

George B. Buck Consulting Actuaries, Inc.  
Two Pennsylvania Plaza, New York, New York 10121  
Telephone 212 | 279 4400

March 5, 1984

Mr. Robert A. Slater  
Assistant Director-Finance & Control  
The State Teachers Retirement System  
of Ohio  
275 East Broad Street  
Columbus, Ohio 43215

BUCK  
CONSULTANTS

Dear Mr. Slater:

As requested in your letter of February 21, 1984 we have calculated the actuarial present value of benefits in accordance with NCGA Statement 6 for the State Teachers Retirement System. The relevant amounts as of July 1, 1983 are shown below:

Actuarial present value of projected benefits payable to current retirants and beneficiaries	\$ 4,386,537,409
Actuarial present value of projected benefits payable to terminated vested members	<u>458,912,361</u>
Total	<u>\$ 4,845,449,770</u>
Actuarial present value of credited projected benefits for active members:	
Member contributions	\$ 1,978,778,553
Employer financed portion	<u>4,708,453,523</u>
Total	<u>\$ 6,687,232,076</u>
Total Actuarial Present Value of Credited Projected Benefits	<u>\$11,532,681,846</u>

Our calculations are based on the data, actuarial assumptions and benefit provisions of the System used for the July 1, 1983 valuation. The actuarial present value of credited projected benefits for active members is the portion of the total projected benefits allocated to the accrued liability using the unit credit actuarial cost method. This differs from the accrued liability developed for funding requirement determinations because different actuarial cost methods are used for the two purposes.

Mr. Robert A. Slater  
March 5, 1984  
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If you have any questions concerning this information, please do not hesitate to contact us.

Sincerely yours,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

Thomas J. Cavanaugh, F.S.A.  
Consulting Actuary

TJC:AA

REPORT ON AN ACTUARIAL VALUATION OF THE  
STATE TEACHERS RETIREMENT SYSTEM OF OHIO  
PREPARED AS OF JULY 1, 1983

George B. Buck Consulting Actuaries, Inc.  
Two Pennsylvania Plaza, New York, New York 10121  
Telephone 212 | 279 4400

November 9, 1983

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

BUCK  
CONSULTANTS

Ladies and Gentlemen:

This report gives the results of an actuarial valuation of the assets and liabilities of the State Teachers Retirement System of Ohio as of July 1, 1983, prepared in accordance with Section 3307.20 of Chapter 3307 of the Ohio Revised Code. The valuation was based on the rates of separation recommended in the report on the experience investigation for the period 1975-1979, an interest rate of 7-1/2% and annual rates of salary increases adopted by the Board effective July 1, 1981.

It should be noted that the one year term cost for health care benefits is set equal to 2.00% of payroll and the Health Care Stabilization Fund has been set at \$107,500,000 as of July 1, 1983. All contributions will be credited to the Fund and the costs of health care will be charged to the Fund so as to eliminate the impact of fluctuating health care costs on valuation results. This is essentially Phase I of the Board's three-phase plan to reduce the unfunded accrued liability liquidation period to 40 years as of January 1, 1986.

Phase II in part called for increasing the employer and employee contribution rates from 13.50% and 8.50% to 14.00% and 8.75%, respectively, as of January 1, 1984. The valuation results indicate that, after reflecting the changes noted above, the unfunded accrued liability will be liquidated in approximately 44 years from July 1, 1983.

Another part of Phase II is the assumption that STRS will earn .29% above the valuation interest rate of 7.50% for the period July 1, 1983 to January 1, 1986. If this assumption is realized and all other actuarial assumptions do not produce a net actuarial loss, then the liquidation period as of January 1, 1986 will not exceed 40 years. Phase III of the plan calls for the employer or employee rate to be increased if the 40 year liquidation period is not achieved.

Respectfully submitted,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

(Signed) THOMAS J. CAVANAUGH

Thomas J. Cavanaugh, F.S.A.  
Consulting Actuary

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REPORT ON AN ACTUARIAL VALUATION OF THE  
STATE TEACHERS RETIREMENT SYSTEM OF OHIO  
PREPARED AS OF JULY 1, 1983

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. This report presents the results of an actuarial valuation of the State Teachers Retirement System of Ohio prepared as of July 1, 1983. For convenience of reference, the principal results of the valuation and, for comparison purposes, the preceding year's results are summarized below.

TABLE I  
SUMMARY OF PRINCIPAL RESULTS

<u>Valuation Date</u>	<u>7/1/83</u>	<u>7/1/82</u>
Active members included in valuation:		
Number	145,603	145,735
Annual salaries	\$ 3,033,025,509	\$ 2,884,405,114
Number of inactive members included in valuation:		
Eligible for pensions	14,604	14,930
Eligible for refunds only	57,617	58,438
Retirants and beneficiaries in receipt of benefits as of the valuation date:		
Number	54,040	52,289
Annual allowances	\$ 403,866,601	\$ 368,196,833
Assets (book value)	\$ 7,210,676,599	\$ 6,344,384,910
Normal Contribution Rate (excluding Health Care)	14.22%	14.22%
One year term cost of Health Care as % of payroll	2.00%	1.95%*
Unfunded Accrued Liability excluding Health Care	\$ 5,301,141,111	\$ 5,124,609,193
Liquidation Period (assumes 5% annual increase in payroll)	44 years	59 years

\*Based on estimated 1982-1983 salaries.

