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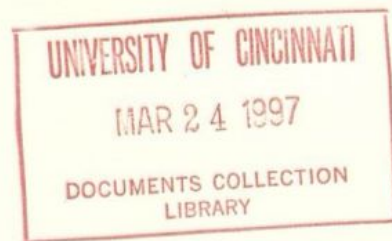
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THE STATE TEACHERS RETI
COMPREHENSIVE ANNU
JUNE 30

**THE STATE TEACHERS RETIREMENT SYSTEM OF OHIO
COMPREHENSIVE ANNUAL FINANCIAL REPORT
Fiscal Year Ended June 30, 1990**

Prepared Through the
Joint Efforts of the
STRS Staff



Copies of this report are available from:
State Teachers Retirement System of Ohio
275 East Broad Street
Columbus, Ohio 43215-3771
(614) 227-4090

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Introduction

**COMPREHENSIVE ANNUAL FINANCIAL REPORT
JUNE 30, 1990**

Introduction

THE BOARD

Membership of the State Teachers Retirement Board is authorized by the Revised Code and includes five active teachers, one retired teacher, and three voting ex-officio members.

Teacher members are elected for four-year terms by members of the Retirement System. The retired teacher member is elected for a four-year term by the retirees receiving

benefits from STRS. Board members serve without compensation other than actual, necessary expenses.

The State Teachers Retirement Board

Charles W. Jewell,
Chairman
Teacher Member

William C. McDonald,
Vice Chairman
Teacher Member

Robert K. Casey
Teacher Member

Louis Koenig
Teacher Member

Betty O. Peters
Retired Teacher Member

Hazel Augusta Sidaway
Teacher Member

Anthony J. Celebrezze, Jr.
Attorney General of Ohio

Thomas E. Ferguson
Auditor of State

Franklin B. Walter
Superintendent of Public Instruction



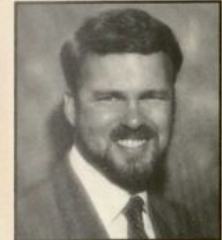
Charles W. Jewell,
Chairman

Elected active teacher member of the Board since 1984. From Youngstown City Schools in Mahoning County.



William C. McDonald,
Vice Chairman

Elected active teacher member of the Board since 1977. From Jackson City Schools in Jackson County.



Robert K. Casey,
Chairman

Elected active teacher member of the Board since 1982. From Galion City Schools in Crawford County.



Louis Koenig

Elected active teacher member of the Board since 1971. From Oak Hills School District in Hamilton County.



Betty O. Peters

Retired teacher member of the Board since 1983 (appointed in 1983, elected in 1985). From Summit County.



Hazel Augusta Sidaway

Elected active teacher member of the Board since 1986. From Canton City Schools in Stark County.



Anthony J. Celebrezze, Jr.
Attorney General of Ohio

Voting ex-officio member of the Board since elected to office in 1983.



Thomas E. Ferguson
Auditor of State

Voting ex-officio member of the Board since elected to office in 1975.



Franklin B. Walter
State Superintendent of Public Instruction

Voting ex-officio member of the Board since appointed to office in 1977.



C. James Grothaus, Executive Director

Deputy Executive Directors

G. Robert Bowers, Administration

Stephen A. Mitchell, Investments

J. Alan Steele, Finance & Data Systems

J. Richard Zimmerman, Member Benefits

Robert A. Slater, Director of Finance & Chief of Fiscal Services

Cynthia E. Hvizdos, Staff Counsel

James W. Miller, Director of Governmental Relations

Independent Auditor:
Arthur Andersen & Co.
Columbus, Ohio

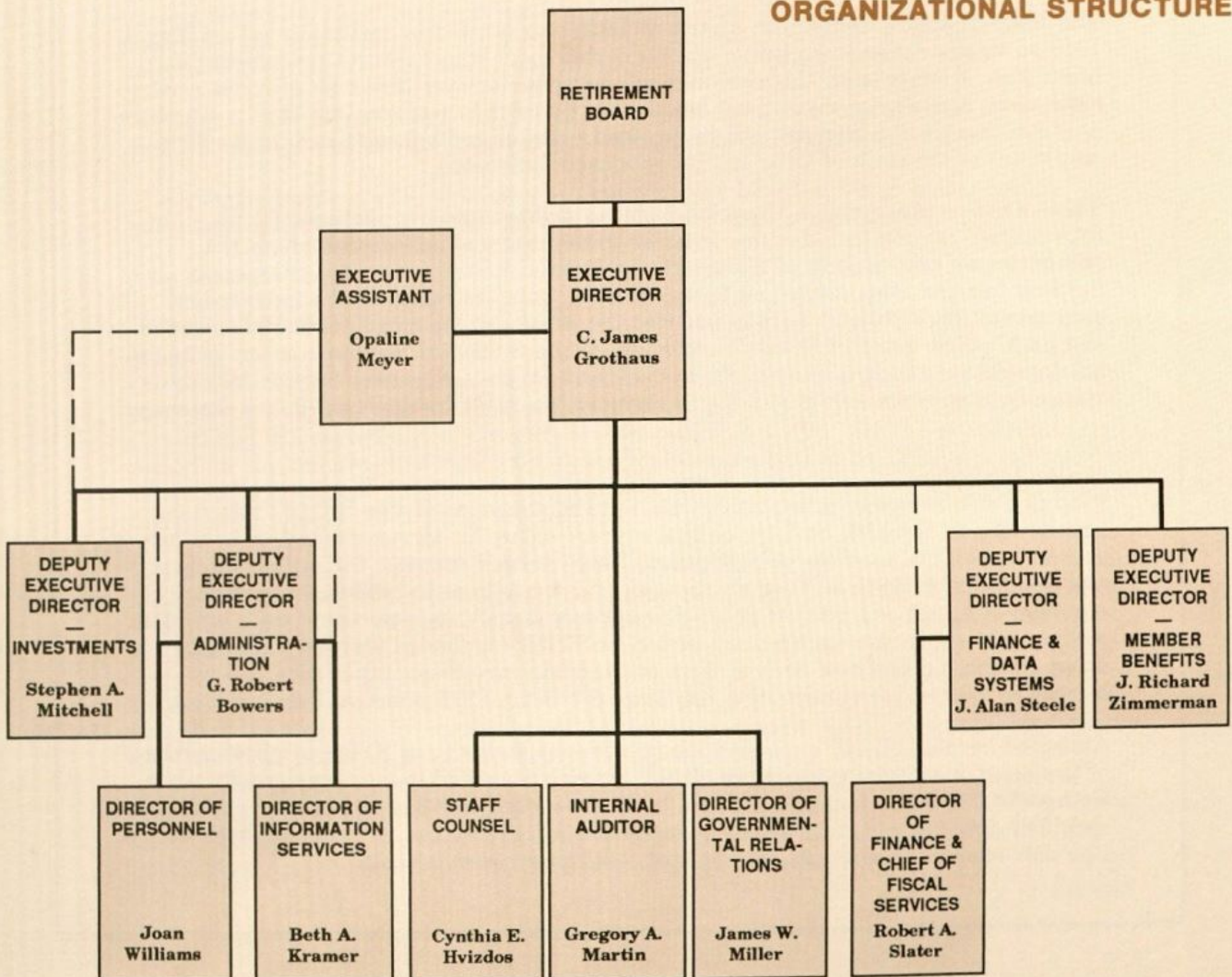
Investment Advisors:
Karsten Realty Advisors
Los Angeles, California

CONSULTANTS

Actuarial Consultant:
Buck Consultants
Chicago, Illinois

Wellington Management Company
Boston, Massachusetts

ORGANIZATIONAL STRUCTURE



Introduction

LETTER OF TRANSMITTAL

THE STATE TEACHERS RETIREMENT SYSTEM OF OHIO

275 EAST BROAD STREET, COLUMBUS, OH 43215-3771

TELEPHONE (614) 227-4090

C. JAMES GROTHAUS, Executive Director

DEPUTY EXECUTIVE DIRECTORS:

G. ROBERT BOWERS, Administration

STEPHEN A. MITCHELL, Investments

J. ALAN STEELE, Finance & Data Systems

J. RICHARD ZIMMERMAN, Member Benefits

STAFF COUNSEL, CYNTHIA E. HVIKDOS

December 14, 1990

Members of the State Teachers Retirement Board:

We are pleased to present the *Comprehensive Annual Financial Report* of the State Teachers Retirement System of Ohio for the fiscal year ended June 30, 1990. This is the first time we have combined financial, investment, actuarial, and statistical information from separate documents into one all-inclusive publication.

The State Teachers Retirement System (STRS) was created by legislative act on May 8, 1919 as an alternative to separate, often-unstable local school district retirement plans. More than 70 years later, this cost-sharing, multiple-employer plan now provides service retirement, disability, survivor, and health care benefits to teachers and faculty members of public boards of education, state-supported colleges and universities, and teaching employees of the state of Ohio and its political subdivisions.

This *Comprehensive Annual Financial Report* is divided into five sections: (1) the Introductory Section includes this letter of transmittal and information about the administrative organization of STRS; (2) the Financial Section contains the general purpose financial statements and footnotes along with the report of the independent auditors; (3) the Actuarial Section includes the results of the annual actuarial valuation and certification letter of Buck Consultants; (4) the Statistical Section consists of historical data showing the progress of the system; and (5) the Investment Section includes a summary of portfolio assets and the Retirement Board's Objective and Policy Statement.

Major Initiatives

Effective with retirements beginning July 1, 1989, Amended House Bill 293 raised the benefit formula from 2% to 2.1% of final average salary for all service and to 2.5% per year of earned Ohio service over 30 years. Death benefit coverage for retired teachers was doubled from \$500 to \$1,000 with an option for retirees to purchase additional coverage of \$1,000 or \$2,000 at group rates. These benefit improvements were provided without increase in the amortization period of STRS's unfunded accrued liability by using unallocated reserves derived from outstanding investment experience and by increasing the teacher contribution rate from 8.77% to 9.25% effective July 1, 1990.

Amended Senate Bill 240 expanded the investment authority of STRS to allow purchase of preferred and common stocks of all U.S. companies listed in the Standard & Poor's Composite 500 Stock Index in addition to stocks issued by other companies who meet specified dividend and debt service restrictions. STRS's maximum common stock allocation continues to be no more than 35% of total fund assets, at cost.

Accounting Basis and Internal Control

The financial statements are prepared in accordance with generally accepted accounting principles and are the responsibility of STRS management. Equity investments are recorded at cost, and fixed income investments are reported at amortized cost. Revenues and expenses are recorded on an accrual basis; that is, revenues are recorded when earned and expenses are recorded when incurred.

STRS maintains a system of internal controls designed to assure responsible safeguarding of assets and reliable financial records. No material weaknesses in internal controls were reported during the conduct of the audit.

The financial statements for the fiscal year ended June 30, 1990 have been audited by Arthur Andersen & Co., Columbus, Ohio. Their report is shown on page 10.

Financial Highlights

Contributions for the fiscal year, including additional service credit purchased by members and employers, totaled \$1.219 billion. The increase of 7.3% over the prior year is primarily the result of higher salaries and the addition of teachers in county boards of mental retardation and developmental disabilities. Contribution rates for members and employers did not change during the 1989-90 fiscal year, however, as mentioned, the members' contribution rate was raised to 9.25% effective July 1, 1990.

Investment income accounted for 58% of revenues and totaled \$1.664 billion for the fiscal year, the second highest amount in STRS history. The rate of return on assets was 9.94%.

The ultimate purpose of any retirement plan is to pay benefits. Total annual benefit payments exceeded \$1 billion for the first time, totaling \$1.009 billion.

Administrative expenses amounted to 0.1% of total assets.

Funding

Contribution rates are actuarially determined to provide a level basis of funding using the entry age normal cost method, and an actuarial valuation is performed annually by Buck Consultants, Chicago, Illinois. The July 1, 1990 valuation shows that the amortization period for the unfunded accrued liability decreased from 34.5 to 34 years and the ratio of assets to total accrued liabilities improved from 69% to 70%. There were no changes in the principal assumptions shown on page 26.

The pension benefit obligation is a standardized measure of the present value of pension benefits prescribed by Governmental Accounting Standards Board Statement No. 5. The total pension benefit obligation, excluding health care, for STRS as of July 1, 1990 was \$23.7 billion.

Investments

Providing the financial foundation of STRS, total investment assets grew to \$17.765 billion as of June 30, 1990. All assets are internally managed and are strategically allocated among three primary portfolios: fixed income, common and preferred stocks, and real estate. The mix of investments is designed to provide high long-term yields while minimizing exposure to risk. The State Teachers Retirement Board's Investment Objective and Policy Statement is included in the Investment Section starting on page 62.

(continued)

Introduction

LETTER OF TRANSMITTAL (continued)

Review of Operations and Activities

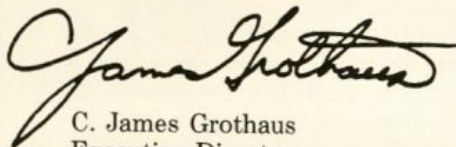
STRS devotes much time and attention to advising members and retirees about their current or future benefits including a comprehensive account statement provided to each member showing projected benefits as well as earnings and service history. During the 1990 fiscal year, Member Benefits staff met in the Columbus office with 4,050 members and benefit recipients and responded to 29,434 telephone calls and 6,557 letters. There were 90 meetings for active and retired teachers throughout the state with total attendance of 6,273 people. Individual conferences were conducted with 4,268 members at approximately 49 field locations.

In August, 1989, STRS's remote computer facility began operations on the west side of Columbus. Duplicate mainframe computers in the headquarters provide complete back-up protection in the event of disaster or other disruption. Additionally, a 130,000 square-foot addition to the downtown headquarters building was completed in April, 1990. The expanded facilities allow the entire STRS staff to be housed in one building for the first time in five years and provide the environment for a full range of member and retiree meetings and services.

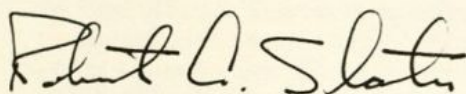
Acknowledgments

The preparation of this report is the result of a combined effort of the STRS staff. It is intended to provide complete and reliable information as a basis for making management decisions, for determining compliance with legal provisions, and for determining responsible stewardship of the assets contributed by the members and their employers.

Respectfully submitted,



C. James Grothaus
Executive Director



Robert A. Slater, CPA
Director of Finance & Chief of Fiscal Services

RETIREMENT BOARD

CHARLES W. JEWELL, CHAIRMAN
PRINCETON JR. HIGH SCHOOL, YOUNGSTOWN

WILLIAM C. McDONALD, VICE CHAIRMAN
JACKSON CITY SCHOOLS, JACKSON

JACK H. CHAPMAN, JR.
ASHTON MIDDLE SCHOOL, REYNOLDSBURG

WILLIAM A. DORSEY
HOBART MIDDLE SCHOOL, PAINESVILLE

BETTY O. PETERS
RETIRED TEACHER MEMBER, NORTHFIELD

HAZEL AUGUSTA SIDAWAY
WORLEY ELEMENTARY SCHOOL, CANTON

ANTHONY J. CELEBREZZE, JR.
ATTORNEY GENERAL OF OHIO

THOMAS E. FERGUSON
AUDITOR OF STATE

FRANKLIN B. WALTER
SUPERINTENDENT OF PUBLIC INSTRUCTION

Financial

**COMPREHENSIVE ANNUAL FINANCIAL REPORT
JUNE 30, 1990**

INDEPENDENT PUBLIC ACCOUNTANTS' REPORT

ARTHUR ANDERSEN & CO.

COLUMBUS, OHIO

Report of Independent Public Accountants

To the State Teachers Retirement Board:

We have audited the accompanying statements of net assets available for benefits of The State Teachers Retirement System of Ohio (STRS) as of June 30, 1990 and 1989, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of STRS management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of STRS as of June 30, 1990 and 1989, and the changes in its net assets available for benefits for the years then ended in conformity with generally accepted accounting principles.

Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information of analysis of funding progress, employer contributions, revenues by source and expenses by type and administrative expense on page 19 to 22 of notes to financial statements is presented for purposes of additional analysis and is not a required part of the basic financial statements. This information, except for the portions marked "unaudited" on which we express no opinion, has been subjected to the auditing procedures applied in our audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Columbus, Ohio,
November 30, 1990.

Arthur Andersen + Co.

Financial

STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS as of June 30

	1990	1989
	Thousands	
ASSETS		
INVESTMENTS:		
Short-term	\$ 1,311,880	\$ 2,083,648
Fixed income	9,695,151	8,145,063
Common and preferred stock and venture capital	4,621,476	3,922,218
Real estate	2,136,706	1,901,809
Total investments	17,765,213	16,052,738
CASH	24,617	5,827
RECEIVABLES:		
Accrued interest and dividends	157,958	139,773
Employer contributions	127,797	117,007
Retirement incentive plan	61,139	69,748
Employee contributions	90,201	81,155
State of Ohio appropriations	4,886	5,287
Securities sold	172,653	54,563
Total receivables	614,634	467,533
FIXED ASSETS, net of accumulated depreciation of \$4,935,000 and \$4,264,000 in 1990 and 1989, respectively	50,778	38,194
Total assets	18,455,242	16,564,292
LIABILITIES		
SECURITIES PURCHASED	173,031	122,331
ACCRUED EXPENSES AND OTHER LIABILITIES	39,758	34,959
Total liabilities	212,789	157,290
NET ASSETS AVAILABLE FOR BENEFITS	\$18,242,453	\$16,407,002

The accompanying **Notes to Financial Statements** are an integral part of these statements.

Financial

STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS Year Ended June 30

	1990	1989
	Thousands	
INVESTMENT INCOME:		
Interest	\$ 1,021,355	\$ 885,626
Dividends	204,516	192,129
Rent	80,364	80,586
Net investment gains	357,365	458,855
Total investment income	<u>1,663,600</u>	<u>1,617,196</u>
CONTRIBUTIONS:		
Employer	754,726	703,773
Employee	455,264	423,639
State of Ohio	4,876	5,287
Other	3,934	3,468
Total contributions	<u>1,218,800</u>	<u>1,136,167</u>
Total increases	<u>2,882,400</u>	<u>2,753,363</u>
BENEFIT PAYMENTS:		
Service retirement	744,625	678,448
Disability retirement	63,174	57,132
Survivor benefits	26,735	25,171
Supplemental benefit	36,885	35,780
Health care	136,563	126,319
Other	1,482	2,707
Total benefit payments	<u>1,009,464</u>	<u>925,557</u>
REFUNDS TO MEMBERS WHO HAVE WITHDRAWN	17,070	17,695
ADMINISTRATIVE EXPENSES	<u>20,415</u>	<u>16,291</u>
Total decreases	<u>1,046,949</u>	<u>959,543</u>
NET INCREASE	<u>1,835,451</u>	<u>1,793,820</u>
NET ASSETS AVAILABLE, beginning of year	<u>16,407,002</u>	<u>14,613,182</u>
NET ASSETS AVAILABLE, end of year	<u><u>\$18,242,453</u></u>	<u><u>\$16,407,002</u></u>

The accompanying **Notes to Financial Statements** are an integral part of these statements.

NOTES TO FINANCIAL STATEMENTS June 30, 1990, and 1989

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements of The State Teachers Retirement System of Ohio (STRS) presented herein have been prepared on the accrual basis of accounting following the accounting policies set forth below.

- a. Organization—STRS (the Plan) is a cost-sharing multiple-employer plan that was created by Chapter 3307 of the Ohio Revised Code (ORC) and is administered by a board comprised of five active members, one retired teacher and three voting ex-officio members.

STRS is not part of the state of Ohio financial reporting entity, nor does the state of Ohio provide oversight authority for the retirement system.

- b. Income Recognition—

- Dividend income is recognized on the record date.
- Interest income is recognized as earned.
- Rental income is recognized as earned.
- Gain or loss on security transactions is determined as of the trade date using the average cost of securities sold.
- Gain or loss on exchange of fixed-income securities is recognized using the completed transaction method.

- c. Contributions—Employer and employee contributions are recorded in the period the related employee salaries are earned.

- d. Fixed Assets—Fixed assets are recorded at historical cost. Depreciation is provided on a straight-line basis over estimated useful lives of 10 years for equipment and 40 years for buildings and building improvements.

- e. Investment Accounting and Valuation—

- Short-term investments and fixed-income investments are valued at amortized cost with any related discount or premium amortized using the effective yield method, subject to adjustment for market declines judged to be other than temporary. Short-term investments include cash equivalents, repurchase agreements and corporate and government notes that mature within four years.
- Common and preferred stock and venture capital investments are valued at cost, subject to adjustment for market declines judged to be other than temporary.
- Real estate investments are valued at historical cost, subject to adjustment for market declines judged to be other than temporary. No provision for depreciation has been made because real estate is treated as an investment asset.
- Purchases and sales of investments are recorded as of their trade date.
- STRS has no individual investment which exceeds five percent of net assets available for benefits.

2. DESCRIPTION OF THE STRS PLAN

Plan Membership—STRS is a mandatory statewide retirement plan for certified teachers and other faculty members employed in the public schools of Ohio (the State) or any school, college, university, institution or other agency controlled, managed and supported, in whole or in part, by the State or any political subdivision thereof. At June 30, 1990 the number of participating employers was:

City school districts	192
Local school districts	372
County offices	85
Exempted village school districts	49
Joint vocational and technical schools	64
Universities and colleges	22
County Boards of Mental Retardation and Developmental Disabilities	86
State of Ohio	1
	871

Plan Benefits—Plan Benefits are established under Chapter 3307 of the ORC. Any member may retire who has (i) five years of service credit and attained age sixty, (ii) twenty-five years of service credit and attained age fifty-five, or (iii) thirty years of service credit regardless of age.

The maximum annual retirement allowance, payable for life, is the greater of the "formula benefit" or the "money purchase benefit" calculation. Under the "formula benefit", the retirement allowance is based on years of credited service and final average salary, which is the average of the member's three highest years' salaries. The annual allowance is determined by multiplying final average salary by 2.5% for each year of Ohio contributing service in excess of 30 and by 2.1% for all other years of credited service up to a maximum allowance of 100% of final average salary. Members retiring before age 65 with less than 30 years of service credit receive a percentage reduction in benefit amounts.

Under the "money purchase benefit" calculation, a member's lifetime contributions plus interest at specified rates are matched by an equal amount from contributed employer funds. This total is then divided by an actuarially determined annuity factor to determine the maximum annual retirement allowance.

Since the plan is tax-qualified, benefits are subject to limits established by Section 415 of the Internal Revenue Code.

Annually, after retirement, benefits are increased 3% if the cost of living as measured by the Consumer Price Index has increased at least 3% since the latest adjustment on a cumulative basis.

Death, Survivors' and Disability Benefits—A member under the age of 60 with five or more years'

Financial

NOTES TO FINANCIAL STATEMENTS June 30, 1990, and 1989 (continued)

credited service who becomes disabled (illness or injury preventing individual's ability to teach) is entitled to a disability allowance. A death benefit of \$1,000 is payable to the beneficiary of each deceased retired member. Additional death benefit coverage up to \$2,000 can be purchased. Various other benefits are available to members' beneficiaries.

Health Care Benefits After Retirement—The Plan provides comprehensive health care benefits to retirees and their dependents. Coverage includes hospitalization, physicians' fees, prescription drugs, and reimbursement of monthly Medicare premiums. No premiums are currently paid by retirees or primary benefit recipients; however, monthly payments are required for covered spouses and other dependents. Pursuant to the ORC, the State Teachers Retirement Board (the Board) has discretionary authority over how much, if any, of the associated health care costs will be absorbed by the Plan.

