	1,648	95,517,390	3,014	154,902,266	4,662	250,419,656
27	1,828	107,801,581	2,894	149,534,243	4,722	257,335,824
28	1,571	94,417,883	2,484	129,187,406	4,055	223,605,289
29	1,539	92,384,262	2,189	114,036,776	3,728	206,421,038
30	1,206	76,434,002	1,183	63,876,836	2,389	140,310,837
31	891	56,259,752	783	41,358,339	1,674	97,618,091
32	630	40,271,490	558	29,804,861	1,188	70,076,351
33	464	30,387,669	362	19,892,861	826	50,280,530
34	315	21,070,650	280	14,956,634	595	36,027,284
35	219	14,360,613	154	8,280,692	373	22,641,305
36	145	9,951,645	107	5,945,694	252	15,897,340
37	70	5,223,449	75	4,153,774	145	9,377,223
38	50	3,586,597	53	2,891,738	103	6,478,335
39	33	2,454,874	32	1,738,191	65	4,193,065

TABLE 2

THE NUMBER AND ANNUAL SALARIES
OF ACTIVE MEMBERS DISTRIBUTED BY
YEARS OF SERVICE AS OF JULY 1, 1999

Years of		Male Female		Female	Totals		
Service	Number	Compensation	Number	Compensation	Number	Compensation	
40	26	1,964,490	29	1,486,280	55	3,450,771	
41	17	1,254,648	16	1,031,866	33	2,286,514	
42	11	801,176	11	584,844	22	1,386,020	
43	5	376,473	6	337,151	11	713,624	
44	2	116,191	3	137,946	5	254,137	
45	3	165,961	1	46,409	4	212,370	
46	1	98,581	1	54,242	2	152,822	
47	1	54,624	2	85,330	3	139,954	
48	1	67,296			1	67,296	
49			2	98,887	2	98,887	
53	1	58,855			1	58,855	
60			1	44,584	1	44,584	
Total	53,022	\$ 2,483,691,838	117,832	\$ 4,557,210,563	170,854	\$ 7,040,902,401	

IN ADDITION TO THE ABOVE, THERE ARE

THE FOLLOWING REHIRED ANNUITANTS:

NUMBER ACCUMULATED CONTRIBUTIONS PLUS INTEREST

12,590 \$ 29,698,997

THE NUMBER OF INACTIVE MEMBERS ELIGIBLE FOR FUTURE ALLOWANCE DISTRIBUTED BY AGE AS OF JULY 1, 1999

TABLE 3

Age	Male	Female	Totals
27	1	10	11
28	1	31	32
29	5	77	`82
30	11	115	126
31	14	190	204
32	28	223	251
33	26	208	234
34	32	218	250
35	35	228	263
36	39	239	278
37	52	292	344
38	61	276	337
39	66	251	317
40	89	281	370
41	93	312	405
42	114	339	453
43	138	390	528
44	143	383	526
45 46	167 190	433 451	600 641
47	190	544	741
48	211	623	834
49	240	615	855
50	247	619	866
51	276	645	921
52	332	665	997
53	215	451	666
54	176	543	719
55	254	476	730
56	246	593	839
57	201	517	718
58	175	492	667
59	157	415	572
60	102	208	310
61	57	132	189
62	42	106	148
63	32	66	98
64	39	45	84
65	12	24	36
66	17	17	34
67	8	14	22
68	8	14	22
69	6	15	21

TABLE 3

THE NUMBER OF INACTIVE MEMBERS ELIGIBLE FOR FUTURE ALLOWANCE DISTRIBUTED BY AGE AS OF JULY 1, 1999

Age	Male	Female	Totals
70	2	17	19
71	3	5	8
72	2	2	. 4
73	5	5	-10
74	2	5	7
75	4	4	8
77		-1	I
78		1	1
79	1		1
81	1		1
82		i	1
85	1		1
87		1	1.
90		1	1
93		1	1
96		1	1
100		1	1
Total	4,576	12,832	17,408