2. The valuation balance sheet showing the results of the valuation is given in Section III.
3. Comments on the valuation results are given in Section IV; the gain and loss analysis during the valuation year is given in Section V.
4. Schedule A of this report outlines the full set of actuarial assumptions and methods employed. Schedule B gives a summary of the benefit and contribution provisions of the system.
5. As noted in the body of the report, the valuation results reflect the impact of the Board's three-phase plan to reduce the unfunded accrued liability liquidation period to 40 years as of January 1, 1986.

SECTION II - MEMBERSHIP DATA

Data regarding the membership of the system for use as a basis for the valuation were furnished by the system's office. The following tables summarize the membership of the system as of July 1, 1983 upon which the valuation was based. Detailed tabulations of the data are given in Schedule C.

TABLE II  
THE NUMBER AND ANNUAL SALARIES OF ACTIVE  
MEMBERS AS OF JULY 1, 1983

GROUP	NUMBER	ANNUAL
Men	56,674	\$ 1,411,432,781
Women	88,929	1,621,592,728
Total	145,603	\$ 3,033,025,509

TABLE III  
THE NUMBER OF INACTIVE MEMBERS  
AS OF JULY 1, 1983

GROUP	ELIGIBLE FOR: ALLOWANCES	ELIGIBLE FOR REFUNDS ONLY
Men	4,101	16,906
Women	10,503	40,711
Total	14,604	57,617



TABLE IV

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF  
RETIRANTS AND BENEFICIARIES AS OF JULY 1, 1983

GROUP	NUMBER	ANNUAL ALLOWANCES AS OF JULY 1, 1983		
		Basic	Cost-of-Living Increases	Total
Superannuation retirants:				
Men	11,994	\$ 109,853,887	\$ 14,201,099	\$ 124,054,986
Women	33,504	188,667,515	32,275,531	220,943,046
Subtotal	45,498	\$ 298,521,402	\$ 46,476,630	\$ 344,998,032
Disability retirants:				
Men	1,174	\$ 12,277,962	\$ 1,248,731	\$ 13,526,693
Women	2,024	14,263,964	1,727,253	15,991,217
Subtotal	3,198	\$ 26,541,926	\$ 2,975,984	\$ 29,517,910
Beneficiaries receiving optional allowances:				
Men	475	\$ 1,859,395	\$ 374,578	\$ 2,233,973
Women	2,053	9,971,599	2,164,722	12,136,321
Subtotal	2,528	\$ 11,830,994	\$ 2,539,300	\$ 14,370,294
Total	51,224	\$ 336,894,322	\$ 51,991,914	\$ 388,886,236
Survivors' Benefit Fund beneficiaries:				
Men	536	\$ 2,246,082	\$ 287,496	\$ 2,533,578
Women	1,841	9,604,378	1,607,353	11,211,731
Orphans	439	1,072,211	162,845	1,235,056
Total	2,816	\$ 12,922,671	\$ 2,057,694	\$ 14,980,365
Grand Total	54,040	\$ 349,816,993	\$ 54,049,608	\$ 403,866,601

In addition 221 beneficiaries of deceased active members entitled to annual deferred allowances of \$518,356 were included in the valuation.

SECTION III - VALUATION BALANCE SHEET

The following valuation balance sheet shows the assets and liabilities of the retirement system as of July 1, 1983. The liability shown for the Health Care Stabilization Fund is equal to the \$107,500,000 reserves held for future health care claims as of the valuation date whereas the liabilities of the other funds (other than accrued expenses) are the actuarially determined present values.

TABLE V

VALUATION BALANCE SHEET SHOWING THE PRESENT AND  
PROSPECTIVE ASSETS AND LIABILITIES OF THE STATE TEACHERS  
RETIREMENT SYSTEM OF OHIO PREPARED AS OF JULY 1, 1983

TABLE V

VALUATION BALANCE SHEET SHOWING THE PRESENT AND  
 PROSPECTIVE ASSETS AND LIABILITIES OF THE  
 STATE TEACHERS RETIREMENT SYSTEM OF OHIO  
 PREPARED AS OF JULY 1, 1983

LIABILITIES		
Present value of benefits payable on account of present retirants and beneficiaries from the:		:
Annuity and Pension Reserve Fund	\$ 4,225,059,858	:
Survivors' Benefit Fund	161,477,551	:
Total liabilities for retirants and beneficiaries		: \$ <sup>✓</sup> 4,386,537,409 <sup>✓</sup>
Reserves held in the Health Care Stabilization Fund		: 107,500,000
Present value of benefits payable on account of active and inactive members from contributions to the Teachers' Savings Fund and Employers' Trust Fund:		:
Superannuation allowances	\$ 11,292,209,371	:
Disability allowances	751,426,840	:
Survivor benefits	442,245,864	:
Refunds	660,013,226	:
Retirement death benefits	5,259,744	:
Total liabilities for active and inactive members		: 13,151,155,045
Accrued Expenses		: 1,205,277
Total Liabilities		: \$ 17,646,397,731

SECTION IV - COMMENTS ON VALUATION

The valuation balance sheet gives the following information in regard to the funds of the system as of July 1, 1983.

