

Enriching the Future

State Teachers Retirement System of Ohio
Comprehensive Annual Financial Report

Fiscal Year Ended June 30, 1993

STRS Philosophy

Mission

To enhance quality of life for teachers and their beneficiaries through retirement benefits as statutorily defined, health care coverage, and related services.

Vision

- To be a premier retirement system as evidenced by
- Accurate, prompt, and courteous service
 - Comprehensive benefits
 - Exceptional investment returns
 - Actuarial soundness

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*Enriching
the
Future*

The State Teachers Retirement System of Ohio

Comprehensive Annual Financial Report

Fiscal Year Ended June 30, 1993

Prepared through the joint efforts of the STRS staff

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

Membership of the Retirement Board is set by the General Assembly and includes five active teachers, one retired teacher, and three voting ex officio members. Teacher members are elected to four-year terms by members of the Retirement System. The retired teacher member is elected to a four-year term by the retirees receiving benefits from STRS. Board members serve without compensation other than actual necessary expenses.

The Retirement Board is proud to present this *Comprehensive Annual Financial Report* for the fiscal year July 1, 1992, through June 30, 1993.



Hazel A. Sidaway, Chair
 Betty Ocasak
 Peters, James Van Keuren, Teacher member since 1989
 Canton City Schools
 Stark County



Jack H. Chapman
 Teacher member since 1990
 Marysville City Schools
 Franklin County



William A. Dorsey
 Teacher member since 1990
 Plainville City Schools
 Lake County



Charles W. Jewell
 Teacher member since 1977
 Jackson City Schools
 Jackson County



William C. McDonald
 Auditor of State Ex officio member of the board since 1975
 Thomas E. Ferguson, Auditor of State Ex officio member of the board since 1991
 Lee I. Fisher, Attorney General Ex officio member of the board since 1991
 Ted Sanders, Superintendent of Public Instruction Ex officio member of the board since 1991



The State Teachers Retirement Board meets each month to transact business and set policy. From left to right: Herbert L. Dyer, executive director; Charles W. Jewell, William C. McDonald, Dr. James Van Keuren, representing the superintendent of public instruction; Hazel A. Sidaway, Betty Ocasak, Peters, James Van Keuren, representing the attorney general; and William A. Dorsey, Theresa Schaefer, representing the auditor of state.

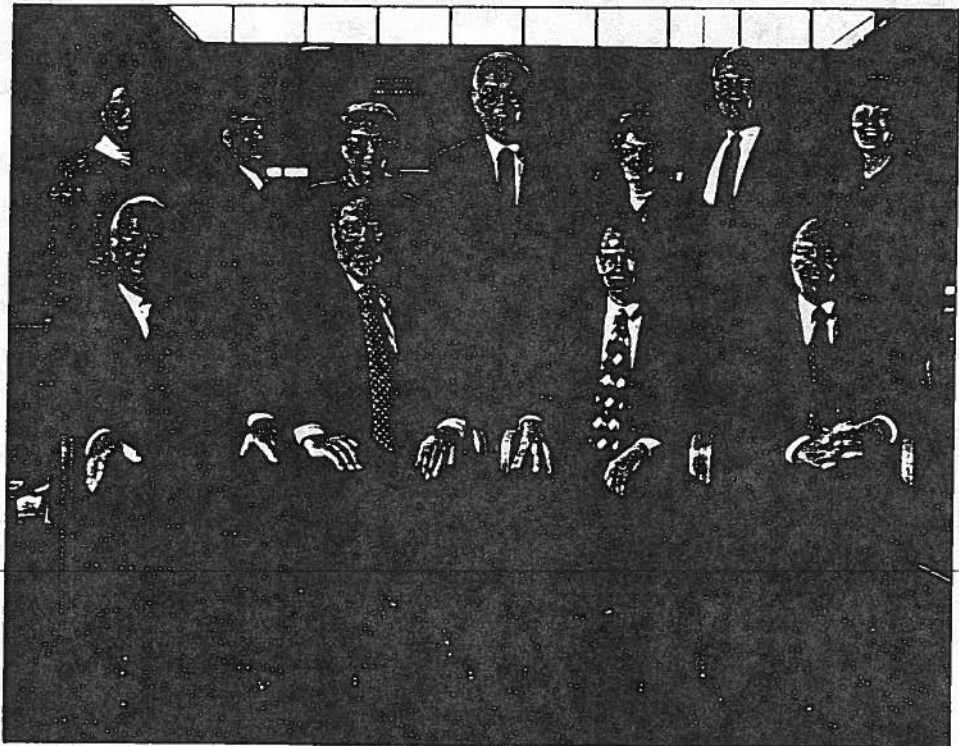
Planning the Future

Managing the Future

Professional Consultants

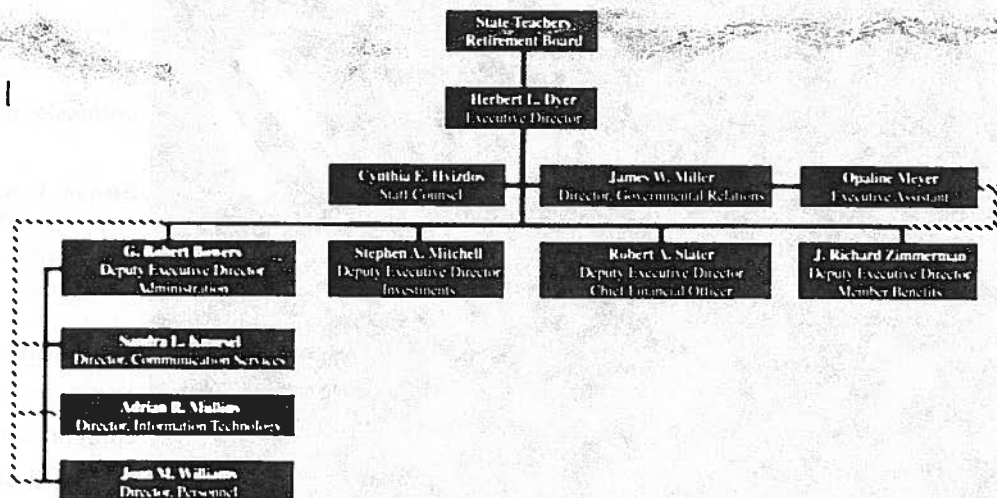
- Independent Public Accountants: Deloitte & Touche, Columbus, Ohio
- Investment Advisors: Frank Russell Company Real Estate Consulting, Tacoma, Washington
Wellington Management Company, Boston, Massachusetts
- Actuarial Consultant: Buck Consultants, Chicago, Illinois

Senior Staff



The STRS senior staff meets regularly to discuss day-to-day operations and develop procedures for administering policies adopted by the Retirement Board. In the front row from the left are: G. Robert Bowers, deputy executive director — Administration; J. Richard Zimmerman, deputy executive director — Member Benefits; Robert A. Slater, deputy executive director, chief financial officer; Stephen A. Mitchell, deputy executive director — Investments. Standing from left to right: Cynthia E. Hvizdos, staff counsel; Adrian R. Mullins, director of Information Technology Services; Opaline Meyer, executive assistant; Herbert L. Dyer, executive director; Joan M. Williams, director of Personnel; James W. Miller, director of Governmental Relations; and Sandra L. Knoesel, director of Communication Services.

Organizational Structure



"My greatest satisfaction as a teacher is seeing my students develop and go into careers that are personally and professionally satisfying to them."

Sonya Dinerio
Professor, College of Education
Kent State University
Kent, Ohio

"My reward as an educator is to see a student's mind light up and get excited about ideas. It's gratifying to see them grow and mature into successful professionals."

Tom Dinerio
Associate Professor, College of Education
Kent State University
Kent, Ohio



Letter of Transmittal

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**THE STATE TEACHERS
RETIREMENT SYSTEM
OF OHIO** 275 EAST BROAD STREET, COLUMBUS, OH 43215-3771
TELEPHONE (614) 227-4090

HERBERT L. DYER, Executive Director

DEPUTY EXECUTIVE DIRECTORS

G. ROBERT BOWERS, Administration

STEPHEN A. MITCHELL, Investments

ROBERT A. SLATER, Chief Financial Officer

J. RICHARD ZIMMERMAN, Member Benefits

STAFF COUNSEL: CYNTHIA E. HVIZDOS

December 9, 1993

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, 1993. This single publication is intended to provide readers with financial, investment, actuarial, and statistical information.

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. This cost-sharing, multiple-employer plan now provides service retirement, disability and survivor benefits, and health care coverage to teachers and faculty members of public boards of education, state-supported colleges and universities, and to teaching employees of the state of Ohio and its political subdivisions.

The *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 evaluation 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 investment assets and the Retirement Board's Investment Objective and Policy Statement.

Major Initiatives and Developments

Herbert L. Dyer became the seventh executive director of STRS on January 1, 1993, succeeding C. James Grothaus, who retired. Mr. Dyer has more than 20 years of retirement fund experience, including affiliation with Connecticut General Life Insurance Company, USAir, and United Mine Workers Health and Retirement Funds. Most recently, he was executive director of the Maryland State Retirement Systems.

In response to federal requirements, a Disability Allowance Program was initiated as an alternative to the existing Disability Retirement Program. Although it provides a different level of benefits, the new program extends disability coverage to members after age 60. Members as of July 29, 1992, selected either the Disability Allowance or Disability Retirement Program. New members since July 29, 1992, are automatically enrolled in the Disability Allowance Program.

Senate Bill 43 became effective October 7, 1993, giving Ohio public retirement systems additional investment authority. The new law allows STRS to invest up to 50% of assets in stocks; the previous limit was 35%. Additionally, a maximum of 10% of assets may be invested in international stocks, bonds or other securities. Based on a recent allocation study, the expanded investment authority may result in higher long-term investment returns.

A complete review of 1992-93 highlights can be found on Pages 9-13 of this report.

Economic Environment

Nationally, the economy was very strong at the start of the 1992-93 fiscal year, showing average growth of 4.6% during the first six months. However, much weaker growth during the second half brought the increase for the entire year down to 2.9%. Economic recovery was slowed by two primary factors. First, businesses and consumers, feeling a need to reduce debt burdens, did not borrow to make purchases. Second, unemployment remained relatively high as businesses continued to trim back operations. Consequently, confidence remained weak, causing poor consumer demand for goods and services.

Significant declines in interest rates pushed bond prices up. STRS was able to take advantage of rising prices and sell long-term, fixed-income investments at a gain. This strategy also reduced average maturities and positioned the portfolio more defensively for possible future rises in interest rates. Stocks performed very well during the fiscal year, exceeding the Standard & Poor's 500 stock index return of 13.6%. Consistent with its strategy to divide equity holdings into groups that use complementary approaches to stock selection, STRS added a passive index portfolio and a growth portfolio in fiscal 1993.

There are signs that the depression in the real estate industry is bottoming out. STRS returns for this asset class were slightly positive for the fiscal year. Nonetheless, the real estate portfolio is being managed with caution. Sales exceeded purchases during the fiscal year by \$155 million, lowering the asset allocation for real estate, at cost, to 7.5%.

The forecast for relatively low interest rates could mean lower investment returns in the future. Similarly, covered payroll is expected to grow at a slower rate in the coming years. Actuarial assumptions have been adjusted accordingly, as discussed in the Actuarial Section beginning on Page 33.

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 ensure 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, 1993, have been audited by Deloitte & Touche, Columbus, Ohio. Their report is shown on Page 16.

Financial Highlights

	1993	1992	Increase
Net investment income	\$2,394,523,389	\$2,294,646,312	4.4%
Contributions	1,442,801,726	1,420,135,384	1.6
Total revenues	\$3,837,325,115	\$3,714,781,696	3.3%

Investment income totaled \$2.4 billion, representing a 10.4% return on assets at book value. The assumed rate of return for actuarial purposes was 7.5%.

