

**TEACHERS'
RETIREMENT
SYSTEM
OF
OKLAHOMA**

**FORTY-
SEVENTH
ANNUAL
REPORT**

June 30, 1990

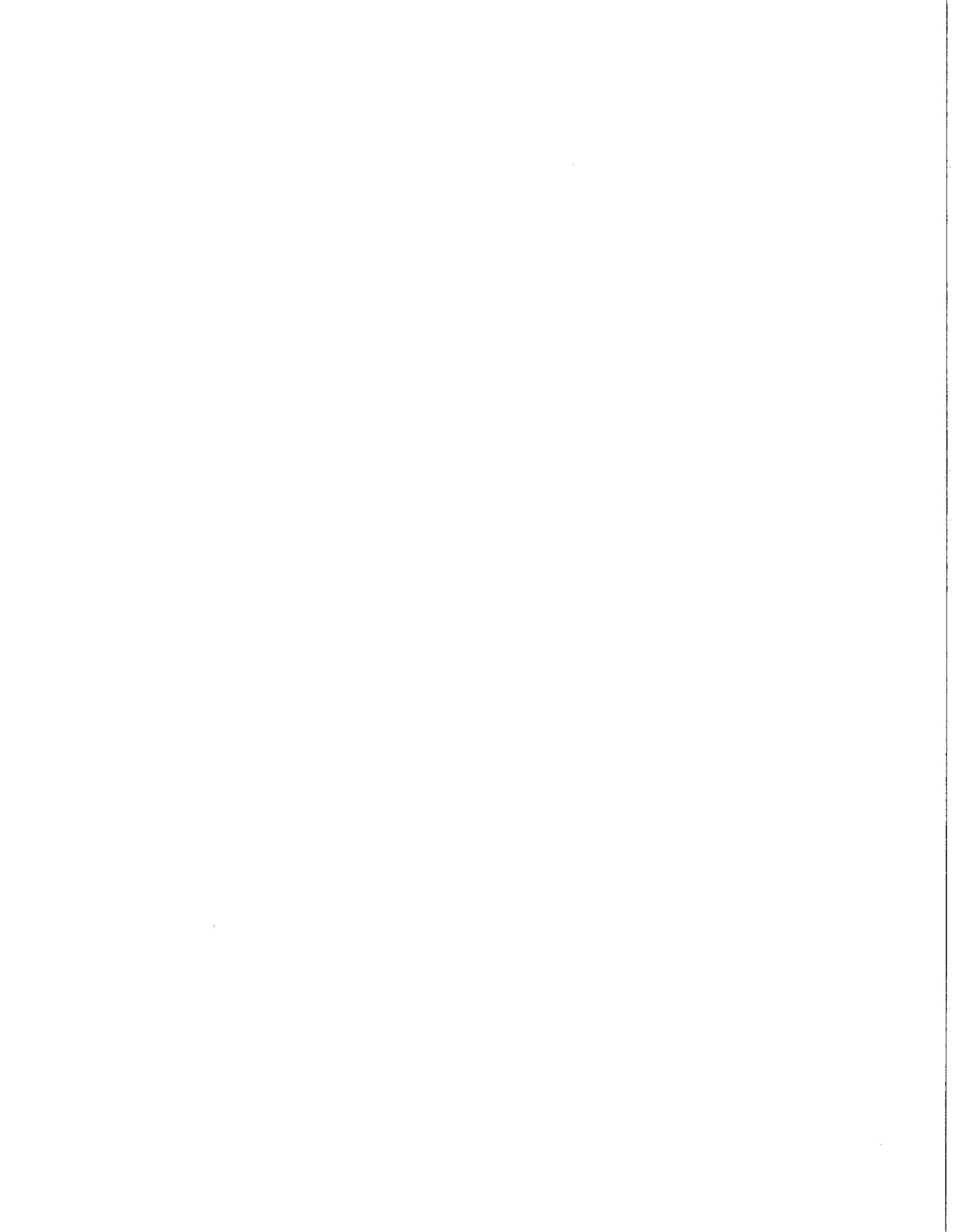
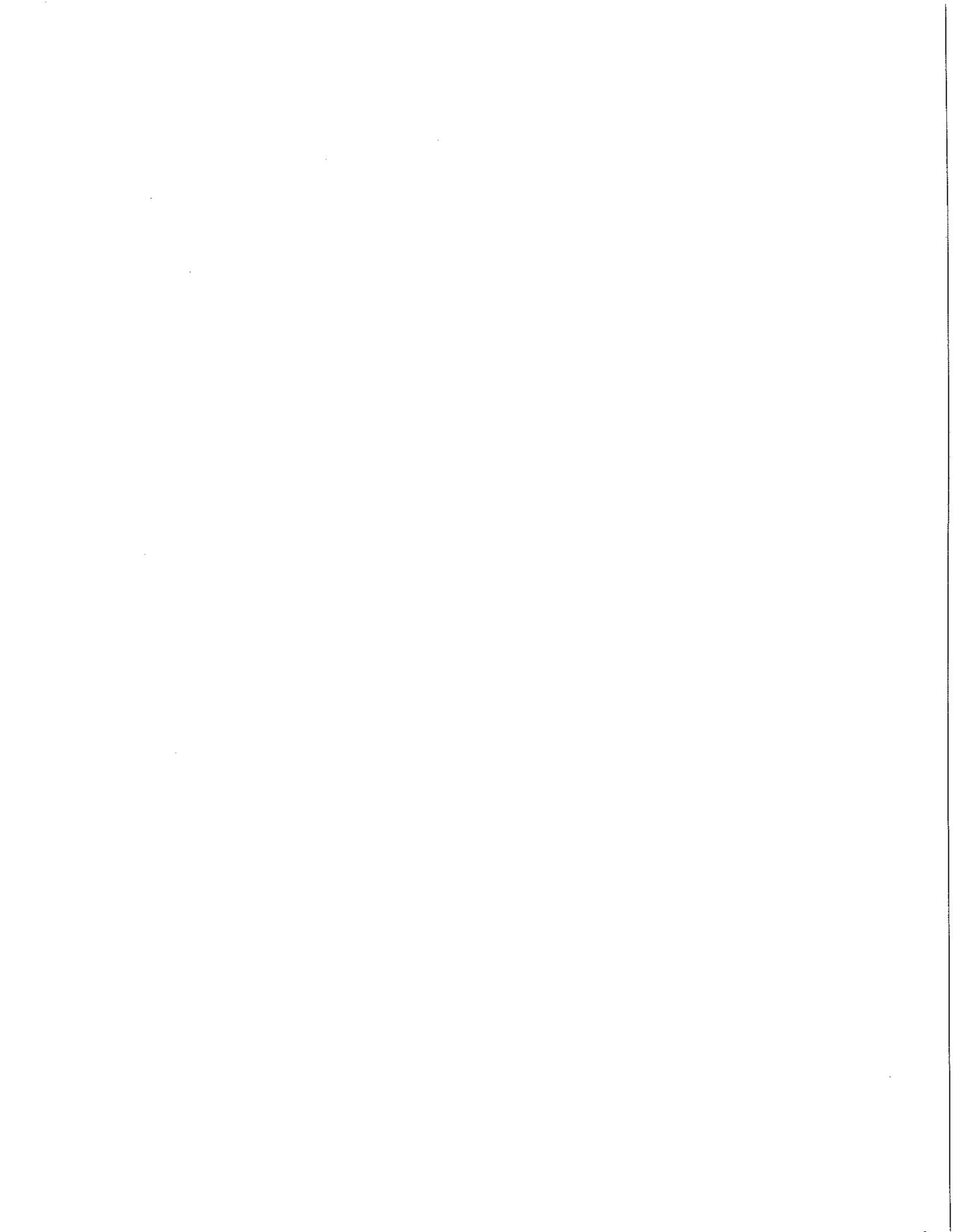


TABLE OF CONTENTS

<i>Members of the Board of Trustees, Advisors, and Staff</i>	<i>PAGE 1</i>
<i>Plan Summary</i>	<i>PAGE 2</i>
<i>Benefits Section</i>	<i>PAGE 4</i>
<i>Investment Section</i>	<i>PAGE 10</i>
<i>Financial Section</i>	<i>PAGE 15</i>

The 47th Annual Report of the Teachers' Retirement System of Oklahoma is prepared in accordance with Title 70 O.S. Supp. 1989, Section 17-106.1; 5,000 copies have been printed by the Office of Public Affairs Central Printing Division at a cost of \$4,400. Copies have been deposited with the Publications Clearinghouse of the Oklahoma Department of Libraries.