Annuity and Pension Reserve Fund

The Annuity and Pension Reserve Fund is the fund from which is paid all retirement allowances for which reserves have been transferred from the Teachers' Savings Fund and the Employers' Trust Fund. The present assets credited to the fund as of July 1, 1983 amounted to \$4,377,030,104 and future state appropriations to finance House Bills 204 (1979) and 248 (1971) were equal to \$63,969,565. Therefore the present and future assets amounted to \$4,440,999,669. The liabilities of the fund were \$4,225,059,858 as of July 1, 1983. The difference between the assets and liabilities, or \$215,939,811, is the surplus in the fund as of July 1, 1983.

Survivors' Benefit Fund

The Survivors' Benefit Fund is the fund from which is paid the benefits to survivors of members who die in active service or after disability retirement. The present assets credited to the fund as of July 1, 1983 amounted to \$134,972,681 and future state appropriations to finance House Bills 204 (1979) and 248 (1971) amounted to \$1,729,064. Therefore, the total present and future assets were equal to \$136,701,745. The liabilities of the fund were \$161,477,551 as of July 1, 1983. The difference between the assets and liabilities, or \$24,775,806 is the deficiency in the fund as of the valuation date.

Health Care Stabilization Fund

The assets of the Health Care Stabilization Fund as of July 1, 1983 are set equal to \$107,500,000 in accordance with Phase I of the Board's three-phase plan. The one year term cost to provide health care is equivalent to 2.00% of payroll.

Teachers' Savings Fund and Employers' Trust Fund

The Teachers' Savings Fund is the fund to which members' contributions are credited and from which is paid all refunds of members' contributions upon withdrawal or upon death where no other survivor benefit is payable. Upon retirement a member's contributions are transferred from this fund to the Annuity and Pension Reserve Fund and upon death where a benefit is paid to a survivor, his contributions are transferred to the Survivors' Benefit Fund.

The Employers' Trust Fund is the fund to which the employers' contributions are credited. At retirement or death the reserves necessary to provide the benefits payable less the members' contributions are transferred from this fund to the Annuity and Pension Reserve Fund or the Survivors' Benefit Fund.

The present assets credited to the Teachers' Savings Fund and Employers' Trust Fund were \$1,978,778,553 and \$611,189,984, respectively, as of the valuation date. The present value of the liabilities for active and inactive members amount to \$13,151,155,045. If the present assets are subtracted from the liabilities there remain \$10,561,186,508 to be met by future contributions of members and employers. The present value of members' future contributions was \$3,115,358,460 as of the valuation date leaving \$7,445,828,048 to be met by future contributions of the employers. The normal rate payable

based upon the entry age of members with less than two years of service was calculated as of July 1, 1981 to be 14.22% of which 8.5% (8.75% effective January 1, 1984) of payroll is met by members' contributions and the remainder or 5.72% (5.47% effective January 1, 1984) of payroll is met by employers. A detailed breakdown of the normal contribution rate by liability category is presented below.

TABLE VI  
NORMAL CONTRIBUTION RATE

CATEGORY	: RATE AS : % OF : PAYROLL
Superannuation Allowances	: 10.91%
Disability Allowances	: 1.15
Survivor Benefits	: .57
Refunds	: 1.58
Retirement Death Benefits	: .01
TOTAL	: 14.22%

Future normal contributions by employers have a present value of \$1,953,522,932. If this amount is subtracted from \$7,445,828,048, the present value of future contributions by employers, there remains \$5,492,305,116 as the amount of unfunded accrued liability. From this must be subtracted the surplus of \$215,939,811 in the Annuity and Pension Reserve Fund, and to this must be added the deficit in the Survivors' Benefit Fund of \$24,775,806, resulting in a total unfunded accrued liability of \$5,301,141,111. Employers pay 13.50% (14.00% effective January 1, 1984) of payroll of which 5.72% (5.47% effective January 1, 1984) is payable toward the normal contribution and 2.00% is payable for health care, leaving 5.78% (6.53% effective January 1, 1984) of payroll available to liquidate the

unfunded accrued liability. Based upon an annual increase of 5% in payroll, the unfunded accrued liability would be liquidated in about 44 years.

The increases in contribution rate noted above, which are effective January 1, 1984, are part of Phase II of the Board's three-phase plan to reduce the liquidation period to 40 years as of January 1, 1986. Another part of Phase II is the assumption that STRS will earn .29% above the valuation interest rate of 7.50% for the period July 1, 1983 to January 1, 1986. If this assumption is realized and all other actuarial assumptions do not produce a net actuarial loss, then the liquidation period as of January 1, 1986 will not exceed 40 years.

#### SECTION V - GAIN AND LOSS ANALYSIS

On the basis of the assumptions used in the valuation of the system as of July 1, 1982, the unfunded accrued liability, excluding the liability for health care, as of July 1, 1983 was about \$39 million less than expected.

Interest earnings on the book value of the assets were at a rate of 10.31%. On the basis of an interest assumption of 7-1/2%, which was the rate used in the valuation as of July 1, 1982, the approximate excess earnings were about \$181 million of which approximately \$20 million will be paid out to retirants and beneficiaries in December, 1983, leaving a net gain of \$161 million.

Mortality and termination experience among retirants and beneficiaries resulted in a gain of approximately \$17 million.



Salary increases to active members were in excess of those expected and increased the unfunded accrued liability by about \$137 million.

There were more retirants on account of both service and disability and fewer withdrawals and deaths which resulted in losses to the system of about \$138 million.