TABLE 4

THE NUMBER OF INACTIVE MEMBERS ELIGIBLE FOR REFUNDS ONLY DISTRIBUTED BY AGE AS OF JULY 1, 1999

Age	Male	Female	Totals
UNKNOWN	516	5,787	6,303
20	12	16	28
21	37	87	124
22	83	309	392
23	180	481	661
24	276	739	1,015
25	384	876	1,260
26	452	1,177	1,629
27	579	1,416	1,995
28	671	1,749	2,420
29	813	1,828	2,641
30	827	1,812	2,639
31	805	1,847	2,652
32	844	1,707	2,551
33	951	1,617	2,568
34	958	1,642	2,600
35	1,056	1,556	2,612
36	1,079	1,553	2,632
37	996_	1,512	2,508
38	1,039	1,620	2,659
39	1,013	1,553	2,566
40	1,111	1,628	2,739
41	1,085	1,674	2,759
42	1,154	1,682	2,836
43	1,174	1,678	2,852
44	1,301	1,688	2,989
45	1,275	1,942	3,217
46	1,265	1,941	3,206
47	1,288	2,077	3,365
48	1,343	1,976	3,319
49	1,255	1,935	3,190
50	1,239	1,861	3,100
51	1,235	1,773	3,008
52	1,326	1,926	3,252
53	838	1,251	2,089
54	791	1,174	1,965
55	650	1,030	1,680
56	717	1,081	1,798
57	581	910	1,491
58	497	776	1,273
59	437	612	1,049
60	381	523	904
61	364	493	857

TABLE 4

THE NUMBER OF INACTIVE MEMBERS ELIGIBLE FOR REFUNDS ONLY DISTRIBUTED BY

AGE AS OF JULY 1, 1999

Age	Male	Female	Totals
62	316	403	719
63	269	284	553
64	212	251	• 463
65	200	213	413
66	183	183	366
67	155	148	303
68	135	157	292
69	143	143	286
70	101	97	198
71	96	74	170
72	82	99	181
73	64	75	139
74	57	70	127
75	60	44	104
Total	36,951	64,756	101,707

TABLE 5

#### SUPERANNUATION RETIREES

		Male	F	emale		Totals
Age	Number	Annuities	Number	Annuities	Number	Annuities
48	1	\$ 31,535	2	\$ 57,679	3	\$ 89,214
49	4	122,584	5	153,843	9	276,427
50	35	1,087,941	53	1,542,456	88	2,630,397
51	235	7,691,158	263	8,150,619	498	15,841,777
52	595	19,833,452	596	18,519,036	1,191	38,352,488
53	599	20,157,436	539	16,823,433	1,138	36,980,869
54	721	24,662,397	632	20,108,828	1,353	44,771,225
55	861	28,990,866	841	26,118,750	1,702	55,109,616
56	1,093	37,658,368	994	30,498,831	2,087	68,157,199
57	1,005	35,303,239	1,039	32,150,357	2,044	67,453,596
58	1,010	35,599,528	1,023	30,990,173	2,033	66,589,701
59	1,008	36,310,624	1,012	30,460,291	2,020	66,770,915
60	1,097	37,453,750	1,464	36,590,742	2,561	74,044,492
61	1,157	39,163,283	1,670	39,914,140	2,827	79,077,423
62	1,160	38,166,233	1,652	37,359,567	2,812	75,525,800
63	1,193	<del>38,971,824</del>	1,627	<del>36,502,662</del>	2,820	75,474,486
64	1,168	36,307,495	1,670	36,235,329	2,838	72,542,824
65	1,155	34,525,457	1,491	32,261,142	2,646	66,786,599
66	1,202	36,253,218	1,651	35,894,284	2,853	72,147,502
67	1,188	34,776,637	1,564	32,566,131	2,752	67,342,768
68	1,263	37,304,716	1,755	35,800,073	3,018	73,104,789
69	1,130	31,884,459	1,707	33,836,193	2,837	65,720,652
70	1,107	30,387,467	1,570	30,722,438	2,677	61,109,905
71	1,075	29,389,222	1,563	29,059,876	2,638	58,449,098
72	1,015	25,817,858	1,535	28,087,227	2,550	53,905,085
73	975	24,038,933	1,409	24,860,773	2,384	48,899,706
74	979	24,410,930	1,279	22,517,512	2,258	46,928,442
75	850	20,203,292	1,211	19,472,268	2,061	39,675,560
76	700	16,888,550	1,217	19,100,829	1,917	35,989,379
77	693	15,693,572	1,131	17,284,322	1,824	32,977,894
78	578	12,848,875	1,184	16,944,549	1,762	29,793,424
79	477	10,186,439	1,112	15,944,803	1,589	26,131,242
80	377	7,866,933	1,068	14,329,183	1,445	22,196,116
81	378	7,315,426	1,119	14,896,223	1,497	22,211,649
82	334	6,418,440	982	12,682,681	1,316	19,101,121
83	269	5,153,101	956	12,234,048	1,225	17,387,149
84	259	4,770,338	946	11,981,230	1,205	16,751,568
85	224	4,266,155	851	10,716,814	1,075	14,982,969
86	187	3,666,646	841	10,605,815	1,028	14,272,461
87	162	2,931,941	730	9,362,712	892	12,294,653