Under Ohio law, the costs for medical costs paid from the funds of the Plan are included in the employer contribution rate, currently 14% of compensation. The Board allocates employer contributions equal to 2% of covered payroll to a health care reserve fund within the Employers' Trust Fund from which payments for health care benefits are paid. The balance in the health care reserve fund is \$340,312,000 and \$349,681,000 at June 30, 1990 and June 30, 1989, respectively.

The net health care costs paid by the Plan were \$136,563,000 for the year ended June 30, 1990 and \$126,319,000 for the year ended June 30, 1989. Eligible benefit recipients totaled 68,739 and 66,453 at July 1, 1990 and July 1, 1989, respectively.

Supplemental Benefits—In December of each year, if the Board determines that sufficient funds are available, a lump-sum supplemental benefit payment is made to eligible retirees. The payment is based on the retiree's years of service and date of retirement. The amount of the payment may vary and is not guaranteed from year to year. Approximately \$36,885,000 and \$35,780,000 were paid in December 1989 and 1988, respectively.

3. FUNDING METHOD AND CONTRIBUTION REQUIREMENTS

STRS funding policy provides for periodic employer and employee contributions at rates, expressed as percentages of covered payroll, that will accumulate assets sufficient to pay benefits when due. Employer and employee contribution rates are established by the Board and limited by Chapter 3307 of the ORC to 14% and 10%, respectively, of covered payroll. The rates are established by the Board based on an actuarial evaluation of the liabilities of STRS by its actuary.

The actuarial evaluation used the projected benefit method with level percentage entry age normal and an open-end unfunded actuarial liability to calculate the projected benefit obligation and to determine the period over which the unfunded liability would be amortized (based on present fixed employer and employee contribution rates). The significant actuarial assumptions used to compute the projected benefit obligation are the same as those used to compute the standardized measure of the pension obligation discussed in Note 4.

Contributions consisted of the following components:

	Effective Rates at 7-1-90	Year Ended 6-30-90	Year Ended 6-30-89
Employee normal cost	9.25%	8.77%	8.77%
Employer			
Normal cost	5.78%	6.26%	5.53%
Amortization of unfunded actuarial liability	6.22%	5.74%	6.47%
Health care benefits	2.00%	2.00%	2.00%
Total employer	14.00%	14.00%	14.00%

Normal cost is the amount necessary to finance benefits earned by employees during the current service year. As a result of benefit improvements, the normal cost increased from 14.30% to 15.03% as of July 1, 1989.

The actuarial calculation resulted in an unfunded liability for funding purposes that would liquidate over a period of 34 years.

Contribution requirements based on covered payroll were \$696,422,000 and \$652,117,000 for employers and \$436,259,000 and \$408,504,000 for employees in 1990 and 1989, respectively. Actual contributions received were \$754,726,000 and \$703,773,000 for employers and \$455,264,000 and \$423,639,000 for employees in 1990 and 1989, respectively. The differences are primarily due to programs whereby employees and employers can purchase additional years of service credit.

4. FUNDING STATUS AND PROGRESS

The amounts shown below as "pension benefit obligation" (PBO) are standardized disclosure measures of the present value of pension benefits estimated to be payable in the future as a result of employee service to date. The PBO is adjusted for the effects of composite projected salary increases. The measure is the actuarial present value of credited projected benefits and is intended to help users assess the funding status of the Plan 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.

The PBO was determined as part of actuarial valuations at July 1, 1990 and 1989. Significant actuarial

assumptions included (a) a rate of return on the investment of present and future assets of 7.75% per year, compounded annually, (b) assumed projected annual salary increases ranging from 10.50% at age 20 to 4.50% at age 65, which reflect an allowance for inflation and merit or seniority increases, (c) post-retirement life expectancies based on the 1955 American Annuity Table with ages set back two years for men and seven years for women, (d) pre-retirement life expectancies, rates of withdrawal from service before retirement for reasons other than death, rates of disability and rates of retirement ages developed on the basis of actual plan experience, (e) assumed annual post-retirement benefit increases equal to 3% of the member's benefit at retirement, based on the assumption that the change in the Consumer Price Index will equal or exceed 3% each year in the future, and (f) an employee contribution rate of 8.77% at July 1, 1989 and 9.25% effective July 1, 1990, and an employer contribution rate of 14%.

Benefit improvement legislation was enacted on September 15, 1989. The legislation increased the benefit formula to 2.1% of final average salary per year of service and to 2.5% per year of earned Ohio service over 30 years. The effect of the benefit improvements was to increase the pension benefit obligation \$608 million.

At July 1, 1990 and 1989, the unfunded pension benefit obligation was \$5,842,518 and \$5,921,156, respectively, as follows (dollar amounts in thousands):

5. FUNDS

Various funds were established under the ORC to account for contributions, reserves, income and administrative expenses.

- The Teachers' Savings Fund (TSF) is used to accumulate employee contributions in trust.
- The Employers' Trust Fund (ETF) is used to accumulate employer contributions in trust. ETF includes assets allocated to the health care reserve fund from which payments for comprehensive health care benefits are made (see Note 2).
- The Annuity and Pension Reserve Fund (APRF) is the fund from which all annuities and pension payments to retired members are made for which reserves have been transferred from the TSF and ETF funds.
- The Survivors' Benefit Fund is the fund from which all survivor benefit payments are made.
- The Guarantee Fund is used to accumulate income derived from gifts, bequests, and investments for the year.
- The Expense Fund is the fund from which all expenses for the administration and management of STRS are paid.

After interest is allocated to the various funds, the Guarantee Fund and the Expense Fund are closed into the Employers' Trust Fund at year-end.

	1990		1989	
	Number of Members	Amount	Number of Members	Amount
Actuarial present value of projected benefits payable to current retirees and beneficiaries	68,739	\$ 9,576,506	66,453	\$ 8,618,907
Actuarial present value of projected benefits payable to terminated vested members	16,193	946,343	15,814	1,107,810
Total	84,932	10,522,849	82,267	9,726,717
Actuarial present value of credited projected benefits for plan members:				
Member contributions		3,509,869		3,230,662
Employer financed vested		3,668,864		3,456,249
Employer financed nonvested		6,043,077		5,564,849
Total (120,600 and 118,788 vested members; 106,713 and 102,861 nonvested members at July 1, 1990 and 1989, respectively.)	227,313	13,221,810	221,649	12,251,760
Total members	312,245		303,916	
Pension benefit obligation		23,744,659		21,978,477
Net assets available for benefits (excluding health care reserve fund of \$340,312 at July 1, 1990 and \$349,681 at July 1, 1989)		17,902,141		16,057,321
Unfunded pension benefit obligation		\$ 5,842,518		\$ 5,921,156

Financial

NOTES TO FINANCIAL STATEMENTS June 30, 1990, and 1989 (continued)

At June 30, 1990 and 1989, net assets available for benefits were included in the various funds as follows (in thousands):

	1990	1989
Teachers' Savings Fund	\$ 3,729,945	\$ 3,446,312
Employers' Trust Fund	5,083,457	4,381,212
Annuity and Pension Reserve Fund	9,147,308	8,313,978
Survivors' Benefit Fund	281,743	265,500
	<u>\$18,242,453</u>	<u>\$16,407,002</u>

6. COMMITMENTS

STRS has made commitments to fund various real estate investments totaling approximately \$322,722,000 at June 30, 1990.

In October 1990, the Board passed a resolution that provides lump-sum supplemental benefit payments totaling approximately \$38,000,000 to be paid to eligible retirees in December 1990.

7. INVESTMENT SUMMARY

The investment authority of the Board is governed by Section 3307.15 of the ORC which also requires the Board to publish its investment policies annually and make copies available to interested parties. This section requires that investments be made with care, skill, prudence and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. It further provides that the Board may invest in bonds, notes, certificates of indebtedness, mortgage notes, real estate, stocks and debentures with certain restrictions as to the nature and quality of this investment and composition of the investment portfolio. The Board has further restricted investments as to the nature and quality of the investment and composition of the investment portfolio.

A complete description of the investment powers of the Board may be found in Section 3307.15 of the ORC. The Board's "Investment Objective and Policy" may be found in the Investment Section of this report.

Statement No. 3 of the Governmental Accounting Standards Board requires governmental entities to categorize investments as an indication of the level of risk at fiscal year end. Category 1 includes investments that are insured or registered or for which the securities are held by STRS or its agent in the name of STRS. Category 2 includes uninsured and unregistered investments for which the securities are held by the custodian's trust department or agent in the name of STRS. Category 3 includes uninsured and unregistered

investments for which the securities are held by the custodian or its agent but not in STRS' name.

All marketable securities at June 30, 1990 and June 30, 1989 meet the criteria of Category 1. Investments are held in the name of STRS or its custodian as nominated by the Treasurer of the State of Ohio.

Investments held by STRS at June 30, 1990 and 1989 are summarized in the chart on page 17.

8. REAL ESTATE INVESTMENTS

General—The STRS properties are geographically distributed. The real estate investments include retail single-tenant stores and malls (31%), single and multi-tenant office space (38%), single and multi-tenant warehouses (14%), apartments (8%) and other (9%). Certain reclassifications among real estate categories were made in fiscal 1990 to conform with the manner in which the properties are currently being managed (see Note 7). No single project or groups of leases with a single credit represents more than 6% of total real estate investments.

Participating Mortgages—Participating mortgages consist principally of mortgages on commercial office space and have the following general features:

- Fixed interest rates ranging from 7% to 13%, generally 1 to 2 percentage points below the prevailing market rate at the inception of the mortgage in exchange for participation in the net cash flow generated by a project ranging from 50% to 80%.
- Maturities ranging from fiscal year 1991 to 2020.
- Options to convert the mortgage to an equity position in the project, in lieu of payment, or to call the mortgage after a specified period of time.

Multi-Tenant and Sale-Leaseback—Multi-tenant properties and sale-leaseback arrangements consist of real estate leased subject to operating leases, which consist principally of commercial office space, retail store space and warehouse space. Following is a schedule of minimum future rentals on noncancellable operating leases as of June 30, 1990 (in thousands):

Year ending June 30	
1991	\$ 83,614
1992	75,870
1993	68,780
1994	63,145
1995	59,865
Thereafter	<u>481,284</u>
Total minimum future rentals	<u>\$832,758</u>

Other—Other real estate includes syndicated mortgages, consisting of land acquisition costs and mortgage receivables relating to the financing of buildings; and separate accounts, comprised of group annuity contracts and group trusts.

Investments held by STRS at June 30, 1990 and 1989 are summarized as follows (in thousands):

Category	June 30, 1990		June 30, 1989	
	Cost	Fair Market Value	Cost	Fair Market Value
Short-term	\$ 1,311,880	\$ 1,315,050	\$ 2,083,648	\$ 2,094,723
Fixed-income:				
Guaranteed mortgages	3,344,836	3,314,810	3,010,250	3,027,375
U.S. Government and governmental agencies	4,821,086	4,956,311	3,920,419	4,157,470
Corporate bonds	1,245,308	1,233,167	943,078	938,999
Canadian bonds	262,846	245,711	242,818	230,412
Municipal bonds	2,710	2,618	2,980	2,861
Convertible bonds	18,365	12,758	25,518	20,864
Total fixed income	<u>9,695,151</u>	<u>9,765,375</u>	<u>8,145,063</u>	<u>8,377,981</u>
Common and preferred stock	<u>4,593,856</u>	<u>5,740,509</u>	<u>3,904,147</u>	<u>5,009,012</u>
Real estate (see Note 8):				
Participating mortgages	582,268	640,454	469,063	529,195
Multi-tenant properties	616,074	585,244	488,398	488,790
Sale leasebacks	486,726	475,648	630,112	634,843
Other	451,638	524,118	314,236	349,719
Total real estate	<u>2,136,706</u>	<u>2,225,464</u>	<u>1,901,809</u>	<u>2,002,547</u>
Venture capital	<u>27,620</u>	<u>29,042</u>	<u>18,071</u>	<u>23,048</u>
Total investments	<u>\$17,765,213</u>	<u>\$19,075,440</u>	<u>\$16,052,738</u>	<u>\$17,507,311</u>

Fair market valuation—Stocks traded on a national securities exchange are valued at the closing price on the last business day of the fiscal year; stocks traded over the counter are valued at the closing bid price, as reflected by NASDAQ, on the last business day of the fiscal year; U.S. Government and governmental agency securities, bonds, certain guaranteed mortgages, and short-term corporate and government notes are valued based on information from an independent service organization for institutional investors; guaranteed mortgages are valued based on their coupon rate relative to the coupon rate for similar mortgages on the last business day of the fiscal year; short-term cash equivalent investments are stated at amortized cost which approximates market value; real estate is valued based on appraisals performed by independent appraisers or, for properties not appraised, at the present value of the projected future net income stream, and venture capital is based on values established by valuation committees.

From June 30, 1990 through November 30, 1990, there has been a decline in the stock markets. As measured by the Standard and Poor's 500 Stock Index, the market has declined approximately 12% for this asset class. Management believes there has been some subsequent decrease in the market value of STRS's common and preferred stock portfolio held at June 30, 1990.

9. DEPOSITS

The Treasurer has entered into an agreement with a bank that provides STRS with various banking services, provided that STRS maintains sufficient compensating balances to cover the costs of the bank in supplying the specified services. For the year ended June 30, 1990, such compensating balances averaged approximately \$4,092,000. The lost earnings from not investing such balances in short-term investments equated to a cost to STRS of approximately \$346,000.

The STRS bank account is fully collateralized with the collateral being held by the Treasurer of State in the name of STRS.

10. STATE APPROPRIATIONS

From time to time, the legislature of the State has increased benefit payments to retirees. In certain instances, concurrent with the passage of such legislation, a provision for payment of these benefits through future State appropriations has been made. The present value of future State appropriations at June 30, 1990 and 1989 for these benefits was approximately \$33,166,000 and \$36,885,000, respectively.

STRS received approximately \$4,886,000 and \$5,287,000 from the State for increased benefits paid during the years ended June 30, 1990 and 1989, respectively. Funding for these increased benefits is on a pay-as-you-go basis by the State.

Financial

NOTES TO FINANCIAL STATEMENTS

June 30, 1990, and 1989 (continued)

11. PENSION PLAN

Substantially all full-time STRS employees are eligible to participate in a contributory retirement plan administered by the Public Employees Retirement System of Ohio (PERS). PERS is a cost-sharing, multiple-employer public employee retirement system. The payroll for employees covered by PERS for the year ended June 30, 1990 was approximately \$7,173,000; STRS's total payroll was approximately \$7,587,000.

Eligible employees are entitled to a retirement benefit, payable monthly for life, equal to 2.1% of their final average salary for each year of credited service up to 30 years and 2.5% for each year of service over 30 years. Final average salary is the employee's average salary over the highest three years of earnings. Benefits fully vest on reaching five years of service. Vested employees may retire at any age with 30 years of credited service, at age 60 with a minimum of five years of credited service and age 55 with a minimum of 25 years of service. Employees retiring with less than 30 years of service and under age 65 receive reduced retirement benefits. Benefits are established by State statute. Employees covered by the PERS system are required by Ohio statute to contribute 8.5% of their salary to the plan. STRS is required by the same statute to contribute 13.95% of covered payroll; 9.40% is the portion that is used to fund pension obligations with the remainder used to fund the health care program for retirees. The total contribution requirement for the year ended June 30, 1990 was approximately \$1,611,000, which consisted of \$1,001,000 from STRS and \$610,000 from employees; these contributions represented 13.95% and 8.5% of covered payroll, respectively. There were no changes in actuarial assumptions, benefits provisions, or actuarial funding methods for the most recent actuarial study, except that the assumed investment rate of return was increased from 7.5% to 7.75% per year.

The pension benefit obligation and the net assets available for benefits for PERS as a whole, based on the most recent information and actuarial valuations available, is presented below (in thousands):

	<u>December 31, 1988</u>
Pension benefit obligation	\$15,658,000
Net assets available for benefits	\$13,290,000

The pension benefit obligation is a standardized disclosure measure of the actuarial present value of credited projected benefits, adjusted for the effects of projected salary increases and any step rate benefits, estimated to be payable in the future as a result of the employee's service to date. This measure is intended to help users assess each public employee retirement 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 and among employers. The total pension benefit obligation does not include projected health care benefits. STRS's contributions represented less than one percent of the total contributions required of all participating entities in PERS.

Historical trend information showing the progress of PERS in accumulating sufficient assets to pay benefits when due is presented in the *PERS Comprehensive Annual Financial Report*.

12. TEN-YEAR HISTORICAL TREND INFORMATION

Ten-year historical trend information designed to provide information about STRS's progress made in accumulating sufficient assets to pay benefits when due is presented on pages 19-21. The standardized measure of the pension benefit obligation is unavailable for fiscal years prior to 1983.

SUPPLEMENTARY INFORMATION OF ANALYSIS OF FUNDING PROGRESS 1983-1990

(In Thousands Except Percentages)

Fiscal Year	Net Assets Available For Benefits*	Pension Benefit Obligation	Percentage Funded	Unfunded Pension Benefit Obligation	Annual Covered Payroll	Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll
1983 (unaudited)	\$ 7,260,743	\$11,532,682	63%	\$4,271,939	\$3,090,437	138%
1984 (unaudited)	8,207,347	13,020,055	63%	4,812,708	3,327,764	145%
1985 (unaudited)	9,332,364	14,513,636	64%	5,181,272	3,590,278	144%
1986 (unaudited)	10,678,570	15,980,947	67%	5,302,377	3,839,151	138%
1987 (unaudited)	12,589,487	17,600,461	72%	5,010,974	4,133,831	121%
1988 (audited)	14,258,680	19,324,598	74%	5,065,918	4,380,287	116%
1989 (audited)**	16,057,321	21,978,477	73%	5,921,156	4,657,975	127%
1990 (audited)	17,902,141	23,744,659	75%	5,842,518	4,974,442	117%

*At cost (see Note 1). Excludes assets allocated to the health care reserve fund.

**In fiscal year 1989, plan benefit provisions were amended to increase the benefit formula. The amendment increased the pension benefit obligation in fiscal 1989 by \$608 million.

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of STRS' funding status on a going-concern basis. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the retirement system. Trends in unfunded pension benefit obligation and annual covered payroll are both affected by inflation. Expressing the unfunded pension benefit obligation as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of STRS' progress in accumulating assets to pay benefits when due. Generally, the smaller this percentage, the stronger the retirement system.

The amount of net assets available for benefits on an accrual basis and the GASB 5-defined pension benefit obligation are not available prior to 1983.

The actuarial assumptions used in the computation of the pension benefit obligation are revised periodically based on STRS' experience.

Financial

SUPPLEMENTARY INFORMATION OF REVENUES BY SOURCE AND EXPENSES BY TYPE

1981-1990
(In Thousands)

Revenues By Sources

Fiscal Year	Employee Contributions	Employer Contributions	Investment Income	State Appropriations	Other	Total
1981 (unaudited)*	\$236,099	\$365,835	\$ 454,069	\$9,106	\$1,446	\$1,066,555
1982 (unaudited)*	253,208	390,632	516,640	4,323	1,825	1,166,628
1983 (unaudited)	269,913	417,209	682,034	7,979	1,866	1,379,001
1984 (unaudited)**	296,876	467,696	740,029	7,471	2,311	1,514,383
1985 (unaudited)	325,351	540,824	890,331	7,048	3,036	1,766,590
1986 (unaudited)	354,011	604,729	1,163,976	6,595	3,622	2,132,933
1987 (unaudited)	384,490	614,989	1,798,705	6,142	3,117	2,807,443
1988 (audited)	396,655	676,536	1,494,435	5,704	3,392	2,576,722
1989 (audited)***	423,639	703,773	1,617,196	5,287	3,468	2,753,363
1990 (audited)	455,264	754,726	1,663,600	4,876	3,934	2,882,400

Expenses by Type

Fiscal Year	Benefits	Refunds	Administration	Total
1981 (unaudited)	\$ 380,688	\$25,099	\$ 4,650	\$ 410,437
1982 (unaudited)	423,056	28,978	5,298	457,332
1983 (unaudited)	472,150	26,604	6,333	505,087
1984 (unaudited)	526,719	21,330	7,789	555,838
1985 (unaudited)	595,247	20,848	8,090	624,185
1986 (unaudited)	678,202	19,317	9,449	706,968
1987 (unaudited)	763,052	17,232	11,245	791,529
1988 (audited)	845,476	15,526	13,610	874,612
1989 (audited)	925,557	17,695	16,291	959,543
1990 (audited)	1,009,464	17,070	20,415	1,046,949

*Fiscal years 1981-1982 were prepared on a cash basis of accounting.

**Employee and employer contribution requirements were increased from 8.50%/13.50%, respectively, to 8.75%/14.00% effective January 1, 1984. The effect of this change was to increase fiscal 1984 employee and employer contributions \$6 million/\$12 million, respectively.

***Effective July 1, 1988, the employee contribution rate was increased from 8.75% to 8.77% of compensation. The effect was an increase in employee contributions of \$768,000 for fiscal year 1989.

SUPPLEMENTARY INFORMATION OF EMPLOYER CONTRIBUTIONS 1981-1990

(In Thousands Except Percentages)

<u>Fiscal Year</u>	<u>Employer Contributions*</u>	<u>Annual Covered Payroll</u>	<u>Employer Contributions As Percentage of Annual Covered Payroll**</u>
1981 (unaudited)	\$365,835	\$2,709,889	13.50%
1982 (unaudited)	390,632	2,893,570	13.50%
1983 (unaudited)	417,209	3,090,437	13.50%
1984 (unaudited)	467,696	3,327,764	14.05%
1985 (unaudited)	540,824	3,590,278	15.06%
1986 (unaudited)	604,729	3,839,151	15.75%
1987 (unaudited)	614,989	4,133,831	14.88%
1988 (audited)	676,536	4,380,287	15.45%
1989 (audited)	703,773	4,657,975	15.11%
1990 (audited)	754,726	4,974,442	15.17%

*Employer contributions include payments under the voluntary retirement incentive plan. The retirement incentive plan was established in August, 1983.

**Statutory employer contribution requirements were increased from 13.50% to 14.00% effective January 1, 1984. As a result, employer contributions increased approximately \$12 million in fiscal 1984. Differences between statutory rates and computed rates are primarily related to the retirement incentive plan as discussed above.

Financial

ADMINISTRATIVE EXPENSES Year Ended June 30

	<u>1990</u>	<u>1989</u>
PERSONNEL:		
Salaries and wages	\$ 7,631,838	\$ 6,663,523
Retirement contributions	957,343	828,924
Benefits	1,431,778	1,131,119
	<u>10,020,959</u>	<u>8,623,566</u>
PROFESSIONAL AND TECHNICAL SERVICES:		
Investment advisor	600,219	370,244
Investment research	127,944	137,222
Computer support services	2,946,503	1,684,849
Health Care Services	326,873	211,186
Actuary	262,607	338,880
Auditing	42,415	60,900
Legal	99,542	43,694
	<u>4,406,103</u>	<u>2,846,975</u>
COMMUNICATIONS:		
Postage and courier services	775,559	746,384
Printing and supplies	938,818	844,878
Telephone	172,941	149,817
	<u>1,887,318</u>	<u>1,741,079</u>
OTHER EXPENSES:		
Equipment repairs and maintenance	702,799	556,474
Building occupancy and maintenance	650,295	480,504
Transportation and travel	649,785	618,246
Equipment rental	508,584	300,368
Depreciation	858,221	663,459
Insurance	270,579	172,908
Memberships and subscriptions	123,456	108,577
Retirement study commission	187,984	133,643
Miscellaneous	149,247	44,918
	<u>4,100,950</u>	<u>3,079,097</u>
TOTAL ADMINISTRATIVE EXPENSES	<u><u>\$20,415,330</u></u>	<u><u>\$16,290,717</u></u>

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**COMPREHENSIVE ANNUAL FINANCIAL REPORT
JUNE 30, 1990**

ACTUARY'S CERTIFICATION LETTER

BUCK CONSULTANTS

Xerox Centre
55 West Monroe Street Suite 1700
Chicago, Illinois 60603

November 21, 1990

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

Ladies and Gentlemen:

This report presents the results of the actuarial valuation of the assets and liabilities of The State Teachers Retirement System of Ohio as of July 1, 1990, prepared in accordance with Section 3307.20 of Chapter 3307 of the Ohio Revised Code.