There was a gain of about \$48 million from new entrants. In addition the amount of present assets assigned to the Health Care Stabilization Fund was decreased by about \$87 million which accounts for the remainder of the decrease in unfunded accrued liability. While not technically an actuarial gain, this amount is presented here to complete the discussion regarding the change in the unfunded accrued liability.

The above analysis may be summarized as follows:

	<u>In Thousands</u>
Items that increased the unfunded accrued liability:	
Salary increases above those expected	\$ 136,972
Separation experience	<u>137,971</u>
Total increases	\$ 274,943
Items that decreased the unfunded accrued liability:	
Excess investment earnings	\$ 161,360
Experience among retirants and beneficiaries	17,230
Reduction in assets assigned to the Health Care Stabilization Fund	86,924
New entrants	<u>48,242</u>
Total decreases	<u>\$ 313,756</u>
Net decrease	\$ 38,813

SCHEDULE A

## STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

INTEREST RATE: 7-1/2% per annum, compounded annually.

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed rates of separation and annual rates of salary increase are as follows:

AGE	<u>ANNUAL RATES OF</u>					<u>ANNUAL RATES OF SALARY INCREASE</u>	
	<u>Withdrawal</u>	<u>Death</u>	<u>Disability</u>	<u>Superannuation</u>			
				<u>30 years service</u>	<u>25-29 years service</u>		<u>Under 25 years service</u>
<u>MEN</u>							
20	.0716	.0005	-	-	-	.1050	
30	.0646	.0006	.0003	-	-	.0850	
40	.0311	.0018	.0008	-	-	.0650	
50	.0158	.0067	.0048	.2000	-	.0530	
55	.0148	.0077	.0069	.2000	.0550	.0500	
60	.0148	.0086	-	.2000	.0550	.2000	
65	.0148	.0134	-	.3000	.2000	.3000	
70	-	.0202	-	.2000	.2000	.2000	
<u>WOMEN</u>							
20	.0566	.0005	-	-	-	.1050	
30	.0630	.0005	.0004	-	-	.0850	
40	.0261	.0015	.0010	-	-	.0650	
50	.0157	.0034	.0042	.1400	-	.0530	
55	.0133	.0038	.0061	.1600	.0720	.0500	
60	.0123	.0043	-	.2700	.1750	.1400	
65	.0123	.0059	-	.3000	.2000	.3000	
70	-	.0097	-	.2000	.2000	.2000	

DEATH AFTER RETIREMENT: According to the 1955 American Annuity Table with ages set back two years for men and seven years for women. Special mortality tables are used for the period after disability retirement.

VALUATION 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: Cost value.

SCHEDULE B

## SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

Eligibility for membership                    Immediate

## Service Retirement

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

Benefits    Greater of 2% of average annual salary for the three highest paid years or \$86, multiplied by years of service credit and adjusted by the following percentage:

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

Maximum benefit - 90% of average annual salary for three highest paid years.

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

## Optional Forms of Benefit

Option 1 - 100% joint and survivorship. If the beneficiary dies before the member or if the beneficiary is the spouse and the marriage is terminated the member will receive the benefit before optional modification.

Option 2 - A joint and survivorship annuity payable during the lifetime of the member, with the designated beneficiary to receive a lesser annuity if living at the death of the member. If the beneficiary dies before the member or if beneficiary is the spouse and marriage is terminated the member will receive the benefit without optional modification.

Option 3 - A life annuity payable during the lifetime of the member, with a guarantee that at least an elected number of monthly payments will be paid in any event.

Option 4 - Any other benefit arrangement approved by the Board and certified by the actuary to be an actuarially equivalent benefit.

#### Disability Retirement

##### Eligibility

Completion of 5 or more years of service, under age 60 and permanently incapacitated for the performance of duty.

##### Benefits

- (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.

#### Death after Retirement

Lump sum payment of \$500 upon death after service or disability retirement.

#### Survivor's Benefit

##### Eligibility

Upon death after at least 1-1/2 years of credit for Ohio service with at least 1/4 year of such service in the 2-1/2 years preceding death or upon death of a disability retiree.

##### Benefits

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

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

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

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

#### Refund of Contributions

A member's contributions 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 accumulated contributions at retirement less payments made are returned to the designated beneficiary.

#### Cost-of-living Benefits

The basic benefit is increased by 3% each year provided the change in Consumer Price Index equals or exceeds 3%.

#### Health Care

Retirants, their spouses and dependent children are covered by comprehensive medical expense health care plan.

#### Contribution

##### By Members

8.5% of salary (8.75% effective January 1, 1984).

##### By Employers

13.50% of salaries of their employees who are members (14.00% effective January 1, 1984).