MEMBERS OF THE BOARD OF TRUSTEES, ADVISORS AND STAFF

BOARD OF TRUSTEES

Dr. Thomas L. Palmer
Chairman

Mr. Tommy Fulton
Secretary

Dr. C. Wayne Bland
Retired Classroom Teacher

Mr. V. Ronald Frangione
Member appointed by Governor

Dr. Alexander B. Holmes
Ex officio

Dr. Roy Peters, Jr.
Ex officio

Mr. Stephen M. Hull
Vice Chairman

Miss Mary Evelyn Adams
Classroom Teacher

Mr. Leroy Crozier
School Administrator

Mr. Gerald E. Hoeltzel
Ex officio

Mr. Rod Kenslow
Representative of Insurance Industry

Mr. David E. Rainbolt
Member appointed by Governor

Ms. Derryl L. Venters
Classroom Teacher

ADVISORS

The Chicago Corporation
Investment Manager

Hotchkis and Wiley
Investment Manager

Liberty National Bank & Trust Company
Investment Manager

Mitchell Hutchins Asset Management, Inc.
Investment Manager

TCW Asset Management Company
Investment Manager

William M. Mercer Asset Planning, Inc.
Financial Consultant

The Wyatt Company
Actuary

Eagle Asset Management, Inc.
Investment Manager

Investment Advisers, In.c
Investment Manager

Mellon Bond Associates
Investment Manager

Newberger & Berman Pension Management
Investment Manager

Tom Johnson Investment Management, Inc.
Investment Manager

Bankers Trust Company
Investment Custodian

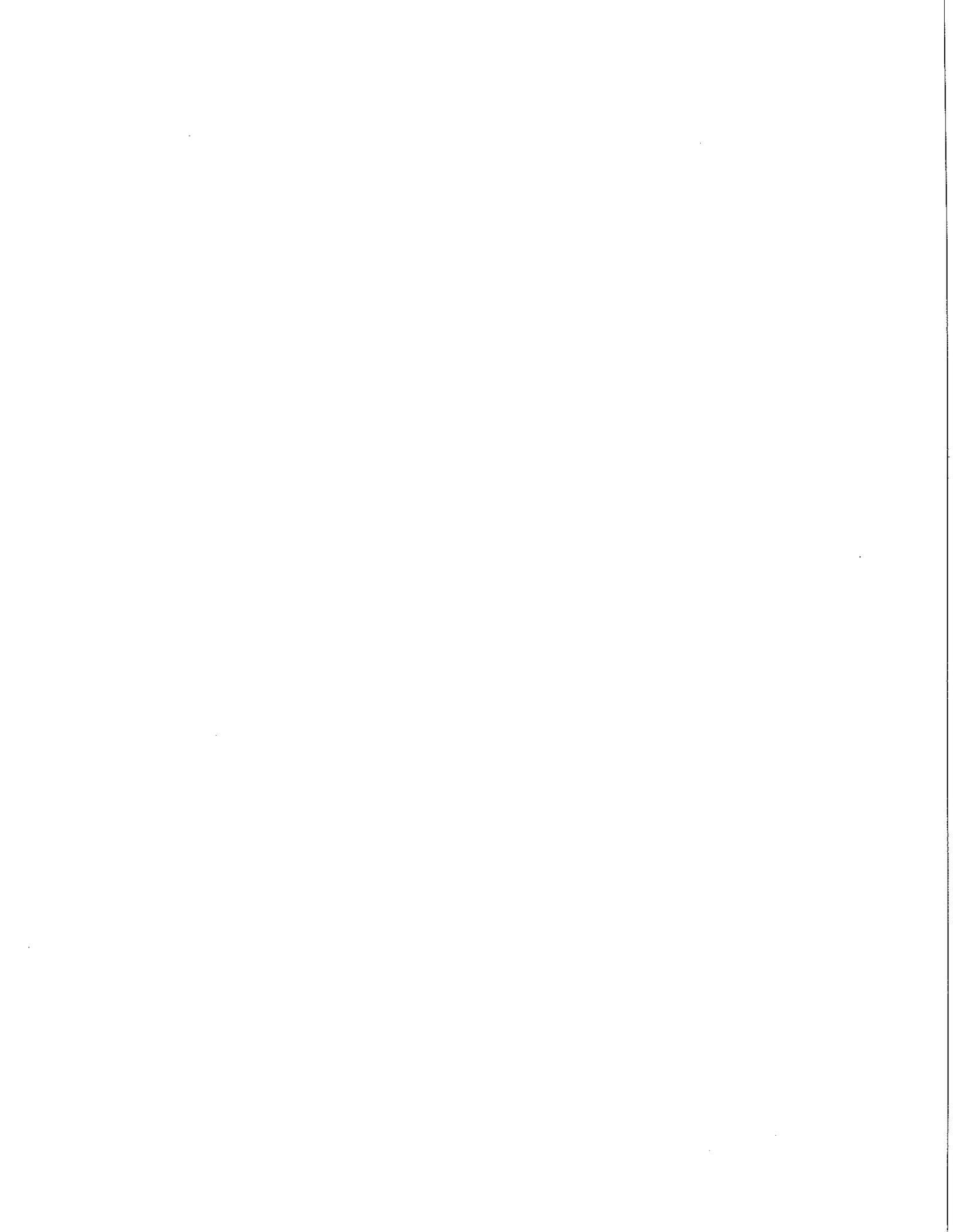
Ms. Tammy Thompson
Legal Counsel

STAFF

Mr. Tommy C. Beavers
Executive Secretary

Ms. Sue Peterson
Assistant Executive Secretary

Mr. Randall L. Kopsa
Secretary/Treasurer



Administration

The Teachers' Retirement System of Oklahoma (TRS) was established July 1, 1943, for the purpose of providing retirement allowances and other specified benefits for qualified persons employed by state-supported educational institutions. TRS is governed by a 13 member Board of Trustees which oversees the administration of the System and acts as fiduciary for investing its funds.

Revenue

The three primary sources of revenue for TRS are contributions from active members, dedicated revenue from the State of Oklahoma, and investment income. Participating members are required to contribute 6% of their applicable earnings up to a maximum of \$25,000 and may elect to contribute 11% on the earnings in excess of \$25,000 up to a maximum of \$40,000. In addition to the member contributions, beginning July 1, 1989, employers were required by law to contribute 1/2% of applicable earnings. Effective, July 1, 1990, the employer contribution rate increased to 1%.

Membership

Membership is required for all teachers and other certified employees of common schools, faculty and administrators in public colleges and universities, and administrative personnel of state educational boards and agencies. Membership is optional for all other regular employees of public educational institutions who work at least 15 hours per week.

Service Credit

To qualify for one year of membership, a member must work six full months. A school month is 20 school days consisting of six or more hours each. Subject to limitations, credit may be granted for out-of-state service, military service, service with certain Oklahoma state government entities, and service prior to July 1, 1943.

Retirement Annuity

A member may retire at age 62, with unreduced benefits, upon completing at least 10 years of creditable Oklahoma service; or, a member with at least 10 years of creditable Oklahoma service may retire, with reduced benefits, as early as age 55. A member may also retire, with unreduced benefits, at the age at which the sum of the member's age and the number of years of creditable service total 80.

The monthly benefit is determined by multiplying the average salary of the three highest years of contributory service by 2%, times the years of service, divided by 12. Depending on the retirement plan selected by the member, this benefit may be subject to reduction. Under certain plan options, the beneficiary is entitled to receive benefits after the member's death.

A member is fully vested after 10 years of contributory Oklahoma membership service and is then entitled to any benefits for which eligibility requirements have been satisfied.

Disability Benefits

Any member who is actively employed in the Oklahoma public education system, and who has at least 10 years of contributory Oklahoma membership service, may be retired by the Board of Trustees on a disability retirement allowance. A medical board comprised of three physicians reviews a member's application for disability retirement to determine if the member is incapable of performing the duties of employment.

Death Benefits

Upon the death of an active, in-service member, the designated beneficiary, or estate, shall be entitled to survivor benefits consisting of an \$18,000 death benefit, accumulated contributions, plus statutorily required interest. A surviving spouse of a deceased member who had 10 or more years of service and who had reached age 55, or had obtained an age and service totaling 80, may choose a monthly benefit in lieu of a lump sum payment. The beneficiary of a retired member is entitled to the balance of the member's account along with a \$4,000 death benefit. Certain retirement plan options provide the surviving spouse with a continuing monthly retirement benefit.

Refunds

TRS will refund a member's contributions provided the member has officially terminated employment in the public schools of Oklahoma and an application is submitted no earlier than three months from the last day of employment. The refund con-

sists of all contributions made by the member or on behalf of the member by the employer, plus the applicable portion of interest earnings. When the member accepts a refund, all service credit with the System is forfeited. Such credit may be re-established if the member returns to eligible employment for at least one full year and repays the withdrawn contributions plus interest.

Medical Benefits

A vested member may enroll in the State and Education Employees Group Health Insurance Plan within 30 days of termination of employment. Dependent coverage is available on an optional basis, as is dental coverage. Coverage for dependent care after the initial enrollment period is subject to insurability and other conditions as determined by the State and Education Employees Group Insurance Board. TRS currently pays the first \$75 of monthly premiums for each participating retiree.

Tax-Sheltered Annuity Plan

The System administers a tax-sheltered annuity program qualified under section 403(b) of the Internal Revenue Code. Members of the Retirement System may deposit funds into this plan provided that their board of education or other governing board adopts a resolution making the plan available to its employees and the member signs a contract with the employer for the express purpose of buying an annuity with TRS. Contributions to the an-

nuity plan are restricted to an annual maximum contribution level of \$9,500, subject to various Internal Revenue Code restrictions. Interest on the annuity accounts is calculated each June 30 based on the amount of money on deposit July 1 of the preceding year. An interest rate of 8-1/2% was paid in both 1989 and 1990. Participants in the annuity program should be aware that withdrawals from the plan are subject to various withdrawal restrictions and tax penalties mandated by the Internal Revenue Code.