The valuation was based on the same actuarial assumptions and methods used in last year's valuation. During fiscal year 1989/90 there were no significant modifications in the benefit or contribution provisions which needed to be reflected in the current valuation.

The valuation indicates that the unfunded accrued liability of the System is equal to \$7,641 million as of July 1, 1990. Based on the assumption that the STRS payroll will grow in the future at the rate of 5.875% per annum, the unfunded amount of \$7,641 million will be liquidated over a period of 34 years commencing July 1, 1990.

As of last year's valuation, the major improvements in benefits under H.B. 293 were incorporated in the assets and liabilities of STRS. These improvements make STRS one of the most competitive pension benefit programs for teachers in the nation. It should be noted that based upon the current valuation, the funding provisions of H.B. 293 have been maintained in that the funding period of the deficiency of STRS remains within the original 35-year requirement as of July 1, 1989 without any increase in employer contributions.

The valuation also indicates that the assets of the System include reserves which have been established for the following specific purposes:

- (1) A reserve of \$53 million established as of July 1, 1989 to be used for future benefit improvements for members.
- (2) A reserve of \$200 million established as of July 1, 1990 to cover additional liabilities expected to emerge over the next 3 years on account of adverse actuarial experience which may not be offset by additional investment earnings.

Buck Consultants, Inc.
312 | 332-2285 Fax 312 | 332-5245

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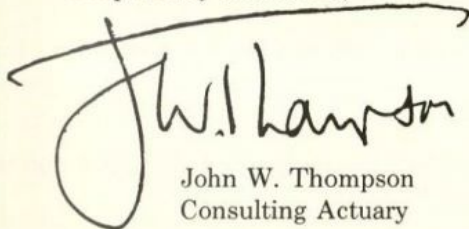
The Retirement Board
The State Teachers
Retirement System of Ohio
November 21, 1990
Page 2

The reserve of \$53 million indicated above has been used to establish a portfolio of bonds whose income is dedicated to providing the anticipated future benefit improvements for members. This action is consistent with the Board's policy established in 1983 under which benefit improvements for retired members would generally be financed by the use of a dedicated bond portfolio.

If the reserve of \$200 million had not been established as of July 1, 1990, the unfunded accrued liability of the System would have been \$7,441 million as of July 1, 1990 and the liquidation period would have been 32¾ years.

It should be noted that the current funding period of 34 years is ahead of the original 1983 Management Improvement Plan objective of attaining a funding period of 40 years as of January 1, 1986, which is equivalent to a period of 35½ years as of July 1, 1990. As already noted, it is also consistent with the funding provisions of House Bill 293 which required a funding period of no greater than 35 years as of July 1, 1989.

Respectfully submitted,



John W. Thompson
Consulting Actuary

BUCK
CONSULTANTS

Actuarial

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

Interest Rate: 7¼% per annum, compounded annually. (Adopted 1985.)

Separations From Active Service: Representative values of the assumed rates of separation and annual rates of salary increase are as follows:

Age	Withdrawal	Death	Disability	ANNUAL RATES OF (Adopted 1985)			Salary Increase
				Superannuation			
				30 Years Service	25-29 Years Service	Under 25 Years Service	
MEN							
20	.0855	.0009	—	—	—	—	.1050
30	.0655	.0010	.0003	—	—	—	.0850
40	.0295	.0016	.0009	—	—	—	.0650
50	.0150	.0035	.0054	.2250	—	—	.0530
55	.0153	.0054	.0077	.2070	.0495	—	.0500
60	.0163	.0096	—	.2475	.0675	.0765	.0475
65	.0163	.0177	—	.3825	.3600	.2565	.0450
70	—	.0309	—	.3600	.3600	.3150	.0450
WOMEN							
20	.0566	.0003	—	—	—	—	.1050
30	.0599	.0004	.0005	—	—	—	.0850
40	.0248	.0007	.0012	—	—	—	.0650
50	.0149	.0016	.0048	.2250	—	—	.0530
55	.0126	.0029	.0070	.2250	.0900	—	.0500
60	.0117	.0054	—	.2610	.1305	.1440	.0475
65	.0123	.0099	—	.4050	.3600	.2970	.0450
70	—	.0174	—	.3600	.3150	.2700	.0450

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. (Adopted 1981; reviewed 1985.)

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.

Payroll Growth: Assumed to grow at 5.875% per annum for purposes of determining the liquidation period of the unfunded accrued liability. (Adopted 1989.)

Pension Benefit Obligation: The measure of the actuarial present value (APV) as of the valuation date of credited projected benefits prorated on service, or pension benefit obligation (PBO) as referred to in Statement No. 5 of the Governmental Accounting Standards Board (GASB), includes an adjustment for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to July 1, 1990. Significant actuarial assumptions used to determine the pension benefit obligation as of July 1, 1990 include the following:

- (1) An assumed rate of return on the investment of present and future assets of 7¼% per annum, compounded annually.
- (2) Assumed projected annual salary increases ranging from 10.50% at age 20 to 4.50% at age 65, which reflect an allowance for inflation and merit or seniority increases.
- (3) Assumed annual post-retirement benefit increases equal to 3% of the member's benefit at retirement, based on the assumption that the change in Consumer Price Index will equal or exceed 3% each year in the future.

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SCHEDULE OF ACTIVE MEMBER VALUATION DATA 1981-1990

Active Members

<u>Valuation Date</u>	<u>Number</u>	<u>Annual Payroll</u>	<u>Annual Average Pay</u>	<u>% Increase in Average Pay</u>
1981	150,972	\$2,737,510,200	\$18,133	10%
1982	145,735	2,884,405,114	19,792	9%
1983	145,603	3,033,025,509	20,831	5%
1984	146,387	3,276,468,295	22,382	7%
1985	147,790	3,531,209,445	23,893	7%
1986	149,428	3,788,136,615	25,351	6%
1987	150,607	4,074,129,054	27,051	7%
1988	152,200	4,336,723,017	28,494	5%
1989	153,830	4,624,118,605	30,060	5%
1990	157,650	4,941,916,397	31,347	4%

SCHEDULE OF RETIREES AND BENEFICIARIES 1981-1990

<u>Valuation Date</u>	<u>Number</u>	<u>Annual Allowances</u>	<u>% Increase in Annual Allowances</u>	<u>Average Annual Allowances</u>
1981	50,456	\$336,242,968	9%	\$ 6,664
1982	52,289	368,196,833	10%	7,042
1983	54,040	403,866,601	10%	7,473
1984	55,908	466,368,960	15%	8,342
1985	58,348	524,518,901	12%	8,989
1986	60,960	588,109,760	12%	9,647
1987	62,819	640,566,254	9%	10,197
1988	64,957	713,028,230	11%	10,977
1989	66,453	773,339,143	8%	11,637
1990	68,739	854,536,192	10%	12,432

Actuarial

SUMMARY OF ACCRUED AND UNFUNDED ACCRUED LIABILITIES 1981-1990

Valuation Date	Aggregate Accrued Liabilities*	Valuation Assets	Assets as % of Accrued Liabilities	Unfunded Accrued Liabilities UAL*	Annual Active Member Payroll	UAL as % of Annual Active Member Payroll
1981	\$10,304,723,151	\$ 5,634,904,635	55%	\$4,669,818,516	\$2,737,510,200	171%
1982	11,468,994,103	6,344,384,910	55%	5,124,609,193	2,884,405,114	178%
1983	12,511,817,710	7,368,243,336	59%	5,143,574,374	3,033,025,509	170%
1984	14,099,005,247	8,326,787,730	59%	5,772,217,517	3,276,468,295	176%
1985	15,539,374,321	9,469,193,599	61%	6,070,180,722	3,531,209,445	172%
1986	17,309,200,649	10,895,158,195	63%	6,414,042,454	3,788,136,615	169%
1987	19,291,791,692	12,911,071,860	67%	6,380,719,832	4,074,129,054	157%
1988	21,372,968,376	14,613,182,194	68%	6,759,786,182	4,336,723,017	156%
1989	23,618,688,229	16,407,002,188	69%	7,211,686,041	4,624,118,605	156%
1990	25,883,338,779	18,242,453,340	70%	7,640,885,439	4,941,916,397	155%

*Based on the actuarial method used for funding purposes, which is different from the standard measure of the pension benefit obligation prescribed by Governmental Accounting Standards Board Statement No. 5.

SOLVENCY TEST 1981-1990

Valuation Date	Aggregate Accrued Liabilities for				Portion of Accrued Liabilities Covered by Assets		
	(1)	(2)	(3)	Valuation Assets	(1)	(2)	(3)
	Active Member Contributions	Retirees and Beneficiaries	Active Members (Employer Financed Portion)				
1981	\$1,649,244,208	\$3,660,701,843	\$ 4,994,777,100	\$ 5,634,904,635	100%	100%	7%
1982	1,809,180,897	3,961,436,332	5,698,376,874	6,344,384,910	100%	100%	10%
1983	1,978,778,553	4,386,537,409	6,146,501,748	7,368,243,336	100%	100%	16%
1984	2,226,867,849	5,075,022,472	6,797,114,926	8,326,787,730	100%	100%	15%
1985	2,421,531,824	5,831,342,665	7,286,499,832	9,469,193,599	100%	100%	17%
1986	2,637,764,379	6,490,306,408	8,181,129,862	10,895,158,195	100%	100%	22%
1987	2,900,597,610	7,079,879,662	9,311,314,420	12,911,071,860	100%	100%	31%
1988	3,153,950,326	7,932,553,422	10,286,464,628	14,613,182,194	100%	100%	34%
1989	3,446,311,610	8,618,907,338	11,553,469,281	16,407,002,188	100%	100%	38%
1990	3,729,945,386	9,576,505,968	12,576,887,425	18,242,453,340	100%	100%	39%

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 (i) 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 a formula percentage of 2.5% will apply, or (ii) \$86 multiplied by years of service credit, and adjusted by the following percentage:

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

Maximum benefit—100% 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. Reduced retirement allowance payable to the member continuing for life to the member's sole beneficiary named at retirement after the member's death.

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.

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 payments that remain to be paid are to be paid to the estate of the beneficiary last receiving.

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

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 2.1% of the average salary during the 3 highest paid years, except that for service in excess of

Actuarial

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS (continued)

30 years the 2.5% formula will apply, 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 \$1,000 upon death after service or disability retirement.

Survivor's Benefit

Eligibility

Upon death after at least 1½ years of credit for Ohio service with at least ¼ year of such service in the 2½ years preceding death or upon death of a disability retiree.

Benefits

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 Qualified Dependents	% of Average Annual Salary for 3 Highest Paid Years	Minimum Annual Benefit
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

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

Contribution:

By Members

9.25% of salary effective July 1, 1990.

By Employers

14.00% of salaries of their employees who are members.

Statistical

**COMPREHENSIVE ANNUAL FINANCIAL REPORT
JUNE 30, 1990**

Statistical

BENEFIT EXPENSES BY TYPE 1981-1990

Fiscal Year Ended	Service Retirement	Disability Retirement	Survivor Benefits	Supplemental Benefit	Health Care	Other	Total
1981	\$329,447,312	\$20,115,641	\$12,846,609	\$17,444,000	*	\$ 834,034	\$ 380,687,596
1982	361,025,767	24,110,960	14,913,910	21,747,000	*	1,258,115	423,055,752
1983	351,606,995	27,958,236	14,859,769	13,145,000	63,040,000	1,540,000	472,150,000
1984	393,826,636	32,149,687	16,431,129	19,436,000	63,518,718	1,356,381	526,718,551
1985	451,786,843	36,978,060	18,535,461	22,211,000	64,495,088	1,241,286	595,247,738
1986	512,974,848	41,635,906	20,015,375	25,289,000	76,539,846	1,746,851	678,201,826
1987	562,872,938	46,941,117	21,260,410	35,347,356	95,366,709	1,263,756	763,052,286
1988	621,378,512	51,854,634	23,058,214	41,298,075	105,949,945	1,936,204	845,475,584
1989	678,447,848	57,132,357	25,171,167	35,780,107	126,318,913	2,707,131	925,557,523
1990	744,624,646	63,174,340	26,734,854	36,885,490	136,562,551	1,481,766	1,009,463,647

*Payments for health care benefits included with service retirement, disability retirement, and survivor benefits prior to 1983.

SELECTED FUNDING INFORMATION 1981-1990

(Dollar Amounts in Thousands)

Fiscal Year Ended	Contribution Rate		Interest Assumption	Payroll Assumption	Unfunded Liability*	Funding Period
	Employee	Employer				
1981	8.5 %	13.50%	7.50%	5.0 %	4,669,818	50.0 Yrs.
1982	8.5 %	13.50%	7.50%	5.0 %	5,124,609	59.0 Yrs.
1983	8.5 %	13.50%	7.50%	5.0 %	5,143,574	44.0 Yrs.
1984	8.75%	14.00%	7.50%	5.25 %	5,772,218	41.0 Yrs.
1985	8.75%	14.00%	7.75%	5.50 %	6,070,181	40.5 Yrs.
1986	8.75%	14.00%	7.75%	5.50 %	6,414,042	39.5 Yrs.
1987	8.75%	14.00%	7.75%	5.50 %	6,380,720	35.0 Yrs.
1988	8.75%	14.00%	7.75%	5.50 %	6,759,786	35.0 Yrs.
1989	8.77%	14.00%	7.75%	5.875%	7,211,686	34.5 Yrs.
1990	8.77%	14.00%	7.75%	5.875%	7,640,885	34.0 Yrs.

*Excluding health care

Statistical

NUMBER OF REPORTING EMPLOYERS BY TYPE 1983-1990

Fiscal Year Ended	City School Districts	Local School Districts	County Boards of Education	Exempted Village Districts	Vocational & Technical Schools	Colleges & Universities	County MR/DD Boards	State of Ohio	Total
1983	191	375	87	49	67	19	*	1	789
1984	191	375	87	49	67	19	*	1	789
1985	191	375	87	49	67	19	*	1	789
1986	191	375	87	49	67	19	*	1	789
1987	191	376	87	49	67	19	*	1	790
1988	191	375	86	49	65	21	*	1	788
1989	192	372	85	49	64	22	*	1	785
1990	192	372	85	49	64	22	86	1	871

*County Boards of Mental Retardation and Developmental Disabilities added as reporting employers in FY 1990.

Note: Information not compiled prior to 1983 fiscal year.

NUMBER OF MEMBERS: ACTIVE, INACTIVE, RETIREES AND BENEFICIARIES 1981-1990

Fiscal Year Ended	Number of Members		
	Active	Inactive	Retirees & Beneficiaries
1981	150,972	72,130	50,456
1982	145,735	73,368	52,289
1983	145,603	72,221	54,040
1984	146,387	73,606	55,908
1985	147,790	73,733	58,348
1986	149,428	75,496	60,960
1987	150,607	78,583	62,819
1988	152,200	81,107	64,957
1989	153,830	83,633	66,453
1990	157,650	85,856	68,739

Statistical

ASSUMED RATE OF INTEREST AND REALIZED RATE OF RETURN ON ASSETS 1981-1990

Fiscal Year Ended	Interest Assumption	Realized Internal Yield on Assets		
		Interest, Rent, Dividends	Capital Gains	Total
1981	7.50%	*	*	9.59%
1982	7.50%	*	*	8.92%
1983	7.50%	9.23%	1.08%	10.31%
1984	7.50%	9.06%	0.73%	9.79%
1985	7.75%	9.58%	0.79%	10.37%
1986	7.75%	8.85%	3.15%	12.00%
1987	7.75%	8.40%	7.87%	16.27%
1988	7.75%	7.50%	3.93%	11.43%
1989	7.75%	7.72%	3.15%	10.87%
1990	7.75%	7.74%	2.20%	9.94%

*Not available.

Investments

**COMPREHENSIVE ANNUAL FINANCIAL REPORT
JUNE 30, 1990**

Investments

INVESTMENT REVIEW

Economic Factors

At the beginning of our 1990 fiscal year, the U.S. economy was already setting records for the longevity of a peacetime economic expansion. The latest statistics show the expansion lasted through the end of this fiscal year, tallying its thirty-first quarter of growth, but it was clearly losing its vigor. A year ago, business investment in new capital equipment, net exports, and federal government spending were contributing to economic growth. Now, only net exports are providing any push to the economy, and even there, momentum has slowed considerably. The economy is not losing its zip due to harsh restraint from the forces which typically act to terminate expansions, such as a large inventory overhang or a very tight monetary policy. Rather, it is the massive debt burden on both the public and private sectors built during the past decade that is grinding down activity. The required payments on that debt have grown so large relative to incomes that they have become a restraint on new purchases.

In addition to the restraining influence of the debt burden, there was one other major development in the past year which set off a chain of events that is impairing economic growth. That development was the crisis in the Savings & Loan industry. With the failure of many S&Ls and the implementation of a federal bailout program, the speculative (and sometimes fraudulent) nature of a great many real estate investments made by these institutions in recent years was laid bare. These revelations caused concern at many other financial institutions, particularly the commercial banks. That concern has led to tighter lending requirements that are making it difficult for many smaller businesses to obtain loans needed for continued growth.

Broad-based weakness in final demand for goods and services has produced a further slowing in the rate of economic growth. The trailing four quarter growth of real Gross National Product fell from 2.7% in the second quarter of 1989 to only 1.0% in the second quarter of 1990. By the end of our fiscal year, we were seeing contraction in Consumer Durable and Non-Durable Goods Purchases, Capital Spending, and Residential Investment, while growth in Consumer Services, Net Exports and Federal Government Purchases was much slower. Although total employment grew by about two million jobs, goods-producing jobs in manufacturing, construction, and mining actually fell by half a million. Despite some acceleration in food and medical care costs, the twelve-month change in the Consumer Price Index slowed to 4.7% at the end of our fiscal year from a 5.2% comparison a year ago.

Little more than one month after the end of fiscal 1990, the Iraqi invasion of Kuwait and the ensuing military buildup in the Persian Gulf region sent oil prices skyrocketing. With the economy already on the edge of recession, this additional shock seems likely to have been enough to terminate the expansion.

Liquidity Reserves

The Liquidity Reserves portfolio exists to meet STRS liquidity needs for other investments and the payment of benefits, and as a stable store of value when there is uncertainty in other investment asset categories. During fiscal 1990, the availability of attractive levels in other asset categories, particularly in fixed-income investments, encouraged a reduction in Liquidity Reserves from 13.0% to 7.4% of total investment assets.

Fixed Income Investments

In the arena for fixed-income investments, short-and long-term interest rates displayed divergent patterns the past year. Although the levels did not change greatly in either case, short-term rates were generally falling and long-term rates were generally rising this fiscal year. Having begun the year at a level of 8.26%, the yield on three-month Treasury Bills finished at 7.99%. At the long end of the maturity scale, the yield on the thirty-year Treasury Bond rose from 8.04% to 8.40%.

The principal objective in the fixed-income portfolio during fiscal 1990 was to increase the aggressiveness of the portfolio, while maintaining its high quality, as long-term interest rates continued their cyclical rise. While it is not certain that the cyclical peaks in rates have been reached, the slowing of the economy that is becoming quite evident suggests the peak will have been reached in the not-too-distant future. The net results of trading the past twelve months have been to increase the duration of the portfolio, and thus its aggressiveness, while maintaining its near-AAA quality. Over the past fiscal year, the Shearson Corporate/Government Bond Index had a total return of 7.1%. This index closely resembles the universe of investment alternatives of the fixed-income portfolio. Board Policy directs that STRS performance publications follow the industry convention of reporting on a calendar year basis. This report appears on page 39. Using the book value of sales and maturities as a measure, turnover of the fixed-income portfolio rose to 28% for fiscal 1990 from 20% in the prior year. This rate of turnover is still quite modest compared with other managed fixed-income portfolios.

Stocks and Other Equities

For fiscal 1990, the Dow Jones Industrial Average had a total return of 22.2%, while the Standard & Poor's 500 Index returned 16.4%. As the year ended, these major stock market indexes were nearing new record highs, yet many individual stocks were trading significantly below their 1989-90 peak prices.

This anomaly is explained by wide divergence in performance by economic sectors. The Consumer Staples, Capital Goods, and Energy sectors had very strong returns, while all other sectors underperformed the major indexes. STRS common stock holdings grouped by economic sector are shown in the Schedule of Investments, pages 54-57. Performance of the equity portfolio is shown on page 39. Using the book value of sales as a measure, turnover of the equity portfolio was 33%, versus 26% last year.

In an effort to ameliorate the risks inherent in relying on a single approach to stock portfolio management, STRS has divided its equity holdings into four groups that use complementary approaches to stock selection. These portfolios are:

Active Portfolio—Using traditional fundamental and technical analysis to make industry group rotation and stock selection decisions, this portfolio accounts for 40% of STRS equities;

Valuation Portfolio—Making heavy use of computer-driven models to select stocks with low market valuations and strong balance sheets, this portfolio includes another 40% of STRS equities;

Industry Index Portfolio—This portfolio, constituting about 15% of STRS equities, has its industry weighting indexed to the percentage weightings of twenty-six industry groupings of the Standard & Poor's 500, although individual stocks are selected from the STRS Criteria & Approved List; and

Smaller Company Portfolio—Pursuing opportunities in companies that are somewhat smaller than most of those in the major indexes, this portfolio is less than 10% of total equities.

STRS manages a covered call option program as an adjunct to the common stock portfolio with the objectives of realizing higher proceeds on stock sales and generating incremental income. During the past year, the program helped realize higher stock sales

proceeds and also added \$8.5 million to the program's accumulated incremental income, which now stands at \$51.7 million.

Guaranteed Mortgages

During most of fiscal 1990, the yields on U.S. Government guaranteed mortgages and Mortgage-Backed Federal Agencies were competitive with other investment alternatives. As a result, additions to this area were in line with cash flow. This sector now totals \$3.34 billion, \$656 million of which is invested directly in Ohio, and constitutes 18.8%, at cost, of the total fund.

Real Estate Investments

The past fiscal year saw an acceleration of the negative news that has been impacting the real estate market in recent years. Federal regulators accomplished what persistently high vacancy rates had failed to do: they caused a severe cutback in capital availability for new projects. In response to the Savings & Loan crisis, the Office of the Controller of the Currency has clamped down on the underwriting and valuation of real estate assets by commercial banks. The effect, at least temporarily, has been a sharp dropoff in lending activity for real estate, especially for new construction. Ironically, the current and continuing news of loan defaults and developer bankruptcies is setting the stage for a more attractive investment environment in the next few years, as less building means lower vacancy rates and higher rents.

STRS continued its cautious approach to new real estate investment during fiscal 1990. The share of total STRS assets allocated to real estate inched upward from 11.9% to 12%, as new fundings of \$325 million were partially offset by sales of \$50 million. The total invested in this area is now \$2.1 billion. Conservative valuations of these investments exceeded cost by \$89 million at fiscal year end. STRS properties have largely escaped the problems experienced by the Savings & Loan industry. The new acquisitions were primarily in existing, high quality, well-leased properties in major metropolitan areas in other states and throughout Ohio. STRS continues to have a larger share of its real estate investment in Ohio than in any other state.