SCHEDULE C

TABLE 1

THE NUMBER AND ANNUAL SALARIES  
OF ACTIVE MEMBERS DISTRIBUTED BY  
AGE AS OF JULY 1, 1983

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
19			2\$	1,332
20	1\$	800		
21	3	9,053	4	31,506
22	17	98,619	78	355,921
23	175	1,522,478	757	6,095,327
24	377	3,908,235	1,300	12,354,385
25	597	7,162,678	1,679	19,330,284
26	798	10,784,028	2,083	26,149,282
27	918	13,507,391	2,247	30,492,629
28	1,030	15,843,642	2,587	36,849,214
29	1,163	19,344,114	2,682	39,547,805
30	1,392	24,392,815	2,854	43,850,266
31	1,750	32,300,165	3,437	55,009,935
32	1,994	38,948,960	3,614	60,672,065
33	2,097	43,418,583	3,725	63,603,562
34	2,448	52,380,406	3,828	65,972,922
35	2,462	55,151,928	3,700	66,273,320
36	3,070	72,535,904	4,044	73,614,374
37	2,605	63,599,911	3,386	61,868,091
38	2,106	52,940,387	2,764	50,027,610
39	2,063	53,123,835	2,663	49,131,595
40	2,222	57,972,894	2,951	54,865,886
41	2,154	57,418,497	2,924	54,672,787
42	1,897	51,358,827	2,566	48,844,852
43	1,709	47,215,889	2,285	43,815,770
44	1,618	45,331,424	2,152	42,244,393
45	1,577	45,344,287	2,242	44,725,583
46	1,447	41,455,279	2,128	42,531,629
47	1,481	41,899,255	2,020	41,672,647
48	1,397	41,287,392	1,820	37,737,507
49	1,367	39,621,603	1,783	37,500,618
50	1,279	37,611,454	1,551	32,712,900
51	1,319	39,093,438	1,625	34,976,646
52	1,303	39,521,327	1,677	36,618,873
53	1,233	37,323,705	1,685	36,732,713
54	1,097	33,044,909	1,521	33,492,781
55	976	29,508,984	1,451	31,854,919

TABLE 1

THE NUMBER AND ANNUAL SALARIES  
OF ACTIVE MEMBERS DISTRIBUTED BY  
AGE AS OF JULY 1, 1983

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	892	\$ 26,788,752	1,401	\$ 30,872,952
57	790	23,475,356	1,248	27,700,063
58	735	22,163,866	1,190	26,578,811
59	660	20,198,570	1,010	22,661,619
60	555	16,620,245	894	20,120,009
61	428	12,488,682	764	17,706,746
62	415	12,092,196	657	15,009,832
63	307	9,449,898	511	11,759,787
64	193	5,992,072	391	9,103,595
65	182	5,521,292	349	8,052,813
66	120	3,716,243	237	5,434,503
67	64	1,658,971	146	3,425,221
68	70	2,185,163	125	2,949,944
69	43	1,134,232	82	1,804,744
70	42	1,261,842	58	1,374,779
71	18	365,141	20	419,222
72	6	134,286	13	174,935
73	3	30,335	4	58,590
74	4	103,179	1	13,612
75	1	2,425	5	55,573
76	1	3,563	4	44,931
77	1	27,613	2	7,939
79	1	30,786	2	30,579
80	1	4,977		
TOTAL	56,674	\$1,411,432,781	88,929	\$1,621,592,728



TABLE 2

THE NUMBER AND ANNUAL SALARIES  
OF ACTIVE MEMBERS DISTRIBUTED BY  
YEARS OF SERVICE AS OF JULY 1, 1983

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	650\$	2,121,989	1,436\$	3,926,507
1	2,667	31,918,991	5,328	43,048,444
2	2,140	36,369,455	4,475	48,757,165
3	2,231	42,594,828	4,942	64,219,773
4	2,175	44,511,598	5,119	73,793,920
5	2,275	48,651,685	5,267	81,600,721
6	2,048	44,372,900	4,888	78,360,093
7	1,998	43,837,541	4,415	73,720,955
8	2,092	47,239,440	4,311	74,989,631
9	2,162	49,479,803	4,402	80,611,293
10	2,310	55,005,026	4,776	91,252,408
11	2,678	66,317,659	4,357	88,431,862
12	2,275	58,225,029	3,684	77,925,051
13	2,320	61,893,955	3,655	80,518,913
14	2,817	76,561,717	3,604	81,476,806
15	2,544	70,197,662	3,075	70,646,195
16	2,369	67,322,441	2,767	63,826,237
17	2,107	59,845,811	2,456	57,441,666
18	1,827	53,167,451	2,147	50,568,572
19	1,667	48,400,266	1,845	43,736,238
20	1,553	44,818,910	1,654	39,125,167
21	1,378	40,062,665	1,523	36,589,776
22	1,272	37,370,685	1,356	32,799,888
23	1,199	35,890,234	1,173	28,288,507
24	1,172	34,575,049	1,069	26,348,258
25	1,058	31,640,262	953	22,998,727
26	953	29,392,456	838	20,742,486
27	794	24,535,884	722	17,797,025
28	678	20,854,054	589	14,623,528
29	598	18,619,655	477	12,164,561
30	512	15,668,070	431	10,916,277
31	433	13,596,526	273	6,959,876
32	350	11,184,990	234	5,779,812
33	335	10,605,725	153	3,918,631
34	255	8,316,672	123	3,111,864
35	207	6,837,201	101	2,585,102

TABLE 2

THE NUMBER AND ANNUAL SALARIES  
OF ACTIVE MEMBERS DISTRIBUTED BY  
YEARS OF SERVICE AS OF JULY 1, 1983

## CONTINUED

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	195	\$ 6,396,347	59	\$ 1,482,399
37	144	4,893,995	58	1,445,723
38	85	2,801,216	41	1,048,101
39	53	1,833,715	31	798,395
40	37	1,328,880	39	1,059,257
41	27	993,452	24	640,939
42	14	512,144	19	489,561
43	8	318,070	10	237,384
44	5	158,448	13	370,065
45	1	29,101	5	123,780
46	3	72,091	3	71,238
47	1	26,037	2	53,624
48	1	21,410	2	53,281
49	1	43,590	3	71,802
50			1	29,244
55			1	16,000
TOTAL	56,674	\$1,411,432,781	88,929	\$1,621,592,728