BENEFITS SECTION



Active Personnel

Selected Plan Options

Distribution By Years of Service

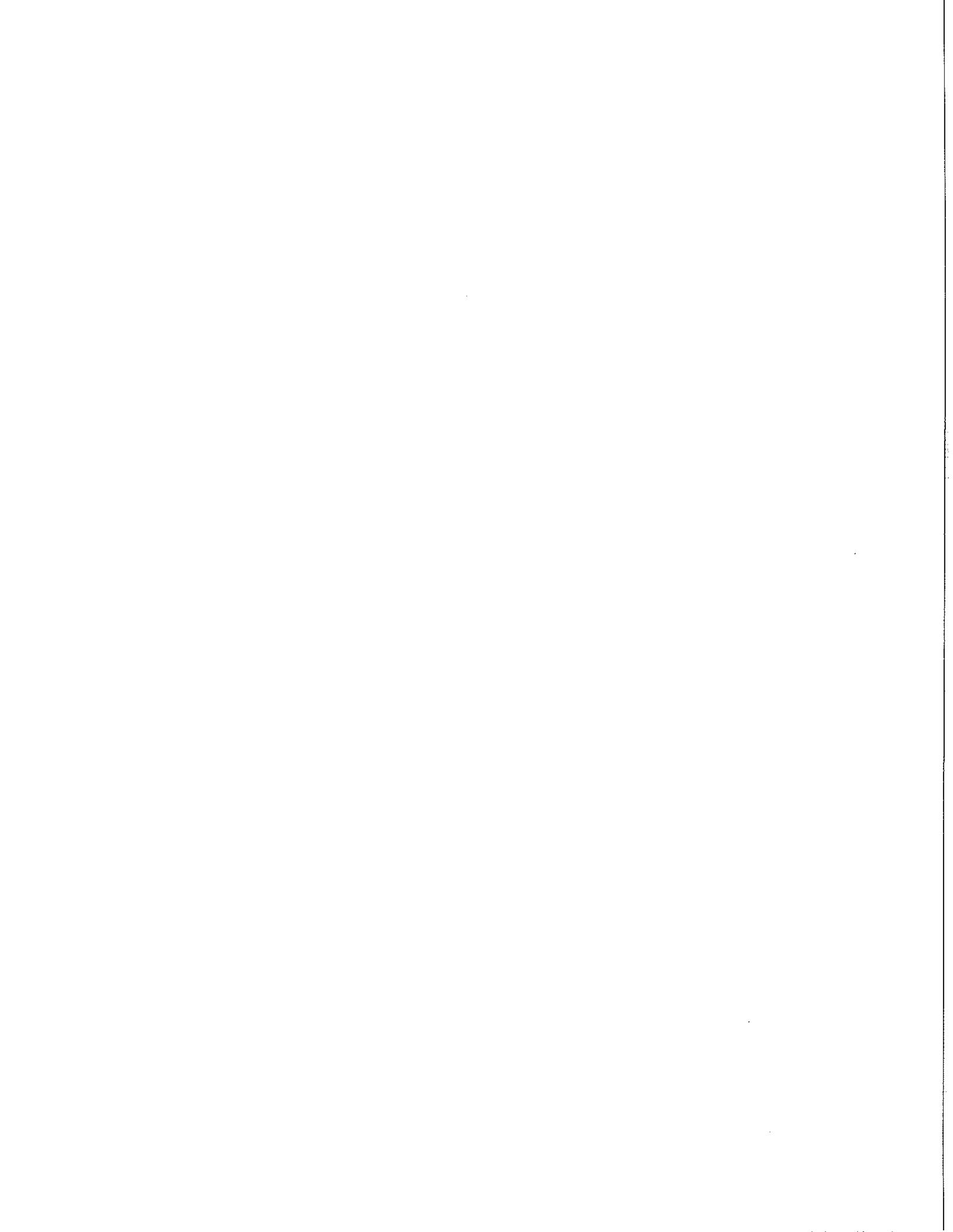
Distribution By Age At Retirement

Distribution By Retiree Age

Average Monthly Retirement Income

Distribution By Monthly Income

Members Retiring Per Fiscal Year



ACTIVE PERSONNEL

Years of Service	*All Active Personnel	Classified Personnel	*Unclassified Personnel
Under 5 yrs.	28,006	15,459	12,547
5-9	17,550	11,726	5,824
10-14	13,744	11,330	2,414
15-19	10,444	9,065	1,379
20-24	6,815	6,086	729
25-29	2,748	2,572	176
30-34	933	880	53
35-39	283	273	10
40-44	68	66	2
45-49	8	8	0
50-54	3	2	1
TOTALS	80602	57467	23135

Salary Range	All Active Personnel	Classified Personnel	Unclassified Personnel
0-\$5,000	409	56	353
5001-10,000	4,826	415	4,411
10,001-15,000	6,063	752	5,311
15,001-20,000	9,820	5,508	4,312
20,001-25,000	17,993	15,673	2,320
25,001-30,000	13,769	12,596	1,173
30,001-35,000	6,606	5,974	632
35,001-40,000	3,698	3,316	382
40,001-45,000	2,402	2,206	196
45,001-50,000	1,381	1,276	105
50,001-55,000	877	804	73
55,001-60,000	598	571	27
60,001-65,000	368	345	23
65,001-70,000	276	265	11
70,001-75,000	187	175	12
75,001 and Above	430	416	14
TOTALS	69,703	50,348	19,355

* Includes members who have terminated employment but have not withdrawn their account.

Average Age	43.1	42.3	45.7
Average Salary	\$25,286	\$28,690	\$16,429
Average Service	9.6	11.1	5.8

SELECTED PLAN OPTIONS

Option	Retired Members			Average	% of
	Male	Female	Total	Monthly Payment	Total
Maximum	1,329	6,520	7,849	\$905.71	34.53%
Option 1	2,951	7,386	10,337	971.68	45.48%
Option 2	1,477	315	1,792	1,064.16	7.88%
Option 3	1,033	325	1,358	1,224.67	5.97%
Option 4	110	101	211	965.59	0.93%
Options 5, 6 & 7	524	46	570	664.74	2.51%
Disabled	189	425	614	708.64	2.70%
TOTALS	7,613	15,118	22,731	\$956.43	100.00%

DISTRIBUTION BY YEARS OF SERVICE

Years of Creditable Service	Retired Members			Average
	Male	Female	Total	Monthly Payment
Under 10	54	153	207	\$182.05
10-14	527	1,770	2,297	293.39
15-19	755	2,062	2,817	484.33
20-24	893	2,650	3,543	739.22
25-29	1,102	2,483	3,585	1,011.56
30-34	1,712	2,621	4,333	1,177.98
35-39	1,569	1,848	3,417	1,333.46
40-44	904	1,261	2,165	1,472.69
45-49	94	267	361	1,541.29
50 and Over	3	3	6	2,282.03
TOTALS	7,613	15,118	22,731	\$956.43

DISTRIBUTION BY AGE AT RETIREMENT

Age at Retirement	Retired Members			Average Monthly Payment	Average Length of Service
	Male	Female	Total		
40 and Under	10	24	34	\$450.39	13.4
41-45	22	33	55	634.31	16.8
46-50	59	82	141	958.91	23.2
51-55	1,029	929	1,958	1,155.80	27.3
56-60	1,797	3,178	4,975	979.65	26.7
61-65	4,117	9,712	13,829	940.81	28.0
66-70	514	1,055	1,569	838.54	25.5
71-75	52	90	142	552.33	22.3
76-80	11	14	25	515.04	22.4
Over 80	2	1	3	300.34	18.3
TOTALS	7,613	15,118	22,731	\$956.43	27.4

DISTRIBUTION BY RETIREE AGE

Age	Total Retired Members	Average Length of Service	Average Monthly Payment
	Under 50	67	16.3
50-54	487	28.0	1,333.04
55-59	1,909	26.3	1,159.80
60-64	3,661	25.6	1,016.96
65-69	4,359	25.5	937.04
70-74	3,857	26.5	860.62
75-79	3,515	28.2	897.77
80-84	2,859	30.5	936.76
85-89	1,470	31.3	927.07
Over 90	547	33.1	934.88
TOTALS	22,731	27.4	\$956.24

Average age of retired members is 71.2

AVERAGE MONTHLY RETIREMENT INCOME

Date	Regular Annuitants	Date	Regular Annuitants	Special Annuitants
June 30, 1948	\$33.04	June 30, 1978	\$344.87	
June 30, 1954	75.33	June 30, 1979	364.83	
June 30, 1960	83.00	June 30, 1980	382.25	
June 30, 1966	128.72	June 30, 1981	432.46	
June 30, 1969	147.71	June 30, 1982	479.87	
June 30, 1970	178.77	June 30, 1983	591.85	
June 30, 1971	201.07	June 30, 1984	600.07	
June 30, 1972	209.09	June 30, 1985	683.33	
June 30, 1973	217.35	June 30, 1986	760.85	150.00
June 30, 1974	225.71	June 30, 1987	836.93	158.89
June 30, 1975	248.10	June 30, 1988	907.10	159.00
June 30, 1976	296.72	June 30, 1989	949.06	158.84
June 30, 1977	320.90	June 30, 1990	956.43	158.79

Beginning June 30, 1989, the figures do not include the \$75.00 per month Medical Benefit

DISTRIBUTION BY MONTHLY INCOME

Monthly Income	Retired Members	Total Payment	Average Payment
Under \$100	89	\$7,323.67	\$82.29
\$101-200	675	105,967.81	156.99
\$201-\$300	1,184	296,559.94	250.47
\$301-\$400	1,343	468,665.44	348.97
\$401-\$500	1,352	609,309.48	450.67
\$501-\$600	1,339	736,096.78	549.74
\$601-\$700	1,344	871,470.05	648.42
\$701-\$800	1,449	1,085,378.42	749.05
\$801-\$900	1,511	1,286,761.81	851.60
\$900-\$1,000	1,728	1,644,131.71	951.47
\$1,001-\$1,100	1,714	1,800,902.03	1,050.70
\$1,101-\$1,200	1,811	2,081,545.19	1,149.39
\$1,201-\$1,300	1,894	2,369,357.58	1,250.98
\$1,301-\$1,400	1,606	2,167,145.25	1,349.41
\$1,401-\$1,500	1,127	1,630,185.80	1,446.48
\$1,501-\$1,600	786	1,214,921.87	1,545.70
\$1,601-\$1,700	531	874,289.19	1,646.50
\$1,701-\$2,000	781	1,428,858.15	1,829.52
\$2,001-\$2,500	380	829,605.39	2,183.17
Over \$2,500	87	232,050.25	2,667.24
TOTALS	22,731	\$21,740,525.81	\$956.43