(continued)

Investments

INVESTMENT REVIEW (continued)

Fund Performance Highlights

During the past five years, the markets have been very rewarding to holders of financial assets. STRS has reaped the benefit of this favorable environment, as evidenced by the total returns detailed on the following page. The annualized rate of return of the total fund over the preceding five calendar years (by Board Policy, performance is calculated on a calendar year basis for adequate comparisons) was 14.8% in 1989. Total fund performance thus continues to exceed, by a significant margin, the 8-9% absolute long-term return goal established in the Investment Objective and Policy statement. Absolute long-term return goals for each asset category were surpassed by sizeable margins as well.

When compared with the respective yardsticks established by Board Policy for relative performance of each asset category, STRS portfolios continue to compare well. For the five years to 1989, Equities continued to beat our Criteria List Index (the universe of eligible stocks), while nearly matching the Standard & Poor's 500 Index. Fixed Income investments trailed their yardsticks on a five-year basis by a small margin. Real Estate continues to surpass the performance of accepted real estate performance indexes for the longer holding period. The five-year performance of total STRS investment assets surpassed by a significant margin the rate of inflation and our hybrid index, which combines the principal yardsticks for each asset category.

Investments

TOTAL RETURN (ANNUALIZED)

	<u>1 Year 1989</u>	<u>3 Years '87-'89</u>	<u>5 Years '85-'89</u>	<u>Long Term Policy Objective (5-Year)</u>
Equities				
STRS Common Stocks	29.83%	15.48%	19.87%	8 - 10%
Criteria List Index *	25.72%	14.37%	16.51%	
Standard & Poor's 500	31.64%	17.32%	20.37%	
Dow Jones Industrials	31.77%	17.32%	22.38%	
SEI Median Fund	29.50%	16.16%	19.72%	
Fixed Income				
STRS Fixed Income Investments	16.39%	8.99%	11.70%	7 - 8%
Shearson Lehman Bond Index	14.23%	7.92%	12.01%	
Salomon Brothers Broad Mkt. Index	14.42%	8.01%	12.16%	
Real Estate				
STRS Real Estate **	8.00%	8.41%	9.64%	8 - 10%
Frank Russell Corp. Index (FRC)	6.03%	6.18%	6.92%	
Evaluation Associates, Inc.	6.23%	7.02%	8.16%	
Total Fund				
STRS	18.63%	11.88%	14.75%	8 - 9%
S&P/Shearson Lehman/FRC Index ***	18.68%	10.92%	13.97%	
Inflation (GNP Deflator)	4.20%	3.53%	3.24%	

* Universe of stocks meeting legal and policy criteria.

** STRS Real Estate returns are income only prior to 1986.

*** A hybrid of equity, fixed income, and real estate yardsticks.

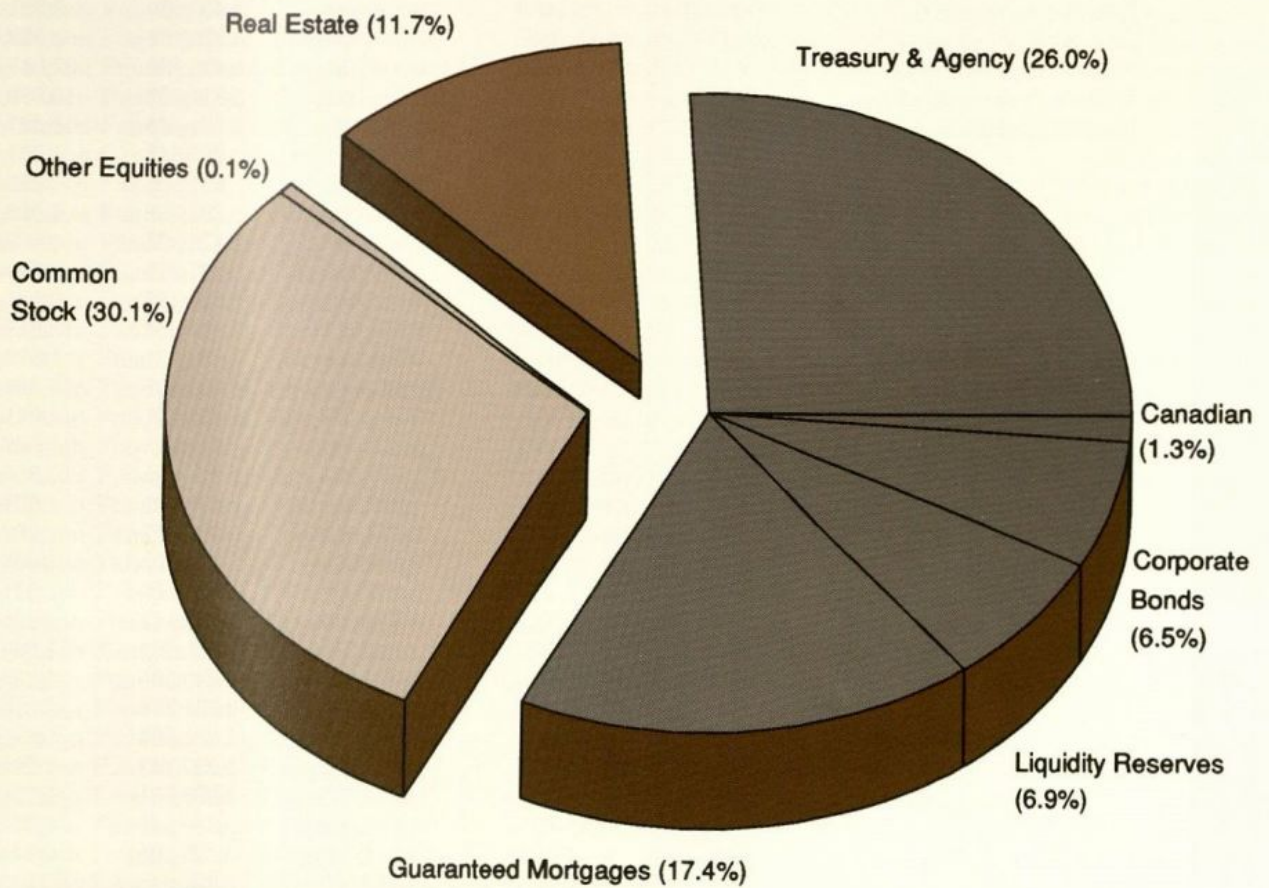
Investments

SUMMARY OF INVESTMENT ASSETS as of June 30 (Dollars in Thousands)

	1990		1989		1988	
	Book Value	Market Value %	Book Value	Market Value %	Book Value	Market Value %
Short Term/ Liquidity Reserves	\$ 1,311,880	\$ 1,315,050 6.9%	\$ 2,083,648	\$ 2,094,723 12.0%	\$ 1,332,270	\$ 1,331,074 8.8%
Fixed Income						
U.S. Government & Agency Canadian Bonds	\$ 4,821,086 262,846	\$ 4,956,311 245,711 26.0% 1.3	\$ 3,920,419 242,818	\$ 4,157,470 230,412 23.7% 1.3	\$ 3,646,873 275,265	\$ 3,651,213 256,614 24.1% 1.7
Municipal Bonds	2,710	2,618 0.0	2,980	2,861 0.0	3,230	2,919 0.0
Corporate Bonds & Notes	1,245,308	1,233,167 6.4	943,078	938,999 5.4	690,544	672,177 4.4
Convertible Bonds	18,365	12,758 0.1	25,518	20,864 0.1	25,586	22,716 0.1
Guaranteed Mortgages	3,344,836	3,314,810 17.4	3,010,250	3,027,375 17.3	2,668,690	2,590,987 17.1
Total Fixed Income	\$ 9,695,151	\$ 9,765,375 51.2%	\$ 8,145,063	\$ 8,377,981 47.8%	\$ 7,310,188	\$ 7,196,626 47.4%
Equity						
Common & Convertible Real Estate	\$ 4,593,856 2,136,706	\$ 5,740,509 2,225,464 30.1% 11.7	\$ 3,904,147 1,901,809	\$ 5,009,012 2,002,547 28.6% 11.5	\$ 3,799,793 1,771,952	\$ 4,740,711 1,857,114 31.3% 12.3
Other Equity Investments	27,620	29,042 0.1	18,071	23,048 0.1	17,155	23,671 0.2
Total Equity	\$ 6,758,182	\$ 7,995,015 41.9%	\$ 5,824,027	\$ 7,034,607 40.2%	\$ 5,588,900	\$ 6,621,496 43.8%
Total Investments	\$ 17,765,213	\$ 19,075,440 100.0%	\$ 16,052,738	\$ 17,507,311 100.0%	\$ 14,231,358	\$ 15,149,196 100.0%

Investments

INVESTMENT DISTRIBUTION by Market Value as of June 30, 1990



- - Fixed Income
- - Equities
- - Real Estate

Investments

SCHEDULE OF INVESTMENTS as of June 30, 1990

Dedicated and Secular Portfolios

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
U.S. Treasury Principal Strips	.000	11-15-09	\$ 60,000,000	\$ 10,164,029	\$ 11,287,200
U.S. Treasury Principal Strips	.000	11-15-09	465,000,000	78,771,223	87,475,800
U.S. Treasury Interest Payments	.000	05-15-03	15,000,000	4,041,371	5,071,800
U.S. Treasury Interest Payments	.000	05-15-05	13,000,000	2,800,998	3,721,250
U.S. Treasury Interest Payments	.000	05-15-05	12,500,000	3,016,165	3,578,125
U.S. Treasury Interest Payments	.000	11-15-05	116,000,000	28,496,860	32,045,000
U.S. Treasury Interest Payments	.000	02-15-05	34,500,000	8,874,252	10,080,210
U.S. Treasury Interest Payments	.000	05-15-04	40,000,000	11,384,443	12,437,200
FNMA Strip Series 1	.000	02-12-05	2,685,000	682,845	761,466
FNMA Strip Series 1	.000	08-12-05	2,685,000	651,600	729,327
FNMA Strip Series 1	.000	02-01-05	5,120,000	1,291,385	1,355,878
FNMA Strip Series 1	.000	02-12-09	2,685,000	475,334	539,363
FNMA Strip Series 1	.000	08-12-09	2,000,000	337,979	384,800
FNMA Sub Capital Debenture Strip	.000	08-01-05	8,481,000	2,040,452	2,145,863
FNMA Sub Capital Debenture Strip	.000	08-01-06	8,720,000	1,914,768	2,017,372
FNMA Sub Capital Debenture Strip	.000	02-01-07	7,100,000	1,487,281	1,572,011
FNMA Senior Capital Debentures	.000	07-05-14	470,000,000	55,872,693	57,866,400
FNMA Senior Capital Debentures	.000	02-12-10	5,107,000	852,067	941,118
FNMA Senior Capital Debentures	.000	02-12-11	5,370,000	819,395	907,852
FNMA Senior Capital Debentures	.000	08-12-11	5,370,000	784,455	869,564
FNMA Senior Capital Debentures	.000	08-12-14	5,370,000	612,202	671,357
FNMA Senior Capital Debentures	.000	02-12-16	2,570,000	264,257	282,340
FNMA Senior Capital Debentures	.000	08-12-16	5,370,000	529,505	565,031
FNMA Senior Capital Debentures	.000	02-12-17	5,370,000	510,418	541,189
FNMA Senior Capital Debentures	.000	02-12-18	5,370,000	473,441	496,510
U.S. Treasury Coupon Under Book Entry	.000	05-15-99	2,131,250	895,689	1,004,352
U.S. Treasury Coupon Under Book Entry	.000	05-15-00	8,922,500	3,340,665	3,858,981
U.S. Treasury Coupon Under Book Entry	.000	08-15-00	7,929,220	2,901,711	3,355,012
U.S. Treasury Coupon Under Book Entry	.000	11-15-00	5,000,000	1,781,204	2,076,550
U.S. Treasury Coupon Under Book Entry	.000	02-15-01	3,120,000	1,039,143	1,265,534
U.S. Treasury Coupon Under Book Entry	.000	05-15-01	14,540,000	4,865,581	5,770,490
U.S. Treasury Coupon Under Book Entry	.000	11-15-01	16,520,000	5,233,541	6,287,842
U.S. Treasury Coupon Under Book Entry	.000	02-15-02	16,524,140	5,193,635	6,144,832
U.S. Treasury Coupon Under Book Entry	.000	05-15-02	33,919,287	10,447,242	12,338,141
U.S. Treasury Coupon Under Book Entry	.000	08-15-02	947,875	282,085	337,377
U.S. Treasury Coupon Under Book Entry	.000	11-15-02	17,111,537	4,972,520	5,972,953
U.S. Treasury Coupon Under Book Entry	.000	05-15-03	12,315,500	3,407,010	4,114,116
U.S. Treasury Coupon Under Book Entry	.000	11-15-03	7,669,000	1,974,884	2,463,666
U.S. Treasury Coupon Under Book Entry	.000	05-15-04	10,544,000	2,605,252	3,232,369
U.S. Treasury Coupon Under Book Entry	.000	11-15-04	9,110,625	2,112,591	2,687,634
U.S. Treasury Coupon Under Book Entry	.000	05-15-05	13,216,375	2,925,123	3,729,397
U.S. Treasury Coupon Under Book Entry	.000	11-15-05	17,572,106	3,693,678	4,782,776
Government Trust Certificate (ISRAEL)	.000	05-15-99	1,000,000	440,289	460,000
Government Trust Certificate (ISRAEL)	.000	05-15-02	24,112,000	8,148,192	8,491,764
Government Trust Certificate (ISRAEL)	.000	11-15-02	4,500,000	1,474,945	1,518,750
Government Trust Certificate (ISRAEL)	.000	11-15-09	9,928,000	1,634,870	1,845,913
Government Trust Certificate (ISRAEL)	.000	05-15-10	10,000,000	1,571,829	1,784,300
Government Trust Certificate (ISRAEL)	.000	05-15-02	6,400,000	2,191,914	2,253,952
Government Trust Certificate (ISRAEL)	.000	11-15-02	11,612,000	3,730,268	3,919,050
Government Trust Certificate (ISRAEL)	.000	05-15-99	5,000,000	2,201,445	2,300,000

Investments

Dedicated and Secular Portfolios (continued)

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
Government Trust Certificate (ISRAEL)	.000	05-15-00	\$ 3,661,000	\$ 1,469,587	\$ 1,542,196
Government Trust Certificate (ISRAEL)	.000	05-15-03	8,829,000	2,756,120	2,847,353
Government Trust Certificate (ISRAEL)	.000	11-15-06	5,662,000	1,225,106	1,348,235
Government Trust Certificate (ISRAEL)	.000	05-15-08	4,000,000	750,975	840,000
Government Trust Certificate (ISRAEL)	.000	11-15-08	12,000,000	2,161,284	2,418,720
Resolution Funding Corp. Coupon Strip	.000	10-15-08	10,320,000	1,850,462	2,102,700
Resolution Funding Corp. Coupon Strip	.000	04-15-09	23,808,000	4,090,624	4,664,701
Resolution Funding Corp. Coupon Strip	.000	10-15-09	13,155,000	2,156,773	2,478,797
Resolution Funding Corp. Coupon Strip	.000	04-15-11	31,199,000	4,475,188	5,186,834
Resolution Funding Corp. Coupon Strip	.000	01-15-06	4,837,000	1,118,046	1,245,528
Resolution Funding Corp. Coupon Strip	.000	01-15-08	5,000,000	961,999	1,084,350
Resolution Funding Corp. Coupon Strip	.000	04-15-01	4,725,000	1,791,806	1,850,121
Resolution Funding Corp. Coupon Strip	.000	10-15-01	4,725,000	1,711,241	1,771,875
Resolution Funding Corp. Coupon Strip	.000	04-15-02	4,725,000	1,632,302	1,692,117
Resolution Funding Corp. Coupon Strip	.000	10-15-02	4,725,000	1,560,369	1,621,242
Resolution Funding Corp. Coupon Strip	.000	04-15-07	5,325,000	1,103,743	1,231,406
Resolution Funding Corp. Coupon Strip	.000	10-15-07	5,000,000	983,240	1,107,800
Resolution Funding Corp. Coupon Strip	.000	10-15-11	32,177,000	4,535,738	5,108,099
Resolution Funding Corp. Coupon Strip	.000	04-15-12	2,674,000	349,431	406,929
Resolution Funding Corp. Coupon Strip	.000	10-15-12	10,325,000	1,292,357	1,503,527
Resolution Funding Corp. Coupon Strip	.000	10-15-16	4,000,000	400,245	422,480
Resolution Funding Corp. Coupon Strip	.000	04-15-17	2,355,000	227,876	241,388
Resolution Funding Corp. Coupon Strip	.000	10-15-17	3,263,000	302,271	323,233
Resolution Funding Corp. Coupon Strip	.000	04-15-18	3,263,000	296,394	313,020
Resolution Funding Corp. Coupon Strip	.000	01-15-99	21,500,000	10,098,834	10,259,370
Resolution Funding Corp. Coupon Strip	.000	01-15-00	17,095,000	7,407,180	7,473,592
Resolution Funding Corp. Coupon Strip	.000	07-15-00	1,950,000	808,696	815,334
Resolution Funding Corp. Coupon Strip	.000	01-15-02	4,940,000	1,747,396	1,810,806
Resolution Funding Corp. Coupon Strip	.000	07-15-02	4,065,000	1,374,588	1,424,010
Resolution Funding Corp. Coupon Strip	.000	01-15-03	4,315,000	1,393,220	1,448,200
Resolution Funding Corp. Coupon Strip	.000	07-15-03	4,215,000	1,300,958	1,354,069
Resolution Funding Corp. Coupon Strip	.000	07-15-06	10,000,000	2,228,804	2,462,500
Resolution Funding Corp. Coupon Strip	.000	01-15-09	9,440,000	1,812,893	1,888,000
Resolution Funding Corp. Coupon Strip	.000	07-15-09	8,970,000	1,647,664	1,723,855
Resolution Funding Corp. Coupon Strip	.000	01-15-10	8,345,000	1,468,893	1,538,568
Resolution Funding Corp. Coupon Strip	.000	01-15-11	31,000,000	5,126,758	5,298,830
Resolution Funding Corp. Coupon Strip	.000	07-15-11	28,040,000	4,398,461	4,547,527
Resolution Funding Corp. Coupon Strip	.000	01-15-12	13,180,000	1,908,365	2,046,986
Resolution Funding Corp. Coupon Strip	.000	07-15-12	9,439,000	1,341,642	1,404,051
Resolution Funding Corp. Coupon Strip	.000	01-15-13	8,940,000	1,223,596	1,276,721
Resolution Funding Corp. Coupon Strip	.000	07-15-13	13,255,000	1,724,828	1,818,321
Resolution Funding Corp. Coupon Strip	.000	01-15-14	9,315,000	1,154,448	1,228,369
Resolution Funding Corp. Coupon Strip	.000	07-15-14	9,315,000	1,106,659	1,181,794
Resolution Funding Corp. Coupon Strip	.000	01-15-15	3,661,000	418,051	440,455
Resolution Funding Corp. Coupon Strip	.000	07-15-15	2,500,000	275,761	286,700
Resolution Funding Corp. Coupon Strip	.000	01-15-16	2,200,000	233,358	244,750
Resolution Funding Corp. Coupon Strip	.000	01-15-18	41,695,000	4,076,485	4,078,188
Resolution Funding Corp. Coupon Strip	.000	07-15-18	48,645,000	4,593,852	4,605,709
Resolution Funding Corp. Coupon Strip	.000	01-15-19	5,175,000	446,669	475,427
Resolution Funding Corp. Coupon Strip	.000	07-15-19	5,175,000	429,097	460,886
Resolution Funding Corp. Coupon Strip	.000	01-15-20	31,470,000	2,618,731	2,714,288
Resolution Funding Corp. Coupon Strip	.000	07-15-20	43,470,000	3,533,785	3,640,613
Resolution Funding Corp. Coupon Strip	.000	01-15-21	61,837,000	4,769,268	4,985,299
Resolution Funding Corp. Coupon Strip	.000	07-15-21	69,245,000	5,118,179	5,366,488
Resolution Funding Corp. Coupon Strip	.000	01-15-22	32,931,000	2,317,870	2,449,078

Investments

Dedicated and Secular Portfolios (continued)

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
Resolution Funding Corp. Coupon Strip	.000	01-15-23	\$ 5,175,000	\$ 336,215	\$ 354,124
Resolution Funding Corp. Coupon Strip	.000	07-15-23	5,175,000	323,407	339,584
U.S. Treasury Coupon Receipts	.000	08-15-94	4,031,250	2,397,759	2,830,662
U.S. Treasury Coupon Receipts	.000	02-15-98	5,375,000	2,094,473	2,776,510
U.S. Treasury Coupon Receipts	.000	08-15-98	5,375,000	1,968,953	2,658,905
U.S. Treasury Coupon Receipts	.000	08-15-94	9,000,000	5,308,354	6,319,620
U.S. Treasury Coupon Receipts	.000	02-15-98	55,020,000	20,681,260	28,421,131
U.S. Treasury Coupon Receipts	.000	08-15-98	9,120,000	3,335,711	4,511,481
U.S. Treasury Coupon Receipts	.000	11-15-97	12,375,000	4,966,602	6,535,485
U.S. Treasury Coupon Receipts	.000	05-15-98	12,375,000	4,692,774	6,257,047
U.S. Treasury Coupon Receipts	.000	11-15-98	12,375,000	4,371,085	5,990,243
U.S. Treasury Coupon Receipts	.000	08-15-94	1,946,875	1,129,241	1,367,057
U.S. Treasury Coupon Receipts	.000	02-15-98	7,231,250	2,707,072	3,735,374
U.S. Treasury Coupon Receipts	.000	05-15-91	3,511,250	3,129,407	3,265,463
U.S. Treasury Coupon Receipts	.000	05-15-92	2,517,500	1,965,378	2,148,510
U.S. Treasury Coupon Receipts	.000	05-15-94	6,625,000	3,986,086	4,753,437
U.S. Treasury Coupon Receipts	.000	11-15-94	6,558,750	3,680,723	4,509,141
U.S. Treasury Bond Coupons	.000	02-15-91	12,746,875	11,808,264	12,105,452
U.S. Treasury Bond Coupons	.000	08-15-90	14,397,500	14,179,767	14,248,918
U.S. Treasury Bond Corpus	.000	05-15-92	13,000,000	10,256,521	11,094,590
Total			\$2,554,025,665	\$ 516,841,942	\$ 578,663,946