TABLE 5

#### SUPERANNUATION RETIREES

		Male	F	emale		Totals
Age	Number	Annuities	Number	Annuities -	Number	Annuities
88	124	\$ 2,359,720	722	\$ 8,849,646	846	\$ 11,209,366
89	119	2,371,505	651	8,612,848	770	10,984,353
90	114	2,079,935	581	7,251,173	695	9,331,108
91	80	1,579,344	515	6,504,781	595	8,084,125
92	67	1,194,351	432	5,273,866	499	6,468,217
93	40	585,609	377	4,566,945	417	5,152,554
94	29	575,068	287	3,635,567	316	4,210,635
95	26	344,026	220	2,622,717	246	2,966,743
96	18	336,736	138	1,602,404	156	1,939,140
97	14	266,964	117	1,348,030	131	1,614,994
98	8	127,058	73	778,866	81	905,924
99	3	42,721	43	458,654	46	501,375
100	4	99,351	18	223,017	22	322,368
101	1	15,033	20	203,814	21	218,847
102	1	6,623	9	123,331	10	129,954
103	2	33,842	8	92,597	10_	126,439
104	2	33,536	2	8,412	4	41,948
105			2	14,112	2	14,112
109			1	15,096	1	15,096
Total	30,171	\$876,561,740	48,170	\$945,523,738	78,341	\$1,822,085,478
SUMMARY						
NO OPTION	6,634	\$178,115,181	29,372	\$554,349,684	36,006	\$ 732,464,865
OPTION 1	14,028	397,384,061	6,588	123,567,847	20,616	520,951,908
OPTION 2	4,894	151,332,894	3,866	85,679,232	8,760	237,012,126
OPTION 3	3,389	112,895,895	6,245	139,991,631	9,634	252,887,526
OPTION 4	845	23,860,812	1,543	27,954,689	2,388	51,815,501
OPTION 5	7	75,201	38	448,639	45	523,840
OPTION 6	8	189,806	27	430,488	35	620,294
OPTION 7	3	49,962	29	446,139	32	496,101
PENDING	363	12,657,928	462	12,655,389	825	25,313,317