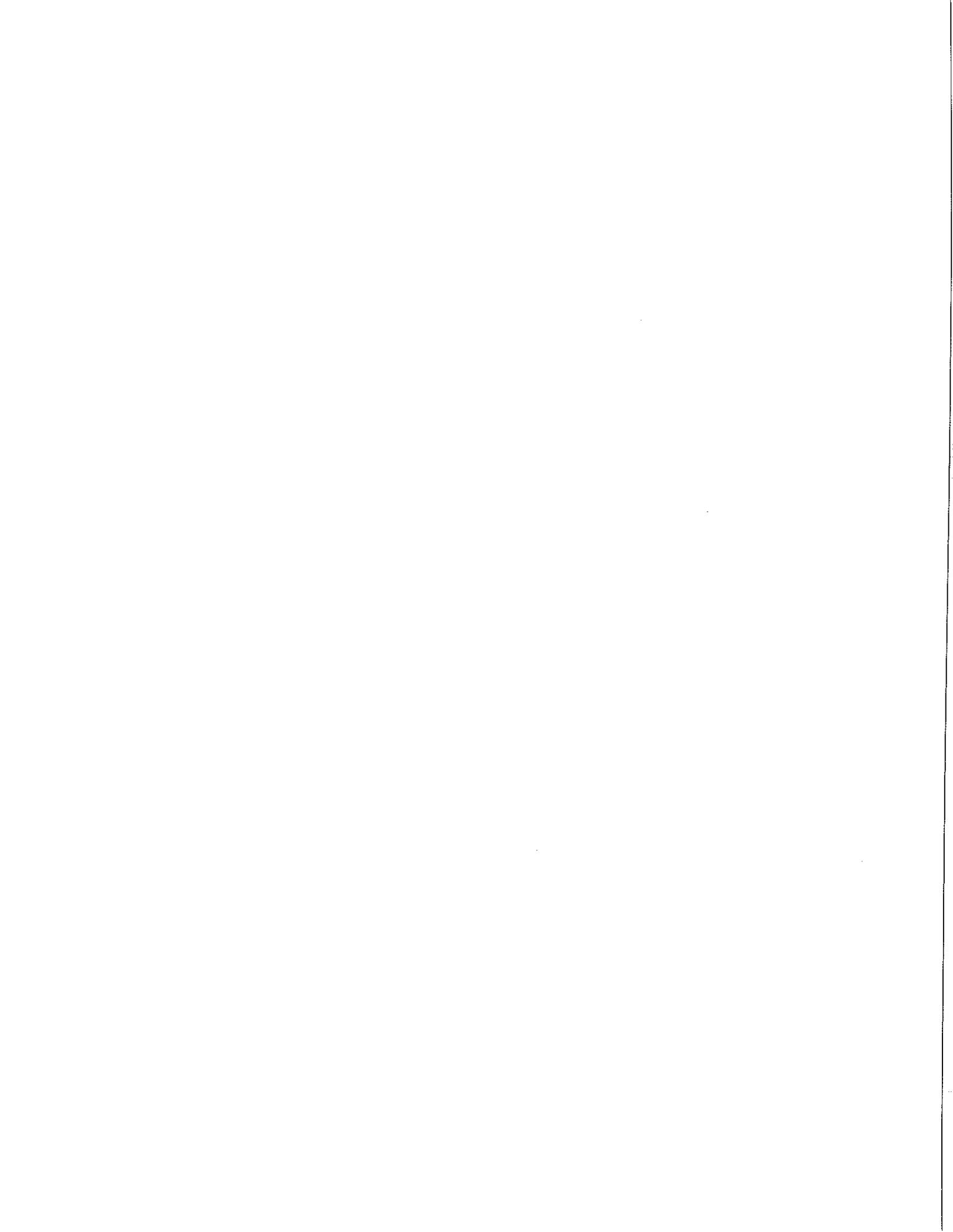
MEMBERS RETIRING PER FISCAL YEAR

Fiscal Year	Members Retiring
-------------	------------------

1980-81	1176
1981-82	761
1982-83	743
1983-84	1223
1984-85	588

Fiscal Year	Members Retiring
-------------	------------------

1985-86	3510
1986-87	991
1987-88	1964
1988-89	923
1989-90	1422



INVESTMENT SECTION



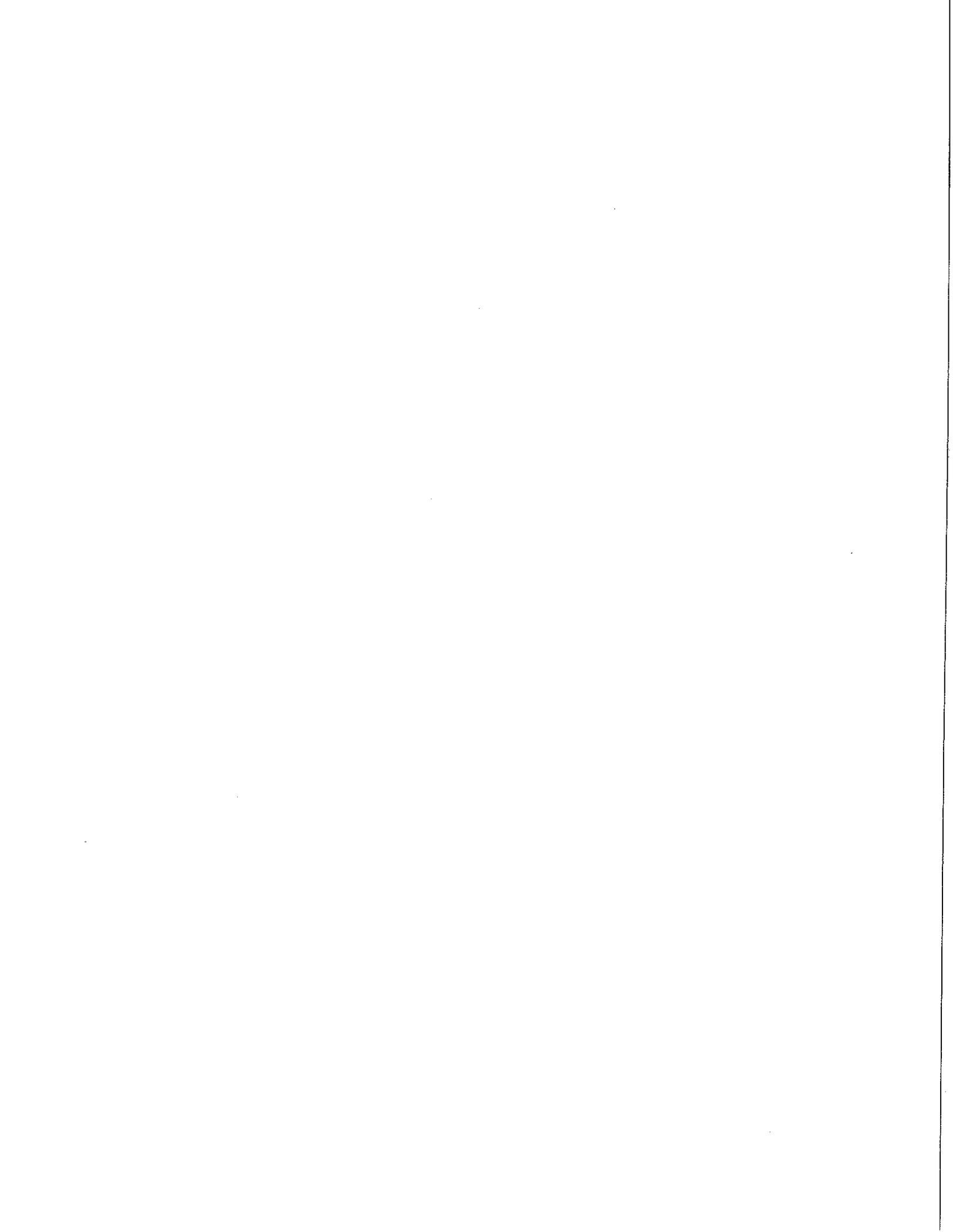
Asset Allocation

Investment Portfolio Summary

Economic Overview

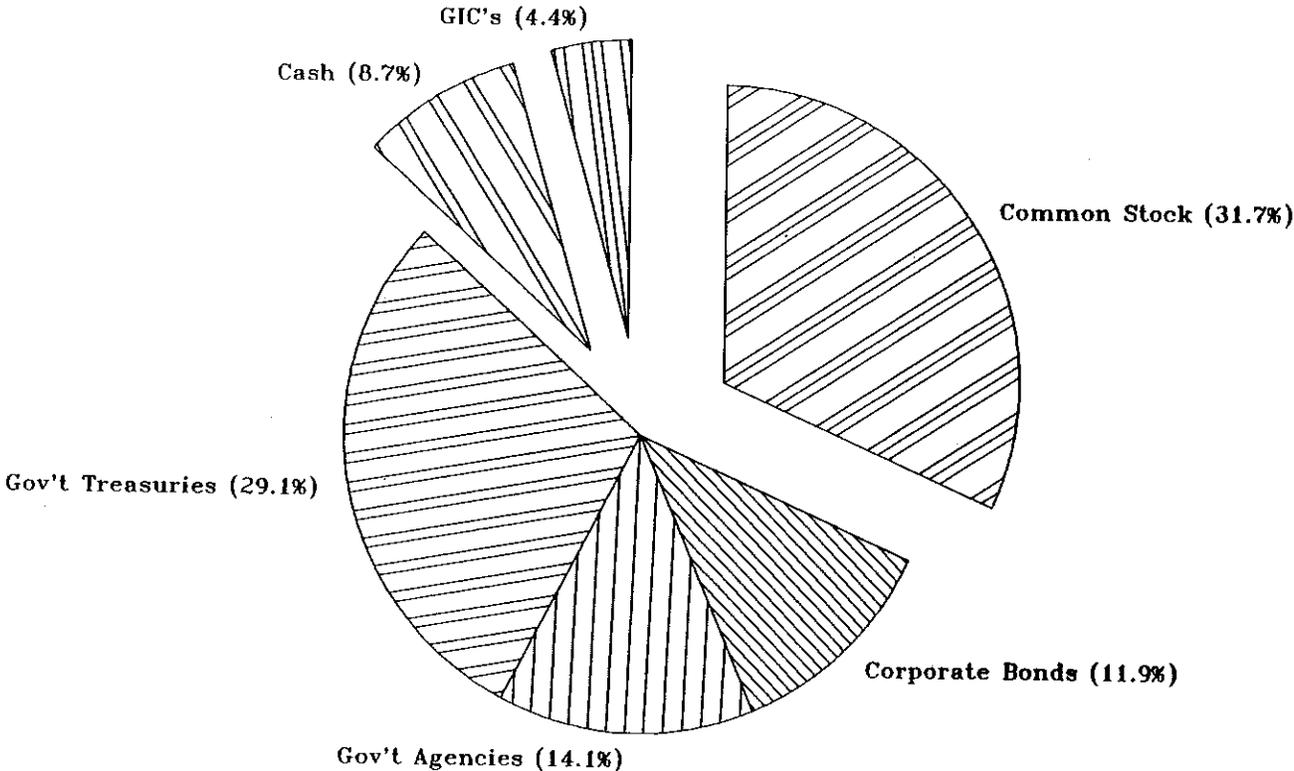
Investment Policy Overview

Investment Performance



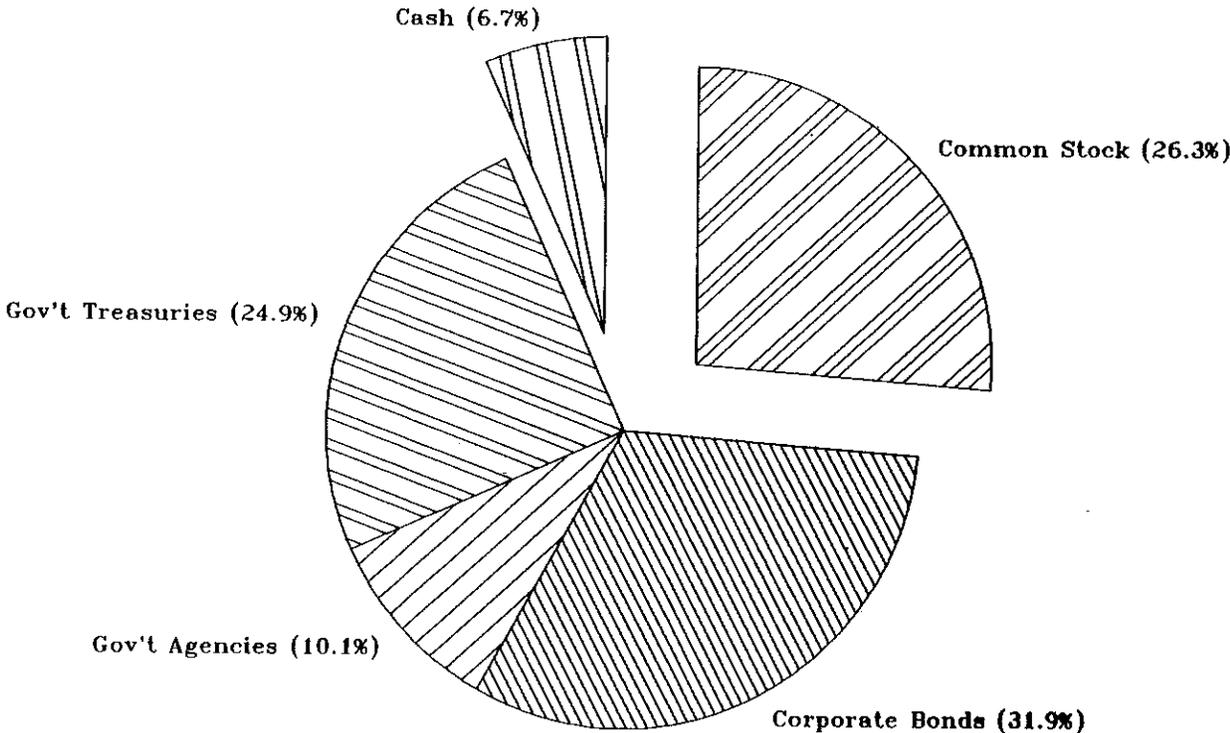
ASSET ALLOCATION---Market Value

June 30, 1990



ASSET ALLOCATION---Market Value

June 30, 1989



INVESTMENT PORTFOLIO SUMMARY

June 30, 1990

	<u>Book Value</u>	% of Total Book Value	<u>Market Value</u>	% of Total Market Value
Government Obligations:				
U.S. Government	\$599,742,675	30%	\$606,655,384	29%
Federal Agency	<u>292,681,340</u>	15%	<u>293,144,192</u>	14%
Total Government Obligations	892,424,015	45%	899,799,576	43%
Corporate Obligations:				
Public Utilities Bonds	39,876,730	2%	39,490,249	2%
Telephone Bonds and Debentures	20,162,304	1%	20,227,105	1%
Corporate Industrial Bonds	<u>186,348,862</u>	9%	<u>187,316,991</u>	9%
Total Corporate Obligations	246,387,896	12%	247,034,345	12%
GIC	<u>92,451,430</u>	5%	<u>92,451,430</u>	4%
Total Fixed Income Securities	1,231,263,341	62%	1,239,285,351	60%
Equities	584,884,484	29%	660,713,600	32%
Short-Term Investments	<u>180,642,525</u>	9%	<u>181,823,301</u>	9%
Total Investment Portfolio	\$1,996,790,350	100%	\$2,081,822,252	100%

INVESTMENT PORTFOLIO SUMMARY

June 30, 1989

	<u>Book Value</u>	% of Total Book Value	<u>Market Value</u>	% of Total Market Value
Government Obligations:				
U.S. Government	\$462,533,765	25%	\$477,408,893	25%
Federal Agency	<u>192,273,925</u>	11%	<u>194,072,334</u>	10%
Total Government Obligations	654,807,690	36%	671,481,227	35%
Corporate Obligations:				
Public Utilities Bonds	107,424,333	6%	108,275,613	6%
Telephone Bonds and Debentures	67,449,252	4%	66,543,985	3%
Corporate Industrial Bonds	<u>434,163,580</u>	24%	<u>435,798,250</u>	23%
Total Corporate Obligations	609,037,165	33%	610,617,848	32%
Total Fixed Income Securities	1,263,844,855	69%	1,282,099,075	67%
Equities	438,463,043	24%	503,288,214	26%
Short-Term Investments	<u>127,806,283</u>	7%	<u>128,757,078</u>	7%
Total Investment Portfolio	\$1,830,114,181	100%	\$1,914,144,367	100%

---INVESTMENT REPORT---

ECONOMIC OVERVIEW

Investors were well-rewarded for their financial courage during the decade of the 1980's, even though they had to endure several major market swings.

The beginning of the decade saw disabling double-digit inflation, with astronomical interest rates, at a time when the U.S. position as the financial giant of the world was being challenged.

We saw highly leveraged corporate takeovers explode onto the market as never before. Consumer, corporate and government debt swelled.

Because of the strengthening of our global competitors, the U.S. economy was, and is, being impacted more and more by the international markets. Not only must investors concern themselves with the happenings in our domestic markets, but they now must also have a much greater awareness of events abroad.

In mid-1990, the U.S. economic expansion was in its eighth year, when historically the average life of business expansions before 1980 was about four years. Many economists are predicting a national recession as inevitable; some, however, have made this same prediction for the past several years.