TABLE 3  
 THE NUMBER OF INACTIVE MEMBERS ELIGIBLE FOR  
 FUTURE ALLOWANCES DISTRIBUTED BY  
 AGE AS OF JULY 1, 1983

AGE	MEN	WOMEN
27		2
28	6	48
29	19	163
30	30	247
31	59	348
32	72	480
33	83	517
34	100	545
35	123	551
36	152	556
37	146	453
38	122	369
39	145	346
40	163	391
41	139	356
42	130	349
43	115	289
44	129	295
45	151	274
46	140	291
47	140	243
48	138	262
49	149	225
50	141	201
51	147	243
52	156	242
53	178	261
54	159	247
55	141	249

TABLE 3

THE NUMBER OF INACTIVE MEMBERS ELIGIBLE FOR  
 FUTURE ALLOWANCES DISTRIBUTED BY  
 AGE AS OF JULY 1, 1983

CONTINUED

AGE	MEN	WOMEN
56	137	261
57	130	257
58	135	236
59	104	259
60	82	203
61	36	64
62	32	61
63	21	19
64	9	22
65	9	20
66	11	10
67	6	14
68	1	6
69	5	3
70	2	3
71	3	1
72		7
73	1	4
75	2	3
76	1	1
77		1
79		1
80 and over	1	4
TOTAL	4,101	10,503

TABLE 4  
 THE NUMBER OF INACTIVE MEMBERS ELIGIBLE FOR  
 REFUNDS ONLY DISTRIBUTED BY  
 AGE AS OF JULY 1, 1983

AGE	MEN	WOMEN
19		1
20	1	6
21	8	8
22	37	147
23	116	424
24	219	747
25	284	1,001
26	435	1,217
27	492	1,240
28	541	1,274
29	632	1,504
30	616	1,644
31	711	1,898
32	739	1,860
33	787	1,828
34	805	1,902
35	861	1,889
36	912	2,185
37	708	1,896
38	593	1,489
39	557	1,437
40	531	1,495
41	489	1,404
42	424	1,136
43	349	1,022
44	321	841
45	306	750
46	282	749
47	282	679
48	286	608
49	245	595
50	206	471
51	242	479
52	197	459
53	242	461
54	198	411
55	207	396

THE NUMBER OF INACTIVE MEMBERS ELIGIBLE FOR  
REFUNDS ONLY DISTRIBUTED BY  
AGE AS OF JULY 1, 1983

## CONTINUED

AGE	MEN	WOMEN
56	188	348
57	176	331
58	176	294
59	176	269
60	177	225
61	157	195
62	133	196
63	134	188
64	104	148
65	86	128
66	83	98
67	68	92
68	69	89
69	56	81
70	49	48
71	33	55
72	23	37
73	23	52
74	17	43
75	22	30
76	21	26
77	8	24
78	13	26
79	5	23
80 and over	48	112
TOTAL	16,906	40,711

TABLE 5  
 THE NUMBER AND ANNUAL RETIREMENT  
 ALLOWANCES OF BENEFICIARIES  
 DISTRIBUTED BY AGE AS OF JULY 1, 1983

AGE	MEN		WOMEN	
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
49	2	\$ 37,329	1	\$ 16,345
50	3	38,838	1	14,764
51	5	85,152	6	77,218
52	25	405,023	17	206,046
53	68	1,070,596	54	701,429
54	128	1,945,453	68	895,842
55	186	2,856,790	93	1,132,381
56	288	4,106,567	141	1,651,757
57	307	4,409,155	153	1,676,143
58	396	5,614,811	181	1,933,360
59	375	5,174,134	195	2,148,876
60	399	5,205,076	341	3,019,822
61	478	5,893,253	580	4,286,482
62	481	5,734,534	795	5,697,045
63	490	5,582,165	913	6,543,836
64	393	4,365,638	957	6,766,528
65	474	4,983,500	1,172	8,526,387
66	496	5,066,590	1,247	8,695,924
67	447	4,613,219	1,283	9,064,935
68	494	5,029,899	1,294	9,215,032
69	484	4,752,167	1,352	9,459,974
70	464	4,693,975	1,397	9,303,935
71	442	4,236,907	1,552	10,219,242
72	436	3,977,916	1,405	9,015,513
73	410	3,738,396	1,530	10,052,974
74	426	3,806,979	1,523	9,667,423
75	432	3,719,422	1,688	10,378,437
76	425	3,482,669	1,550	9,669,055
77	375	3,101,383	1,501	9,016,537
78	369	2,883,507	1,565	9,391,041
79	287	2,182,741	1,338	7,874,575
80	265	2,094,505	1,280	7,459,332
81	219	1,637,725	1,059	5,949,496
82	207	1,616,018	928	5,339,787
83	149	1,088,189	743	4,388,579
84	127	914,301	617	3,556,449
85	114	870,917	566	3,339,649