Covered payroll for the fiscal year increased only 3.9%, significantly less than the growth rate assumed for actuarial purposes. Combined with a reduction in transfers from other Ohio public retirement systems, member and employer contributions increased only 2.8% and 2.3%, respectively. The lower-than-expected growth in payroll resulted in a \$133 million actuarial loss. Growth in total contributions was further reduced by a 1.7% drop in optional Retirement Incentive Plan participation.

	Expenses		Increase (Decrease)
	1993	1992	
Benefits paid	\$1,323,643,944	\$1,226,843,465	7.9%
Withdrawals	16,385,619	17,487,613	(6.3)
Administrative expenses	35,869,545	28,956,330	23.9
Total expenses	\$1,375,899,108	\$1,273,287,408	8.1%

Total benefit payments exceeded \$1.3 billion for the fiscal year, an increase of 7.9% over last year. Health care costs for retirees, an area of concern for several years, decreased slightly as a result of retirees sharing in the premium cost, establishment of the managed care networks, and additional discounts on prescription drugs.

The increase in administrative expenses was primarily a result of development costs of new computer software systems.

Funding

Contribution rates are actuarially determined to provide a level basis of funding using the entry age normal cost method. An actuarial valuation is performed annually by Buck Consultants, Chicago. The July 1, 1993, valuation shows that the amortization period for the unfunded accrued liability decreased to 31½ years from 32½ years, and the ratio of assets to liabilities improved to 76% from 73%. Principal actuarial assumptions for future demographic and economic experience have been changed effective July 1, 1993. The changes and their effect on the actuarial valuation are discussed in detail in Note 4 of the financial statements and in the Actuarial Section.

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 for STRS as of July 1, 1993, was \$31.5 billion, excluding health care.

Investments

Providing the financial foundation of STRS, total investment assets grew to \$24.5 billion as of June 30, 1993. All assets are internally managed and are strategically allocated among three primary asset categories: 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 Investment Objective and Policy Statement is included in the Investment Section starting on Page 44.

Review of Operations and Activities

STRS devotes much time and attention to advising members and retirees about their benefits. Informational services provided to members include the comprehensive annual statement of account showing projected benefits. In addition, counseling sessions are offered at the STRS building in Columbus as well as throughout the state. STRS associates also address groups of active and retired members in general meetings. STRS' Retirement Planning Seminars, Life Planning Workshops and the annual Information Fair are popular forums for receiving STRS benefit information as well. Timely information is provided to members through periodic newsletters mailed to the homes of both active and retired teachers.

Certificate of Achievement in Financial Reporting

The Government Finance Officers Association (GFOA) of the United States and Canada awarded a Certificate of Achievement for Excellence in Financial Reporting to STRS for its comprehensive annual financial report for the fiscal year ended June 30, 1992. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

To be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report (CAFR), with contents conforming to program standards. A CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid only for one year. STRS has received a Certificate of Achievement for the last three consecutive years. We believe our current report continues to conform to the Certificate of Achievement program requirements and are submitting it to the GFOA.

Acknowledgments

Preparation of this report is possible only through the combined efforts of the STRS staff. It is intended to provide complete and reliable information as a basis for management decisions, compliance with legal provisions, and responsible stewardship of the assets contributed by members and their employers. Respectfully submitted,

Herben L. Dyer

Herben L. Dyer
Executive Director

Robert A. Slater

Robert A. Slater, CPA
Deputy Executive Director and
Chief Financial Officer

STATE OF OHIO
TEACHERS RETIREMENT SYSTEM
100 EAST WASHINGTON STREET
COLUMBUS, OHIO 43260
614.464.2000

1992-93: Year in Review

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New executive director named

Herbert L. Dyer became STRS' executive director on January 1, 1993, succeeding C. James Grothaus, who retired December 31, 1992.

Dyer came to STRS with 20 years experience as executive director of various retirement funds. Before joining STRS, he served as executive director of the Maryland State Retirement Systems, a \$15 billion pension fund for state public employees and teachers.

Dyer has also worked for Connecticut General Life Insurance Company, USAir, United Mine Workers of America Health and Retirement Funds, and Montgomery County (Maryland) Board of Investment Trustees. He is active in many professional associations.

Board establishes governing policies, standards

As part of STRS' strategic management plan, the Retirement Board established comprehensive policies to ensure continued board responsiveness, financial stability, member satisfaction and quality operations of the Retirement System.

The first of four policies establishes "ends," results to be obtained in the areas of investment returns, member satisfaction with the system, and actuarial soundness. The second policy defines how the board will govern and evaluate itself; while the third and fourth policies address Retirement Board-executive director relationships and the scope of responsibilities held by each.

Board policies are important because they address the needs of the system and membership on a global, long-term level, rather than taking a microscopic view of isolated issues. The policies stress actions that must be taken and goals that must be achieved to ensure STRS' continued ability to serve its members well.

Included in the policies is a code of conduct for board members, from which a code of ethics was developed for STRS associates. Both the code of conduct and the code of ethics were established to ensure continued high personal and professional standards of those associated with STRS, as well as to uphold the integrity of the system itself.

Board approves 13th supplemental benefit payment

The Retirement Board, in its October 1992 meeting, allocated more than \$32 million for a December supplemental benefit payable to nearly 72,000 benefit recipients. The supplemental benefit had a \$12 unit value.

This is the 13th consecutive supplemental benefit distribution since the Retirement Board gained authority in 1980 to issue supplemental benefits. The 13 supplemental benefits have totaled more than \$368 million.

The supplemental benefit is not guaranteed from year to year. Funds for the benefit are derived from investment income earned each year that exceeds the amount required to guarantee annual benefits.



Karen McCombs, STRS benefits counselor, discusses retirement benefits and services with an STRS member. More than 10,000 individual counseling sessions were conducted last year throughout Ohio.

1992-93: Year in Review (cont.)

Cost-of-living increase authorized for 1992-93

STRS retirees who received a benefit on or before July 1, 1991, received a 3% cost-of-living increase for fiscal year 1992-93. The annual inflation rate for 1991 was 4.1%, as measured by the U.S. Department of Labor's Consumer Price Index (CPI).

A retiree is eligible for a cost-of-living adjustment on the first anniversary of retirement if the CPI increased at least three percent over the previous calendar year. At that time, a reserve is opened for the retiree. On the first anniversary of retirement, this reserve is credited with any CPI percentage points in excess of three. In following years, the retiree accumulates percentage points the same way.

After the first anniversary of retirement, retirees are eligible for a cost-of-living adjustment each year if the CPI increase is three percent or more over the previous year, or if the CPI increase is under three percent and the retiree has at least three percentage points in reserve.

If a retiree does not have at least three percentage points in reserve in a year when inflation is under three percent, the retiree will not receive an adjustment but will receive the CPI amount as an addition to the reserve.

Ohio legislators created the reserve system to help protect retirement benefits in years of high inflation.

New disability program offered

In response to federal legislation, STRS began offering a new disability benefits plan called the Disability Allowance Program.

Those joining STRS after July 29, 1992, are automatically enrolled in the Disability Allowance Program. Those who were STRS members on or before July 29, 1992, and were not on disability retirement or receiving any other benefit from STRS, were asked to select either the new Disability Allowance Program or the existing Disability Retirement Program.

The programs differ in four areas: payment ranges, survivors upon the member's death, and eligibility for service retirement; cash refund payments made to survivors upon the member's death, and eligibility at age 60).

Retirement Board amends rule on ERL credit

The STRS Retirement Board, in its November 1992 meeting, amended the rule regarding use of employer-purchased Early Retirement Incentive Plan (ERL) credit to qualify for health care coverage.

Effective September 1, 1996, members whose employers purchase ERL credit to qualify them for service retirement must pay the full cost for health care coverage. As retirees, they pay the full premium cost until qualifying for service retirement without the added ERL credit.

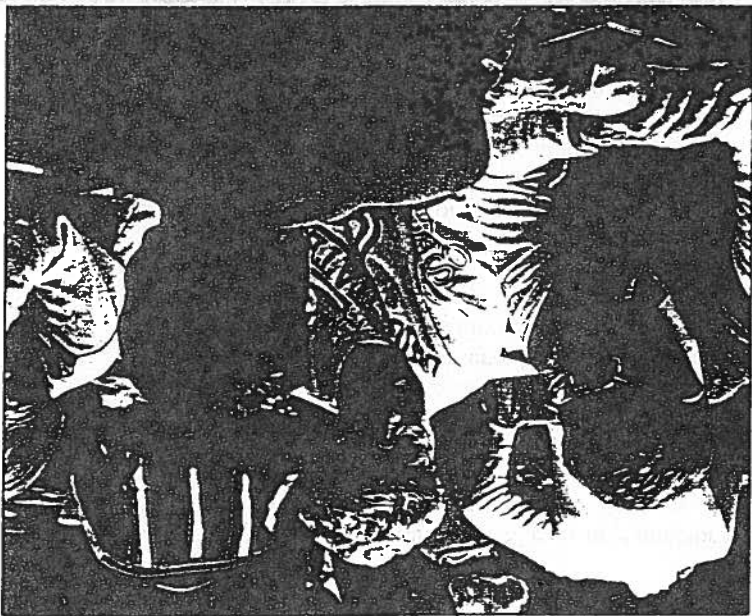
Individual Option Network controls costs

On April 1, 1993, some STRS benefit recipients began using the Individual Option Network, a "managed care" approach to hospital-medical services.

The Individual Option Network gives benefit recipients under age 65 who live in Ohio a choice of two insurers: Aetna Health Plans or Blue Cross & Blue Shield of Ohio.

The change in the health care delivery system did not affect the types of medical services covered or the amount of premium deductions. Medical coverage under both insurers is identical. The only differences are the physicians, hospitals and other health care providers who participate in the networks.

STRS members engage in lively discussion during an STRS-sponsored Retirement Planning Seminar. These seminars have helped thousands of Ohio educators prepare for retirement with confidence.



The Individual Option Network was developed to help STRS control rapidly rising health care costs without sacrificing the quality and value of health care coverage provided to STRS benefit recipients.

Benefit recipients begin paying premiums for health care insurance

In an effort to contain health care costs while continuing to provide quality health care coverage, STRS benefit recipients were asked to pay a portion of their premium costs beginning July 1, 1992. Premium costs are determined by length of service, with career teachers who have at least 25 years of service paying the lowest rates.

Retirement Board approves special allocation to health care stabilization fund

In fall 1992, the State Teachers Retirement Board authorized a \$354 million lump-sum allocation to the Health Care Stabilization Fund. This allocation was the largest ever to the fund and was greater than the combined total of previous lump-sum allocations.

The \$354 million allocation, along with benefit recipient premiums and modifications in the health care plan, will allow STRS to maintain meaningful, affordable health care benefits throughout the decade.

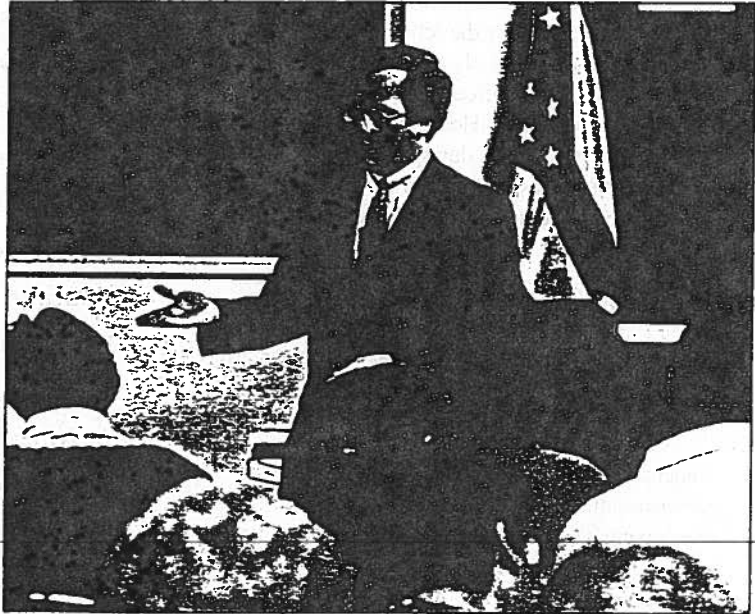
STRS asset allocation projections and revenue sources are currently under study in an attempt to provide a plan sufficient to fund pension benefits and health care coverage well into the 21st century.