U.S. Government and Agency Bonds

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
U.S. Treasury Notes	7.250	11-15-96	\$ 293,019,000	\$ 274,718,159	\$ 275,162,422
U.S. Treasury Notes	7.375	05-15-96	153,993,000	141,760,043	146,148,597
U.S. Treasury Notes	11.750	01-15-91	64,940,000	66,423,228	66,096,581
U.S. Treasury Notes	9.125	02-15-91	16,330,000	16,440,821	16,416,712
U.S. Treasury Notes	7.625	10-31-91	18,700,000	18,516,525	18,547,969
U.S. Treasury Notes	8.625	01-15-95	10,500,000	10,633,328	10,585,260
U.S. Treasury Notes	11.250	02-15-95	106,265,000	117,794,167	117,322,936
U.S. Treasury Notes	10.875	02-15-93	65,500,000	70,598,156	69,327,165
U.S. Treasury Notes	7.625	05-15-93	35,000,000	34,207,765	34,343,750
U.S. Treasury Notes	11.875	08-15-93	15,000,000	16,355,801	16,401,450
U.S. Treasury Notes	11.750	11-15-93	54,300,000	59,220,450	59,492,166
U.S. Treasury Notes	7.000	04-15-94	8,595,000	8,276,739	8,213,554
U.S. Treasury Notes	11.250	05-15-95	25,000,000	27,615,196	27,710,750
U.S. Treasury Notes	8.875	07-15-95	16,000,000	16,466,178	16,280,000
U.S. Treasury Notes	10.500	08-15-95	124,010,000	136,099,032	134,279,268
U.S. Treasury Notes	8.875	02-15-96	22,925,000	23,579,472	23,333,294
Government Trust Certificate (ISRAEL)	.000	05-15-93	6,000,000	4,651,952	4,687,500
Government Trust Certificate (ISRAEL)	.000	11-15-93	9,150,000	6,780,539	6,859,572
Government Trust Certificate (ISRAEL)	.000	05-15-94	32,693,000	23,256,539	23,405,899
Government Trust Certificate (ISRAEL)	.000	05-15-94	6,000,000	4,294,375	4,295,580
Government Trust Certificate (ISRAEL)	.000	11-15-94	10,042,000	6,870,236	6,891,323
Government Trust Certificate (ISRAEL)	.000	11-15-94	4,000,000	2,741,994	2,745,000
Government Trust Certificate (ISRAEL)	.000	05-15-95	30,500,000	19,847,847	20,005,865
Government Trust Certificate (ISRAEL)	.000	05-15-95	8,000,000	5,245,009	5,247,440
Government Trust Certificate (ISRAEL)	.000	11-15-95	9,900,000	6,190,119	6,221,457
Government Trust Certificate (ISRAEL)	.000	05-15-97	14,500,000	7,731,112	7,961,370
Government Trust Certificate (ISRAEL)	.000	11-15-97	9,200,000	4,762,548	4,838,556

Investments

U.S. Government and Agency Bonds (continued)

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
U.S. Treasury Coupon Under Book Entry	.000	11-15-96	\$ 39,373,114	\$ 22,038,429	\$ 23,033,272
U.S. Treasury Coupon Under Book Entry	.000	11-15-97	40,382,875	19,765,727	21,667,835
U.S. Treasury Coupon Under Book Entry	.000	02-15-98	18,039,845	8,582,239	9,453,961
U.S. Treasury Coupon Under Book Entry	.000	05-15-98	1,000,000	453,424	513,120
U.S. Treasury Coupon Under Book Entry	.000	11-15-98	8,223,225	3,548,527	4,055,037
U.S. Treasury Coupon Under Book Entry	.000	02-15-99	15,854,375	7,425,329	7,629,918
U.S. Treasury Coupon Under Book Entry	.000	05-15-99	2,100,000	960,587	989,625
U.S. Treasury Coupon Under Book Entry	.000	08-15-99	10,201,720	4,629,046	4,705,543
U.S. Treasury Coupon Under Book Entry	.000	05-15-00	15,079,841	6,303,443	6,522,031
U.S. Treasury Coupon Under Book Entry	.000	02-15-01	1,259,500	487,300	510,878
U.S. Treasury Coupon Under Book Entry	.000	05-15-01	8,959,350	3,409,230	3,555,697
U.S. Treasury Coupon Under Book Entry	.000	08-15-01	4,280,000	1,457,685	1,662,480
U.S. Treasury Coupon Under Book Entry	.000	05-15-95	9,085,805	5,866,715	6,039,153
U.S. Treasury Coupon Under Book Entry	.000	11-15-95	4,280,342	2,536,194	2,728,718
U.S. Treasury Coupon Under Book Entry	.000	05-15-94	5,000,000	3,652,543	3,617,150
U.S. Treasury Coupon Under Book Entry	.000	11-15-94	17,100,000	11,575,701	11,873,727
U.S. Treasury Coupon Under Book Entry	.000	05-15-96	26,180,437	15,537,572	15,961,689
U.S. Treasury Coupon Under Book Entry	.000	05-15-92	4,000,000	3,421,958	3,426,240
U.S. Treasury Interest Payments	.000	08-15-95	94,051,000	60,193,813	61,514,997
U.S. Treasury Interest Payments	.000	02-15-96	293,325,000	183,077,270	183,694,781
U.S. Treasury Interest Payments	.000	02-15-95	141,550,000	95,332,014	96,474,818
U.S. Treasury Interest Payments	.000	05-15-96	573,800,000	338,269,818	351,808,256
U.S. Treasury Interest Payments	.000	08-15-96	50,000,000	30,790,675	30,000,000
U.S. Treasury Interest Payments	.000	11-15-96	6,650,000	3,890,113	3,913,060
U.S. Treasury Interest Payments	.000	02-15-97	208,200,000	116,291,459	119,715,000
U.S. Treasury Interest Payments	.000	05-15-97	169,000,000	89,488,348	95,167,280
U.S. Treasury Interest Payments	.000	08-15-97	106,250,000	54,358,244	58,570,313
U.S. Treasury Interest Payments	.000	02-15-02	135,000,000	51,528,922	50,750,550
U.S. Treasury Receipts	.000	11-15-96	1,485,000	877,772	855,731
FNMA Senior Capital Debenture	.000	02-12-05	1,855,000	487,829	526,078
FHLMC Sub Capital Debenture Strip	.000	06-23-92	6,039,000	5,096,371	4,959,529
FNMA Senior Capital Debentures	.000	02-12-08	2,109,000	422,352	461,808
U.S. Treasury Principal Strip	.000	05-15-17	726,600,000	72,304,003	80,834,250
U.S. Treasury Principal Strip	.000	05-15-18	107,800,000	9,918,465	11,284,504
Treasury Bond Coupon	.000	11-15-90	2,551,500	2,451,072	2,474,955
U.S. Treasury Bonds	8.750	05-15-17	170,275,000	167,973,487	174,637,446
U.S. Treasury Bonds	8.875	08-15-17	216,375,000	229,534,812	224,690,291
U.S. Treasury Bonds	8.875	02-15-19	25,000,000	24,298,522	26,085,750
U.S. Treasury Bonds	10.750	08-15-05	25,000,000	29,010,648	29,500,000
U.S. Treasury Bonds	10.375	05-15-95	7,880,000	8,405,522	8,471,000
U.S. Treasury Bonds	11.750	02-15-10	68,000,000	83,643,208	85,148,240
U.S. Treasury Bonds	11.625	11-15-02	171,720,000	216,636,759	211,268,833
U.S. Treasury Bonds	10.750	05-15-03	148,205,000	171,359,234	172,981,912
U.S. Treasury Bonds	11.125	08-15-03	82,725,000	101,826,036	99,088,832
U.S. Treasury Bonds	11.875	11-15-03	148,285,000	189,066,279	186,606,293
U.S. Treasury Bonds	7.250	05-15-16	258,100,000	204,602,707	224,547,000
U.S. Treasury Bonds	7.500	11-15-16	383,335,000	336,810,126	343,441,327
Resolution Funding Corp. Coupon Strip	.000	01-15-14	4,437,000	499,867	585,107
Resolution Funding Corp. Coupon Strip	.000	07-15-14	5,037,000	542,993	639,044
Resolution Funding Corp. Coupon Strip	.000	10-15-14	5,325,000	562,198	662,270
Resolution Funding Corp. Coupon Strip	.000	01-15-15	5,037,000	524,522	606,001
Resolution Funding Corp. Coupon Strip	.000	07-15-15	5,037,000	502,096	577,643
Resolution Funding Corp. Coupon Strip	.000	10-15-15	5,325,000	519,979	600,713
Resolution Funding Corp. Coupon Strip	.000	07-15-16	4,140,000	427,665	446,333
Resolution Funding Corp. Coupon Strip	.000	01-15-17	6,512,000	622,768	677,639

Investments

U.S. Government and Agency Bonds (continued)

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
Resolution Funding Corp. Coupon Strip	.000	04-15-17	\$ 5,325,000	\$ 520,577	\$ 545,813
Resolution Funding Corp. Coupon Strip	.000	07-15-17	9,177,000	859,233	926,235
Resolution Funding Corp. Coupon Strip	.000	10-15-17	5,325,000	501,082	527,495
Resolution Funding Corp. Coupon Strip	.000	01-15-18	9,177,000	858,087	897,602
Resolution Funding Corp. Coupon Strip	.000	04-15-18	5,075,000	459,761	486,845
Resolution Funding Corp. Coupon Strip	.000	07-15-18	9,177,000	829,051	868,878
Resolution Funding Corp. Coupon Strip	.000	10-15-18	5,325,000	464,522	495,864
Resolution Funding Corp. Coupon Strip	.000	01-15-19	67,702,000	6,155,299	6,219,783
Resolution Funding Corp. Coupon Strip	.000	04-15-19	25,347,000	2,050,046	2,289,088
Resolution Funding Corp. Coupon Strip	.000	07-15-19	61,767,000	5,441,989	5,500,969
Resolution Funding Corp. Coupon Strip	.000	10-15-19	5,325,000	417,279	465,938
Resolution Funding Corp. Coupon Strip	.000	01-15-20	36,147,000	2,904,141	3,117,679
Resolution Funding Corp. Coupon Strip	.000	04-15-20	33,282,000	2,535,887	2,828,970
Resolution Funding Corp. Coupon Strip	.000	07-15-20	19,177,000	1,395,805	1,606,074
Resolution Funding Corp. Coupon Strip	.000	10-15-20	14,260,000	1,025,596	1,176,450
Resolution Funding Corp. Coupon Strip	.000	01-15-21	25,507,000	1,848,352	2,056,374
Resolution Funding Corp. Coupon Strip	.000	07-15-01	4,140,000	1,535,090	1,586,117
Resolution Funding Corp. Coupon Strip	.000	07-15-00	4,080,000	1,658,248	1,705,930
Resolution Funding Corp. Coupon Strip	.000	01-15-01	4,140,000	1,605,628	1,658,567
Resolution Funding Corp. Coupon Strip	.000	01-15-00	3,000,000	1,275,205	1,311,540
Resolution Funding Corp. Coupon Strip	.000	10-15-97	7,000,000	3,660,936	3,729,670
Resolution Funding Corp. Coupon Strip	.000	04-15-97	27,000,000	14,755,827	15,010,110
Resolution Funding Corp. Coupon Strip	.000	10-15-96	7,000,000	4,006,096	4,070,920
Resolution Funding Corp. Coupon Strip	.000	04-15-96	7,000,000	4,187,772	4,250,260
Resolution Funding Corp. Coupon Strip	.000	04-15-21	25,146,000	1,767,229	1,988,043
Resolution Funding Corp. Coupon Strip	.000	07-15-21	25,507,000	1,775,359	1,976,793
Resolution Funding Corp. Coupon Strip	.000	10-15-21	2,226,000	150,965	169,020
Resolution Funding Corp. Coupon Strip	.000	01-15-22	22,438,000	1,447,666	1,668,714
Resolution Funding Corp. Coupon Strip	.000	04-15-22	5,325,000	358,490	387,713
Resolution Funding Corp. Coupon Strip	.000	07-15-22	46,909,000	3,042,738	3,342,266
Resolution Funding Corp. Coupon Strip	.000	10-15-22	5,325,000	345,730	372,750
Resolution Funding Corp. Coupon Strip	.000	01-15-23	43,523,000	2,754,511	2,978,279
Resolution Funding Corp. Coupon Strip	.000	04-15-23	13,875,000	847,367	932,123
Resolution Funding Corp. Coupon Strip	.000	07-15-23	35,047,000	2,126,652	2,299,784
Resolution Funding Corp. Coupon Strip	.000	10-15-23	5,325,000	321,739	342,770
Resolution Funding Corp. Bonds	8.625	01-15-30	26,000,000	25,821,716	25,577,500
Resolution Funding Corp. Bonds	8.875	04-15-30	10,000,000	9,945,637	9,000,000
Resolution Funding Corp. Bonds	8.125	10-15-19	9,100,000	8,544,318	8,417,500
Student Loan Marketing Assoc. Notes	8.250	06-29-92	3,000,000	2,994,740	2,984,040
Student Loan Marketing Assoc. Notes	.000	10-03-22	315,000,000	18,949,424	21,555,450
U.S. Treasury Invest. Growth Receipts	.000	02-15-94	5,862,000	4,403,494	4,297,548
U.S. Treasury Certificate of Accrual	.000	05-15-09	14,100,000	3,010,556	2,753,871
Tennessee Valley Authority Power	8.625	11-15-29	20,000,000	19,181,477	18,500,000
Sub Total			\$6,806,640,929	\$4,303,618,264	\$4,377,912,429
Net Securities Traded Not Settled			10,000,000	625,526	(264,960)
Total			\$6,816,640,929	\$4,304,243,790	\$4,377,647,469

Investments

Canadian Bonds

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
British Columbia Hydro & Power Authority	15.000	04-15-11	\$ 13,200,000	\$ 18,600,655	\$ 16,438,092
British Columbia Hydro & Power Authority	15.500	07-15-11	14,185,000	20,904,736	18,165,595
British Columbia Hydro & Power Authority	15.500	11-15-11	11,000,000	16,321,877	14,196,820
Hydro Quebec	11.250	10-15-09	5,000,000	5,349,200	5,384,350
Hydro Quebec	13.250	10-15-10	22,425,000	28,671,592	26,538,418
Hydro Quebec	16.250	07-15-91	23,102,000	24,942,507	24,784,057
Hydro Quebec	17.375	09-01-91	3,000,000	3,286,306	3,279,360
Hydro Quebec	14.625	08-15-92	8,300,000	9,601,552	9,192,250
Hydro Quebec	13.375	02-15-13	15,500,000	20,541,118	18,512,735
Hydro Quebec	13.250	12-15-13	12,200,000	16,732,164	14,575,095
Hydro Quebec	8.875	03-01-26	10,000,000	10,421,251	9,412,500
Hydro Quebec	8.250	01-15-27	2,000,000	1,725,790	1,749,360
Hydro Quebec	9.375	04-15-30	5,000,000	4,877,015	5,010,900
Manitoba (Province of)	14.750	03-15-97	11,280,000	14,312,745	12,852,094
Montreal Urban Community	13.750	10-15-92	10,000,000	11,068,563	10,968,700
Nova Scotia Power	15.750	11-15-91	6,700,000	7,296,838	7,282,029
Ontario (Province of)	15.750	03-15-12	3,000,000	4,445,169	3,935,610
Ontario (Province of)	14.625	08-31-92	4,600,000	5,180,745	5,103,102
Ontario (Province of)	12.500	04-04-94	5,550,000	6,458,494	6,155,283
Quebec Hydro Electric Commission	7.250	11-01-91	2,100,000	2,074,916	2,060,624
Quebec (Province of)	12.750	09-15-94	4,500,000	5,274,496	5,077,935
Quebec (Province of)	11.000	06-15-15	15,500,000	16,711,717	16,986,915
Saskatchewan (Province of)	16.375	10-01-91	<u>2,650,000</u>	<u>2,911,422</u>	<u>2,880,206</u>
Sub Total			\$ 210,792,000	\$ 257,710,868	\$ 240,542,030
Net Securities Traded Not Settled			<u>4,800,000</u>	<u>5,135,136</u>	<u>5,168,976</u>
Total			\$ 215,592,000	\$ 262,846,004	\$ 245,711,006

Municipal Bonds

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
Bowling Green State University	3.000	11-01-94	\$ 330,000	\$ 330,000	\$ 266,211
Central State College	5.000	12-01-91	100,000	100,000	95,760
Miami University	3.250	05-01-94	205,000	205,000	170,845
University of Dayton	10.000	10-01-00	<u>2,075,000</u>	<u>2,075,000</u>	<u>2,084,898</u>
Total			\$ 2,710,000	\$ 2,710,000	\$ 2,617,714

Investments

Utility Bonds

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
Camino Energy Company	8.500	03-01-93	\$ 5,600,000	\$ 5,593,206	\$ 5,491,416
Camino Energy Company	8.550	09-01-93	5,600,000	5,600,000	5,473,552
Camino Energy Company	9.980	09-01-97	4,000,000	4,221,399	4,051,840
Dominion Financing, Inc.	9.340	05-26-92	5,000,000	5,000,000	5,009,600
Dominion Financing, Inc.	8.550	07-20-92	5,000,000	5,000,000	4,935,950
Dominion Financing, Inc.	8.840	10-16-92	5,000,000	5,000,000	4,955,400
Dominion Financing, Inc.	9.200	06-22-93	6,000,000	6,000,000	5,974,680
Dominion Financing, Inc.	8.620	12-28-93	1,500,000	1,500,000	1,464,450
National Rural Util. Co-op Financial Corp.	9.070	01-13-97	10,000,000	10,000,000	9,797,000
National Rural Util. Co-op Financial Corp.	9.800	05-06-96	7,500,000	7,732,186	7,601,700
National Rural Util. Co-op Financial Corp.	14.750	02-01-11	9,517,000	11,383,449	9,992,850
Ohio Air Quality Development Authority	9.750	09-01-92	2,310,000	2,300,683	2,309,376
Potomac Capital Investment Corporation	9.500	05-23-94	5,000,000	5,013,244	5,031,150
Potomac Capital Investment Corporation	9.480	06-04-96	10,000,000	10,296,174	10,011,100
Potomac Capital Investment Corporation	9.720	09-16-96	15,000,000	15,671,407	15,156,300
Potomac Capital Investment Corporation	9.900	05-13-96	5,000,000	5,000,000	5,091,750
PSEG Capital Corporation	9.000	12-02-96	10,000,000	10,000,758	9,957,400
PSEG Capital Corporation	9.000	11-27-96	5,000,000	5,009,815	4,978,700
Total			\$ 117,027,000	\$ 120,322,321	\$ 117,284,214

Telephone Bonds

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
Bell Atlantic TriCon Leasing, Inc.	9.110	06-28-91	\$ 3,300,000	\$ 3,301,315	\$ 3,320,196
Bell Atlantic TriCon Leasing, Inc.	8.400	11-01-91	19,000,000	18,977,818	18,946,990
Bell Atlantic TriCon Leasing, Inc.	8.800	07-15-92	6,000,000	6,008,276	5,988,240
Bell Atlantic TriCon Leasing, Inc.	9.300	06-01-94	5,000,000	4,989,625	5,048,900
Bell Atlantic Systems Leasing, Inc.	9.625	12-18-91	5,000,000	5,004,071	5,065,750
Bell Atlantic Systems Leasing, Inc.	9.580	01-27-92	4,800,000	4,798,494	4,865,040
Bell Atlantic Systems Leasing, Inc.	9.625	01-27-92	6,000,000	5,994,752	6,084,120
GTE Southwest, Inc.	10.875	10-15-95	2,000,000	2,136,455	2,036,240
Total			\$ 51,100,000	\$ 51,210,806	\$ 51,355,476

Railroad Bonds

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
Consolidated Rail Corporation	8.650	11-09-94	\$ 5,000,000	\$ 5,000,000	\$ 4,893,350
Union Pacific Corporation	6.000	03-01-92	9,000,000	8,515,150	8,572,500
Total			\$ 14,000,000	\$ 13,515,150	\$ 13,465,850

Investments

Finance Bonds

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
Aetna Life & Casualty Company	8.000	01-15-17	\$ 13,300,000	\$ 12,398,133	\$ 11,367,244
American General Corporation	7.950	07-15-93	2,500,000	2,447,412	2,427,475
American General Corporation	9.760	09-18-98	7,500,000	7,785,858	7,665,375
American Express Credit Corporation	7.875	11-01-93	5,000,000	5,000,000	4,826,550
American General Finance Corporation	12.375	01-01-94	5,000,000	5,436,492	5,050,000
American General Finance Corporation	12.250	01-15-95	5,000,000	5,643,667	5,106,250
Ameritrust Corporation	8.625	06-30-96	5,000,000	4,977,586	4,748,400
Amsouth Bancorporation	9.375	05-01-99	5,900,000	5,761,219	5,678,750
Asset Backed Securities Corporation	6.850	12-15-90	989,264	987,208	984,317
Asset Backed Securities Corporation	8.300	04-15-92	26,496,567	26,414,743	26,447,019
Asset Backed Securities Corporation	9.250	04-15-95	2,089,640	2,090,394	2,099,023
Associates Corporation of North America	8.890	01-29-93	5,000,000	5,000,000	5,001,550
Associates Corporation of North America	12.500	09-15-94	7,800,000	8,668,034	8,623,836
Associates Corporation of North America	10.500	11-01-91	7,000,000	7,071,182	7,000,000
Associates Corporation of North America	8.625	08-15-92	12,500,000	12,453,953	12,386,625
Bank of New York, The	9.125	09-01-92	5,000,000	5,000,000	5,004,000
Bankers Trust N.Y. Corporation	8.000	03-15-97	5,000,000	4,546,100	4,556,250
Boston Safe Deposit & Trust Company	8.830	05-15-92	5,000,000	4,999,755	4,985,150
Boston Safe Deposit & Trust Company	8.930	05-15-92	5,000,000	4,999,872	4,993,500
Boston Safe Deposit & Trust Company	8.810	05-15-91	5,000,000	5,000,000	5,018,550
Capital Holding Corporation	7.875	12-15-93	5,000,000	5,000,000	4,785,900
Capital Holding Corporation	8.900	10-21-99	2,200,000	2,184,354	2,149,796
Capital Holding Corporation	8.900	10-20-99	8,500,000	8,360,299	8,306,030
Capital Holding Corporation	8.860	11-11-96	10,000,000	10,000,000	9,825,000
Combined International Corporation	8.500	06-15-96	9,000,000	9,221,089	8,620,290
Firemans Fund Mortgage Corporation	8.250	11-01-96	5,000,000	5,010,673	4,707,800
First Bank N.A.	9.000	03-22-92	10,000,000	9,952,504	9,983,500
First Chicago Corporation	9.125	07-31-91	8,000,000	8,004,746	8,025,120
First Chicago Corporation	9.350	12-10-91	1,500,000	1,501,234	1,507,905
First Chicago Corporation	9.250	06-01-93	19,750,000	19,610,159	19,696,478
First Chicago Corporation	9.550	05-01-95	3,000,000	2,939,167	2,983,800
First Financial Group	9.250	06-01-96	884,000	884,000	805,377
First Nationwide Bank, FSB	8.450	03-15-93	14,000,000	13,631,683	13,735,260
First Nationwide Bank, FSB	8.500	03-15-93	3,000,000	2,953,384	2,946,780
First Nationwide Bank, FSB	9.500	06-01-92	6,100,000	6,168,623	6,115,250
Fleet/Norstar Financial Group, Inc.	8.625	07-15-92	5,000,000	4,995,999	4,945,300
Fleet/Norstar Financial Group, Inc.	9.950	05-15-93	15,000,000	15,004,453	15,009,300
Ford Motor Credit Company	8.950	06-08-92	7,000,000	7,000,000	7,008,610
Ford Motor Credit Company	9.700	06-09-95	1,500,000	1,516,795	1,525,575
General Motors Acceptance Corporation	8.900	02-19-93	21,400,000	21,213,626	21,433,384
General Motors Acceptance Corporation	9.600	01-23-92	10,000,000	9,983,905	10,117,100
General Motors Acceptance Corporation	9.850	05-02-94	3,000,000	3,047,818	3,061,740
General Motors Acceptance Corporation	8.950	06-15-94	2,000,000	1,975,460	1,983,440
Great Western Bank, FSB	9.500	07-01-97	3,500,000	3,500,000	3,447,500
Great Western Bank, FSB	9.800	02-15-94	10,000,000	9,905,093	10,046,800
Great Western Bank, FSB	10.150	03-15-92	18,500,000	18,757,737	18,592,500
Great Western Bank, FSB	9.500	06-03-94	3,000,000	2,995,877	3,005,040
John Hancock Capital Corporation	8.700	11-14-94	5,000,000	5,000,000	4,923,850
John Hancock Capital Corporation	9.200	06-15-95	10,000,000	9,988,140	10,014,800
Household Finance Corporation	9.160	06-08-93	13,000,000	12,946,949	13,085,280
Household Finance Corporation	9.420	12-02-91	10,000,000	10,000,000	10,082,100
IBM Credit Corporation	8.650	08-30-91	5,000,000	5,000,000	5,011,200
Imperial Savings Association	7.500	08-15-91	5,000,000	5,001,239	4,935,900
International Lease Finance Corporation	8.350	06-05-92	5,000,000	4,936,885	4,941,800
International Lease Finance Corporation	9.500	11-17-92	4,000,000	3,945,773	4,031,600