TABLE 6

#### DISABILITY RETIREES

		Male		Female		Totals
Age	Number	Annuities	Number	Annuities ·	Number	Annuities
30			3	\$ 58,891	3	\$ 58,891
31	]] .	!	3	70,676	3	70,676
32			4	96,679	4	96,679
33	1	\$ 17,126	6	131,408	7	148,534
34	1	32,996	5	99,097	6	132,093
35	3	56,812	10	206,836	13	263,648
36	6	177,258	12	274,443	18	451,701
37	5	109,634	6	127,742	11	237,376
38	3	73,131	17	407,899	20	481,030
39	4	112,033	15	372,080	19	484,113
40	5	124,340	19	456,473	24	580,813
41	6	161,693	19	464,446	25	626,139
42	6	159,479	30	701,258	36	860,737
43	14	405,869	35	955,149	49	1,361,018
44	12	343,733	49	1,248,049	61	1,591,782
45	22	622,078	59	1,460,900	81	2,082,978
46	26	729,280	71	1,788,957	97	2,518,237
47	41	1,201,052	92	2,316,949	133	3,518,001
48	48	1,454,612	120	3,081,339	168	4,535,951
49	56	1,638,622	127	3,310,525	183	4,949,147
50	88	2,698,969	135	3,650,064	223	6,349,033
51	92	2,852,247	133	3,613,470	225	6,465,717
52	121	3,784,289	162	4,242,858	283	8,027,147
53	90	2,852,130	125	3,174,646	215	6,026,776
54	105	3,324,448	131	3,470,376	236	6,794,824
55	86	2,571,807	133	3,368,236	219	5,940,043
56	109	3,140,084	163	4,178,381	272	7,318,465
57	82	2,345,937	142	3,472,063	224	5,818,000
58	89	2,670,900	122	2,944,877	211	5,615,777
59	79	2,436,926	124	2,761,196	203	5,198,122
60	79	2,143,469	125	2,853,772	204	4,997,241
61	71	1,849,072	140	3,110,619	211	4,959,691
62	73	2,015,030	108	2,208,158	181	4,223,188
63	81	2,168,882	109	2,340,344	190	4,509,226
64	79	1,918,472	117	2,421,031	196	4,339,503
65	76	1,940,930	88	1,714,549	164	3,655,479
66	59	1,414,203	70	1,430,090	129	2,844,293
67	62	1,657,098	99	1,806,651	161	3,463,749
68	78	1,918,123	81	1,357,477	159	3,275,600
69	55	1,251,401	77	1,201,172	132	2,452,573

TABLE 6

#### DISABILITY RETIREES

	Male				Fe	male		To	otals
Age	Number		Annuities	Number		Annuities ·	Number		Annuities
70	52	\$	1,140,748	73	\$	1,147,546	125	\$	2,288,294
71	61		1,378,507	72		1,146,331	133		2,524,838
72	52		1,047,335	94		1,510,277	146		2,557,612
73	44		950,728	67		972,932	111		1,923,660
74	45	Ì	927,779	69		903,450	114		1,831,229
75	35		762,358	60		826,380	95		1,588,738
76	25		531,310	52		725,207	77		1,256,517
77	21		387,176	70		906,678	91		1,293,854
78	22		351,263	52		682,327	74	ĺ	1,033,590
79	14		238,972	42		505,283	56		744,255
80	11		222,382	48		587,188	59	l	809,570
81	14		209,204	34		440,231	48		649,435
82	3		34,685	21		232,733	24	İ	267,418
83	4		83,738	23		222,870	27		306,608
84	4		51,394	19		184,587	23		235,981
85	3		54,324	9_		104,317	12		<del>158,641</del>
86				11		132,586	11		132,586
87	l			4		44,554	4		44,554
88	1		11,438	7		65,594	8		77,032
89				5		40,258	5		40,258
90				2		24,765	2		24,765
91				4		39,034	4		39,034
92				3		23,312	3		23,312
93				4		36,191	4		36,191
94				2		25,448	2		25,448
95				2		25,352	2		25,352
Total	2,324	\$	62,757,506	3,935	\$	84,505,257	6,259	\$	147,262,763