S.B. 43 passes; increases investment authority

Amended Substitute S.B. 43 was passed by the General Assembly in June 1993, and became law shortly thereafter. The new bill increases STRS' investment authority and is one of the most important pieces of legislation in recent years for Ohio's public retirement systems.

As a result of the new law, Ohio retirement systems are now permitted to invest up to 50% of total assets in U.S. stocks and invest up to 10% of total assets in foreign stocks, bonds and other obligations.

Investment earnings play a prominent role in financing member benefits. The new bill will provide opportunities to increase investment earnings, and will enhance the solid financial foundation STRS presently enjoys. The new law became effective in October 1993.



Gary Russell, STRS benefits counselor, conducts a Retirement Planning Seminar. The seminar addresses topics such as STRS benefits, financial planning, housing, health care benefits, legal affairs and adjustment to retirement.

Passage of H.B. 721 expands survivor benefits

The passage of H.B. 721 in fall 1992 recognizes career teachers by providing a more equitable level of survivor protection commensurate with service earned.

As a result of the new bill, survivors of members with 20 or more years of service at the time of death may choose a benefit based on the member's accumulated service credit. Previously, if a deceased member was not eligible for service retirement and had no dependent children, the spouse received a benefit of only 25% of the average of the member's three highest years of salary. No recognition was given to the often extensive service and financial contributions by the member before death.

H.B. 721 does not change or eliminate any survivor benefit options currently in place at STRS; it simply adds another option to those already available. The bill was retroactive to July 1, 1992.

1992-93: Year in Review (cont.)

S.B. 355 allows student employees to forego STRS contributions on earnings

S.B. 355, passed in September 1992, allows student employees to apply for exemption from STRS contributions.

To qualify for exemption, a student must be employed part time as a teacher by the school, college or university where he or she is regularly attending classes. The exemption remains in effect for as long as student employment continues. However, student employees must make contributions during those periods they are not attending classes. No retirement credit is given for periods of exemption, but membership in STRS is returned.

Tax requirements affect lump-sum payments
New federal tax laws effective January 1, 1993, affect eligible rollover distributions from qualified plans, such as STRS.
Under the new requirements for eligible rollover payments after January 1, 1993, recipients may choose to receive payments themselves or make a direct rollover to an individual retirement account or other qualified plan that accepts rollovers. STRS is required to withhold 20% federal income tax from the taxable portion of lump-sum payments issued directly to members.

As before, recipients will have 60 days to roll over the payments to another qualified plan. However, to roll over all of the distribution, the 20% withholding will have to be made up from other funds and received on the next tax return. Alternatively, members may choose to roll over only 80% of the funds actually received, but any portion that is not rolled over is taxable.

A member may also choose a direct rollover, which is a transfer of tax-deferred funds from STRS directly to an IRA or other qualified plan in which federal and state income taxes will continue to be deferred.

STRS provides written notice of the new rollover and withholding rules to all members who apply for lump-sum payments.

STRS continues responsiveness to members
STRS has a tradition of providing comprehensive, timely information to its members. The following are statistics on the number of members served in fiscal year 1992-93 through various STRS member services:

Program	Number of members served
Individual counseling sessions at STRS	4,282
Individual counseling sessions throughout Ohio	6,284
Retired teacher general meetings	4,552
Active teacher general meetings	4,162
Information fair	613
Counseling correspondence/calls	49,145
Member Benefits correspondence/calls	40,214
Retirement Planning Seminar	415
Life Planning Workshop	153
Calls to toll-free Information Line	66,264
Active teacher newsletter circulation	230,000
Retired teacher newsletter circulation	68,000

New service offers benefit estimates by phone
On April 1, 1993, STRS introduced a new service that allows members to obtain estimates of their service retirement benefits by calling a toll-free phone line.

After entering certain personal information using the keys on their touch-tone phone, members are mailed a computer-generated estimate of their retirement benefit. The service is available 24 hours a day, seven days a week.

Enhanced information system improves service to members

A new state-of-the-art computer information system, called Legacy, went on-line at STRS in June 1993. The new system improves the way member information is managed, accessed and presented. It allows STRS associates to more accurately and efficiently process and store member information, thereby increasing the quality of information and service provided to STRS members.

Development of the Legacy system has been ongoing for five years. Implementation of the system in June was the first of two implementation phases. The second phase is expected to be completed in October 1994.

Legacy is the most technologically advanced software program used by any retirement system in the country. It was created by STRS associates in consultation with Claremont Technology Group Inc.

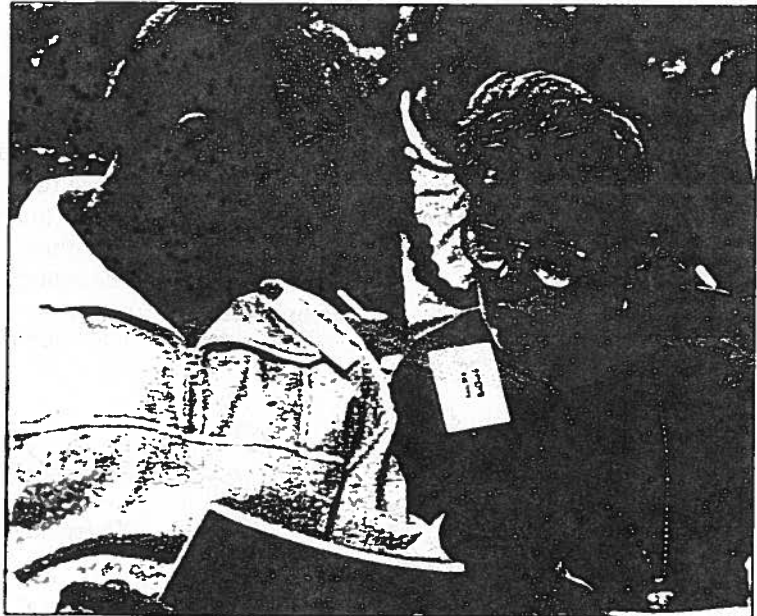
STRS wins awards for excellence in communications

For the third consecutive year, the Government Finance Officers Association of America (GFOA) has awarded its Certificate of Achievement for Excellence in Financial Reporting to STRS. The award is for the comprehensive annual financial report that covered the fiscal year ended June 30, 1992. The Certificate of Achievement is the highest form of recognition for governmental and financial reporting. The GFOA is a nonprofit professional association serving more than 12,000 government financial professionals.

STRS also won the prestigious Prism Award from the central Ohio chapter of the Public Relations Society of America (PRSA) for its 1992 Benefits Summary. The Benefits Summary was chosen for the award because of its overall high quality, including content, layout and graphic design.

STRS child care center honors former executive director C. James Grothaus

STRS' on-site child care center, for children of STRS associates, officially became part of STRS in February 1993. The center was previously operated by a separate, nonprofit corporation. With the merger of the center into STRS came a new name — the C. James Grothaus Child Care Center — in honor of the former STRS executive director who was instrumental in starting the child care program.



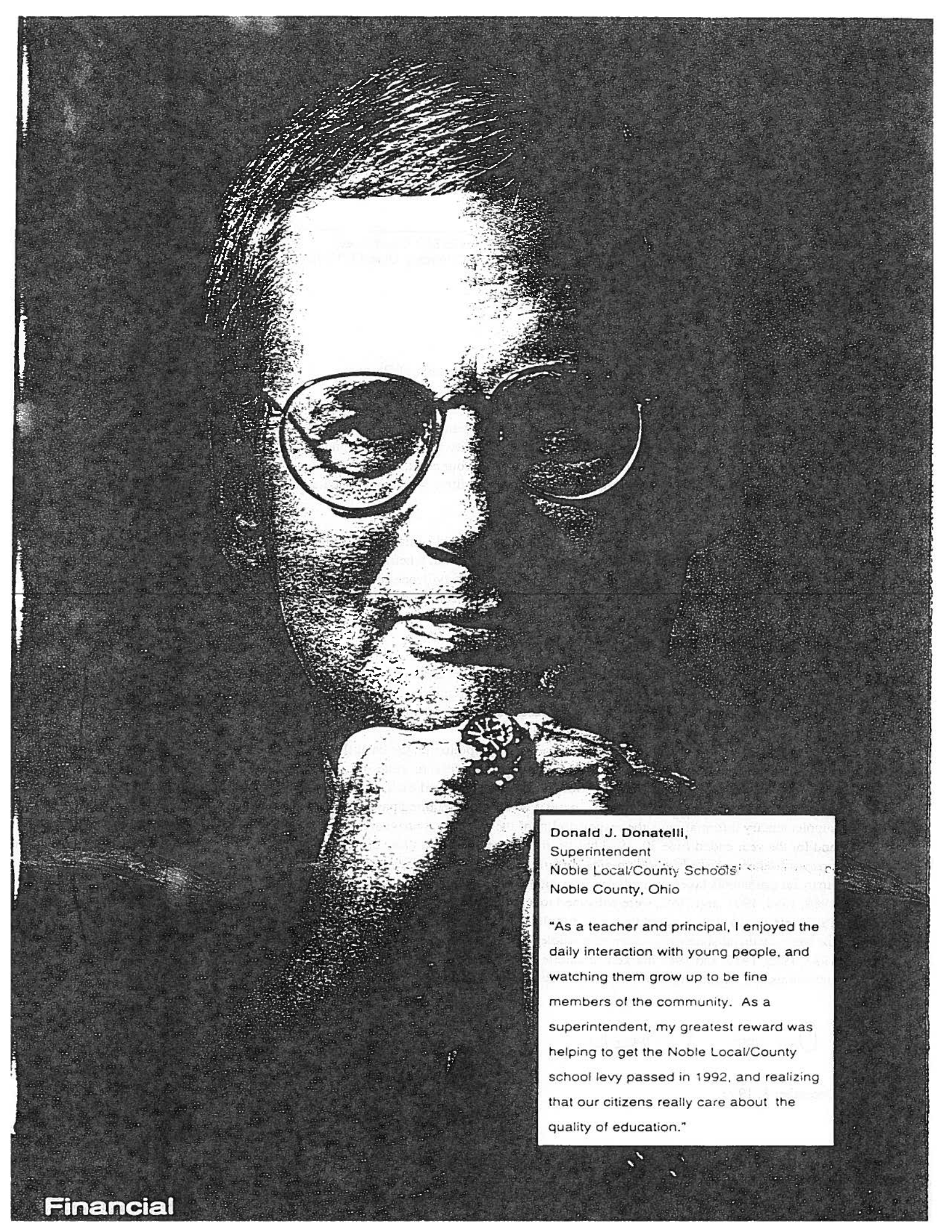
In addition to the Retirement Planning Seminar, STRS provides many other informational services to its members, including: Life Planning Workshops, active and retired teacher general meetings, newsletters and a toll-free benefit information phone line.

Certificate of
 Achievement
 in Financial
 Reporting
 Presented to
 The State Teachers
 Retirement System of Ohio

For its Comprehensive Annual
 Financial Report
 for the Fiscal Year Ended
 June 30, 1992
 A Certificate of Achievement for Excellence in Financial
 Reporting is presented by the Government Finance Officers
 Association of the United States and Canada to
 government units and public employee retirement
 systems whose comprehensive annual financial
 reports (CAFRs) achieve the highest
 standards in government accounting
 and financial reporting.



Conrad H. Thibault
 President
Jeffrey J. Zarek
 Executive Director



Donald J. Donatelli,
Superintendent
Noble Local/County Schools
Noble County, Ohio

"As a teacher and principal, I enjoyed the daily interaction with young people, and watching them grow up to be fine members of the community. As a superintendent, my greatest reward was helping to get the Noble Local/County school levy passed in 1992, and realizing that our citizens really care about the quality of education."