Investments

Finance Bonds (continued)

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
International Lease Finance Corporation	8.850	05-01-92	\$ 2,000,000	\$ 1,965,066	\$ 1,994,860
International Lease Finance Corporation	9.550	01-05-93	5,000,000	4,938,365	5,045,000
International Lease Finance Corporation	9.200	09-08-93	7,000,000	6,978,649	6,992,580
Marine Midland Bank, N.A.	9.000	05-15-92	5,000,000	5,000,000	4,969,600
Marine Midland Bank, N.A.	9.000	05-15-92	10,000,000	10,000,000	9,939,200
Marine Midland Bank, N.A.	9.100	05-15-92	5,000,000	5,000,000	4,977,900
McDonnell Douglas Finance Corporation	9.450	10-11-96	1,500,000	1,524,709	1,461,090
McDonnell Douglas Finance Corporation	8.650	11-01-93	5,000,000	4,993,352	4,850,850
McDonnell Douglas Finance Corporation	8.600	08-15-94	9,000,000	8,866,998	8,638,830
McDonnell Douglas Finance Corporation	9.100	10-22-93	10,000,000	10,092,415	9,828,200
Mellon Bank Corporation	7.350	10-15-91	5,500,000	5,489,080	5,398,580
Meridian Bank, N.A.	8.500	09-01-92	5,000,000	4,996,121	4,967,150
MNC Financial, Inc.	9.850	02-17-92	2,000,000	2,000,000	1,995,120
Morgan (J.P.) & Company, Inc.	8.000	03-15-96	5,000,000	5,030,562	4,760,900
Morgan (J.P.) & Company, Inc.	7.100	11-15-91	3,000,000	2,954,565	2,928,750
Morgan (J.P.) & Company, Inc.	8.875	08-01-94	10,000,000	9,928,247	9,921,800
NWNL Companies, Inc.	10.250	03-15-96	6,300,000	6,520,608	6,380,703
National Bank of Detroit	8.500	07-15-92	10,000,000	9,996,310	9,899,400
National City Bank	9.625	01-15-93	10,000,000	10,029,689	10,106,700
Pittsburgh National Bank	9.030	06-29-92	5,000,000	5,000,000	5,012,050
Pittsburgh National Bank	8.850	06-15-94	6,000,000	5,987,077	5,932,200
Progressive Corporation	10.000	12-15-00	6,500,000	6,762,716	6,508,125
Republic National Bank New York	8.625	05-15-92	13,000,000	12,941,411	12,952,160
Safeco Corporation	10.750	09-15-95	5,000,000	5,594,050	5,276,550
Salomon, Inc.	9.500	05-01-92	20,000,000	19,946,520	20,150,000
Salomon, Inc.	9.750	05-01-92	10,000,000	9,965,976	10,115,600
Sanwa Business Credit Corporation	8.950	01-26-93	8,100,000	8,100,000	8,091,738
Sanwa Business Credit Corporation	9.240	06-08-94	10,000,000	9,981,133	10,129,300
Security Pacific Corporation	8.950	08-20-92	5,000,000	5,008,710	5,003,150
SouthTrust Corporation	9.950	06-01-99	5,000,000	4,990,988	4,926,550
Sovran Financial Corporation	8.900	07-01-91	6,000,000	5,975,838	6,028,560
Sovran Financial Corporation	9.750	06-15-99	3,000,000	2,989,501	2,985,930
State Street Bank & Trust Company	8.500	11-01-96	6,000,000	5,984,985	5,598,720
Toyota Motor Credit Corporation	8.750	09-15-91	5,000,000	5,005,024	4,962,500
Toyota Motor Credit Corporation	8.220	10-21-91	5,000,000	4,988,084	4,970,350
Transamerica Financial Corporation	9.950	05-30-93	5,000,000	5,042,624	5,111,150
USSA Capital Corporation	8.370	07-20-92	10,000,000	10,000,000	9,918,400
USSA Capital Corporation	8.400	07-20-92	10,000,000	10,000,000	9,925,200
USSA Capital Corporation	8.400	07-19-93	5,000,000	4,963,929	4,925,500
U.S. Leasing International, Inc.	9.380	09-10-91	8,200,000	8,176,228	8,261,992
U.S. Leasing International, Inc.	9.760	01-30-92	2,000,000	1,999,901	2,027,660
U.S. Leasing International, Inc.	9.750	01-31-92	2,000,000	1,998,403	2,027,380
U.S. Leasing International, Inc.	10.290	03-08-93	19,000,000	19,183,560	19,518,700
Volkswagen Lease Finance Corporation	9.750	10-15-91	7,375,000	7,444,052	7,469,621
Western Financial Auto Loans, Inc.	9.150	06-01-92	6,748,988	6,748,987	6,784,082
World Savings & Loan Association	9.580	09-09-91	16,000,000	16,047,382	16,107,840
World Savings & Loan Association	9.800	02-14-92	6,400,000	6,377,149	6,474,432
World Savings & Loan Association	8.470	03-10-92	3,900,000	3,852,574	3,866,694
Total			\$ 735,433,459	\$ 736,180,810	\$ 731,486,316

Investments

Industrial Bonds

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
CBS, Inc.	10.875	08-01-95	\$ 7,000,000	\$ 7,268,563	\$ 7,262,500
Capital Cities Communications, Inc.	10.500	09-01-97	17,650,000	18,393,652	18,013,942
Conagra, Inc.	9.440	06-22-98	4,750,000	4,841,774	4,728,863
Conagra, Inc.	9.800	08-24-95	5,000,000	5,139,179	5,099,300
Conagra, Inc.	9.980	01-02-92	5,000,000	5,113,064	5,068,200
Conagra, Inc.	8.850	11-08-96	8,000,000	8,000,000	7,806,160
Consolidated Freightways, Inc.	8.790	11-15-94	10,000,000	10,000,000	9,393,500
Dayton Hudson Corporation	9.350	06-16-20	10,000,000	9,948,724	9,949,400
General Electric Company	7.000	03-01-92	2,000,000	1,944,612	1,920,620
General Mills, Inc.	8.850	12-23-97	10,000,000	9,972,709	9,709,300
ITT Corporation	8.850	06-20-94	5,000,000	5,005,524	4,934,350
International Business Machines Corp.	10.250	10-15-95	14,000,000	15,085,818	14,525,000
International Paper Corporation	10.875	08-15-95	6,170,000	6,410,479	6,385,950
Johnson Controls, Inc.	8.830	12-15-94	9,000,000	9,003,319	8,879,040
K-Mart Corporation	12.125	03-01-95	10,000,000	11,143,223	10,950,000
K-Mart Corporation	9.200	09-01-93	3,000,000	3,022,793	3,021,810
K-Mart Corporation	8.900	05-18-92	4,550,000	4,559,913	4,640,090
Kaiser Foundation Hospitals, Inc.	8.690	11-17-94	5,000,000	4,995,356	4,943,750
Kaiser Foundation Hospitals, Inc.	8.860	12-15-99	10,000,000	9,928,780	9,806,200
Kaiser Foundation Hospitals, Inc.	9.300	04-15-98	9,000,000	8,851,637	9,056,250
Kroger Regional Headquarters	9.625	05-01-16	6,095,463	6,251,479	5,165,904
Marriott Corporation	11.125	05-15-95	9,500,000	10,396,228	9,799,820
McDonnell Douglas Corporation	7.875	01-15-97	3,500,000	3,286,351	3,108,945
NCR Corporation	8.760	03-15-93	9,000,000	8,970,153	8,945,910
Rockwell International Corporation	7.500	03-15-97	5,000,000	4,633,425	4,562,500
Sears Roebuck & Company	9.200	06-09-93	2,400,000	2,417,746	2,411,352
Sears Roebuck & Company	8.960	08-23-93	10,000,000	9,992,516	9,980,200
Sears Roebuck & Company	9.030	08-24-93	10,000,000	9,987,350	9,998,800
Sears Roebuck & Company	13.250	09-01-92	3,375,000	3,644,646	3,670,313
Sears Roebuck & Company	8.420	12-15-92	10,000,000	10,000,000	9,885,200
Standard Oil Company of Ohio	8.000	09-15-93	10,000,000	10,078,634	9,650,000
Super Valu Stores, Inc.	10.500	07-15-95	3,000,000	3,071,334	3,089,040
Unilever Capital Corporation	9.000	06-01-93	20,000,000	20,346,680	20,050,000
White Castle System	8.000	09-01-97	496,342	496,342	435,695
Yellow Freight Systems, Inc.	8.700	07-01-91	5,000,000	5,005,458	5,007,750
Sub Total			\$ 262,486,805	\$ 267,207,461	\$ 261,855,654
Net Securities Traded Not Settled			15,000,000	14,857,850	14,857,850
Total			\$ 277,486,805	\$ 282,065,311	\$ 276,713,504

Convertible Bonds

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
Forum Group	6.250	08-15-11	\$ 5,050,000	\$ 4,964,053	\$ 1,969,500
International Business Machines Service Corporation International	7.875	11-21-04	5,250,000	5,522,836	5,250,000
Wang Labs, Inc.	6.500	04-15-11	2,000,000	2,534,245	1,890,000
Wendy's International, Inc.	9.000	05-15-09	3,000,000	3,011,148	1,672,500
	7.250	12-01-10	2,600,000	2,332,754	1,976,000
Total			\$ 17,900,000	\$ 18,365,036	\$ 12,758,000

Investments

Supranational Bonds

ISSUER	COUPON	MATURITY	PAR VALUE	BOOK VALUE	MARKET VALUE
Int'l Bank Reconstruction & Development	7.950	05-15-16	\$ 5,750,000	\$ 4,687,892	\$ 5,079,723
Int'l Bank Reconstruction & Development	8.500	01-30-17	3,000,000	2,595,652	2,808,750
Int'l Bank Reconstruction & Development	8.750	05-01-17	3,575,000	3,175,267	3,435,325
Int'l Bank Reconstruction & Development	7.450	11-15-93	5,600,000	5,377,266	5,383,000
Int'l Bank Reconstruction & Development	9.030	08-30-91	4,500,000	4,487,176	4,528,125
Int'l Bank Reconstruction & Development	5.875	09-01-93	5,100,000	4,701,358	4,703,117
Int'l Bank Reconstruction & Development	10.900	03-15-93	2,000,000	2,065,213	2,092,500
Int'l Bank Reconstruction & Development	8.000	08-10-92	10,000,000	9,932,507	9,868,700
Int'l Bank Reconstruction & Development	8.300	08-28-92	<u>5,000,000</u>	<u>4,991,466</u>	<u>4,962,500</u>
Total			\$ 44,525,000	\$ 42,013,797	\$ 42,861,740
Total Bonds			\$10,846,440,858	\$6,350,314,967	\$6,450,565,335

Short Term/Liquidity Reserves

ISSUER	PAR VALUE	BOOK VALUE	MARKET VALUE
Commercial Paper	\$ 251,562,000	\$ 250,916,445	\$ 251,562,000
Corporate Notes	1,041,903,238	1,039,891,723	1,042,364,691
Government Notes	<u>27,067,793</u>	<u>25,920,481</u>	<u>26,028,379</u>
Sub Total	\$1,320,533,031	\$1,316,728,649	\$1,319,955,070
Net Securities Traded Not Settled	<u>(5,000,000)</u>	<u>(4,849,094)</u>	<u>(4,905,200)</u>
Total	\$1,315,533,031	\$1,311,879,555	\$1,315,049,870

Investments

Guaranteed Mortgages

ISSUER	PAR VALUE	BOOK VALUE	MARKET VALUE
FEDERAL AGENCIES			
Government National Mortgage Association	\$ 550,257,641	\$ 522,550,027	\$ 519,541,947
Federal Home Loan Mortgage Corporation	932,603,816	896,793,406	882,952,702
Federal National Mortgage Association	653,666,923	609,831,237	605,258,433
Federal Housing Administration Insured Project Loans	<u>113,355,766</u>	<u>99,226,023</u>	<u>95,566,508</u>
Total	\$2,249,884,146	\$2,128,400,693	\$2,103,319,590
SINGLE FAMILY DIRECT			
FHA 235	\$ 7,544,487	\$ 7,282,142	\$ 8,268,505
FHA 203	193,040,049	190,963,375	193,297,528
VA 501	140,168,604	136,866,557	138,711,119
FHA 245	32,663,585	31,717,025	33,355,605
FHA 296	19,637,862	20,154,100	20,138,826
FHA 234	2,623,262	2,570,405	2,602,914
VA Vendee Loans	7,042,427	6,604,292	6,941,624
GNMA Certificates	<u>20,852,532</u>	<u>20,445,075</u>	<u>20,313,530</u>
Total	\$ 423,572,808	\$ 416,602,971	\$ 423,629,651
MULTI-FAMILY DIRECT			
FHA 207 (Rental Apartment)	\$ 47,418,660	\$ 46,337,197	\$ 45,777,672
FHA 221 (Rental Apartment)	381,897,582	356,117,483	351,773,607
FHA 231 (Senior Citizen)	45,668,959	39,590,225	41,074,124
FHA 232 (Nursing Home)	101,473,012	97,082,551	98,159,185
FHA 220 (Urban Renewal Apt)	51,285,545	50,303,249	50,713,688
FHA 236 (Subsidy Housing)	113,216,898	109,593,721	99,217,457
GNMA Project Certificates	40,011,385	39,666,433	39,432,029
Construction Loans	<u>61,712,835</u>	<u>61,141,508</u>	<u>61,712,835</u>
Total	\$ 842,684,876	\$ 799,832,367	\$ 787,860,597
Total Mortgages	\$3,516,141,830	\$3,344,836,031	\$3,314,809,838

Investments

Common Stocks

	SHARES	COST	MARKET VALUE
CONSUMER STAPLES (11.81%)			
Abbott Laboratories	1,643,800	\$ 16,483,827	\$ 68,217,700
American Home Products	700,000	36,610,522	36,750,000
Baxter International	1,742,395	27,977,507	41,817,480
Beckman Instruments	112,118	1,258,498	1,962,065
Bristol-Myers Squibb	1,336,400	31,042,892	84,694,350
CPC International, Inc.	285,000	14,932,438	22,835,626
Carter-Wallace, Inc.	393,800	19,706,229	21,560,550
Clorox Company	938,900	39,513,326	39,551,162
Colgate Palmolive Company	183,800	10,935,663	12,567,325
Dean Foods	1,000,000	30,287,737	36,500,000
Dillard Dept. Stores, CL-A	195,200	8,733,497	17,177,600
Eli Lilly & Company	307,100	18,502,599	25,527,688
Pepsico, Inc.	331,600	21,522,345	25,740,450
Pfizer, Inc.	679,600	37,598,209	43,579,350
Procter & Gamble Company	551,600	22,158,423	48,058,150
Schering-Plough Corporation	1,789,000	59,884,369	84,530,250
SmithKline Beecham PLC	611,800	15,325,784	27,378,050
		\$ 412,473,865	\$ 638,447,796
CONSUMER NONDURABLES (4.41%)			
American Greeting CL-A	875,000	\$ 26,302,560	\$ 30,625,000
Dayton-Hudson Corporation	1,188,100	33,200,993	86,434,276
Hasbro Bradley	110,800	2,263,806	2,035,950
Hillenbrand Industries Limited, Inc.	100,700	3,432,114	4,493,738
Liz Claiborne	520,000	7,271,679	12,545,000
Lowe's Companies	210,000	5,156,850	6,825,000
Nordstrom, Inc.	332,500	8,497,866	16,167,812
Nordstrom, Inc.	675,000	23,512,500	23,118,750
Penney (J.C.), Inc.	630,000	41,522,352	38,193,750
U.S. Shoe Corporation	727,500	17,132,079	18,096,562
		\$ 168,292,799	\$ 238,535,838
CONSUMER DURABLES/HOUSING (2.91%)			
Black & Decker Manufacturing Company	928,400	\$ 20,124,780	\$ 14,622,300
Calmat Company	435,000	14,945,311	14,790,000
Ford Motor Company	430,000	19,005,743	18,812,500
General Motors Corporation	1,794,500	64,873,938	85,463,062
Goodyear Tire & Rubber Company	649,121	31,389,130	19,554,770
Subaru Of America, Inc.	500,000	4,416,667	4,125,000
		\$ 154,755,569	\$ 157,367,632
CONSUMER SERVICES (6.26%)			
Capital Cities/ABC, Inc.	88,500	\$ 30,938,846	\$ 55,135,500
Collins Foods International	125,000	2,381,349	2,718,750
Community Psychiatric	36,500	839,016	976,375
Deluxe Corporation	380,600	10,121,213	13,083,125
Hillhaven Corporation	1,292,800	1,448,488	2,262,400
Humana, Inc.	671,200	16,726,746	32,888,800
Kelly Services, Inc., CL-A	290,625	8,567,125	11,043,750
Marriott Corporation	560,000	19,426,241	12,740,000

Investments

Common Stocks (continued)

	SHARES	COST	MARKET VALUE
CONSUMER SERVICES (6.26%) (continued)			
McDonald's Corporation	482,700	\$ 17,151,383	\$ 17,135,850
National Medical Enterprises	2,076,500	46,550,869	78,647,437
Shoney's, Inc.	1,025,000	10,024,871	15,375,000
Southwest Airlines	1,477,000	34,698,329	38,032,750
USAir Group, Inc.	982,300	38,049,219	24,680,288
Washington Post CL- B	41,400	9,132,675	10,888,200
Wendy's International, Inc.	3,416,976	23,529,868	22,637,466
		\$ 269,586,238	\$ 338,245,691
TECHNOLOGY (10.32%)			
AMP, Inc.	912,700	\$ 46,214,277	\$ 43,010,987
Apple Computer, Inc.	296,000	11,284,093	13,246,000
Avnet, Inc.	1,279,400	36,908,888	36,782,750
Diebold, Inc.	573,400	21,880,411	25,301,275
Digital Equipment Corporation	302,800	6,937,861	25,738,000
General Instrument Corporation	1,371,800	45,026,255	49,727,750
Harris Corporation	1,117,400	38,526,335	38,410,625
Hewlett-Packard Company	363,500	15,223,619	17,175,375
International Business Machines	989,400	97,041,790	116,254,500
NCR Corporation	1,067,000	65,307,812	68,421,375
Perkin Elmer Corporation	930,000	23,746,564	22,436,250
Pitney-Bowes, Inc.	500,000	26,402,026	24,625,000
Scientific-Atlanta	1,114,600	23,711,604	29,397,575
Tektronix, Inc.	1,044,200	29,428,792	16,185,100
Unisys Corporation	1,597,300	36,182,926	21,164,225
Wang Labs, CL-B	2,380,000	23,800,000	10,115,000
		\$ 547,623,253	\$ 557,991,787
CAPITAL SPENDING/DIVERSIFIED (11.30%)			
Ametek, Inc.	1,009,000	\$ 12,560,521	\$ 13,243,125
Boeing Company	830,550	29,586,666	48,587,175
Browning Ferris Industries	433,800	17,619,107	19,249,875
Caterpillar, Inc.	400,000	26,886,779	21,050,000
Cooper Industries, Inc.	2,525,900	44,606,517	107,035,012
E-Systems, Inc.	1,510,100	44,916,976	38,130,025
Emerson Electric Company	1,303,200	50,118,585	53,431,200
Foster Wheeler Corporation	1,104,200	15,173,113	29,537,351
General Electric Company	2,225,400	43,154,171	154,108,950
Ingersoll-Rand	65,400	3,761,934	3,744,150
Loral Corporation	305,400	10,476,569	8,627,550
Martin Marietta Corporation	194,800	8,374,923	8,352,050
Minnesota Mining & Manufacturing Company	115,000	9,116,568	9,961,875
Raytheon Company	973,400	48,724,265	60,715,825
Rockwell International	25,300	699,993	692,587
Sundstrand Corporation	143,800	4,126,704	5,104,900
Westinghouse Electric	800,000	29,319,226	29,400,000
		\$ 399,222,617	\$ 610,971,650

Investments

Common Stocks (continued)

	SHARES	COST	MARKET VALUE
BASIC PRODUCTS (8.39%)			
Air Products & Chemicals, Inc.	736,200	\$ 30,568,406	\$ 41,595,300
Aluminum Company of America	515,000	34,008,685	32,831,250
Bowater, Inc.	185,000	4,775,287	4,255,000
Dow Chemical Company	700,000	45,434,519	40,075,000
duPont (EI) deNemour	1,062,300	42,261,979	40,898,550
Homestake Mining Company	1,644,700	31,621,456	30,015,775
International Paper Company	740,500	36,824,159	37,672,937
Kimberly-Clark Corporation	65,000	4,101,400	4,655,625
Lubrizol Corporation	958,100	34,686,393	39,641,387
Millipore Corporation	297,500	8,616,837	9,743,125
Nalco Chemical Company	939,500	24,821,591	53,199,187
Nucor Corporation	63,600	2,522,410	4,436,100
Phelps Dodge Corporation	800,000	48,551,722	47,600,000
USX Corporation	1,337,997	30,104,932	44,153,902
Union Camp Corporation	330,300	11,932,551	11,643,075
Worthington Industries	445,000	9,433,208	10,902,500
		\$ 400,265,535	\$ 453,318,713
ENERGY (13.56%)			
Amoco Corporation	2,341,600	\$ 83,316,680	\$ 119,714,300
Atlantic Richfield Company	1,078,400	81,256,222	126,712,000
Baker Hughes, Inc.	1,486,700	21,126,608	40,512,575
Chevron Corporation	755,600	22,575,216	53,175,350
Exxon Corporation	510,700	15,776,892	24,449,762
Halliburton Company	1,446,100	34,544,929	69,593,563
Mobil Corporation	2,195,100	76,045,141	135,547,425
Pacific Enterprises	405,900	19,232,468	17,656,650
Sonata, Inc.	463,200	13,786,199	23,391,600
Tenneco, Inc.	498,000	18,887,959	33,739,500
Unocal Corporation	3,258,200	52,565,555	88,378,675
		\$ 439,113,869	\$ 732,871,400
FREIGHT TRANSPORTATION (2.18%)			
Consolidated Freightways	758,100	\$ 22,260,434	\$ 9,760,537
Norfolk Southern Corporation	1,690,900	39,291,334	72,497,338
Roadway Services, Inc.	1,010,000	35,180,900	35,855,000
		\$ 96,732,668	\$ 118,112,875
UTILITIES (15.53%)			
Bellsouth	1,170,200	\$ 61,128,138	\$ 60,850,400
Cincinnati Gas & Electric	1,940,000	50,761,423	58,442,500
Commonwealth Edison Company	2,485,400	89,655,078	81,396,850
Communications Satellite	800,000	29,086,187	26,300,000
Consolidated Edison	2,000,000	40,716,995	47,000,000
DPL, Inc.	2,000,000	35,342,439	38,000,000
Duke Power Company	403,800	21,735,454	22,562,325
FPL Group, Inc.	1,500,000	50,998,060	45,937,500
GTE Corporation	3,916,600	83,690,697	126,799,925
Northeast Utilities	850,000	17,936,302	16,468,750
Pacific Telesis	544,200	17,531,321	24,216,900

Investments

Common Stocks (continued)