TABLE 7

#### CONTINGENT RETIREES

		Male		Female		Totals
Age	Number	Annuities	Number	Annuities `	Number	Annuities
16	1	\$ 632			1	\$ 632
18	1	10,148	1		1	10,148
21	1	32,137	ļ		I	32,137
22	2	77,234			2	77,234
23	1	798			1	798
27			1	\$ 17,544	1	17,544
28	1	15,141	2	35,150	3	50,291
29		,	2	38,068	2	38,068
30	2	5,297	2	6,925	4	12,222
32	2	24,507	3	40,087	5	64,594
34	1	26,725	1	12,853	2	39,578
35	2	4,517	3	53,191	5	57,708
36	2	48,680			2	48,680
37	2	23,739			2	23,739
38	3	40,952	3	47,995	6	88,947
39	2	7,698	3	79,346	5	87,044
40	2	38,652	4	70,779	6	109,431
41	2	45,741	4	76,005	6	121,746
42	1	987	4	91,505	5	92,492
43	4	58,077	4	27,867	8	85,944
44	3	64,095	8	105,764	11	169,859
45	2	14,732	8	146,994	10	161,726
46	5	76,477	5	73,172	10	149,649
47	2	10,800	4	41,244	6	52,044
48	4	40,486	13	229,774	17	270,260
49	2	23,093	7	90,721	9	113,814
50	3	47,343	6	84,008	9	131,351
51	2	4,391	15	200,725	17	205,116
52	[	·	14	207,058	14	207,058
53	5	28,535	11	220,558	16	249,093
54	5	74,958	22	452,083	27	527,041
55	5	99,513	25	398,599	30	498,112
56	3	12,378	26	684,651	29	697,029
57	4	53,714	23	510,849	27	564,563
58	4	68,556	28	542,027	32	610,583
59	5	71,829	39	793,226	44	865,055
60	7	99,162	53	1,269,506	60	1,368,668
61	4	38,137	40	977,116	44	1,015,253
62	10	139,728	63	1,302,508	73	1,442,236
63	3	55,694	60	1,380,077	63	1,435,771

TABLE 7

#### CONTINGENT RETIREES

		Male		Female		Totals
Age	Number	Annuities	Number	Annuities `	Number	Annuities
64	15	\$ 237,514	79	\$ 1,630,013	94	\$ 1,867,527
65	11	165,986	85	1,726,029	96	1,892,015
66	19	221,529	80	1,597,736	99	1,819,265
67	28	402,029	93	1,783,303	121	2,185,332
68	22	391,325	112	2,054,522	134	2,445,847
69	33	292,248	159	3,193,963	192	3,486,211
70	45	440,512	148	2,430,197	193	2,870,709
71	35	382,353	155	2,485,562	190	2,867,915
72	42	409,263	143	2,308,702	185	2,717,965
73	48	461,480	151	2,178,255	199	2,639,735
74	37	373,527	189	2,941,866	226	3,315,393
75	51	395,703	156	2,159,851	207	2,555,554
76	49	426,642	158	2,148,454	207	2,575,096
77	51	366,121	174	2,643,241	225	3,009,362
78	52	407,433	161	2,164,353	213	2,571,786
79	64	544,380	168-	<del>2,025,397</del>	232	<del>2,569,777</del>
80	62	376,502	159	2,067,391	221	2,443,893
18	67	546,429	175	1,985,167	242	2,531,596
82	63	383,099	149	1,641,096	212	2,024,195
83	49	294,831	166	1,838,275	215	2,133,106
84	70	480,770	158	1,709,570	228	2,190,340
85	46	300,430	134	1,446,764	180	1,747,194
86	39	286,410	131	1,403,928	170	1,690,338
87	37	256,536	133	1,376,479	170	1,633,015
88	35	230,350	130	1,273,544	165	1,503,894
89	30	218,186	112	1,034,681	142	1,252,867
90	24	163,210	98	998,149	122	1,161,359
91	22	201,865	88	841,496	110	1,043,361
92	15	88,533	72	703,382	87	791,915
93	13	78,714	61	521,487	74	600,201
94	11	69,936	50	453,298	61	523,234
95	8	61,392	34	320,612	42	382,004
96	8	39,070	21	180,760	29	219,830
97	1	5,226	16	148,499	17	153,725
98	1	6,089	9	76,259	10	82,348
99	1	5,720	10	123,696	11	129,416
100		İ	2	21,883	2	21,883
101	İ		2	14,034	2	14,034
102			3	27,352	3	27,352
103			2	15,043	2	15,043