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Columbus, Ohio 43215-3611
Telephone (614) 221-1000
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To the Retirement Board of the State Teachers Retirement System of Ohio:

We have audited the accompanying statement of net assets available for benefits of the State Teachers Retirement System of Ohio as of June 30, 1993, and the related statement of changes in net assets available for benefits for the year then ended. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of the System as of and for the year ended June 30, 1992 were audited by other auditors whose report, dated November 25, 1992, expressed an unqualified opinion on those statements.

We conducted our audit 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 audit provides a reasonable basis for our opinion.

In our opinion, such 1993 financial statements present fairly, in all material respects, the net assets available for benefits of the System as of June 30, 1993, and the changes in its net assets available for benefits for the year then ended in conformity with generally accepted accounting principles.

Our audit was conducted for the purpose of forming an opinion on the basic 1993 financial statements taken as a whole. The supplementary information on analysis of funding progress, revenues by source and expenses by type, employer contributions, investment summary, administrative expenses, and cash receipts and disbursements on pages 27-31 is presented for the purpose of additional analysis and is not a required part of the basic financial statements. The supplementary information is the responsibility of the System's management. Such supplementary information as of and for the year ended June 30, 1993 has been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, is fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole. The supplementary information as of and for the years ended June 30, 1988, 1989, 1990, 1991, and 1992, were subjected to auditing procedures by other auditors whose report, dated November 25, 1992, referred to above, stated that such supplementary information is fairly stated in all material respects in relation to the basic financial statements taken as a whole. The supplementary information as of and for the years ended June 30, 1984, 1985, 1986, and 1987 marked "unaudited" has not been subjected to our audit of the basic 1993 financial statements and, accordingly, we express no opinion on it.

Deloitte & Touche

December 8, 1993

Statements of Net Assets Available for Benefits 17

As of June 30, 1993 and 1992

(In Thousands)

	1993	1992
ASSETS:		
Investments:		
Short term	\$ 2,470,455	\$ 1,123,795
Fixed income	11,705,758	11,594,104
Common and preferred stock and venture capital	8,505,201	7,373,606
Real estate	1,838,348	1,992,847
Total investments	24,519,762	22,084,352
Cash	32,545	28,489
Receivables:		
Accrued interest and dividends	173,528	159,458
Employer contributions	149,561	143,630
Retirement incentive plan	58,513	58,080
Member contributions	108,127	100,316
State of Ohio appropriations	3,755	4,099
Securities sold	69,647	124,184
Total receivables	563,131	589,767
Fixed assets, net of accumulated depreciation of \$11,543 and \$8,900 in 1993 and 1992, respectively	53,825	53,681
Total assets	25,169,263	22,756,289
LIABILITIES:		
Securities purchased	114,430	164,804
Accrued expenses and other liabilities	57,064	55,142
Total liabilities	171,494	219,946
NET ASSETS AVAILABLE FOR BENEFITS	\$24,997,769	\$22,536,343

See accompanying Notes to Financial Statements

Statements of Changes in Net Assets Available for Benefits

Years Ended June 30, 1993 and 1992

(In Thousands)

	1993	1992
INVESTMENT INCOME:		
Interest	\$ 1,033,772	\$ 1,057,294
Dividends	286,626	241,891
Rent	82,797	72,053
Net investment gains	997,259	928,581
Subtotal	2,400,454	2,299,819
Investment-related expenses	(5,931)	(5,173)
Net investment income	2,394,523	2,294,646
CONTRIBUTIONS:		
Employer	869,862	862,655
Member	564,005	548,841
State of Ohio	3,755	4,099
Other	5,180	4,540
Total contributions	1,442,802	1,420,135
Total increases	3,837,325	3,714,781
BENEFIT PAYMENTS:		
Service retirement	985,024	897,259
Disability retirement	83,888	76,378
Survivor benefits	32,804	30,726
Supplemental benefit	32,489	28,815
Health care	187,318	189,784
Other	2,120	3,881
Total benefit payments	1,323,643	1,226,843
REFUNDS TO MEMBERS WHO HAVE WITHDRAWN	16,386	17,488
ADMINISTRATIVE EXPENSES	35,870	28,956
Total decreases	1,375,899	1,273,287
Net increase	2,461,426	2,441,494
NET ASSETS AVAILABLE FOR BENEFITS, beginning of year	22,536,313	20,094,849
NET ASSETS AVAILABLE FOR BENEFITS, end of year	\$24,997,769	\$22,536,343

See accompanying Notes to Financial Statements

Notes to Financial Statements

Years ended June 30,
1993 and 1992

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the State Teachers Retirement System (STRS) of Ohio 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 (Revised Code) and is administered by a board comprised of five active members, one retired teacher and three voting ex officio members.

STRS is a separate financial reporting entity in accordance with criteria established by Governmental Accounting Standards Board Statement No. 14. Specifically, the Plan is governed by a separately elected body, is legally separate, and is fiscally independent of other state and local governments.

- b. Investment 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.
 - Gain or loss on real estate is recognized upon sale and for market declines judged to be other than temporary.
- c. Contributions — Employer and member contributions are recorded in the period the related member 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.
 - Investment administrative expenses are deducted from gross investment income.
 - STRS has no individual investment that exceeds five percent of net assets available for benefits.
- f. Reclassification — Certain 1992 balances have been reclassified to conform with the 1993 presentation.
- g. Federal Income Tax Status — During the years ended June 30, 1993 and 1992, STRS qualified under Section 501(a) of the Internal Revenue Code and was exempt from federal income taxes.

2. DESCRIPTION OF THE STRS PLAN

Plan Membership — STRS is a mandatory statewide retirement plan for certificated 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, 1993, the number of participating employers was:

City school districts	192
Local school districts	372
County offices	81
Exempted village school districts	49
Joint vocational and technical schools	51
Universities and colleges	35
County boards of mental retardation and developmental disabilities	82
State of Ohio	1
	863

Notes to Financial Statements (cont.)

Plan Benefits — Plan benefits are established under Chapter 3307 of the Revised Code. Any member may retire who has (i) five years of service credit and attained age 60, (ii) 25 years of service credit and attained age 55, or (iii) 30 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 years 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 63 with less than 30 years of service credit receive a percentage reduction in benefit amounts under the "money purchase benefit" calculation.

From 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 compute 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.

After retirement, benefits are increased annually by 3% of the original benefit at retirement if the cost of living as measured by the Consumer Price Index has increased at least 3% on a cumulative basis since the latest adjustment. A retiree of STRS or other Ohio public retirement systems is eligible for reemployment as a teacher following the lapse of two months from the date of retirement. Contributions are made by the reemployed member and employer during the reemployment. Upon termination of reemployment, or age 63, whichever comes later, the retiree is eligible for a money purchase benefit or a lump-sum payment in addition to the original retirement allowance. Death, Survivors' and Disability Benefits — A member under the age of 60 with five or more years' credited service who becomes disabled (illness or injury preventing

individual's ability to teach) is entitled to a disability allowance. Effective October 1992, plan provisions were revised in compliance with federal requirements to provide a limited disability allowance to teachers who become disabled after age 60. In addition, during fiscal 1993, survivor benefits were increased for qualified dependents of certain deceased members. 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. Pursuant to the Revised Code, the State Teachers Retirement Board (the Retirement Board) has discretionary authority over how much, if any, of the associated health care costs will be absorbed by the Plan. Effective July 1, 1992, all benefit recipients are required to pay a portion of the health care costs in the form of a monthly premium.

Under Ohio law, medical costs paid from the funds of the Plan are included in the employer contribution rate, currently 14% of compensation. The Retirement 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. Health care benefits are now included in the pension benefit obligation. The balance in the health care reserve fund was \$730,283,000 and \$396,373,000 at June 30, 1993 and 1992, respectively.

The net health care costs paid by the Plan were \$187,318,000 for the year ended June 30, 1993, and \$189,784,000 for the year ended June 30, 1992. Eligible benefit recipients totaled 74,230 and 72,599 at July 1, 1993 and 1992, respectively. As of July 1, 1993 and 1992, \$20,466,000 and \$34,000,000, respectively, of fiscal year 1993 and 1992 investment income was transferred to the health care reserve fund to provide additional reserves for future health care benefits.

Supplemental Benefits — In December of each year, if the Retirement 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 \$32,489,000 and \$28,815,000 were paid as supplemental benefits in December 1992 and 1991, respectively.

Refunds — Upon termination of employment, a member may withdraw accumulated contributions made to STRS. Withdrawal cancels the individual's rights and benefits in STRS. Employer contributions to STRS are not refundable.

3. FUNDING METHOD AND CONTRIBUTION REQUIREMENTS

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

The actuarial valuation used the projected benefit method with level percentage entry age normal cost 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 member 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.

Effective for the July 1, 1993, actuarial valuation, certain of these actuarial assumptions were changed. See Note 4 for actuarial assumptions used and a description of assumption changes made. In addition, effective July 1, 1993, STRS elected to change its asset valuation method for actuarial purposes from book value to a three-year moving market average method. As described in Note 2, disability and survivor benefits were also revised in fiscal 1993. The changes in actuarial assumptions and asset valuation method resulted in a reduction in the employer normal cost contribution rate to 5.40% in 1993 from 5.78% in 1992. As no change was made in the total employer contribution rate of 14.00%, the net reduction in employer normal cost was applied to the amortization of unfunded actuarial liability. Effective July 1, 1994, the member contribution rate will be increased 0.05% to 9.30% to fund the survivor benefit changes.

Contributions consisted of the following components:

	Year Ended 6/30/93	Year Ended 6/30/92
Member normal cost	9.25%	9.25%
Employer:		
Normal cost	5.40%	5.78%
Amortization of unfunded actuarial liability	6.60%	6.22%
Health care benefits	2.00%	2.00%
Total employer	14.00%	14.00%

Normal cost is the amount necessary to finance benefits earned by members during the current service year.

The actuarial calculation resulted in an unfunded liability for funding purposes that would liquidate over a period of 31.5 years at July 1, 1993, and 32.5 years at July 1, 1992.

Contribution requirements based on covered payroll were approximately \$814,269,000 and \$783,753,000 for employers and \$537,999,000 and \$517,837,000 for members in 1993 and 1992, respectively. Actual contributions recorded were approximately \$869,862,000 and \$862,655,000 for employers and \$564,005,000 and \$548,841,000 for members in 1993 and 1992, respectively. The differences are primarily due to programs whereby members and employers can purchase additional years of service credit.

4. FUNDING STATUS AND PROGRESS

The amounts shown below as the 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 member 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, excluding health care 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 measure is independent of the actuarial funding method used to determine contributions to STRS discussed in Note 3.

The PBO was determined as part of actuarial valuations at July 1, 1993 and 1992. Certain actuarial assumptions were changed effective with the July 1, 1993, actuarial valuation. These assumption changes, along with the change in benefits described in Note 2, resulted in an increase in the July 1, 1993, pension benefit obligation of \$789,424,000. Significant actuarial assumptions for the July 1, 1993 and 1992 valuations were as follows:

	1993	1992
Rate of return on the investment of present and future assets	7.50%	7.75%
Projected annual salary increases	9.25% at age 20 to 3.25% at age 65	10.5% at age 20 to 4.5% at age 65
Postretirement life expectancies	1983 Group Annuity Table with one year set forward for women	1955 American Annuity Table with ages set back two years for men and seven years for women
Preretirement life expectancies, rates of withdrawal from service before retirement other than death, rates of disability and rates of retirement ages	Actual plan experience	Actual plan experience
Annual postretirement benefit increases	3%	3%
Member contribution rate	9.25%	9.25%
Employer contribution rate	14%	14%

Notes to Financial Statements (cont.)