	SHARES	COST	MARKET VALUE
UTILITIES (15.53%) (continued)			
Pacificorp	3,000,000	\$ 52,366,895	\$ 63,750,000
Pennsylvania Power & Light	32,000	1,286,691	1,368,000
Portland General Corporation	1,716,700	41,324,964	29,398,487
Public Service Enterprise	1,500,000	41,090,484	38,812,500
SCE Corporation	2,000,000	69,340,168	75,000,000
Southern Company	157,600	4,304,056	3,979,400
Southern New England Telecom	1,000,000	38,789,509	33,500,000
Southwestern Bell	712,600	27,397,340	38,391,325
Union Electric Company	276,200	6,798,408	7,284,775
		\$ 781,280,609	\$ 839,459,637
FINANCIAL (13.33%)			
American General Corporation	975,000	\$ 32,479,601	\$ 46,800,000
American International	980,400	65,421,867	94,486,050
Banc One Corporation	687,500	10,021,014	19,937,500
Bankers Trust N.Y. Corporation	779,900	25,958,791	32,658,312
Block (H&R), Inc.	1,715,400	31,805,417	72,904,500
CIGNA Corporation	808,200	47,543,419	40,511,025
Capital Holding Corporation	945,100	29,009,110	42,765,775
Chase Manhattan Corporation	1,454,500	44,963,162	34,726,187
Citicorp	1,190,600	22,701,459	26,937,325
Comerica, Inc.	110,000	5,158,361	5,115,000
First Interstate Bancorp	627,300	32,044,259	25,327,237
General Re Corporation	68,600	5,292,271	5,865,302
Golden West Financial Corporation	925,000	16,403,337	28,096,875
Great Western Financial Corporation	1,773,100	27,988,629	31,915,800
Lincoln National Corporation	456,600	21,255,924	25,284,225
Marsh & McLennan Companies	412,200	27,390,112	31,636,350
Mellon National Corporation	286,400	7,853,903	7,482,200
Midlantic Corporation	140,000	5,927,490	2,030,000
NCNB Corporation	1,871,800	63,285,039	70,192,500
NBD Bancorp, Inc.	243,900	7,558,574	7,774,313
National City Corporation	1,016,000	29,762,449	36,576,000
Travelers Corporation	1,057,000	43,369,947	31,445,750
		\$ 603,194,135	\$ 720,468,226
Sub Total		\$4,272,541,157	\$5,405,791,245
Net Securities Traded Not Settled		(7,165,868)	(19,710,302)
Total		\$4,265,375,289	\$5,386,080,943

Investments

Common Stocks—Small Company Portfolio

	SHARES	COST	MARKET VALUE
Action Auto Rental, Inc.	85,800	\$ 9,487	\$ 654,225
Aerovox, Inc.	113,630	157,186	454,520
Albany International Corporation	176,400	2,984,859	2,778,300
American Water Works Company, Inc.	400,600	6,466,389	6,459,675
Bandag, Inc.	54,800	4,407,915	4,644,300
Belo (A.H.) Corporation	232,900	6,780,434	8,384,400
Bic Corporation	170,600	4,764,420	4,904,750
Blair Corporation	209,900	7,115,168	7,923,726
Blessings Corporation	115,900	2,639,634	2,665,700
Carolina Freight Corporation	310,000	8,524,006	6,161,250
Cincinnati Financial Corporation	54,000	2,830,000	4,401,000
Clarcor, Inc.	323,700	7,336,910	7,930,650
Consolidated Stores Corporation	966,200	6,556,962	5,072,550
Corroon & Black Corporation	337,900	10,715,378	10,728,325
Cross (A.T.) Company	150,000	2,568,589	4,518,750
Curtice Burns Foods, Inc.	259,200	5,067,287	4,633,200
Daniel Industries, Inc.	225,720	1,618,339	3,696,165
Durr-Fillauer Medical, Inc.	330,000	6,870,260	8,043,750
Federal Signal Corporation	300,000	5,607,269	6,975,000
Fifth Third Bancorp	150,000	5,126,261	4,762,500
Florida Rock Industries, Inc.	85,948	2,910,459	2,589,184
Forum Group, Inc.	675,000	4,558,816	506,250
Gallagher (Arthur J.) & Company	244,700	4,886,578	5,628,100
Gerber Scientific, Inc.	600,600	9,295,019	8,858,850
Gibson Greetings, Inc.	450,000	10,437,500	10,181,250
Guardman Products, Inc.	79,500	1,121,109	1,033,500
Hannaford Brothers Company	181,800	4,156,072	6,726,600
Harland (John H.) Company	200,000	4,105,698	5,025,000
Heekin Can, Inc.	150,000	4,846,900	5,625,000
Interface, Inc.	10,000	124,000	186,250
International Aluminum Corporation	7,400	198,345	192,400
Jacobson Stores, Inc.	161,000	4,523,126	3,421,250
Ladd Furniture, Inc.	225,500	2,583,057	2,480,500
Lancaster Colony Corporation	494,400	9,104,951	10,629,600
Lance, Inc.	90,000	1,388,215	2,385,000
Lands' End, Inc.	100,000	1,942,920	1,700,000
Lawson Products, Inc.	212,500	4,753,626	6,056,250
Lee Enterprises, Inc.	312,000	8,494,232	8,034,000
Lennar Corporation	214,000	4,619,254	3,798,500
Lilly Industrial Coatings, Inc.	304,660	4,659,162	5,026,890
Loctite Corporation	186,700	7,191,485	11,131,987
MacNeal-Schwendler Corporation	397,300	4,622,794	3,774,350
Mercantile Bankshares Corporation	415,000	8,755,449	9,130,000
National Computer Systems, Inc.	470,000	7,389,187	4,288,750
National Data Corporation	365,000	8,725,722	5,292,500
New England Business Service, Inc.	400,000	8,667,815	6,300,000
Old Kent Financial Corporation	155,000	3,741,797	3,836,250
Preston Corporation	270,000	3,224,375	2,835,000
RPM, Inc.	350,000	4,070,897	7,787,500
Russell Corporation	378,700	6,525,053	10,082,887
Rykoff-Sexton, Inc.	465,250	9,917,402	8,956,062
Schulman (A.), Inc.	316,000	7,096,019	13,430,000
Sealed Air Corporation	350,000	1,000	10,150,000
Seaway Food Town, Inc.	6,800	126,025	124,100
Smucker (J.M.) Company	129,000	3,037,962	5,353,500

Investments

Common Stocks—Small Company Portfolio (continued)

	SHARES	COST	MARKET VALUE
Standard Products Company	315,200	\$ 8,730,057	\$ 7,643,600
Steel Technologies, Inc.	189,111	2,182,915	2,600,276
TJ International, Inc.	113,000	2,779,875	2,683,750
Telxon Corporation	165,000	3,075,600	1,670,625
Tootsie Roll Industries, Inc.	101,700	3,186,132	4,449,375
Tultex Corporation	348,200	3,388,697	2,742,076
Valmont Industries, Inc.	100,000	1,662,500	2,075,000
Valspar Corporation	150,500	4,707,817	5,455,625
WD 40 Company	177,600	4,367,825	5,594,400
Waxman Industries, Inc.	440,000	3,811,840	2,860,000
Willcox & Gibbs, Inc.	501,666	6,924,321	5,204,784
Wolohan Lumber Company	211,000	3,717,480	3,798,000
Yankee Energy Systems, Inc.	98,730	2,156,100	1,925,235
Zero Corporation	265,906	3,555,119	3,855,637
Sub Total		\$ 324,195,052	\$ 350,908,379
Net Securities Traded Not Settled		4,285,656	3,519,439
Total		\$ 328,480,708	\$ 354,427,818
Total Common Stocks		\$4,593,855,997	\$5,740,508,761

Other Equity Investments

	BOOK VALUE	MARKET VALUE
Advanced Assembly Automation	\$ 973,400	\$ 316,501
Altus Corporation	350	34,614
Brantley Venture Partners II	250,000	250,000
C-Bio Management Co., Inc.	935,000	935,000
Cardinal Development Capital Fund I	4,717,876	2,548,785
Cellular Communications, Inc.	385	1,662,500
Datamedia Corporation	50	224,489
Devonshire Capital Liquidation Trust	90	120,671
Explosive Fabricators, Inc.	8,720	446,211
Franchise Developers, Inc.	1,418,000	972,471
Palmer Organization	700	1,337,609
Primus Capital Fund	2,565,514	3,443,510
Primus Capital Fund II	7,000,000	6,862,730
Sagamore Financial Corporation	9,750,000	9,750,000
Theta-J Corporation	350	136,786
Total	\$ 27,620,435	\$ 29,041,877

Investments

Real Estate

	BOOK VALUE	MARKET VALUE	PERCENT
Participating Mortgages	\$ 582,268,168	\$ 640,453,701	28.8%
Multi-Tenant Properties	\$ 447,046,629	\$ 418,050,283	18.8%
Joint Ventures	\$ 169,026,912	\$ 167,193,775	7.5%
Sale Leaseback			
Retail Equities	\$ 469,610,632	\$ 456,357,695	20.5%
Office/Industrial	17,115,456	19,289,808	0.9
Total Sale Leaseback	\$ 486,726,088	\$ 475,647,503	21.4%
Other (Funds/Separate Accounts)	\$ 451,638,557	\$ 524,118,517	23.5%
Total Real Estate	<u>\$2,136,706,354</u>	<u>\$2,225,463,779</u>	<u>100.0%</u>

DISTRIBUTION OF PROPERTIES BY GEOGRAPHY AND USE

Market Value as of June 30, 1990

(Dollars in Millions)

	WEST		MIDWEST		SOUTH		EAST		TOTAL	
Retail										
Single-Tenant Stores	\$ 98.0	4.4%	\$122.9	5.5%	\$249.9	11.2%	\$ 37.8	1.7%	\$ 508.6	22.8%
Community Shopping Centers	15.1	0.7	55.6	2.5	-	-	-	-	70.7	3.2
Strip Shopping Centers	17.7	0.8	1.8	0.1	-	-	-	-	19.5	0.9
Regional Malls	-	-	0.0	0.0	-	-	100.8	4.5	100.8	4.5
Total Retail	<u>\$130.8</u>	<u>5.9%</u>	<u>\$180.3</u>	<u>8.1%</u>	<u>\$249.9</u>	<u>11.2%</u>	<u>\$138.6</u>	<u>6.2%</u>	<u>\$ 699.6</u>	<u>31.4%</u>
Office										
Single-Tenant	\$ 15.3	0.7%	\$ 14.1	0.6%	\$ 4.0	0.2%	\$ -	- %	\$ 33.4	1.5%
Multi-Tenant	42.2	1.9	234.7	10.5	112.6	5.1	421.7	19.0	811.2	36.5
Total Office	<u>\$ 57.5</u>	<u>2.6%</u>	<u>\$248.8</u>	<u>11.1%</u>	<u>\$116.6</u>	<u>5.3%</u>	<u>\$421.7</u>	<u>19.0%</u>	<u>\$ 844.6</u>	<u>38.0%</u>
Warehouse										
Single-Tenant	\$ 3.3	0.1%	\$ -	- %	\$ -	- %	\$ -	- %	\$ 3.3	0.1%
Multi-Tenant	31.4	1.5	99.0	4.4	35.5	1.6	140.5	6.3	306.4	13.8
Total Warehouse	<u>\$ 34.7</u>	<u>1.6%</u>	<u>\$ 99.0</u>	<u>4.4%</u>	<u>\$ 35.5</u>	<u>1.6%</u>	<u>\$140.5</u>	<u>6.3%</u>	<u>\$ 309.7</u>	<u>13.9%</u>
Hotel	\$ -	- %	\$ -	- %	\$ 12.0	0.5%	\$ -	- %	\$ 12.0	0.5%
Apartments	\$ 4.1	0.2%	\$117.5	5.4%	\$ 32.3	1.5%	\$ 26.4	1.2%	\$ 180.3	8.3%
Mixed Use	\$ 40.7	1.7%	\$ 5.7	0.3%	\$ 25.3	1.1%	\$ 0.9	- %	\$ 72.6	3.1%
Timberland	<u>\$ 64.5</u>	<u>2.9%</u>	<u>\$ -</u>	<u>- %</u>	<u>\$ 42.0</u>	<u>1.9%</u>	<u>\$ -</u>	<u>- %</u>	<u>\$ 106.5</u>	<u>4.8%</u>
Deferred Expenses									\$ 0.2	0.0%
Total Portfolio	<u>\$332.3</u>	<u>14.9%</u>	<u>\$651.3</u>	<u>29.3%</u>	<u>\$513.6</u>	<u>23.1%</u>	<u>\$728.1</u>	<u>32.7%</u>	<u>\$2,225.5</u>	<u>100.0%</u>

FOOTNOTES TO SCHEDULE OF INVESTMENTS

1. Explanation of Market Values

- A. Short Term/Liquidity Reserves: Cash Equivalents—due to the very short maturities, par value was used for market value. Corporate and Government Notes—market values were provided by independent sources believed to be reliable.
 - B. Bonds, Notes, and Guaranteed Mortgages: Market values were provided by independent sources believed to be reliable. Some holdings are private placements where no market exists or are public issues that trade infrequently. The market values were based on actual transactions or upon the yields existing at year end for comparable securities. Mortgage values were based upon market yields available at the time of evaluation.
 - C. Common & Convertible Preferred Stocks: Market values were based on the closing prices on the New York Stock Exchange or American Stock Exchange. Securities not listed on those exchanges were priced based upon the "Bid Price" provided by the National Association of Securities Dealers' NASDAQ System.
 - D. Valuations of Real Estate are determined as follows: Sale-Leasebacks were valued based upon discounting the property's income stream at current market rates; Multi-Tenant properties were valued by an alternating schedule of independent MAI appraisals and STRS staff valuations based upon discounted cash flow analysis; Commingled funds and separate accounts are valued annually by independent appraisals. All valuation procedures have been approved by the Board's real estate consultant.
 - E. Other Equity Investments: All investments in this category are venture capital investments. Where no market exists for these securities, values were established by valuation committees.
2. The value of investments used by the Treasurer of State, the custodian of STRS's investments, is par value for bonds, notes, commercial paper and certificates of deposit; the unpaid principal balance for mortgages; and the book value for common stocks, preferred stocks, and venture capital investments. The value was \$18,487,030,421.88 at June 30, 1989, and \$22,414,300,999.62 at June 30, 1990.
 3. The Investments listed were purchased and settled by June 30, 1990. Where applicable, purchases and sales executed prior to June 30 but not yet settled are incorporated in an adjustment that gives the total investments on a trade date basis.

The data included in this Investment Section has been entirely compiled by STRS staff members and has not been audited by an independent party. This report is intended to provide information regarding STRS investments as of June 30, 1990. Financial market changes beyond that date may significantly affect the reported amounts.

Investments

INVESTMENT OBJECTIVE AND POLICY

This Investment Policy was adopted on October 20, 1989. It is published as provided for by Section 3307.15 of the Ohio Revised Code.

The State Teachers Retirement System of Ohio is governed by a Board of nine members with broad statutory powers. The investment function is vested in the Board as set forth in Section 3307.15 of the Ohio Revised Code. Section 3307.15 of the Ohio Revised Code requires the Board to "...adopt in regular meeting, policies, objectives or criteria for the operation of the investment program. Amendments and additions to the policy shall be adopted in regular meeting...." These policies and regulations are adopted under that authority.

In addition to the investment function, Section 3307.15 of the Ohio Revised Code also sets forth the fiduciary responsibility of the Board and other fiduciaries in discharging their duties with respect to the fund. Section 3307.01(U) of the Ohio Revised Code defines a fiduciary, and Section 3307.14 of the Ohio Revised Code lists specific items a fiduciary shall and shall not do. This objective and policy statement incorporates and is subject to all of the above-mentioned sections of the Ohio Revised Code.

LIQUIDITY NEEDS

The Board anticipates that contributions to the pension fund will exceed disbursements for the foreseeable future. Therefore, there is no special need for liquidity in the portfolio, other than that deemed necessary to accomplish investment objectives and strategies.

PRESERVATION OF CAPITAL

In many if not most instances, payments from the pension fund are the major sources of income to retirees and a principal protection against the contingencies of death and disability for active workers. Therefore, the basic policy of the Board is preservation of the capital investment and realization of sufficient return to secure and facilitate payment of the statutory benefit requirements of the System to its beneficiaries. In this connection, it is recognized that the fund will achieve some protection against erosion of principal value through inflation if the actuarially assumed interest rate is achieved.

The risk level of the pension fund should be considerably less than that of the stock market as a whole, but may be somewhat more than that of the bond market by itself. Using volatility as a proxy for risk, and assuming the volatility level of the stock market (defined to be the Standard & Poor's 500

Average) is 1.0, the bond market approximately 0.6, and the short-term cash equivalents 0.0, a volatility level of about 0.8 is considered acceptable for the fund as a whole. This means that, in a downward stock market, the total pension fund should not fall by more than 80% of the decline in the stock market. This should protect the beneficiaries from any undue risk.

In terms of the stock sector alone, restricted by statute to 35% of the fund, a volatility level of between 1.0 and 1.15 (from equality with the stock market to a level 15% higher) is acceptable. Under normal circumstances, the volatility level of the stock sector should average slightly above 1.0. The publicly traded bond sector of the portfolio should have a volatility level approximately 80% to 130% of the Shearson Lehman Government/Corporate Bond Index.

TOTAL RETURN

Each 1% increase in investment return will finance benefit improvement in the range of 10%-15%, or will allow a similar reduction in contributions. Such gain may also be used to reduce the actuarial debt of the plan. Therefore, maximization of return, from both current income and capital appreciation consistent with the overall risk parameters described above, is an important objective. With strict adherence to statutory investment limitations and restrictions, the Board sets a total return objective of 8%-9% per annum. This is a long-term (five to ten-year) objective, and this total return objective, as well as other return objectives, is based on a premium over inflation by assuming a long-term inflation rate of 4%-5%. The objectives should be pursued consistently with prudent management and at the minimal level of market risk necessary to accomplish them.

The fund does not have a capital return or income return objective separate from the total return objective. However, it is anticipated that for the total account there will be income yield over a long-term

period which is greater than capital growth, because of the preponderance of fixed income assets.

For the publicly-traded bond sector of the portfolio, a total return objective of 7%-8%, averaged over a period of five to ten years, is desired. Should conditions change in the bond market so as to make this objective unattainable without undue risk, it will be the responsibility of the Investment Advisor to recommend to the Board a revised figure. Undue risks are to be avoided, particularly those of lower-than-average quality (an average rating of between A and Aa should be the minimum maintained in the publicly-traded sector of the bond portfolio, considering U.S. Treasury and Agency obligations as Aaa).

For the equity sector of the portfolio, a total return objective of 8%-10%, averaged over a period of five to ten years, is desired. Should the Investment Advisor believe attainment of this objective at any time is not possible without undue risk, it is his responsibility to recommend to the Board a revised figure. In today's market, the Board believes an 8%-10% objective is realistic, within the volatility guideline expressed above. The Board recognizes that there is a level of risk associated with an 8%-10% total equity return objective, which should be achieved, however, with the minimum risk acceptance necessary. That is to say, total return should be maximized at the accepted level of risk. The equity portfolio should reduce non-market risk by being diversified.

Income is expected to be an important part of total return, not only for the portfolio as a whole but for the equity sector. Growth of income is an important objective, particularly in the equity sector.

PERSONAL INTEGRITY

Participation in the affairs of any public body demands a high level of personal integrity and conduct. This is especially true when funds of others are involved. Members of the Board and staff must discharge their responsibilities without prejudice or favor, avoiding at all times any conduct that could create or appear to create a conflict of interest.

Staff members shall carry out the duties and responsibilities delegated by the Board in the best interest

of members of the System and in accordance with the code of ethics of the ICFA. No staff member shall engage in any activity in his official position or in a personal investment program that will in any way create a conflict of interest.

ORGANIZATION

Investment Committee

An Investment Committee is established and consists of all nine members of the Board. The Investment Committee is empowered to advise the Board in all investment matters.

Investment Advisors/Consultants

The Board shall employ competent, well-qualified organizations to assist in carrying out its fiduciary responsibility. Duties of the Investment Advisor/Consultants shall include but not be limited to:

1. Preparation of long-term investment objectives, review of these objectives at least annually, and recommendation for changes in the objectives as required.
2. Monitoring performance of the investment program.
3. Availability to counsel with the in-house staff, Executive Director, or members of the Board.
4. Participation in bimonthly meetings of the Investment Committee.
5. Preparation of detailed investment criteria for all investments.
6. Review of Annual Investment Plan.
7. Performance of such other duties as may be provided by contract.

Executive Director

The Executive Director shall have authority to amend this Investment Objective and Policy on an emergency basis to prudently preserve or enhance the assets of the System.

Deputy Executive Director, Investments

The Deputy Executive Director, Investments, shall have the following responsibilities:

1. Supervise activities of the inhouse staff.
2. In cooperation with the Investment Advisor and the Executive Director, formulate an Annual Investment Plan.

(continued)

Investments

INVESTMENT OBJECTIVE AND POLICY (continued)

3. Make recommendations to the Executive Director and Board concerning periodic modification of Annual Investment Plan.
4. Make recommendations as to additions to or deletions from the approved stock list.
5. Supervise execution of orders to buy and sell securities (including options) seeking always to maintain reasonable costs for such services.
6. Report in required detail to the Executive Director, and the Investment Committee and/or the Board on all activities of the investment staff.

CRITERIA FOR SECURITIES

Statutory Provisions

The investment standards set forth in Section 3307.15 of the Ohio Revised Code are incorporated by reference and made a part of this policy. The Board and other fiduciaries shall discharge their duties with respect to such funds solely in the interest of the participants and beneficiaries. It is the intent of the Board to give consideration to investments that enhance the general welfare of Ohio provided such investments offer quality return and safety comparable to other investments currently available to the Board. Also, the Board will give equal consideration to investments that involve minority-owned and minority-controlled firms and firms owned and controlled by women.

Bonds

It is the responsibility of the Investment Advisor to recommend specific criteria for bond investments, to present such criteria to the Investment Committee, and to review such criteria at least annually with the Investment Committee and/or the Board. The purpose of the criteria is to provide assets of reasonable quality and marketability. It is not a substitute for prudent portfolio management nor will it ensure superior performance. Bond purchases, including exchanges, shall meet the following criteria in addition to statutory requirements. All bond, note, debenture, or medium-term note purchases shall:

1. Be issues of at least \$50 million par value.
2. Be made with the intent of creating positions of at least \$1 million.
3. Not exceed 15% of any one issue except for U.S. Treasury, Federal Agencies, and other U.S. Government guaranteed securities.

It is the Board's policy to manage the bond portfolio in order to improve return, as long as overall quality and risk levels of the portfolio are kept within the limits expressed in the sections "Total Return" and "Preservation of Capital" above. Financial Futures may be used to manage volatility of the portfolio provided the amount hedged does not exceed \$250 million. Variations of Fixed Income exchanges and possible environments under which they can be considered are limitless. General criteria may be too restrictive to allow portfolio enrichment and not specific enough to avoid poor judgment. However, the following is required:

1. All bond exchanges are to be documented by the investment staff at the time of execution as to specific details of price and yield, and objectives of the individual exchange.
2. The Investment Advisor will review these periodically with the staff as to reasonableness and adequacy to the overall investment plan and current outlook.
3. The turnover ceiling shall be 150% of marketable bond assets. Turnover is defined as the total book value of sales and maturities as a percent of beginning book value.
4. A portfolio measurement will be made showing incremental advantage or disadvantage obtained through exchange activity.

Private placements shall be limited to 35% of assets invested in bonds and shall be purchased only when there is significant additional return (defined as approximately 75 basis points over the current yield rate of publicly-traded bonds of similar quality) as an offset for non-marketability of privately placed bonds.