#### TABLE 7

#### THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF BENEFICIARIES DISTRIBUTED BY AGE AS OF JULY 1, 1999

#### CONTINGENT RETIREES

		M	ale		Fe	male	Totals		
Age	Number		Annuities	Number Annuities		Number	Annuities		
105				1	\$	2,179	1	\$	2,179
106				1		8,962	1		8,962
Total	1,314	\$	11,496,626	4,634	\$	66,013,405	5,948	\$	77,510,031

TABLE 8

# BENEFICIARIES RECEIVING ALLOWANCES UNDER SURVIVORS' BENEFIT FUND

			Male		Female		Totals		
	Age	Number	Annuities	Number	Annuities	Number	Annuities		
1	2	3	\$ 13,633	1	\$ 6,666	4	\$ 20,299		
Ì	3	1	3,772	1	4,168	2	7,940		
	4	4	17,482	5	19,691	9	37,173		
ı	5	5	25,204	3	10,908	8	36,112		
I	6	6	22,841	3	15,866	9	38,707		
I	7	10	50,485	4	14,619	14	65,104		
I	8	13	65,747	8	39,906	21	105,653		
ł	9	13	84,431	16	76,327	29	160,758		
ı	10	14	94,445	18	100,344	32	194,789		
I	11	17	89,853	13	70,338	30	160,191		
ı	12	23	120,933	21	138,729	44	259,662		
ł	13	28	165,193	24	115,032	52	280,225		
1	14	24	133,612	25	148,640	49	282,252		
l	15	23	137,100	28	144,811	51	281,911		
1	16	31	179,684	38	201,538	69_	381,222		
ł	17	51	304,490	42	202,147	93	506,637		
l	18	54	315,144	47	286,066	101	601,210		
ı	19	45	262,577	53	330,368	98	592,945		
l	20	54	338,261	48	305,363	102	643,624		
I	21	42	174,715	42	239,911	84	414,626		
۱	22	<b>!</b>	·	1	438	1	438		
ı	23	3	12,149			3	12,149		
ĺ	24	1 1	5,993	1	5,755	2	11,748		
l	25	1	·	1	2,985	1	2,985		
ı	26	1	4,430	1	9,453	2	13,883		
ı	27	1 1	5,153	1	3,432	2	8,585		
	28		·	1	4,250	1	4,250		
ı	29	ı	5,295	2	11,611	3	16,906		
ı	30	1	5,619	3	44,516	4	50,135		
	31	1	4,189	2	31,336	3	35,525		
l	32	3	33,579	4	38,281	7	71,860		
l	33	4	23,394	3	23,259	7	46,653		
l	34	3	18,790	` 1	1,600	4	20,390		
ĺ	35	3	25,067	4	63,428	7	88,495		
	36	3	27,813	7	64,538	10	92,351		
	37	8	59,503	7	74,179	15	133,682		
I	38	1	3,838	7	60,627	8	64,465		
	39	3	27,671	و و	106,011	12	133,682		
l	40	9	81,852	6	65,730	15	147,582		