At July 1, 1993 and 1992, the unfunded pension benefit obligation was \$7,216,987,000 and \$6,327,984,000, respectively, as follows (dollar amounts in thousands):

	1993		1992	
	Number of Members	Amount	Number of Members	Amount
Actuarial present value of projected benefits payable to current retirees and beneficiaries	74,230	\$12,869,723	72,599	\$11,506,994
Actuarial present value of projected benefits payable to terminated vested members	16,865	1,252,180	16,815	1,153,430
Total	91,095	14,121,903	89,414	12,660,424
Actuarial present value of credited projected benefits for plan members:				
Member contributions		4,513,196		4,154,922
Employer financed vested		5,269,698		4,416,591
Employer financed nonvested		7,559,210		6,882,017
Total (125,581 and 124,406 vested members; 128,459 and 119,395 nonvested members at July 1, 1993 and 1992, respectively)	254,040	17,342,104	243,801	15,453,530
Total members*	345,135		333,215	
Pension benefit obligation		31,464,007		28,113,954
Net assets available for benefits (excluding health care reserves)				
at cost (market value)		24,247,020		21,785,970
1993-\$26,593,641; 1992-\$23,463,203)				
Unfunded pension benefit obligation		\$ 7,216,987		\$ 6,327,984

*In addition, there were 5,956 and 4,463 reemployed retirees included in the actuarial valuation as of July 1, 1993 and 1992, respectively.

5. FUNDS

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

- The Teachers' Savings Fund (TSF) is used to accumulate member 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. Reserves are transferred to this fund from the TSF and ETF funds at the time of retirement.
- The Survivors' Benefit Fund is the fund from which all survivor benefit payments are made for which reserves have been transferred from the Teachers' Savings Fund and the Employers' Trust Fund.

- 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.

At June 30, 1993 and 1992, net assets available for benefits were included in the various funds as follows (in thousands):

	1993	1992
Teachers' Savings Fund	\$ 4,798,350	\$ 4,434,876
Employers' Trust Fund	7,797,928	6,696,409
Annuity and Pension Reserve Fund	12,049,244	11,080,706
Survivors' Benefit Fund	352,247	324,352
	<u>\$24,997,769</u>	<u>\$22,536,343</u>

6. COMMITMENTS AND CONTINGENCIES

STRS has made commitments to fund various real estate investments totaling approximately \$188,747,000 at June 30, 1993.

In October 1993, the Retirement Board passed a resolution that provides lump-sum supplemental benefit payments to be paid to eligible retirees in December 1993. Estimated payments to be made are \$35 million.

STRS is a party in various lawsuits. While the final outcome cannot be determined at this time, management is of the opinion that the liability, if any, for these legal actions will not have a material adverse effect on the financial statements.

7. CASH AND INVESTMENTS

The investment authority of the Retirement Board is governed by Section 3307.15 of the Revised Code that also requires the Retirement 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 person 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 Retirement 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 the investment and composition of the investment portfolio. The Retirement Board has further restricted investments as to the nature and quality of the investment and composition of the investment portfolio.

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 counterparty'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 counterparty in STRS' name or held by the counterparty's trust department or agent but not in STRS' name.

Investments held by STRS at June 30, 1993 and 1992 are summarized as follows:

Category	June 30, 1993		June 30, 1992	
	Fair Market Value	Cost	Fair Market Value	Cost
Short term	\$ 2,470,455	\$ 2,485,573	\$ 1,123,795	\$ 1,133,945
Fixed income:				
Guaranteed mortgages	3,729,960	3,833,329	3,776,218	3,927,771
U.S. government and governmental agencies	4,482,817	5,320,588	5,162,083	5,602,089
Corporate bonds	2,700,127	2,832,466	1,990,055	2,062,850
Canadian bonds	790,959	833,566	658,226	676,922
Municipal bonds	1,895	2,180	2,150	2,293
Convertible bonds	0	0	5,372	5,108
Total fixed income	11,705,758	12,822,129	11,594,104	12,277,033
Common and preferred stock	8,482,848	9,875,312	7,346,511	8,561,300
Real estate (see Note 8):				
Participating mortgages	234,353	215,599	254,989	239,317
Multitenant properties	527,528	455,203	405,711	328,900
Joint ventures	360,702	285,000	399,109	313,252
Sale-leasebacks	411,307	396,253	435,319	407,747
Separate accounts	259,522	334,858	452,339	486,966
Other	44,936	47,800	45,380	43,319
Total real estate	1,838,348	1,734,713	1,992,847	1,819,501
Venture capital	22,353	26,468	27,095	27,575
Total investments	\$24,519,762	\$26,944,195	\$22,084,352	\$23,819,354

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 that 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.

All investments subject to categorization at June 30, 1993, meet the criteria of Category 1. Investments are held in the name of STRS or its nominee by the Treasurer of the State of Ohio as custodian. Real estate investments and venture capital funds are investments that, by their nature, are not required to be categorized.

STRS participates in a security lending program whereby securities are loaned to investment brokers/dealers (borrower). Securities loaned are collateralized by the borrower at 102% of the loaned securities' market value. The program is administered by a custodial agent bank. STRS receives a fee from the borrower for the use of loaned securities. In fiscal 1993 and 1992, STRS received \$4 million and \$839,000, respectively, in security lending income. STRS has minimized its exposure to credit risk because of borrower default by having the custodial agent bank determine daily that the required collateral meets 100% of the market value of securities on loan. The market value of securities loaned at both June 30, 1993 and 1992, totaled \$2.4 billion.

At June 30, 1993, the carrying amount of STRS' cash deposits was \$32,545,004 and the bank balance was \$34,965,929. Of the bank balance, \$200,000 was insured by the Federal Deposit Insurance Corporation. The remaining bank balance was covered by collateral held in the name of STRS' pledging financial institution as required by state statute.

8. REAL ESTATE INVESTMENTS

General — STRS properties are geographically distributed. The real estate investments include retail single-tenant stores and malls (29%), single and multitenant office space (37%), single and multitenant warehouses (14%), apartments (10%) and other (10%). No single project or group of leases with a single credit represents more than 7% of total real estate investments.

In general, there has been a decline nationally in the value of real estate properties. Losses in market value judged to be other than temporary have been recognized in the financial statements. Management believes that other declines in appraised values are temporary in relation to the expected holding periods of the investments.

Participating Mortgages — Participating mortgages consist principally of mortgages on commercial office space. Fixed interest rates are generally one to two 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.

Multitenant and Sale-Leaseback — Multitenant 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.

Separate Accounts, Joint Ventures and Other — Separate accounts consist of group annuity contracts and group trusts. Joint ventures are co-ownership arrangements with other investors. Other real estate includes syndicated mortgages consisting of land acquisition costs and mortgage receivables relating to the financing of buildings.

9. DEPOSITS

The Treasurer of State 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 to the bank in supplying the specified services. For the year ended June 30, 1993, such compensating balances averaged approximately \$16,798,000. The lost earnings from not investing such balances in short-term investments equated to a cost to STRS of approximately \$551,000.

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 unrecorded present value of future state appropriations at June 30, 1993 and 1992, for these benefits was approximately \$23,465,000 and \$26,533,000, respectively.

STRS received approximately \$3,755,000 and \$4,099,000 from the state for these increased benefits paid during the years ended June 30, 1993 and 1992, respectively. Funding for these increased benefits is on a pay-as-you-go basis by the state.

Notes to Financial Statements (cont.)

11. PENSION PLAN

Substantially all STRS employees are required 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, 1993, was approximately \$12,103,000; STRS' total payroll was approximately \$12,609,000.

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 55 with a minimum of 25 years of credited service, and at age 60 with a minimum of 5 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 PERS are required by Ohio statute to contribute 8.5% of their salary to the plan. STRS is required by the same statute to contribute 13.55% of covered payroll. \$447 is the portion 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, 1993, was approximately \$2,669,000, which consisted of \$1,640,000 from STRS and \$1,029,000 from employees. These contributions represented 13.55% and 8.5% of covered payroll, respectively. During the most recent actuarial study (December 31, 1991), the salary scale increase assumption was changed to 5.25% annually from 5.5%. This change in assumption had no effect on the actuarially determined contribution requirement. There were no other changes in actuarial assumptions, benefits provisions, actuarial funding methods or other significant factors for the most recent actuarial study.

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 in the following table:

(In Thousands)	
December 31, 1991	\$19,801,100
Pension benefit obligation	\$18,501,200
Net assets available for benefits	\$1,299,900
(excluding amounts allocated to health care benefits)	

The pension benefit obligation is a standardized disclosure measure of the actuarial present value of credited projected benefits, excluding health care 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' 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*.

In addition to pension benefits, PERS provides postemployment health care benefits, in accordance with state statutes, to all employees who retire with 10 or more years of qualifying Ohio service credit and to disability recipients. At December 31, 1992, the plan had approximately 350,000 participants. A portion of each employer's contribution to PERS is set aside for the advanced funding of postemployment health care. Of the 13.55% of employee payroll contributed by STRS to PERS, 5.11% or approximately \$620,000, was the portion used to fund health care. Statutory rates equal the actuarially determined contribution requirements.

The actuarial present value of accrued postemployment benefits was determined based on the entry age normal method of funding. Significant actuarial assumptions used in the December 31, 1991, valuation (most recent available) were: (a) investment rate of return of 7.75%, (b) investments valued at cost or amortized cost, adjusted to reflect 20% of unrealized market appreciation or depreciation on investment assets, (c) no change in the number of active employees, (d) base pay increases of 5.25% related to inflation and annual merit pay increases of 0% to 5.1%, and (e) health care increases of 5.25% annually.

The total of PERS' actuarial present value of accrued postemployment benefits as of December 31, 1991, was \$6.44 billion. The net assets available for these benefits at that date were \$4.99 billion.

12. 10-YEAR HISTORICAL TREND INFORMATION

Ten-year historical trend information designed to provide information about STRS' progress made in accumulating sufficient assets to pay benefits when due is presented on Pages 27-29.

Supplementary Information on Analysis of Funding Progress

1984-1993

(Dollar Amounts in Thousands)

Fiscal Year	Net Assets Available for Benefits*	Pension Benefit Obligation	Percentage Funded	Unfunded Pension Benefit Obligation	Annual Covered Payroll	Unfunded Benefit Obligation as a Percentage of Covered Payroll
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%
1991 (audited)	19,655,034	25,812,754	76%	6,157,720	5,272,709	117%
1992 (audited)	21,785,970	28,113,954	77%	6,327,984	5,598,238	113%
1993 (audited)***	24,247,020	31,464,007	77%	7,216,987	5,816,209	124%

The following dollar amounts are in thousands.

* At cost (see Note 1 of financial statements). 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 approximately \$905,000.

*** Certain actuarial assumptions used to compute the pension benefit obligation were changed effective July 1, 1993 (see Note 4 of financial statements). The effect of these assumption changes was to increase the pension benefit obligation in fiscal 1993 by approximately \$789,400.

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

Supplementary Information on Revenues by Source and Expenses by Type

1984-1993

(In Thousands)

Revenues by Sources

Fiscal Year	Member Contributions	Employer Contributions	Investment Income	State Appropriations	Other	Total
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
1991 (audited)***	511,269	793,132	1,719,115	4,490	3,841	3,031,847
1992 (audited)****	548,841	862,655	2,294,646	4,099	4,540	3,714,781
1993 (audited)	564,005	869,862	2,394,523	3,755	5,180	3,837,325

Expenses by Type

Fiscal Year	Benefits	Refunds	Administration	Total
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
1991 (audited)	1,131,877	18,088	29,486	1,179,451
1992 (audited)*****	1,226,843	17,488	28,956	1,273,287
1993 (audited)	1,323,643	16,386	35,870	1,375,899

The following dollar amounts are in thousands.

* Member and employer contribution requirements were increased to 8.75%/14.00% from 8.50%/13.50%, respectively, effective January 1, 1984. The effect of this change was an increase fiscal 1984 member and employer contributions \$6,000,512.000, respectively.