TABLE 5

THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF BENEFICIARIES  
DISTRIBUTED BY AGE AS OF JULY 1, 1983

## SUPERANNUATION RETIRANTS

MEN

WOMEN

CONTINUED

AGE	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
86	89	\$ 664,298	477	\$ 2,936,963
87	55	403,134	445	2,681,697
88	76	517,557	343	2,042,025
89	48	356,972	261	1,610,970
90	28	213,883	226	1,350,202
91	37	272,088	201	1,202,614
92	36	240,399	131	808,814
93	26	175,147	91	522,465
94	10	65,694	75	466,900
95	6	34,240	54	306,490
96	6	38,074	45	261,811
97	5	32,510	27	154,654
98	3	14,024	17	107,007
99			11	62,302
100	1	3,102	7	39,460
101	1	5,710	3	16,556
102	1	2,715	1	4,280
103			2	11,399
104			1	4,287
TOTAL	11,994	\$124,054,986	33,504	\$220,943,046

## SUMMARY

NO OPTION	3,406	\$ 28,424,857	26,548	\$172,565,508
OPTION 1	3,797	38,704,173	2,959	17,655,354
OPTION 2	4,359	52,268,893	3,148	24,757,995
OPTION 3	432	4,657,063	849	5,964,189



TABLE 6

THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF BENEFICIARIES  
DISTRIBUTED BY AGE AS OF JULY 1, 1983

## DISABILITY RETIRANTS

AGE	MEN		WOMEN	
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
28	1	\$ 10,580		
29			3	\$ 29,466
30			6	56,929
31	2	19,068	10	99,633
32	2	15,468	7	87,763
33	6	66,363	9	80,690
34	6	59,467	21	200,721
35	10	102,774	16	163,073
36	5	52,891	24	243,663
37	8	83,275	14	135,712
38	9	116,710	20	216,360
39	12	157,872	16	149,933
40	14	135,095	26	237,760
41	13	185,025	28	307,896
42	12	145,594	22	212,141
43	15	196,209	24	226,951
44	14	204,453	35	382,430
45	20	243,936	35	375,271
46	15	209,331	29	281,938
47	20	274,419	19	199,670
48	17	194,574	35	355,728
49	22	297,737	43	446,757
50	28	323,018	33	351,027
51	42	522,542	40	401,912
52	37	521,529	51	500,439
53	41	567,573	45	443,615
54	51	644,648	55	447,258
55	53	687,407	67	668,684
56	52	669,147	87	779,893
57	70	864,118	73	625,598
58	82	1,078,132	80	685,094
59	62	771,685	71	563,007
60	58	726,462	95	732,082
61	69	765,125	96	724,213
62	70	711,882	87	679,572
63	32	349,767	83	609,274
64	39	406,817	77	524,898
65	28	264,079	85	540,929
66	28	216,575	49	273,920
67	20	123,868	57	330,918
68	17	102,069	56	297,628
69	12	109,976	30	152,510
70	4	34,286	43	211,376

TABLE 6

THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF BENEFICIARIES  
DISTRIBUTED BY AGE AS OF JULY 1, 1983

## DISABILITY RETIRANTS

MEN

WOMEN

CONTINUED

AGE	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
71	4	\$ 27,155	29	\$ 154,578
72	6	35,420	21	95,383
73	3	10,586	24	114,316
74	6	37,827	16	82,333
75	1	9,409	12	51,893
76	7	45,197	22	85,297
77	3	12,193	18	63,117
78	3	9,787	16	65,681
79	4	18,902	11	45,272
80	5	21,058	13	60,191
81	5	23,961	9	34,889
82	4	24,404	7	24,463
83			3	9,957
84			6	23,879
85			4	13,258
86	1	3,177	5	12,128
87	1	5,704		
88	1	3,213	2	8,434
89			1	4,645
90			1	2,343
91	1	4,162	1	2,714
92	1	2,992	1	2,114
TOTAL	1,174	\$ 13,526,693	2,024	\$ 15,991,217

TABLE 7

THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF BENEFICIARIES  
DISTRIBUTED BY AGE AS OF JULY 1, 1983

## BENEFICIARIES RECEIVING OPTIONAL ALLOWANCES

AGE	MEN		WOMEN	
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
29	1	\$ 5,816	1	\$ 2,515
31	2	9,677		
34			1	2,874
35			2	10,664
36	2	6,852	1	2,072
37	2	4,506		
38			1	7,139
39	2	8,994		
40			1	2,832
41			1	7,213
42	1	5,666		
43	1	5,200	3	15,518
44			1	10,642
45			1	5,581
46	1	4,188	2	16,261
47	1	5,567	1	3,810
49			1	7,578
50			2	16,081
51	1	5,577	2	13,455
52			5	24,624
53			5	41,164
54			5	20,547
55	1	9,640	10	62,182
56	3	10,780	4	23,782
57			11	72,758
58	1	10,915	13	86,576
59	1	3,061	14	121,067
60			11	66,423
61	1	9,201	18	128,165
62	4	18,616	15	99,442
63	7	33,096	26	149,703
64	7	30,191	30	196,148
65	13	70,677	36	221,381
66	12	72,114	42	271,892
67	18	89,798	46	333,736
68	17	70,243	56	359,515
69	19	78,414	56	311,263
70	19	111,272	76	474,156

THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF BENEFICIARIES  
DISTRIBUTED BY AGE AS OF JULY 1, 1983

BENEFICIARIES RECEIVING OPTIONAL ALLOWANCES

MEN

WOMEN

CONTINUED

AGE	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
71	19	\$ 110,267	79	\$ 444,627
72	20	97,756	66	378,937
73	24	114,270	88	498,053
74	16	60,743	93	533,849
75	24	106,204	98	562,375
76	31	154,586	97	560,058
77	25	110,894	89	505,372
78	31	121,016	104	592,680
79	12	44,231	91	558,062
80	16	79,205	95	551,607
81	19	85,814	84	478,400
82	14	63,516	78	453,061
83	20	92,250	68	416,396
84	10	38,826	65	392,164
85	17	95,361	59	364,051
86	6	24,112	49	290,262
87	8	36,439	48	275,186
88	8	34,188	34	188,139
89	5	26,121	38	190,700
90	3	14,856	31	177,138
91	3	13,380	18	112,744
92	2	4,940	26	138,199
93	3	14,688	14	78,479
94	1	5,572	15	68,292
95			10	50,785
96			6	34,533
97			4	18,770
98	1	4,677	3	17,143
99			1	5,721
100			1	6,062
101			1	5,717
TOTAL	475	\$ 2,233,973	2,053	\$ 12,136,321

TABLE 8

THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF BENEFICIARIES  
DISTRIBUTED BY AGE AS OF JULY 1, 1983

BENEFICIARIES RECEIVING ALLOWANCES  
UNDER SURVIVORS BENEFIT FUND

AGE	MEN		WOMEN	
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
22			1	\$ 4,656
25			1	5,547
28	2	\$ 10,894	1	5,237
30	2	11,167	2	17,970
31	1	5,035	5	39,454
32	1	6,740	4	26,786
33	2	9,660	4	29,310
34	1	5,661	4	26,969
35			5	38,793
36	3	23,302	9	63,843
37	1	6,389	11	92,880
38	2	10,065	9	79,700
39	1	3,318	6	40,585
40	5	32,799	14	142,127
41	3	23,304	10	99,263
42	5	30,744	7	69,343
43	2	12,183	11	126,715
44	3	25,344	17	180,023
45	5	23,432	19	206,622
46	4	22,293	15	166,168
47	2	20,744	25	248,235
48	4	23,596	15	122,807
49	2	17,417	14	136,853
50	4	24,084	10	74,322
51	6	36,651	34	274,591
52	5	28,100	32	238,553
53	4	17,683	31	246,433
54	12	58,990	47	355,329
55	8	55,206	42	279,915
56	13	67,025	50	411,466
57	10	42,057	45	312,221
58	12	58,359	39	252,856
59	19	99,957	42	308,345
60	7	28,457	48	306,699
61	19	110,446	51	365,773
62	15	74,557	50	310,916
63	18	76,409	51	326,741
64	23	112,623	38	205,654
65	13	72,768	45	245,351

TABLE 8

THE NUMBER AND ANNUAL RETIREMENT  
ALLOWANCES OF BENEFICIARIES  
DISTRIBUTED BY AGE AS OF JULY 1, 1983

BENEFICIARIES RECEIVING ALLOWANCES  
UNDER SURVIVORS BENEFIT FUND

MEN

WOMEN

CONTINUED

AGE	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE
66	23 \$	103,164	58 \$	301,844
67	21	91,482	43	195,939
68	30	127,031	56	257,764
69	19	88,200	53	267,913
70	19	79,059	55	271,823
71	25	92,854	49	238,123
72	20	81,288	61	256,891
73	22	76,896	54	253,366
74	9	47,264	53	259,816
75	17	78,981	73	345,657
76	14	58,028	60	270,407
77	19	70,681	48	215,314
78	11	36,099	39	178,920
79	12	50,747	43	232,989
80	8	41,693	44	215,983
81	7	29,278	32	171,139
82	4	28,519	30	164,221
83	3	9,143	24	112,333
84	3	11,164	22	112,240
85	5	17,807	16	99,491
86	1	5,597	12	65,103
87	3	12,822	12	59,275
88	1	5,494	9	38,615
89			6	34,498
90	1	2,828	9	48,641
91			6	16,717
92			3	15,068
93			1	4,940
94			3	10,611
96			1	3,544
97			1	1,894
98			1	5,601
TOTAL	536 \$	2,533,578	1,841 \$	11,211,731

TABLE 9  
 THE DISTRIBUTION OF THE NUMBER AND ANNUAL ALLOWANCES BY AGE AS OF JULY 1, 1983  
 CHILDREN WITHOUT AN ELIGIBLE PARENT

AGE OF YOUNGEST CHILD	NUMBER OF CHILDREN AGE																						TOTAL	ANNUAL ALLOWANCES
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22 AND OVER				
3	3																					3	\$ 10,129	
4		0																				0	0	
5			3					1														4	11,718	
6				7		1	1	2	2													15	38,672	
7					4	5	1	1	1													8	13,376	
8							4															12	34,692	
9								10														10	22,678	
10									10													17	49,331	
11										10												19	55,577	
12											2											43	134,374	
13												3										26	78,578	
14												4										46	105,807	
15												25										38	88,330	
16													21									28	72,777	
17														17								33	97,796	
18															22							31	83,886	
19																23						44	126,415	
20																	34					28	93,649	
21																		24				18	69,703	
22 & OVER																						16	47,568	
TOTAL	3	0	3	7	7	5	6	5	14	14	29	38	30	29	44	38	48	44	34	25	16	439	\$1,235,056	