Cash Equivalents

It is the Board's policy to use cash equivalents to provide adequate protection against downward market movements and to assist in overall return objectives. Because of the size of both the bond and equity sectors of the portfolio, and because of the essentially long-term nature of the fund, the Board does not expect that major moves will be made into or out of cash reserves. Under normal circumstances, a reserve of 20% of the value of the total fund shall be considered the maximum limit. However, it will be the responsibility of the Investment Advisor, together with the Deputy Executive Director, Investments, to recommend any modification of this position.

Investments may be made in commercial paper, Treasury obligations, certificates of deposit, bankers' acceptances, or repurchase agreements, with the responsibility resting with the investment staff as to selection of the specific instrument at any given point in time. Any commercial paper purchased by the System shall have a maturity of not more than 270 days and shall be rated P-1 by Moody's Investors Service, Inc. and/or A-1 by Standard & Poor's Corporation. Certificates of deposit and bankers' acceptances shall be purchased on those banks affiliated with the largest 100 U.S. bank holding companies, in terms of assets with short-term debt ratings of P-1 and/or A-1, the twenty largest bank holding companies in Ohio, and the ten largest savings and loan holding companies in Ohio.

Positions should not exceed \$50 million in any one obligor of commercial paper, certificates of deposit, or bankers' acceptances. Repurchase agreements shall be collateralized by U.S. Treasury or Agency securities with a market value in excess of funds advanced.

Mortgages and Mortgage-Related Securities

1. Government Guaranteed Mortgages

The Board is aware of the desirability of contributing to the economic growth of the state of Ohio by encouraging home ownership and will promote this objective within the limits of fiduciary responsibility. It is the policy of the Board to make regular investments in Ohio single-family FHA/VA residential mortgages whenever the yield on such instruments equals or exceeds the yield currently available on recently offered corporate bonds rated Aaa.

Guaranteed project mortgages on such facilities as apartments, nursing homes, and elderly housing shall be purchased without location restrictions. Construction loans guaranteed by the United States government shall be restricted to Ohio locations. Construction loans guaranteed by the United States government that convert to permanent loans can be purchased without location restrictions.

Mortgages shall be limited to 20% of total assets. Mortgage securities issued by the Government National Mortgage Association (GNMA), the Federal Home Loan Mortgage Corporation (FHLMC), and the Federal National Mortgage

Association (FNMA) shall be purchased and managed under the "Bonds" section of this Investment Objective and Policy. The primary emphasis of the mortgage and mortgage-related securities portfolio will continue to be government-guaranteed mortgages.

2. Mortgage-Backed Securities

- a. Mortgage-backed bonds: The Board may purchase bonds that are collateralized by Ohio single-family mortgages. The bond shall be rated Aa or better, and the mortgage pool shall be at least 150% of the amount outstanding of the bond.
- b. Pass-through securities: The Board may invest in pass-through securities that are backed by Ohio single-family mortgages or Ohio commercial mortgages, provided that: (a) the minimum pass-through certificate is \$5 million; (b) private mortgage insurance is provided on any conventional mortgage with a loan-to-value ratio greater than 80%; and (c) the selling institution is Ohio-based and has a net worth exceeding \$5 million.
- c. Fixed-rate commercial mortgages: The Board may invest in fixed-rate commercial mortgages in order to enhance the existing government-guaranteed mortgage portfolio or to facilitate sales of existing real estate investments. The loan-to-value ratio of such commercial mortgages shall not exceed 90% unless that portion of the loan greater than 90% is insured. No more than 10% of the total portfolio shall be invested in fixed-rate commercial mortgages.

Real Estate

1. Objective

It is the Board's policy to invest in real estate in order to diversify the investment portfolio and to provide one means of insulating assets of the System against the effects of inflation. Consequently, real estate investments will be acquired to provide a real return commensurate with investment risk, coupled with an annual increase in cash flow. Cash-on-cash yield at purchase shall be a key objective of the portfolio. The opportunity for increasing cash flows during ownership shall be present as evidenced by percentage leases, cost of living clauses, short-term leases with limited renewal provisions, or a combination of the above. Long-term appreciation shall also be a factor in

(continued)

Investments

INVESTMENT OBJECTIVE AND POLICY (continued)

determining real estate selection, but shall be secondary to cash-on-cash yield and arrangements for securing increased cash flows for the dominant portion of the portfolio.

2. Allocation

Real estate investments shall be limited to 20% of total assets.

3. Diversification

a. Property type: High quality properties that are relatively general purpose will provide both investment security and maximum equity growth potential. Four such categories of property are:

1. Office buildings;
2. Multi-tenant retail properties such as community shopping centers and regional malls;
3. Distribution centers, warehouses, and industrial parks;
4. Multi-family housing.

Single purpose facilities (i.e., oil refineries, steel plants, etc.) will not be considered for investment.

A special category permitting other property types, such as elderly living centers, hotels, and timberland, is allowed, provided it is always less than 2% of total assets (10% of the real estate portfolio). Given the appropriate financing structure, these property types will add further diversification to the portfolio. Since such properties will require specialized acquisition and management expertise, it is likely that outside assistance will be required.

b. Geographical: As a matter of general procedure, no more than 25% of the real estate portfolio will be invested in any one geographic region, as defined by the NCRIF Real Estate Performance Report. These eight regions are Pacific, Mountain, Southwest, Southeast, West North Central, East North Central, Northeast, and Mideast. However, the East North Central region may have a 35% allocation due to preference for Ohio properties.

Emphasis shall be placed on properties in areas where economic and demographic growth is favorable. When properties located within Ohio offer quality, return and safety compar-

able to properties outside Ohio, the Ohio investment will be given preference. The investment staff shall pursue an active plan to achieve this objective.

c. Financing structure: New real estate investments will include equity-type structures such as direct ownership, participating mortgages, joint ventures, co-ownership, and separate accounts. The staff will search for innovative ways to approach structuring new real estate investments to enhance STRS's total investment strength.

d. Minimum-maximum size guidelines: The minimum size for real estate investments will be generally \$10 million for properties within Ohio and \$15 million for properties outside Ohio. The maximum investment amount for an individual property will be limited to approximately 1% of total assets.

4. Appraisals/Valuations

Valuation procedures shall be adopted to fulfill three purposes: (1) make STRS accounting for real estate compatible with generally accepted accounting procedures (GAAP); (2) measure real estate investment performance against relatively comparable benchmarks; and (3) assist the staff in evaluating the appropriate time to dispose of a property. Portfolio performance will be calculated on a quarterly basis, while individual properties will be valued annually.

The sale-leaseback portion of the portfolio will be valued internally based upon discounting the income stream at market rates. This in-house valuation will be conducted annually, unless a substantial credit or lease change has occurred in the interim. The methodology underlying the in-house valuation will be reviewed and approved by the real estate consultant.

The non-sale-leaseback portion of the portfolio will be valued through a combination of independent appraisals and in-house valuations. Each multi-tenant property shall be independently appraised every third year, or more often should a major change occur in either occupancy of the building or operating budget. In the interim, an in-house valuation shall be conducted annually. The methodology used in this valuation shall be reviewed and approved by the real estate consultant.

Criteria for a non-scheduled outside appraisal shall be:

- a. Properties that experience tenant rollover greater than 33% within one year;
- b. Properties whose actual annual operating incomes vary negatively from the operating budget by 10% or more.

5. Performance

Real estate investment performance will be tracked similarly to stock and bond performance. A reporting format and appropriate benchmarks will show performance according to income and total return, including realized and unrealized increases in market value. Two real estate indices shall be used as benchmarks to evaluate performance: The Frank Russell Company Property Index, and Evaluation Associates Fund Performance Index.

6. Use of Real Estate Consultant

The role of the real estate consultant may be expanded beyond current contract provisions to include such special services as:

- a. Consultation on specific asset management situations such as disposition of properties, intensive asset management, and other special situations at the request of the Executive Director.
- b. Validation of valuations conducted by the in-house staff.

To avoid possible conflicts of interest, the real estate consultant will not be a source of any investment proposals unless specifically requested by the staff after review with the Investment Committee.

7. Property Inspections/Asset Management

Triple net sale-leaseback properties shall be inspected at least every two years, with the exception of problem properties which shall be inspected on an "as-needed" basis. Sale-leaseback properties that have landlord responsibilities shall be inspected annually. Multi-tenant properties mortgaged to STRS shall be inspected annually, while multi-tenant properties owned by STRS shall be inspected at least twice each year. Inspections may be conducted by in-house staff or outside inspection consultants. Generally, asset

management is the responsibility of the staff; however, certain portions of the portfolio or a property may be assigned to qualified outside organizations.

8. Due Diligence

Real estate investments shall be subject to the following documentation:

- a. A building and systems evaluation by a qualified engineering firm in the case of existing properties;
- b. An appraisal by an independent appraisal firm;
- c. Review of plans and specifications by an architectural firm in the case of forward purchase commitments;
- d. A hazardous waste and/or hazardous materials evaluation by a qualified consultant;
- e. Management by a firm with extensive experience and a proven capability in managing similar properties;
- f. A financial analysis which shall include, but not be limited to, rate of return, appreciation potential, resale potential, and percentage of the portfolio invested in the project; and
- g. Legal review and approval of appropriate documents.

9. Board Review

All new real estate investments will be reported to the Board monthly in the investment activity report. The Executive Director shall report any new real estate investments under consideration to the Investment Committee prior to making any legally binding commitment to any such investment, provided, however, that the following transactions shall not be subject to this requirement of prior report to the Investment Committee:

- a. Ancillary land purchases, sales or exchanges valued at less than 20% of the total property value;
- b. Release of mortgage security as long as the loan to value ratio remains below 80%;
- c. Early loan prepayments;
- d. Exercise of land purchase and conversion options;
- e. Exercise of property sale options granted by a lease;
- f. Annual capital expenditures that do not exceed 5% of a property's market value.

(continued)

Investments

INVESTMENT OBJECTIVE AND POLICY (continued)

- g. Sales of sale-leaseback properties when the sale price exceeds the investment amount;
- h. Temporary mortgage restructurings, which limit the restructuring to no more than four years and revert back to original terms.

COMMON AND PREFERRED STOCKS AND CONVERTIBLES

The statutes limit the State Teachers Retirement System to a 35% of assets position in common and preferred stocks. It is the Board's policy to maintain an investment in common stocks in the range of 23% to 35% of assets. The amount invested at any time is determined by the long-term objectives established by the Board in conjunction with the Investment Advisor and by the Annual Investment Plan and its periodic modifications. The Executive Director shall have authority to modify the 23% limit to 20% on a temporary basis to preserve or enhance assets or to realize gains for the System.

The function of a pension plan is to provide for long-term investment positions, and therefore it is not the policy of the Board to be engaged in purchase and sale of common stocks on the basis of temporary market swings or other speculative factors. The risk of the equity portfolio has been defined above as a volatility level no greater than 15% more than that of the Standard & Poor's 500.

No more than 6% of assets of the System invested in the equity sector may be invested in equities of any one corporation. The Board shall not generally take a position constituting more than 5% of the outstanding equity of a corporation (except investments approved under the "Venture Capital" section).

Investment criteria for all common and preferred stocks, and securities convertible into common stock, shall be recommended by the Investment Advisor; the criteria shall be presented to the Investment Committee and/or the Board, and shall be reviewed at least annually with the Investment Committee and/or the Board. The purpose of the criteria is to manage capital risk and opportunity by seeking assured earnings and dividend growth. Five separate investment characteristic categories have been established for the quantitative criteria. Each category has different criteria, and each company grouping is assigned a category that best describes

the nature of that company. The criteria are as follows:

1. Growth Category—companies falling into this category must have:
 - a. Annual sales over \$300 million.
 - b. Earnings growth in excess of the S&P 500 earnings growth over the past 10 years. Earnings per share must have grown in 8 of the last 10 years.
 - c. Five-year average return on equity greater than the S&P 500.
 - d. Trading volume during the past 12 months of at least \$25 million.
2. Cyclical Growth Category—companies falling into this category must have:
 - a. Met criteria of the Growth Category, but show cyclical characteristics, or met all of the following:
 - b. Annual sales over \$300 million.
 - c. Equity per share growth in excess of the S&P 500 earnings growth over the past 10 years.
 - d. Earnings per share growth in 6 of the last 10 years.
 - e. Trading volume during the past 12 months of at least \$25 million.
3. Cyclical Category—companies falling into this category must have:
 - a. Met criteria of the Growth or Cyclical Growth categories, or met the following:
 - b. Annual sales over \$300 million.
 - c. Equity per share growth in excess of the GNP Deflator over the past 10 years.
 - d. Not reduced dividends more than twice during the most recent 10-year period. This is defined as a reduction in the indicated annual dividend rate and does not apply to special or extra dividends.
 - e. Trading volume during the past 12 months of at least \$50 million.
4. Defensive Category—companies falling into this category must have:
 - a. Annual sales over \$200 million.
 - b. No more than 1 dividend reduction in the last 10 years.
 - c. Trading volume during the past 12 months of at least \$50 million.

- d. Met criteria for Yield Group or Stable Demand Group.
 - 1. Yield Group:
 - Yield greater than the S&P 500 yield.
 - S&P Debt Rating of at least BBB on senior debt.
 - 2. Stable Demand Group:
 - Earnings per share growth in 8 of the last 10 years.
- 5. Small Company Category—companies falling into this category must have:
 - a. Annual sales or market capitalization of \$500 million or less.
 - b. Earnings growth 20% greater than the S&P 500 earnings growth.
 - c. Earnings growth in 7 of the past 10 years. Companies with fewer than 10 years of financial data may have only one declining year.
 - d. Equity per share growth in excess of the S&P 500 earnings growth over the past 10 years.
 - e. Trading volume during the past 12 months of at least \$15 million.

The total amount invested in the small company portfolio will not exceed 2% of total assets. Companies in this portfolio will be selected from the smaller growth criteria list.

A secondary screen shall be used that applies in varying degrees to all the above categories. This screen considers:

- 1. Future predictability of the company and its environment including its:
 - a. Secular growth rate;
 - b. Self-financing ability;
 - c. Accounting conservatism;
 - d. Trend of profit margins and return on equity.
- 2. Degree to which the company has control over its destiny with respect to:
 - a. Relative size and maturity;
 - b. Political or regulatory climate (inhibitor to accelerating growth?);
 - c. Labor intensity.
- 3. Dominant or unique position of the company within its industry.

- 4. Complexity and understandability of the corporate profile.
- 5. Quality of the company's management including integrity, innovative capacity, motivation, accessibility, and depth.

All common and preferred stocks and securities convertible into common stocks, shall be purchased from a list reviewed by the Investment Committee and/or the Board. This list should strive to predominantly (approximately 85%) contain companies that meet at least one of the category investment criteria referred to above. No deletions from or additions to the list shall be made without prior review by the Investment Committee and/or the Board. While the list may have many companies, it is expected that the portfolios at any one time will contain representation from the list of approximately 150-300 names.

STOCK OPTIONS

Call options may be written against securities in the portfolio under the following guidelines:

- 1. Options are written only if sale of the security is desirable or the security appears to be overvalued but sale is not mandated.
- 2. The maximum number of shares optionable for each portfolio position shall be that determined by the Options Clearing Corporation.
- 3. Only options listed on a registered exchange may be written.
- 4. Purchases of options are prohibited; however, option positions may be closed out.
- 5. The total value of the underlying securities cannot exceed 7% of the total amount invested in common stocks.

VENTURE CAPITAL

Direct venture capital investments are permitted under Section 3307.15(E) of the Ohio Revised Code provided the entity has one-half of its assets within Ohio, or one-half of its employees are employed in Ohio, or its principal office is located in Ohio. Investments in venture capital firms are also permitted provided the firms agree to use their best efforts to make investments in small businesses with principal offices in Ohio and with either more than one-half of their assets in Ohio or more than one-half of their employees employed in Ohio.

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Investments

INVESTMENT OBJECTIVE AND POLICY (continued)

Total value of venture capital investments is legally limited to 5% of total assets. However, it is the Board's intent to make limited investments under this authority in the law provided the risk and return are comparable to similar-type venture capital investments. For direct venture capital investments the general underwriting criteria to be followed for each investment is: (1) the company has already developed a product or service, but may need additional capital to continue to grow; (2) the company has a management team already in place; and (3) other sophisticated equity investors participate in the financing.

The Executive Director shall report any investment under consideration pursuant to this section to the Investment Committee prior to making any legally binding commitment to any such investment.

STAFF MEMBERSHIP ON CORPORATE BOARDS

For investments made under Section 3307.15(E) of the Ohio Revised Code, the investment staff is encouraged to seek board representation on each entity to further enhance the safety and direction of the State Teachers Retirement System investment.

The Deputy Executive Director, Investments, will inform the Board of an individual to serve on a company board and to face election by shareholders of that company. If the named individual is an STRS employee, that individual must sign a letter agreement with the State Teachers Retirement Board indicating that, should the staff member terminate employment at STRS, resignation from any and all company board seats would occur if the State Teachers Retirement Board so directs. The STRS employee can be reimbursed for actual expenses incurred in serving on a board of directors, but no director's fees will be accepted.

PROCEDURES

LONG-TERM OBJECTIVES

The Investment Advisor shall recommend long-term (five to ten-year) objectives for the total plan and for each segment of the portfolio. These long-term objectives, many of which are incorporated into this policy, shall be reviewed by the Investment Committee and/or the Board at least annually. The objec-

tives shall incorporate statements of investment criteria for both publicly-traded bonds and stocks, as recommended by the Investment Advisor and approved by the Board.

ANNUAL INVESTMENT PLAN

In February of each year, or at such other time as the Board may designate, an Annual Investment Plan shall be developed by the Investment Committee.

This plan shall be based upon recommendations of the Investment Department and the Investment Consultant, with approval of the Executive Director. The Annual Investment Plan shall be based upon the following:

1. The long-term objectives set forth by the Board, on recommendation of the Investment Consultant.
2. Estimated monthly cash flow for the ensuing year.
3. General economic outlook for the short and long term.
4. Expected relative values of various investment instruments (i.e., stocks vs. bonds, etc.).
5. Short and long-term interest rates.
6. Expected levels of public and private financing.
7. Such other factors as seem indicated.

The Annual Investment Plan will serve as a guide for the investment staff in its day to day operation. Any substantial deviations from the Plan are to be fully justified in writing.

The Annual Investment Plan will be reviewed bi-monthly by the staff and any indicated modifications or changes recommended. The Plan as modified will become the operational plan for the investment staff until subsequent modification.

REPORTING

The Investment Committee shall be furnished monthly with the following reports:

1. Monthly Activity Report which shall include:
 - a. Common Stocks
 1. Summary of the equity markets
 2. Common stock performance comparisons
 3. Top 20 holdings
 4. Purchases and sales during the month
 5. Portfolio diversification—past, present, and planned

- b. Fixed Income
 - 1. Summary of fixed income markets
 - 2. Summary of trading activity
 - 3. Exchange summary
 - c. Real Estate
 - d. Cash Flow
 - e. Actual and Implied Commissions
 - f. Performance
- 2. Portfolio Summary, classified by asset type
 - 3. Investment purchases and sales, year-to-date

PROXY VOTING

Common stock voting proxies may be executed by the Executive Director, the Deputy Executive Director, Administration, or the Deputy Executive Director, Investments. Issues that cannot be resolved shall be referred to a committee consisting of the Executive Director, Deputy Executive Director, Investments, and Chairman of the Board. Questions that cannot be decided by this committee will be referred to the Investment Committee prior to proxy execution.

For corporations operating in or doing business with the Republic of South Africa, it is the intent of the Board in exercising its proxy rights to encourage adoption of the Statement of Principles and other proposals that are effective ways of implementing racial equality in South Africa yet not hurt the black employees nor significantly hinder the financial returns of the American companies.

OHIO INVESTMENTS

It is the policy of the Board to give consideration to investments that enhance the general welfare of the state and its citizens provided the funds are invested solely in the interest of participants and beneficiaries. This goal will be pursued to the greatest extent possible within the limits of fiduciary responsibility and Section 3307.15 of the Ohio Revised Code. Preference will be given to Ohio investments offering competitive returns at risk levels comparable to similar investments currently available to the Board.

To meet this objective an Ohio Investment Plan, incorporating all provisions of the STRS Investment Objective and Policy Statement, shall be maintained and implemented by the investment staff. This plan

shall set forth procedures to assure that a special effort will be made by the investment staff to examine and evaluate all legal investment opportunities in the state and, where policy objectives are met, to acquire such investments.

BROKER-DEALERS

Purchases and sales of publicly-traded securities shall be executed with broker-dealers from a list reviewed by the Investment Committee. The list shall be limited, to the extent practicable, to no more than 60 firms, and shall be based upon an evaluation by the investment staff as to financial soundness, underwriting capabilities, research services, execution capabilities and other factors required by the staff to fulfill its assigned investment responsibilities. Specific transactions will be directed to the broker on that list most capable of providing brokerage services necessary to obtain both the best available price and the most favorable execution. The Board shall give equal consideration to minority-owned and controlled firms and to firms owned and controlled by women. The Board shall be proactive in its intent to include firms that have an operating office located in Ohio, minority-owned and controlled firms, and firms owned and controlled by women.

Each firm listed shall file with the State Teachers Retirement Board on an annual basis such evidence of financial responsibility as required by the Board. This information shall include, but not be limited to, an audited financial statement.

When stocks are purchased during an underwriting, allocations may be made to dealers not on the approved list provided the managing underwriter is so listed. Bond purchases may be made either at underwriting or in the secondary market from any firm holding membership in the National Association of Securities Dealers.

When entering into real estate transactions, the Board shall give equal consideration to Ohio firms providing associated professional services, minority-owned and controlled firms, and firms owned and controlled by women.

MEASUREMENT

The primary goal of the fund shall be to achieve the absolute return targets described in the "Total

(continued)

Investments

INVESTMENT OBJECTIVE AND POLICY (continued)

Return" section of this policy. However, a secondary measurement objective of the Board is to relate the fund's performance to various indices.

Relative measurement of both bond and stock performance shall be made on a quarterly and annual basis. Time periods of one year, two years, and three years will be used primarily to examine relative performance, with the three-year measurement regarded as the most significant.

The benchmark against which investment return of the publicly-traded bond sector will be measured is the Shearson Lehman Government/Corporate Bond Index, Salomon Broad Market Index, and the GNP Deflator. The Board's objective is an annual rate of return matching or exceeding the indices measured over a three-year period.

The equity portfolio shall be compared against the Dow Jones Industrial Average, the Standard & Poor's 500 Average, the criteria and approved list, and the SEI Median Fund. The Board's objective is to match or exceed performance of the yardsticks, subject to the volatility level expressed in the "Total Return" section of this policy. The primary time period for such comparisons shall be three years, although one and two-year comparisons shall also be examined.

SECURITY VALUATION

Valuation of investments for purposes of complying with Section 3307.15 of the Ohio Revised Code shall be the total of:

1. Par value of all bonds, notes, certificates of indebtedness, and mortgages.
2. Cost of all preferred stocks, common stocks, and productive real estate.

Market valuation of investments shall be the total of:

1. The closing price on the principal registered stock exchange for all common and preferred stocks so listed.
2. The final bid as reflected by NASDAQ for common and preferred stocks not listed on a registered stock exchange.
3. The current value as determined by a qualified independent service for all bonds, notes, and certificates of indebtedness.

4. Par value for commercial paper, certificates of deposit, repurchase agreements and other short-term investments with a maturity of 270 or fewer days.
5. Real Estate valued through a combination of independent MAI Appraisals and in-house valuations. Methodology underlying internal valuations will be approved by the real estate consultant.
6. The most recent valuation for pooled venture capital and direct venture capital.
7. Guaranteed mortgages assigned an estimated value based upon the most recent posted rate for new Veteran's Administration or Federal Housing Administration guaranteed mortgages.