** Effective July 1, 1988, the member contribution rate was increased to 8.77% from 8.75% of compensation. The effect was an increase in member contributions of \$76k for fiscal year 1989.

*** Effective July 1, 1991, the member contribution rate was increased to 9.25% from 8.77% of compensation. The effect was an increase in member contributions of \$25,409 for fiscal year 1991.

**** Effective July 1, 1991, investment administrative expenses are deducted from gross investment income.

Supplementary Information on Employer Contributions

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1984-1993

(Dollar Amounts in Thousands)

Fiscal Year	Employer Contributions*	Annual Covered Payroll	Employer Contributions as Percentage of Annual Covered Payroll**
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%
1991 (audited)	793,132	5,272,709	15.04%
1992 (audited)	862,655	5,598,238	15.41%
1993 (audited)	869,862	5,816,209	14.96%

The following dollar amounts are in thousands:

- * Employer contributions include payments under voluntary retirement incentive plans. Authority for employers to offer retirement incentive plans was established in August 1983.
- ** Statutory employer contribution requirements were increased to 14.00% from 13.50% effective January 1, 1984. As a result, employer contributions increased approximately \$12,000 in fiscal 1984. Differences between statutory rates and computed rates are primarily related to the retirement incentive plan as discussed above.

Investment Summary

Year Ended June 30, 1993

(In Thousands)

Investment Category	Carrying Value as of June 30, 1992	Purchases and Accretions	Sales, Redemptions and Accruals	Carrying Value as of June 30, 1993	Market Value as of June 30, 1993
Short term	\$1,123,795	\$16,731,748	\$15,385,088	\$ 2,470,455	\$ 2,485,573
Fixed income:					
Guaranteed mortgages	3,776,218	1,047,044	1,093,302	3,729,960	3,833,329
U.S. government/agencies	5,162,083	2,000,101	2,679,367	4,482,817	5,320,588
Corporate bonds	1,990,055	1,060,126	350,054	2,700,127	2,832,466
Canadian bonds	658,226	327,345	194,612	790,959	833,566
Municipal bonds	2,150	0	255	1,895	2,180
Convertible bonds	5,372	0	5,372	0	0
Total fixed income	11,594,104	4,434,616	4,322,962	11,705,758	12,822,129
Common and preferred stock	7,346,511	4,230,744	3,094,407	8,482,848	9,875,312
Real estate:					
Participating mortgages	254,989	15,402	36,038	234,353	215,599
Multitenant properties	405,711	137,373	15,556	527,528	455,203
Joint ventures	399,109	101	38,508	360,702	285,000
Sale-leasebacks	435,319	2,320	26,332	411,307	396,253
Separate accounts	452,339	0	192,817	259,522	334,858
Other	45,380	0	444	44,936	47,800
Total real estate	1,992,847	155,196	309,695	1,838,348	1,734,713
Venture capital	27,095	750	5,492	22,353	26,468
Total investments	\$22,084,352	\$25,553,054	\$23,117,644	\$24,519,762	\$26,944,195

Supplementary Information on Administrative Expenses

Years Ended June 30, 1993 and 1992

	1993	1992
PERSONNEL:		
Salaries and wages	\$ 8,895,469	\$ 7,279,561
Retirement contributions	1,157,424	989,978
Benefits	1,673,199	1,534,466
Total personnel	<u>11,726,092</u>	<u>9,804,005</u>
PROFESSIONAL AND TECHNICAL SERVICES:		
Computer support services	12,567,150	9,155,910
Health care services	394,023	340,254
Actuary	259,736	299,505
Auditing	106,680	111,536
Legal	210,462	111,624
Total professional and technical services	<u>13,538,051</u>	<u>10,018,829</u>
COMMUNICATIONS:		
Postage and courier services	1,719,929	1,381,784
Printing and supplies	1,682,211	1,658,478
Telephone	330,786	261,975
Total communications	<u>3,732,926</u>	<u>3,302,237</u>
OTHER EXPENSES:		
Equipment repairs and maintenance	1,715,048	1,496,339
Building utilities and maintenance	792,145	545,636
Transportation and travel	422,287	435,371
Equipment rental	12,700	26,876
Depreciation	2,690,717	2,316,523
Insurance	224,224	257,852
Memberships and subscriptions	85,091	93,701
Retirement study commission	172,624	167,856
Miscellaneous	757,640	491,105
Total other expenses	<u>6,872,476</u>	<u>5,831,259</u>
TOTAL ADMINISTRATIVE EXPENSES	<u>\$35,869,545</u>	<u>\$28,956,330</u>

*See Above amounts do not include Investment Department administrative expenses that are deducted from investment income.

Cash Receipts and Disbursements

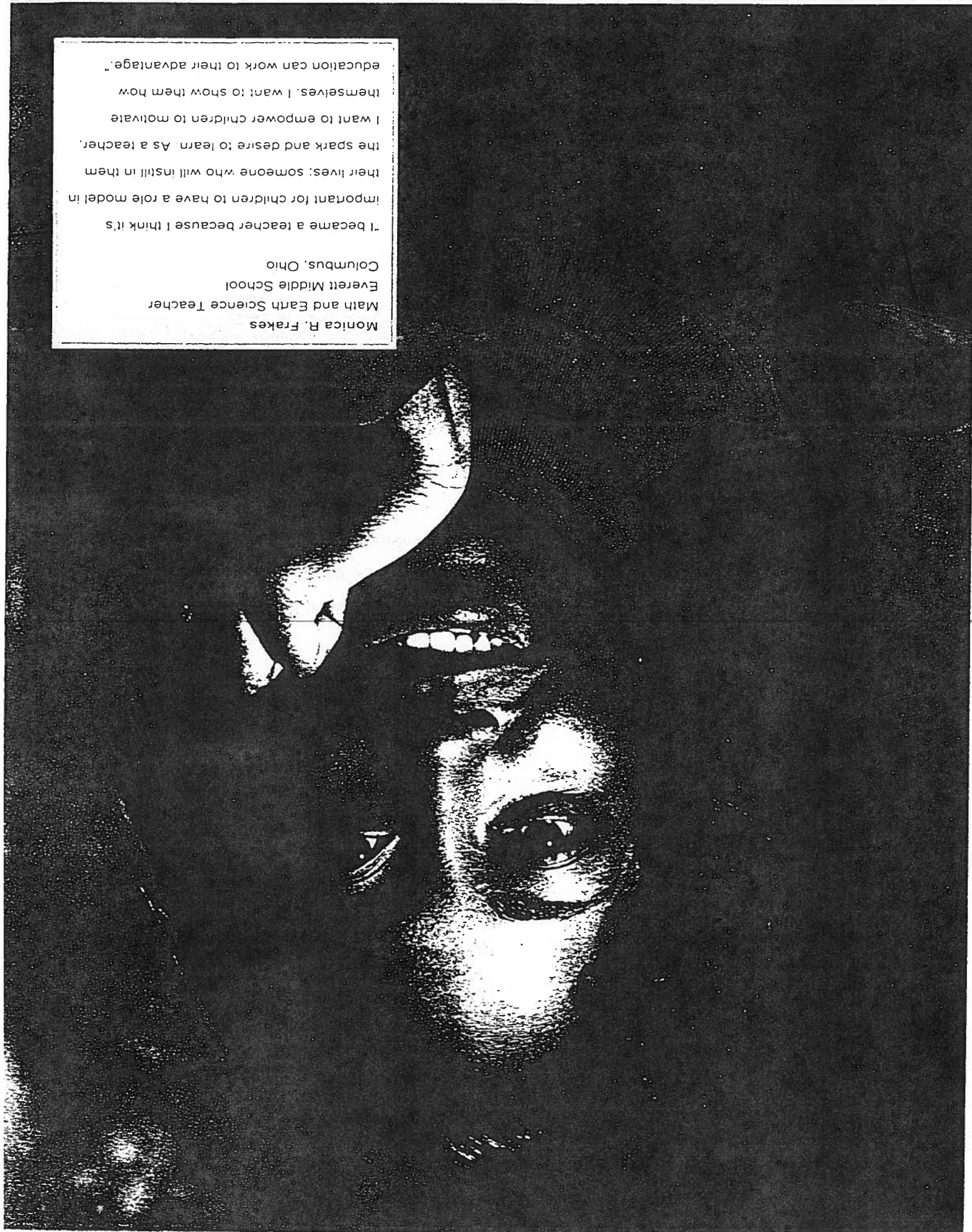
31

Years Ended June 30, 1993 and 1992
(In Thousands)

	<u>1993</u>	<u>1992</u>
CASH BALANCE		
Beginning of year	\$ 28,489	\$ 11,875
ADD RECEIPTS:		
Member contributions	556,194	542,163
Employer contributions	863,498	844,647
Miscellaneous contributions	9,279	9,020
Interest, rent and dividends	1,295,846	1,135,175
Investments sold or matured	<u>24,169,440</u>	<u>17,689,489</u>
Total cash receipts	<u>26,894,257</u>	<u>20,220,494</u>
LESS DISBURSEMENTS:		
Benefit payments	1,321,533	1,218,088
Administrative expenses	39,276	31,154
Investments purchased	25,510,149	18,932,935
Refunds	16,386	17,488
Fixed asset purchases	<u>2,857</u>	<u>4,215</u>
Total cash disbursements	<u>26,890,201</u>	<u>20,203,880</u>
CASH BALANCE		
End of year	<u>\$ 32,545</u>	<u>\$ 28,489</u>

Monica R. Frakes
Math and Earth Science Teacher
Everett Middle School
Columbus, Ohio

"I became a teacher because I think it's important for children to have a role model in their lives; someone who will instill in them the spark and desire to learn. As a teacher, I want to empower children to motivate themselves. I want to show them how education can work to their advantage."



**BUCK
CONSULTANTS**

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

Actuary's Certification Letter 33

December 8, 1993

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

Ladies and Gentlemen:

This report presents the results of the annual actuarial valuation of the assets and liabilities of the State Teachers Retirement System of Ohio (STRS) as of July 1, 1993, prepared in accordance with Section 3307.20 of the Ohio Revised Code.

The valuation was based on membership data which was reported to us by STRS. While we did not verify the data at its source, we did review it for reasonableness.

Currently, of the total contribution rate of 23.25% from employers and members, 2% is dedicated to the health care fund with 21.25% remaining for pension and survivor benefits. The valuation indicates that the contribution rate of 21.25% is sufficient to provide for the payment of the promised pension and survivor benefits, while reducing the funding period of the deficiency by the expected one year from last year's funding period (i.e., reduced to 31.5 years from 32.5 years).

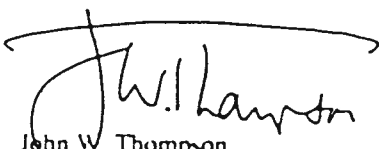
The valuation reflects an improvement in the survivor benefits payable to the qualified dependents of deceased members as provided by H.B. 721. The additional accrued liability on account of this improvement of \$62 million was financed by a transfer from the existing special reserve. The additional normal cost of .05% is to be financed by an increase in the members' contribution rate of .05% effective July 1, 1994.


The valuation indicates that for the fiscal year 1992-93, the actuarial experience of STRS was favorable and generated net actuarial gains of \$248 million. The Retirement Board elected to transfer \$20 million of these gains to the Health Care Premium Stabilization Fund bringing the health care fund reserve balance to \$750 million as of July 1, 1993. The remaining portion of the net actuarial gain of \$228 million was added to existing special reserves increasing the reserve to \$366 million as of July 1, 1993.