Recent statements by Federal Reserve Bank Chairman Alan Greenspan indicate the "Fed" is having to carry on a battle on two fronts. First, there is their long-standing commitment to keeping inflation within target

levels. Second, the Fed has been committed to, and instrumental in, maintaining the steady pace of economic growth over the past eight years.

The economic statistics of late have indicated that growth has slowed to very marginal levels at a time when inflation seems to be heating up. The tightrope the Fed is walking has become even more tenuous to balance.

In recent testimony before Congress, Chairman Greenspan indicated the Federal Reserve would be willing to ease monetary policy, thereby making money more available at lower rates to fuel business growth. When this is done, however, the likelihood of inflation increases significantly. He indicated that the Federal Reserve Bank Board could not balance the growth and inflation equation alone. He strongly stated that to be successful, Congress and the President must come to terms with the budget deficit.

INVESTMENT POLICY OVERVIEW

In 1988, the legislature gave the System's Board of Trustees broader investment authority. Previously, the Board had several statutory limitations, including a maximum 25% exposure in equities. In March of 1988, the Board established an Investment Committee, comprised of five members. That fall, the committee began discussions relating to the allocation of the System's financial assets.

In October 1988, the Board accepted a recommendation from the committee to adopt a new Statement of Investment Policy, Objectives and Guidelines, which among other items, changed the asset allocation to a maximum exposure of 50% in equities. In early 1989, the Board voted to fund the equity segment of the portfolio to an initial amount of 40%.

In June 1989, the Board conducted a national search for an investment consultant. Upon hiring, the Investment Committee set about developing the methodology to fund the new allocation. Primary consideration was given to the level of risk-tolerance the Board was willing to accept, and the rate of return they desired to achieve.

The end result of this process was a high degree of portfolio diversification. The Board conducted a national search for investment managers. Approximately 250 responses to this search were received and analyzed. The different styles deployed for the equity segment of the portfolio include value, growth, small capitalization, core, and convertibles managers. Fixed income managers were selected to deploy intermediate-term and longer-term strategies.

INVESTMENT PERFORMANCE

Over the past 10 years, the System has earned a total rate of return on all assets of 11.95%. The equity and fixed income

components earned 17.76% and 10.77%, respectively. The Board of Trustees reviews investment performance quarterly and, as benchmarks, compares these broad asset classes to the Standard & Poor 500 (for equities) and the Shearson Lehman Hutton Corporate/Government index (for fixed income). This comparison shows that the S&P 500 earned a return of 16.86% for this period and the SLH C/G Index 10.73%.

The equity and fixed income markets for the year ending June 30, 1990, were somewhat volatile, with stronger rates of return realized in the equity market. The S&P 500 generated a return of 16.37% while the SLH G/C Index returned 7.06%. The Oklahoma Teachers' Retirement System outperformed these investment benchmarks by returning 17.3% and 7.93%, respectively. The overall rate of return for the System for the past fiscal year was 11.54%.