TABLE 8

# BENEFICIARIES RECEIVING ALLOWANCES UNDER SURVIVORS' BENEFIT FUND

ſ			Male		Female		Totals
1	Age	Number	Annuities	Number	Annuities	Number	Annuities
f	41	14	\$ 115,767	6	\$ 61,878	20	\$ 177,645
l	42	7	60,509	8	86,357	15	146,866
ı	43	10	69,382	7	68,722	17	138,104
İ	44	16	191,091	14	203,505	30	394,596
l	45	15	125,007	22	235,992	37	360,999
l	46	23	173,775	30	295,249	53	469,024
l	47	19	141,864	38	457,033	57	598,897
l	48	22	224,802	35	435,112	57	659,914
ı	49	29	257,369	37	469,386	66	726,755
١	50	20	189,288	42	531,255	62	720,543
۱	51	34	358,325	47	655,690	81	1,014,015
۱	52	51	443,516	72	1,144,991	123	1,588,507
۱	53	43	541,144	55	824,904	98	1,366,048
I	54	29	346,378	59	824,289	88	1,170,667
l	55	34	305,724	58	837,085	92	1,142,809
t	56	42	429,748	72	1,203,544	114	1,633,292
l	57	41	401,723	63	1,023,752	104	1,425,475
ļ	58	32	370,094	69	1,152,557	101	1,522,651
	59	40	507,490	43	683,810	83	1,191,300
l	60	39	368,155	71	1,061,581	110	1,429,736
l	61	46	504,974	86	1,184,882	132	1,689,856
l	62	36	403,608	71	986,276	107	1,389,884
l	63	31	351,329	80	1,189,877	111	1,541,206
l	64	42	481,857	68	1,163,548	110	1,645,405
l	65	38	483,415	71	1,087,365	109	1,570,780
I	66	43	501,340	68	798,087	111	1,299,427
l	67	39	405,616	79	1,089,195	118	1,494,811
l	68	48	484,675	83	1,105,838	131	1,590,513
l	69	48	577,106	90	1,213,483	138	1,790,589
I	70	42	386,082	86	1,241,729	128	1,627,811
l	71	57	616,606	95	1,276,787	152	1,893,393
l	72	50	453,296	99	1,198,007	149	1,651,303
I	73	49	487,107	91	1,016,918	140	1,504,025
١	74	47	391,830	75	888,520	122	1,280,350
I	75	40	366,484	68	793,916	108	1,160,400
۱	76	29	258,216	69	900,820	98	1,159,036
ı	77	34	256,145	79	941,927	113	1,198,072
	78	38	328,701	58	588,013	96	916,714
I	79	25	174,604	50	555,755	75	730,359
١	80	17	177,599	34	310,265	51	487,864

TABLE 8

# BENEFICIARIES RECEIVING ALLOWANCES UNDER SURVIVORS' BENEFIT FUND

		Male		Female	2		Totals
Age	Number	Annuities	Number	An	nuities	Number	Annuities
81	11	\$ 99,062	44	\$	441,400	55	\$ 540,462
82	14	119,994	37		428,935	51	548,929
83	20	144,318	40		304,692	60	449,010
84	25	180,651	35		330,988	60	511,639
85	8	54,552	33		308,757	41	363,309
86	9	68,601	35		356,360	44	424,961
87	9	85,462	29		296,801	38	382,263
88	7	45,915	27		196,483	34	242,398
89	4	23,993	28		302,571	32	326,564
90	9	63,317	24		222,653	33	285,970
91	1	9,975	21		165,859	22	175,834
92	1	5,364	11		89,887	12	95,251
93	2	7,136	15		123,899	17	131,035
94	1	3,512	8		63,073	9	66,585
95	5	48,081	7		52,987	12	101,068
96	1	2,358	4		43,939	5	46,297
97	2	10,654	3		24,852	5	35,506
98	1	17,567	1		3,796	2	21,363
101	1	5,516				1	5,516
Total	1,997	\$ 17,651,706	3,251	\$ 38	3,628,699	5,248	\$ 56,280,405