Based on our recommendations and effective with this valuation, the Retirement Board adopted a comprehensive package of revisions to the actuarial assumptions. Those revisions include: (i) a decrease in the valuation interest rate to 7.50% from 7.75%, (ii) a decrease of 1.25% at each age in the age-related salary increase table, (iii) an increase of 15% in the 30-year retirement rates, (iv) a decrease of 45% in the death-in-service rates, (v) an increase of 300% in the nonvested termination rates, (vi) a decrease of 20% in the vested termination rates, and (vii) the adoption of a ~~more~~ ^{more} hip-to-date postretirement mortality table. Also, the asset valuation method was changed from book value to a market-related valuation method under which the annual difference between the expected return at the valuation interest rate and the actual return will be recognized over a three-year period. Also, the assumed growth rate in membership payroll for purposes of projecting the deficiency funding contribution was reduced to 5% from 5.7%. The net effect of the revisions in assumptions and methods was neutral in that the funding period of the deficiency was left unchanged at 31.5 years.

Our report, which follows, describes the detailed results of the valuation as of July 1, 1993.

Respectfully submitted,


John W. Thompson
Consulting Actuary


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

34 Statement of Actuarial Assumptions and Methods

Interest Rate: 7.5% per annum, compounded annually. (Adopted 1993)

Separations From Active Service: Representative values of the assumed rates of separation and annual rates of salary increase are as follows (adopted 1993):

Superannuation		MEN				WOMEN									
Age	Withdrawal	Death	Disability	Retirement Service, Years, 30	Retirement Service, Years, 25-29	Retirement Service, 25 Years, Under	Salary Increase	Age	Withdrawal	Death	Disability	Retirement Service, Years, 30	Retirement Service, Years, 25-29	Retirement Service, 25 Years, Under	Salary Increase
20	.0684	.0004	—	—	—	—	.0925	20	.0453	.0002	—	—	—	—	.0925
30	.0524	.0005	.0003	—	—	—	.0725	30	.0479	.0003	.0005	—	—	—	.0725
40	.0236	.0008	.0009	—	—	—	.0525	40	.0198	.0005	.0012	—	—	—	.0525
50	.0120	.0026	.0054	.2588	—	—	.0405	50	.0119	.0012	.0048	.2588	—	—	.0405
55	.0122	.0027	.0077	.2381	.0495	—	.0375	55	.0101	.0019	.0070	.2588	.0900	—	.0375
60	.0130	.0043	—	.2846	.0675	.0765	.0350	60	.0093	.0030	—	.3002	.1305	.1440	.0350
65	.0130	.0091	—	.4399	.3600	.2565	.0325	65	.0098	.0035	—	.4658	.3600	.2970	.0325
70	—	.0139	—	.4140	.3600	.3150	.0325	70	—	.0052	—	.4140	.3150	.2700	.0325

Death After Retirement: According to the 1983 Group Annuity Table, with no setback in age for males and one year set forward in age for females. Special mortality tables are used for the period after disability retirement. (Adopted 1993)

Future Expenses: The assumed interest rate is net of the anticipated future administrative expenses of the fund.

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

Asset Valuation Method: A three-year moving market average value of assets that spreads the difference between the actual investment income and the expected income (based on the valuation interest rate) over a period of three years. (Adopted 1993)

Payroll Growth: 5% per annum compounded annually. (Adopted 1993)

Schedule of Active Member Valuation Data

35

1984-1993

Active Members

Valuation Date	Number	Annual Payroll (In Thousands)	Annual Average Pay	% Increase in Average Pay
1984	146,387	\$ 3,276,468	\$ 22,382	7%
1985	147,790	3,531,209	23,893	7%
1986	149,428	3,788,137	25,351	6%
1987	150,607	4,074,129	27,051	7%
1988	152,200	4,336,723	28,494	5%
1989	153,830	4,624,119	30,060	5%
1990	157,650	4,941,916	31,347	4%
1991	160,012	5,237,832	32,734	4%
1992	162,898	5,509,947	33,825	3%
1993	165,711	5,742,577	34,654	2%

Schedule of Retirees and Beneficiaries

1984-1993

Retirees and Beneficiaries

Valuation Date	Number	Annual Allowances (In Thousands)	% Increase in Annual Allowances	Average Annual Allowances
1984	55,908	\$ 466,369	15%	\$ 8,342
1985	58,348	524,519	12%	8,989
1986	60,960	588,110	12%	9,647
1987	62,819	640,566	9%	10,197
1988	64,957	713,028	11%	10,977
1989	66,453	773,339	8%	11,637
1990	68,739	854,536	10%	12,432
1991	70,583	938,137	10%	13,291
1992	72,599	1,029,952	10%	14,187
1993	74,230	1,120,770	9%	15,099

36 Summary of Accrued and Unfunded Accrued Liabilities

1984-1993

(Dollar Amounts in Thousands)

Valuation Date	Aggregate Liabilities*	Valuation Assets	Assets as % of Accrued Liabilities	Unfunded Accrued Liabilities (U.A.L.)	Annual Active Member Payroll	U.A.L. as % of Annual Active Member Payroll
1984	\$14,099,005	\$ 8,326,788	59%	\$5,772,218	\$3,276,468	176%
1985	15,539,374	9,469,194	61%	6,070,181	3,531,209	172%
1986	17,309,201	10,895,158	63%	6,414,042	3,788,137	169%
1987	19,291,792	12,911,072	67%	6,380,720	4,074,129	157%
1988	21,372,968	14,613,182	68%	6,759,786	4,336,723	156%
1989	23,618,688	16,407,002	69%	7,211,686	4,624,119	156%
1990	25,883,339	18,242,453	70%	7,640,885	4,941,916	155%
1991	28,109,360	20,094,849	71%	8,014,512	5,237,832	153%
1992	30,800,238	22,536,343	73%	8,263,895	5,509,947	150%
1993	34,488,976	26,259,447	76%	8,229,529	5,742,577	143%

*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. 15.

Solvency Test

(Dollar Amounts in Thousands)

Aggregate Accrued Liabilities For:

Valuation Date	Active Member Contributions	Reserves and Benefits	Active Members (Employer Financial Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Valuation Assets
1984	\$2,226,868	\$ 5,075,022	\$ 6,797,115	\$ 8,326,788	100% 15%
1985	2,421,532	5,831,343	7,286,500	9,469,194	100% 17%
1986	2,637,764	6,490,306	8,181,130	10,895,158	100% 22%
1987	2,900,598	7,079,880	9,311,314	12,911,072	100% 31%
1988	3,153,950	7,932,553	10,286,465	14,613,182	100% 34%
1989	3,446,312	8,618,907	11,553,469	16,407,002	100% 38%
1990	3,729,945	9,576,506	12,576,887	18,242,453	100% 39%
1991	4,076,990	10,440,584	13,591,787	20,094,849	100% 41%
1992	4,434,876	11,506,944	14,858,368	22,536,343	100% 44%
1993	4,513,196	12,869,723	17,106,057	26,259,447	100% 52%

Summary of Benefit and Contribution Provisions

Eligibility for Membership

Immediate.

Service Retirement:

Eligibility

Age 60 with five 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			88%
		28	90%
62			91%
63			94%
		29	95%
64			97%
65		30 or more	100%

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

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

Minimum benefit — The sum of the annuity provided by 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 and 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. In the event of the death of the sole beneficiary or termination of marriage between the retiree and sole beneficiary, the retiree may elect to return to a single lifetime benefit equivalent, available for an actuarially computed charge as determined by the Retirement 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, the benefit will continue for the remainder of such period to the 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 are to be paid to the estate of the beneficiary last receiving benefits.

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

Disability Retirement Allowance

Eligibility

Completion of five or more years of service, under age 60 and permanently incapacitated for the performance of duty. A limited disability allowance is available to teachers who become disabled after age 60.

Benefits

(1) Annuity with a reserve equal to the member's accumulated contributions, plus (2) The difference between (1) and the greater of 2 1/2% of the average salary during the three highest paid years. For service in excess of 30 years, the 2.5% formula will apply, or 586 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 1 1/2 years of credit for Ohio service with at least 1/2 year of such service in the 2 1/2 years preceding death or upon death of a disability retiree.

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 the Consumer Price Index equals or exceeds 3%.

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

Contribution
 By members:
 9.25% of salary.
 By employers:
 1% of salaries of their employees who are members.

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 Dependents	% of Average Annual Salary	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

The survivor benefit is the minimum of a percentage of final average salary based on years of credited service ranging from 25% with 19 years of service to 60% with 29 years of service. Qualified beneficiaries are spouse, dependent children and/or dependent parents over age 65.



Edith T. Brown
Retired Elementary Teacher
Groveport Elementary School
Groveport, Ohio

"My greatest satisfaction as a teacher was to see a student's accomplishments.

I think it's important for teachers to realize that all students are not proficient in everything. We as teachers must find their strengths and encourage students to reach their potentials and utilize their abilities.

I always tried to make each child feel special."

40 Benefit Expenses by Type

1984-1993

(In Thousands)

Fiscal Year Ended	Service Retirement	Disability Retirement	Survivor Benefits	Supplemental Benefit	Health Care	Other	Total
1984	\$393,827	\$32,150	\$16,431	\$19,436	\$ 63,319	\$1,356	\$ 526,719
1985	451,787	36,978	18,535	22,211	64,495	1,241	595,248
1986	512,975	41,636	20,015	25,289	76,540	1,747	678,202
1987	562,873	46,941	21,260	35,347	95,367	1,264	763,052
1988	621,379	51,855	23,058	41,298	105,950	1,936	845,476
1989	678,448	57,132	25,171	35,780	126,319	2,707	925,558
1990	774,625	63,174	26,735	36,885	136,563	1,482	1,009,464
1991	822,842	70,150	28,851	38,110	170,583	1,342	1,131,878
1992	897,259	76,378	30,726	28,815	189,784	3,881	1,226,843
1993	985,024	83,888	32,804	32,489	187,318	2,120	1,323,643

Selected Funding Information

1984-1993

(Dollar Amounts in Thousands)

Fiscal Year Ended	Employer Contribution Rate	Employer Assumption	Interest Assumption	Payroll Assumption	Unfunded Accrued Liability*	Funding Period
1984	8.75%	14.00%	7.50%	5.250%	\$5,772,218	41.0 Yrs.
1985	8.75%	14.00%	7.75%	5.500%	6,070,181	40.5 Yrs.
1986	8.75%	14.00%	7.75%	5.500%	6,414,042	39.5 Yrs.
1987	8.75%	14.00%	7.75%	5.500%	6,380,720	35.0 Yrs.
1988	8.75%	14.00%	7.75%	5.500%	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.
1991	9.25%	14.00%	7.75%	5.875%	8,014,512	33.5 Yrs.
1992	9.25%	14.00%	7.75%	5.875%	8,263,895	32.5 Yrs.
1993	9.25%	14.00%	7.50%	5.000%	8,229,529	31.5 Yrs.