OKLAHOMA TEACHERS' RETIREMENT SYSTEM
Comparative Rates of Return
Cumulative and Annualized

PERIOD	S&P 500	SLG/C	TEACHERS RETIREMENT		
			TOTAL	EQUITY	FIXED
FY 1981	20.63%	-13.25%	-2.45%	27.34%	-11.26%
FY 1982	-11.64%	8.82%	3.56%	-13.43%	8.77%
FY 1983	61.20%	42.09%	37.77%	68.84%	35.92%
FY 1984	-4.75%	-1.60%	-1.61%	-5.48%	-2.99%
FY 1985	31.10%	28.49%	28.61%	32.94%	32.02%
FY 1986	35.81%	20.63%	21.21%	42.52%	20.66%
FY 1987	25.08%	4.71%	9.67%	20.34%	6.24%
FY 1988	-7.09%	7.49%	4.06%	-9.49%	7.47%
FY 1989	20.51%	12.42%	13.73%	20.42%	11.33%
FY 1990	16.37%	7.06%	11.54%	17.30%	7.93%

CUMULATIVE RETURNS

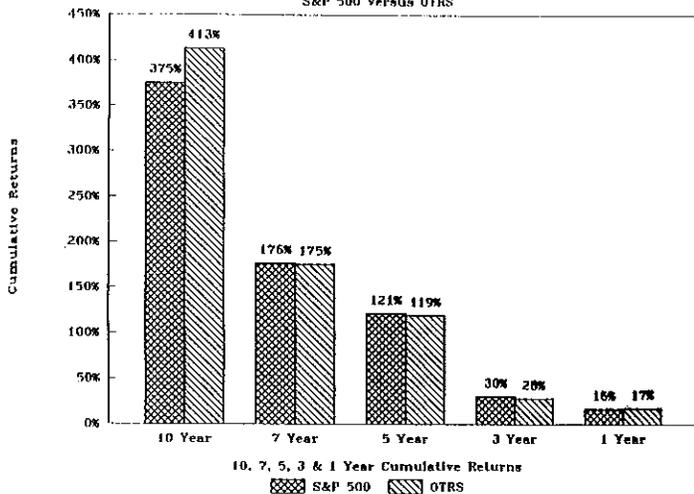
10 Year	375%	177%	209%	413%	178%
7 Year	176%	107%	122%	175%	112%
5 Year	121%	63%	75%	119%	66%
3 Year	30%	29%	32%	28%	29%
1 Year	16%	7%	12%	17%	8%

ANNUALIZED RETURNS

10 Year	16.86%	10.73%	11.95%	17.76%	10.77%
7 Year	15.63%	10.92%	12.07%	15.58%	11.33%
5 Year	17.22%	10.32%	11.91%	17.00%	10.61%
3 Year	9.22%	8.96%	9.70%	8.53%	8.90%
1 Year	16.37%	7.06%	11.54%	17.30%	7.93%

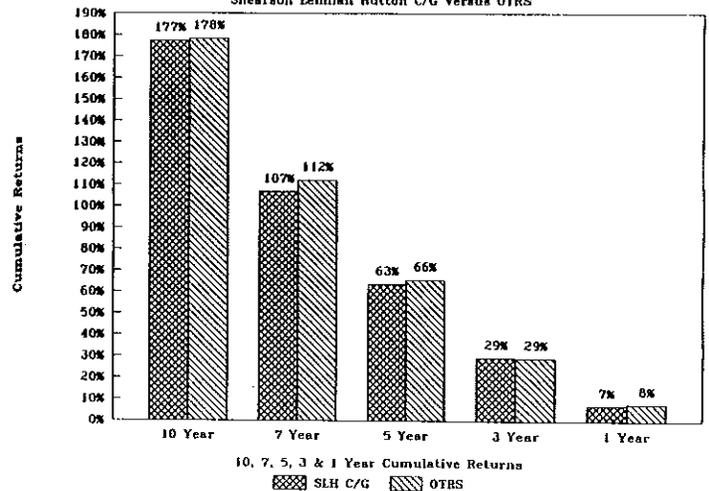
CUMULATIVE EQUITY RATE COMPARISON

S&P 500 Versus OTRS



CUMULATIVE FIXED INCOME COMPARISON

Shearson Lehman Hutton C/G Versus OTRS



FINANCIAL SECTION

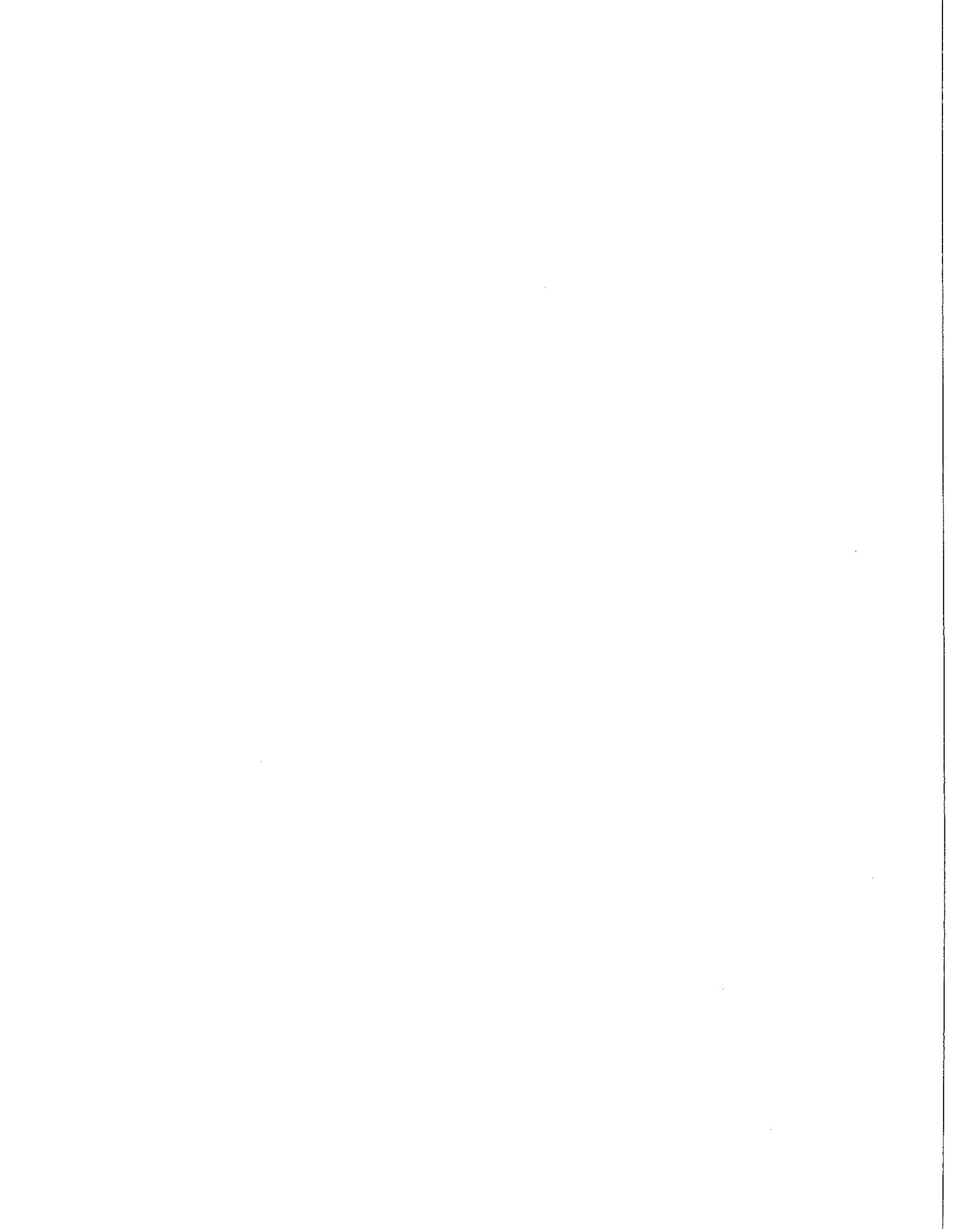


Balance Sheets

*Statements of Revenues, Expenditures
and Changes*

Statements of Funds

Notes to Financial Statements



OKLAHOMA TEACHERS' RETIREMENT SYSTEM

BALANCE SHEETS
June 30, 1989 and 1990CURRENT ASSETS:

	<u>1989</u>	<u>1990</u>
Cash Not Available For Investments	\$1,387,873.90	\$1,098,942.58
Fixed Income Securities (See note 2)	1,281,335,900.96	1,231,263,340.99
Equities (See note 2)	438,463,043.43	584,884,483.86
U.S. Treasury Bills	7,684,129.73	0.00
Repurchase Agreements	0.00	16,400,000.00
Commercial Paper	96,259,859.78	156,602,223.45
Banker's Trust STIF Account	0.00	7,640,301.05
Discount Notes	6,371,246.88	0.00
Real Estate	187,616.00	187,616.00
Due From\To) Broker	0.00	(7,738,730.83)
Accrued Interest	<u>25,280,385.07</u>	<u>23,811,247.00</u>
Total Current Assets	\$1,856,970,055.75	\$2,014,149,424.10
<u>CAPITAL ASSETS:</u>		
Office Furniture & Equipment	<u>\$532,151.39</u>	<u>\$587,177.93</u>
TOTAL ASSETS	\$1,857,502,207.14	\$2,014,736,602.03

CURRENT LIABILITIES:

Teachers' Savings Fund	\$667,501,231.44	\$755,502,328.57
Retirement Benefit Fund	992,652,596.89	1,070,319,712.76
Interest Fund	0.00	0.00
Accrued Interest (Earned, Not Collected)	25,280,385.07	0.00
Permanent Retirement Fund	0.00	0.00
Expense Fund	5,988,745.24	7,552,000.00
Suspense Fund	1,893,569.83	1,810,829.77
Reserve for Investment Fluctuations Fund	36,602,283.62	39,766,979.37
Membership Annuity Reserve Fund	0.00	0.00
Teachers' Deposit Fund	<u>127,051,243.66</u>	<u>139,197,573.63</u>
Total Current Liabilities	\$1,856,970,055.75	\$2,014,149,424.10
OTRS Capital Investment	<u>\$532,151.39</u>	<u>\$587,177.93</u>
TOTAL LIABILITIES AND CAPITAL INVESTMENT	\$1,857,502,207.14	\$2,014,736,602.03

OKLAHOMA TEACHERS' RETIREMENT SYSTEM

STATEMENTS OF REVENUES, EXPENDITURES AND CHANGES
June 30, 1989 and 1990

	<u>1989</u>	<u>1990</u>
Balance of Cash and Investments		
Beginning of Period	\$1,772,689,872.56	\$1,831,689,670.68
RECEIPTS:		
Members' Deposits	\$92,051,369.14	\$111,440,985.16
Members' Tax-Sheltered Annuity Deposits	8,805,930.72	8,223,827.25
Employer Contributions	0.00	7,571,475.60
Employers Contributions from OPERS	32,440.79	0.00
Membership Fees	1,070.00	1,824.00
Federal Matching from Schools	3,806,080.71	5,099,666.93
Reimbursements	304,694.61	337,856.37
Dedicated Revenue	<u>128,470,030.96</u>	<u>132,203,966.94</u>
Total Retirement Receipts	233,471,616.93	264,879,602.25
Interest Income on Bonds	108,954,379.25	130,525,694.17
Dividends	13,080,659.19	18,560,833.57
STIF Income	13,271,066.64	16,905,509.95
Net Realized Gain/(Loss)	12,085,005.73	46,712,242.76
Proceeds From Class Action Lawsuit	0.00	221,341.16
Investment Operations Income:		
Securities Lending	0.00	416,326.40
Commission Recapture	<u>0.00</u>	<u>110,482.52</u>
Total Investment Income	147,391,110.81	213,452,430.53
TOTAL RECEIPTS	<u>\$380,862,727.74</u>	<u>\$478,332,032.78</u>
DISBURSEMENTS:		
Retirement Benefits	249,920,831.69	252,646,769.68
Education Employees Group Insurance	36,300,000.00	0.00
Insurance Premiums Paid for Retirees	9,735,450.00	16,935,975.00
Death Benefits	4,363,021.74	4,686,762.32
Withdrawals of Accounts	10,469,549.56	11,128,851.22
Tax-Sheltered Annuity Withdrawals	<u>7,865,062.23</u>	<u>6,789,561.73</u>
Total Benefit Payments	318,653,915.22	292,187,919.95
Administrative Expense:		
General Operations	1,680,020.75	1,895,376.82
Investment Expense (Current Year)	1,528,993.65	1,315,933.48
Investment Expense (Prior Year)	0.00	473,049.11
Total Administrative Expenses	3,209,014.40	3,684,359.41
TOTAL DISBURSEMENTS	<u>\$321,862,929.62</u>	<u>\$295,872,279.36</u>
Balance of Cash and Investments		
End of Period	\$1,831,689,670.68	\$2,014,149,424.10
NET INCREASE	<u>\$58,999,798.12</u>	<u>\$182,459,753.42</u>

TEACHERS' SAVINGS FUND

June 30, 1990

Balance July 1, 1989		\$667,501,231.44
RECEIPTS:		
Members' Contributions	111,440,985.16	
Transfer from Suspense Fund	82,740.06	
Transfer from Retirement Benefit Fund	<u>1,088,708.43</u>	
TOTAL RECEIPTS FY'90		112,612,433.65
DISBURSEMENTS:		
Withdrawals of Accounts	11,128,851.22	
Transfer to Retirement Benefit Fund	<u>13,482,485.30</u>	
TOTAL DISBURSEMENTS FY'90		<u>24,611,336.52</u>
Balance June 30, 1990		<u>\$755,502,328.57</u>

The Teachers' Savings Fund represents the accumulation of members' contributions, including certain interest earnings. Funds are transferred to the Retirement Benefit Fund upon a member's retirement in an amount sufficient to pay retirement benefits.

TEACHERS' DEPOSIT FUND

June 30, 1990

Balance July 1, 1989		\$127,051,243.66
RECEIPTS:		
Members' Deposits	8,223,827.25	
Transfer from Interest Fund	<u>10,712,064.45</u>	
TOTAL RECEIPTS FY'90		18,935,891.70
DISBURSEMENTS:		
Tax-Sheltered Annuity Withdrawals	6,789,561.73	<u>6,789,561.73</u>
Balance June 30, 1990		<u>\$139,197,573.63</u>

The Teachers' Deposit Fund represents contributions and interest earnings related to the 403(b) tax-sheltered annuity plan.

RETIREMENT BENEFIT FUND

June 30, 1990

Balance July 1, 1989		\$992,652,596.89
RECEIPTS:		
Employer Contributions	7,571,475.60	
Dedicated Revenue	132,203,966.94	
Federal Matching	5,099,666.93	
Reimbursements	337,761.93	
Transfer from Teachers' Savings Fund	13,482,485.30	
Transfer from Interest Fund	<u>194,329,974.60</u>	
TOTAL RECEIPTS FY'90		353,025,331.30
DISBURSEMENTS:		
Retirement Benefits	252,646,769.68	
Death Benefits	4,686,762.32	
Insurance Premiums Paid for Retirees	16,935,975.00	
Transfer to Teachers' Savings Fund	<u>1,088,708.43</u>	
TOTAL DISBURSEMENTS FY'90		<u>275,358,215.43</u>
Balance June 30, 1990		<u>\$1,070,319,712.76</u>

The Retirement Benefit Fund consists of monies received from state dedicated revenues, state appropriations, if any, federal matching funds and accumulation of annuity amounts transferred from the Teachers' Savings Fund. Monthly retirement benefits and certain death benefits are disbursed from this fund.

RESERVE FOR INVESTMENT FLUCTUATIONS FUND

June 30, 1990

Balance July 1, 1989		\$36,602,283.62
RECEIPTS:		
Transfer from Interest Fund (2% Cap Adjustment)		<u>3,164,695.75</u>
Balance June 30, 1990		<u>\$39,766,979.37</u>

The Reserve for Investment Fluctuations Fund represents the accumulation of investment earnings and realized profits from the sale of securities. This fund must be maintained at an amount equal to 2% of the investment portfolio.

INTEREST FUND

June 30, 1990

Balance July 1, 1989		\$0.00
RECEIPTS:		
Interest Income, Bonds	130,525,694.17	
STIF Income	16,905,509.95	
Dividends	18,560,833.57	
Net Realized Gain/(Loss)	46,712,242.76	
Proceeds From Class Action Lawsuit	221,341.16	
Securities Lending	416,326.40	
Commission Recapture	<u>110,482.52</u>	
TOTAL RECEIPTS FY'90		213,452,430.53
DISBURSEMENTS:		
Investment Expense	473,049.11	
Transfer to Teachers' Deposit Fund	10,712,064.45	
Transfer to Expense Fund	4,772,646.62	
Transfer to Retirement Benefit Fund	194,329,974.60	
Transfer to Reserve for Investment Fluctuations Fund	<u>3,164,695.75</u>	
TOTAL DISBURSEMENTS FY '90		<u>213,452,430.53</u>
Balance June 30, 1990		\$0.00

The Interest Fund is the annual accumulation of all income derived from deposits and investments. As of June 30, this fund is transferred to other funds.

EXPENSE FUND
June 30, 1990

Balance July 1, 1989		\$5,988,745.24
RECEIPTS:		
Membership Fees and Redeposits	1,918.44	
Transfer from Interest Fund	<u>4,772,646.62</u>	
TOTAL RECEIPTS FY'90		4,774,565.06
DISBURSEMENTS:		
Administrative Expenses:		
Salaries and Personnel Service	1,129,978.63	
Consultant and Professional Services	1,490,314.89	
Travel and Per Diem	45,209.10	
Office Expense	154,068.96	
Communications	135,925.61	
Furniture and Equipment	18,265.03	
Data Processing Operations	137,999.08	
Rent	<u>99,549.00</u>	
TOTAL DISBURSEMENTS FY '90		<u>3,211,310.30</u>
Balance June 30, 1990		<u>\$7,552,000.00</u>

The Expense Fund consists of the funds accumulated to pay for the expense of administering and maintaining the System.

SUSPENSE FUND
June 30, 1990

Balance July 1, 1989		\$1,893,569.83
DISBURSEMENTS:		
Transfer to Teachers' Savings Fund		<u>82,740.06</u>
Balance June 30, 1990		<u>\$1,810,829.77</u>

The Suspense Fund is the accumulation of dormant accounts transferred under the provisions of state statute and represent obligations of the retirement system which cannot be legally discharged.

MEMBERSHIP ANNUITY RESERVE FUND
 June 30, 1990

Balance July 1, 1989	\$0.00
Balance June 30, 1990	<u>\$0.00</u>

The Membership Annuity Reserve Fund represents the accumulation of teachers' contributions and state matching funds for those members who retired prior to August 2, 1968.

PERMANENT RETIREMENT FUND
 June 30, 1990

Balance July 1, 1989	\$0.00
Balance June 30, 1990	<u>\$0.00</u>

The Permanent Retirement Fund denotes the accumulation of gifts, awards, and bequests made to the retirement system.

NOTES TO FINANCIAL STATEMENTS**(1) Summary of Significant Accounting Policies****(a) Basis of Accounting**

The System's accounting records are presented on a cash basis except for accruals of interest income. In 1990, the System changed from recording investments on a settlement date basis to a trade date basis of accounting.

(b) Investments

The System utilizes 10 investment counselors to assist in the investment of retirement funds. Funds not invested by the investment counselors are temporarily invested by the System's internal investment group. The investing of TRS's funds are diversified in order to minimize the risks of large losses, and are subject to internal investment guidelines.

Investments are stated at cost, net of premium, or discount.

(c) Property and Equipment (Non-Investment Assets)

Property and equipment are stated at cost. Depreciation, which is not considered material, is not provided for on these items.

(d) Federal Income Tax Status

The System is exempt from Federal and State income taxes under Section 401(a) of the Internal Revenue Code.

(e) Net Assets Available for Plan Benefits

The System is comprised of the following major funds:

* The Teacher's Saving Fund represents the accumulation of members' contributions, including certain interest earnings. Such funds are transferred to the Retirement Benefit Fund upon a member's retirement, in an amount sufficient to pay retirement benefits.

* The Retirement Benefit Fund consists of monies received from state dedicated revenues, state appropriations, if any, federal matching funds, and accumulation of annuity amounts transferred from the Teachers' Savings Fund. Monthly retirement benefits and certain death benefits are disbursed from this fund.

* The Teachers' Deposit Fund represents contributions and interest earnings related to the 403(b) tax-sheltered annuity plan.

* The Expense Fund consists of funds accumulated to pay for the expense of administering and maintaining the System.

* The Interest Fund is the annual accumulation of all income derived from deposits and investments. Each June 30, this fund is transferred to other funds.

- * The Permanent Retirement Fund denotes the accumulation of gifts, awards, and bequests made to the Retirement System.
- * The Suspense Fund is the accumulation of dormant accounts transferred under the provisions of state statute and represent obligations of the Retirement System which cannot be legally discharged.
- * The Reserve for Investment Fluctuations Fund represents the accumulation of investment earnings and realized profits from the sale of securities. This fund must be maintained at an amount equal to 2% of the investment portfolio.
- * The Membership Annuity Reserve Fund represents the accumulation of teachers' contributions and state matching funds for those members who retired prior to August 2, 1968.

(f) Actuarial Valuations (Valuation as of June 30, 1989)

Actuarial Cost Method

The minimum required state contribution is determined using the Frozen Entry Age Actuarial Cost Method. This method assigns the System's total unfunded liabilities (actuarial present value of future benefits less the actuarial value of assets) to various periods. The Unfunded Frozen Actuarial Accrued Liability is assigned to years prior to the valuation, and the State Normal Cost is assigned to the year following the valuation. The remaining State costs are assigned to future years. The minimum required contribution is comprised of (i) the Normal Cost, and (ii) an amortization payment on the Unfunded Frozen Actuarial Accrued Liability. The required state contributions for 1989 and 1990 were \$148,520,000 and \$205,012,610, respectively.

Actuarial Value of Assets

The actuarial value of assets is determined as the sum of the market value of equities in the trust fund plus the carrying or amortized value of all other assets. From this, the value of the Teacher's Deposit fund is subtracted because it is not available to pay retirement benefits.

Actuarial Assumptions

The assumptions used for the actuary valuation were adopted by the Board of Trustees after consulting with the actuary. Differences between assumed and actual experience (actuarial gains and losses) become part of unfunded actuarial accrued liabilities. When these difference between assumed and actual experience have been observed to be sizable and persistent a change is made to the actuarial assumptions. In May of 1990, an actuarial experience study was performed to determine if the present assumptions were valid. Based on this study, several of the assumptions were changed and will be reflected in the valuation performed as of June 30, 1990. The following assumptions were used in the actuarial valuation of June 30, 1989.

Actuarial Assumptions (continued)

Rate of return on investments: 7-1/2% per annum, compounded annually

Salary increase rate: An inflation plus merit scale as shown below

<u>Age</u>	<u>Annual Rate of Salary Increase</u>	
	<u>Males</u>	<u>Females</u>
20	7.51%	6.79%
25	7.51%	6.79%
30	7.00%	6.37%
35	6.52%	6.00%
40	6.21%	5.80%
45	5.95%	5.63%
50	5.60%	5.47%
55	5.48%	5.37%
60	5.31%	5.31%
65	5.00%	5.00%

Average age at retirement: Rates are set for males and females separately. A rate of at least 25% was used at the age the member first becomes eligible for normal retirement.

<u>Age</u>	<u>Retirement Rates Per 100 Lives</u>	
	<u>Males</u>	<u>Females</u>
below 60	0	0
60	5	7
61	5	7
62	30	40
63	23	26
64	23	26
65 or above	100	100

Rate of turnover: A scale of graduated rates becoming progressively lower as age advances, consistent with the System's experience

Mortality rates:
 Nondisabled 1975 Group Annuity Mortality Table
 Disabled 1965 Railroad Retirement Board Totally Disabled Annuitants Mortality Table

The above actuarial assumptions are based on the presumption that the System will continue. Were the System to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits and credited projected benefits.

Funding Status and Progress

The amount shown below as "pension benefit obligation" (PBO) is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date. The measure is the actuarial present value of credit projected benefits and is intended to help users assess the System's funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among public employee retirement systems (PERS). The measure is independent of the funding method used to determine contributions to the PERS.

The PBO as determined as part of the latest actuarial valuation dated June 30, 1989 is as follows:

Pension benefit obligation:		
Retirees and beneficiaries currently receiving benefits		\$2,194,031,000
Terminated employees not yet receiving benefits		54,726,000
Current employees:		
Vested		1,508,044,000
Nonvested		<u>351,483,000</u>
Total pension benefit obligation		4,108,284,000
Net assets available for benefits, at cost		<u>1,723,930,067</u>
Unfunded pension benefit obligation		<u>\$2,384,353,933</u>

The vested and nonvested PBO for current employees includes \$798,567,000 in accumulated employee contributions.

State contributions totaling \$128,470,000 were made during 1989. The actuarial determined contributions to be made by the State in 1989 was \$205,012,610, consisting of (a) \$43,500,093, normal cost and (b) \$161,512,517, amortization of the unfunded actuarial liability. The actuarial determined contribution approximates 12.74% of the current year covered payroll. The actual contribution was approximately 7.3% of the current year covered payroll.

Analysis of Funding Progress

Fiscal Year	(1) Net Assets Available for Benefits (at cost)	(2) Pension Benefit Obligation	(3) Percentage Funded (1)/(2)	(4) Unfunded Pension Benefit Obligation (2) - (1)	(5) Annual Covered Payroll	(6) Unfunded Pension Benefit Obligation as Percentage of Covered Payroll (4)/(5)
1989	1,723,930,000	4,108,284,000	42.0%	2,384,354,000	1,610,000,000	148.1%
1988	1,679,489,000	3,326,151,000	50.5%	1,646,662,000	1,500,000,000	109.8%
1987	1,593,430,000	2,992,093,000	53.3%	1,398,663,000	1,500,000,000	93.2%

Net assets available excludes the Teacher's Deposit Fund and the Expense Funds because they are not available to pay retirement benefits.

The summary on the preceding page is shown only for the three years available. Additional years will be added as data becomes available.

(g) Plan Termination

In the event the plan terminates, the Board of Trustees will distribute the net assets of the System to provide the following benefits in the order indicated:

(i) Accumulated contributions will be allocated to each respective participant, former participant, retired member, joint annuitant, or beneficiary then receiving payments.

(ii) The balance of such assets, if any, will be allocated to each person then having an interest in the System--the excess of their retirement income under the plan, less the retirement income which is equal to the actuarial equivalent of the amount allocated to them under (i) above in the following order:

- * Those retired members, joint annuitants, or beneficiaries receiving payments,
- * Those members eligible to retire,
- * Those members eligible for early retirement,
- * Former participants electing to receive a vested benefit, and
- * All other members.

(2) Investments

	June 30, 1989		June 30, 1990	
	<u>Book Value</u>	<u>Market Value</u>	<u>Book Value</u>	<u>Market Value</u>
Government Obligations:				
U.S. Government	\$462,533,765	\$477,408,893	\$599,742,675	\$606,655,384
Federal Agency	<u>192,273,925</u>	<u>194,072,334</u>	<u>292,681,340</u>	<u>293,144,192</u>
Total Government Obligations	654,807,690	671,481,227	892,424,015	899,799,576
Corporate Obligations:				
Public Utilities Bonds	107,424,333	108,275,613	39,876,730	39,490,249
Telephone Bonds and Debentures	67,449,252	66,543,985	20,162,304	20,227,105
Corporate Industrial Bonds	<u>434,163,580</u>	<u>435,798,250</u>	<u>186,348,862</u>	<u>187,316,991</u>
Total Corporate Obligations	609,037,165	610,617,848	246,387,896	247,034,345
GIC	<u>0</u>	<u>0</u>	<u>92,451,430</u>	<u>92,451,430</u>
Total Fixed Income Securities	1,263,844,855	1,282,099,075	1,231,263,341	1,239,285,351
Equities	438,463,043	503,288,214	584,884,484	660,713,600
Short-Term Investments	<u>127,806,283</u>	<u>128,757,078</u>	<u>180,642,525</u>	<u>181,823,301</u>
Total Investment Portfolio	<u>\$1,830,114,181</u>	<u>\$1,914,144,367</u>	<u>\$1,996,790,350</u>	<u>\$2,081,822,252</u>

Investments are held by the System's agent in the name of the System.

(3) Required Supplementary Information--Revenue by Source and Expenditures by Type

REVENUE BY SOURCE

Fiscal Year	Member Contributions	Investment Income (net)	State and Federal Sources	Total
1990	\$119,666,636	\$211,663,447	\$144,875,109	\$476,205,193
1989	100,890,811	145,862,117	132,276,112	379,029,039
1988	95,390,416	131,365,220	120,204,025	346,959,661
1987	82,432,408	172,673,570	114,243,109	369,349,087
1986	96,442,486	142,339,465	128,211,082	366,993,033
1985	69,005,747	125,523,976	127,870,696	322,400,419
1984	70,845,732	105,262,467	127,614,166	303,722,365
1983	76,358,854	99,241,175	127,669,257	303,269,286
1982	48,098,129	62,006,898	182,672,844	292,777,871
1981	43,037,884	55,420,186	128,057,821	226,515,891

EXPENDITURES BY TYPE

Fiscal Year	Retirement Benefits	Death Benefits, Withdrawals	Insurance Fund	Administrative Expenses	Total
1990	\$269,244,888	\$22,605,175	\$0	\$1,895,377	\$293,745,440
1989	259,351,587	22,697,634	36,300,000	1,680,021	320,029,242
1988	223,906,307	20,084,903	3,300,000	1,808,476	249,099,686
1987	187,763,792	15,293,433	0	1,309,972	204,367,198
1986	149,876,975	12,704,866	0	1,340,394	163,922,235
1985	128,547,340	13,114,848	0	1,177,453	142,839,641
1984	120,098,773	10,123,129	0	1,314,393	131,536,294
1983	115,503,755	9,082,477	0	1,241,236	125,827,467
1982	84,885,933	9,723,704	0	1,081,950	95,691,587
1981	77,560,453	7,662,574	0	942,636	86,165,664