*Including health care

Number of Reporting Employers by Type

4-

1984-1993

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
1984	191	375	87	49	52	34	*	1	789
1985	191	375	87	49	52	34	*	1	789
1986	191	375	87	49	52	34	*	1	789
1987	191	376	87	49	52	34	*	1	790
1988	191	375	86	49	50	36	*	1	788
1989	192	372	85	49	49	37	*	1	785
1990	192	372	85	49	49	37	88	1	873
1991	193	371	85	49	49	37	88	1	873
1992	193	370	85	49	51	35	88	1	872
1993	192	372	81	49	51	35	82	1	863

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

Number of Members: Active, Inactive, Retirees and Beneficiaries

1984-1993

Number of Members

Fiscal Year Ended	Active	Inactive	Retirees & Beneficiaries
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
1991	160,012	88,591	70,583
1992	162,898	97,718	72,599
1993	165,711	105,194	74,230

Year	Service Retirement	Disability Retirement	Beneficiaries Receiving	Optional Allowances	Benefit Survivor	Total
1984	\$ 705	\$ 863	\$ 519	\$ 496	\$ 695	\$ 2,695
1985	763	913	545	512	804	2,749
1986	824	968	568	504	850	2,850
1987	871	1,027	599	526	850	2,974
1988	941	1,081	643	556	915	3,136
1989	1,000	1,144	661	581	970	3,366
1990	1,070	1,215	699	606	1,036	3,626
1991	1,147	1,288	740	637	1,108	3,920
1992	1,227	1,359	770	682	1,182	4,120
1993	1,304	1,433	803	748	1,258	4,346

1984-1993

Average Monthly Allowances by Type

Year	Service Retirement	Disability Retirement	Beneficiaries Receiving	Optional Allowances	Benefit Survivor	Total
1984	46,883	3,412	2,694	2,919	55,908	
1985	48,929	3,607	2,861	2,951	58,348	
1986	51,024	3,807	3,054	3,075	60,960	
1987	52,430	3,964	3,303	3,122	62,819	
1988	54,174	4,113	3,430	3,240	64,957	
1989	55,234	4,296	3,569	3,354	66,453	
1990	57,016	4,503	3,822	3,398	68,739	
1991	58,436	4,643	4,001	3,503	70,583	
1992	59,994	4,830	4,274	3,501	72,599	
1993	61,515	5,020	4,478	3,217	74,230	

1984-1993


Number of Benefit Recipients by Type

Fiscal Year	Interest	Assumption	Dividends	Capital	Total
1984	7.50%	7.50%	9.06%	0.73%	9.79%
1985	7.50%	7.50%	9.58%	0.79%	10.37%
1986	7.75%	7.75%	8.85%	3.15%	12.00%
1987	7.75%	7.75%	8.40%	7.87%	16.27%
1988	7.75%	7.75%	7.50%	3.93%	11.43%
1989	7.75%	7.75%	7.72%	3.15%	10.87%
1990	7.75%	7.75%	7.74%	2.20%	9.94%
1991	7.75%	7.75%	7.10%	2.09%	9.19%
1992	7.75%	7.75%	6.62%	4.64%	11.26%
1993	7.75%	7.75%	5.99%	4.45%	10.44%

1984-1993

Assumed Rate of Interest and Realized Rate of Return on Assets

Realized Internal Yield on Assets



Susan M. Eibers
Teacher, Learning Disabilities
Central Intermediate School
Newark, Ohio

"I have always believed that every child is born with a desire for knowledge. They will learn about things that are important to them, and they will excel in their abilities if allowed. Our job as teachers is to make them interested, inquisitive, and proud — our own future depends on it."

Investment Review

U.S. economic recovery stalled again in fiscal 1993

The U.S. economy can be described as on-again, off-again during STRS' fiscal year that ran from July 1, 1992, to June 30, 1993. The economy was very strong for the first six months of the fiscal year, growing at an average rate of 4.6% (3.4% in third quarter 1992, 5.7% in fourth quarter 1992). However, the second six months were very weak, growing at an average rate of only 1.3% (0.8% in first quarter 1993, 1.9% in second quarter). Growth for the entire fiscal year was 2.9%.

The reason for the erratic behavior of the economy was the unusual presence of simultaneous strong positive cyclical forces and strong negative long-term forces. The normal condition for economic expansion existed, and even grew stronger, during the past 12 months. Several times it appeared the economy was really starting to take off. There were declines in interest rates and inflation, increases in pent-up demand, and gains in inflation-adjusted personal income — all in amounts that should have produced self-reinforcing growth. Yet every time growth seemed imminent, the economy appeared to run out of steam, stalling any expansion.

Two long-term factors mentioned in last year's "Investment Review" continue to be responsible for halting economic recovery. First, consumers and businesses continue to realize that heavy debt burdens accumulated in the 1980s are negatively affecting them in the 1990s, and that they are better off reducing these burdens. This attitude continues to curb the development of the normal debt-fueled expansion process — people will just not borrow to make the kinds of purchases that accelerate economic recovery. The negative effects of excessive debts are also being recognized by the federal government. The 1991 budget bill is evidence of that with its restraining implications for economic growth.

The second factor responsible for slow economic recovery is continuing business restructuring. The recession made many business realize that operational expansions made during the high-flying 1980s were not sustainable during leaner, more competitive times. The choices became simple: either trim back operations to more workable proportions (which often meant permanent job losses), or be dragged into financial failure by the cost of maintaining the status quo. As businesses elected to trim back operations, even when

The Liquidity Reserves portfolio exists to meet STRS' liquidity needs for investment opportunities and the payment of benefits. It is also a stable store of value when there is uncertainty in other investment asset categories. During fiscal 1993, the share of total investment assets allocated to this portfolio was raised to 10.1% from 5.1% as a result of capital gains and also to build liquidity for future investment opportunities.

Liquidity reserves double in fiscal 1993

In the coming fiscal year, President Clinton's new budget will surely affect the economy, but will not deserve either the credit or the blame for most of what will happen. The U.S. (and global) economy is in an important period of transition. Economies worldwide will try to rationalize excesses that were decades in the making as well as adjust to the dramatic industrialization of many less-developed countries.

Inflation was unchanged from the prior fiscal year, as the change in the Consumer Price Index was 3.0% in the 12 months between June 1992 and June 1993.

Payroll employment rose by 1,647,000 new jobs during the period because of growth in service-producing jobs, more than offsetting a decline in goods-producing jobs. The rate of unemployment fell to 7.0% from 7.7%. Among the 10 major job categories, three (mining, manufacturing of durables and manufacturing of nondurables) declined, while all others showed growth. Services, retail trade and government employment gained the most.

During fiscal 1993, the growth of different sectors of the economy was widely divergent. For example, consumer durable goods and capital spending on equipment showed good gains in the four quarters of STRS' fiscal year, but capital spending on structures, net exports and federal spending on defense declined.

Reduced consumer borrowing and business restructuring continued to curb economic development in fiscal 1993.

economic recovery seemed to be starting. employment remained stubbornly weak. As a result, consumer confidence could not be sustained and people continued their reluctance to spend.

Fixed-income investments produce excellent gains for fiscal year

In the past year, the market for fixed-income investments pushed interest rates downward for all instruments, although short-term interest rates did not decline as much as long-term rates. After beginning the year at 3.65%, the yield on three-month Treasury bills finished at 3.03%, a drop of 0.62 percentage points. The 30-year Treasury bond went to 6.67% from 7.78% during the year, a drop of 1.11 percentage points. The yield curve (the ratio of the Treasury bond yield to the Treasury bill yield), at 2.20, was up from a year ago, but down from a peak of over 2.60 reached during fiscal 1993.

As the economy started showing weakness about the middle of fiscal 1993, fixed-income markets began a strong rally, pushing prices up and yields down. The rally continued at a fairly steady pace to the end of STRS' fiscal year to provide excellent gains for the year. The STRS secular bond portfolio, which was created to take advantage of major declines in interest rates over the past several years, performed particularly well this past fiscal year.

The strategy in fiscal 1993 was to unwind the aggressive stance of the portfolio as the market advanced — taking profits along the way — and make the portfolio somewhat defensive relative to the STRS benchmark, the Salomon Broad Market Index.

The net results of trading the past 12 months include a decrease in the duration of the portfolio (and thus a decrease in its aggressiveness), shorter average maturities and a slightly reduced current yield — all achieved while maintaining near-AAA quality. In addition, the share of the total fund allocated to this area was reduced to 47.8% from 52.6%. Using the book value of sales and maturities as a measure, turnover of the fixed-income portfolio fell to 45% from 55% the prior year. This rate of turnover is quite modest compared with other managed fixed-income funds, and is well within policy guidelines.

During the past fiscal year, the Salomon Broad Market Index had a total return of 12.0%, down from 14.2% the prior year. This index closely resembles the universe of investment alternatives of the fixed-income portfolio. The performance of the STRS fixed-income portfolio significantly surpassed this benchmark, but STRS performance publications follow the industry convention of reporting on a calendar-year basis. This report appears on Page 48.

In fiscal 1993, STRS' fixed-income portfolio significantly surpassed its benchmark, the Salomon Broad Market Index.

Stocks and other equities greatly outperform major indexes

In fiscal 1993, the Standard & Poor's Composite Index of 500 Stocks (Standard & Poor's 500) had a total return of 13.6%. The Dow Jones Industrial Average, which represents many cyclical companies, returned 9.2%. STRS equities performed very well compared with these indexes. Both indexes followed the same pattern of change over the fiscal year. From the start of the year to October, the indexes showed a slight retreat. In October, they began a sizeable rally that lasted until reaching peaks for the year in spring 1993. From then until the end of the fiscal year, they drifted sideways, finishing just below their peaks.

Perhaps the most important force in the equity market during fiscal 1993 was the increasingly unforgiving nature of the economy. Pricing power was almost nonexistent, so companies had to control costs to compete effectively in the new environment. The market favored companies that were able to adjust, and punished those that could not. The ability to select companies that could perform in the new environment was a principal reason STRS was able to achieve superior performance compared with the major indexes.

A continuing belief that the economy is shifting, however haltingly, into a growth phase encouraged STRS to continue raising the share of total assets allocated to stocks and other equities. As a result, the share of total equity assets increased to 34.6% from 33.3% in the past year. STRS common stock holdings, grouped by economic sector, are shown in the schedule of investments on Pages 62-79. Performance of the equity portfolio is shown on Page 48. Using the book value of sales as a measure, turnover of the equity portfolio was 42% in fiscal 1993, versus 41% the year before.

To lessen the risks inherent in relying on a single approach to stock portfolio management, STRS has divided its equity holdings into groups that use complementary approaches to stock selection.

Two new stock portfolios were added in fiscal 1993 to the four that were operating in fiscal 1992. The new portfolios are:

Index Portfolio — This portfolio was created as a way to get pure market exposure by matching the names and weightings of Standard & Poor's 500 to the greatest possible extent. At the end of the fiscal year, it accounted, at cost, for 6.3% of total equities.

Growth Portfolio — Based on fundamental research, this portfolio will select stocks principally for earnings growth prospects and market valuation. The growth portfolio, started just before the end of the fiscal year, accounted for 2.2% of total equities at year-end.

In fiscal 1993, STRS increased its share of total equities and created two new stock portfolios, enhancing the superior performance of these assets.

The other portfolios are:

Active Portfolio — Using traditional fundamental and technical analysis to make industry, group and stock selection decisions, this portfolio accounted for 14.9% of STRS equities at fiscal year-end.

Valuation Portfolio — Making heavy use of computer-driven models to select stocks with low market valuations and strong balance sheets, this portfolio included 43.3% of STRS equities.

Industry Index Portfolio — This portfolio concentrates on individual stock selection. Its industry weighting is indexed to the percentage weightings of 25 industry groupings of Standard & Poor's 500. This portfolio accounted for 24.3% of STRS equities.

Small Company Portfolio — Pursuing opportunities in companies that are smaller than most of those in the major indexes, this portfolio made up 9.2% of total STRS equities.

(Guaranteed mortgages remain strong despite record prepayments)

As the 1993 fiscal year progressed, the yields on U.S. government guaranteed mortgages and mortgage-backed federal agencies fell to lows not seen in more than 20 years. This led millions of homeowners to refinance their mortgages, creating a record number of prepayments in the STRS mortgage portfolio. As a result, it was difficult just to maintain the size of this portfolio. This sector now totals \$3.73 billion, \$531 million of which is invested directly in Ohio. It consists of 15.2% at cost of total investment assets.

Real estate assets perform above indexes in spite of sluggish industry.

While the real estate industry continued in depression, the past fiscal year showed signs that it may have reached bottom. Although the fundamental problem of oversupply remains, the restructuring of financing and ownership, and the decline of rents, slowed considerably during fiscal 1993.

Three factors contributed to the improved outlook for real estate in fiscal year 1993. First, although the absorption of existing supply has been slowed by the weak economy, the sharp slowdown in construction is allowing the demand to gradually gain on the supply in several regions. Second, increased capital came into the real estate market in the form of real estate investment trusts (REITs) and so-called "Opportunity Funds." Finally, the decline of long-term interest rates reduced the capitalization rate used to determine rental property valuations. Real estate industry indexes had negative returns for the fiscal year, but less so than in 1992. STRS real estate returns were slightly positive, outperforming the indexes again in fiscal 1993 as they did in fiscal 1992.

The STRS real estate portfolio continued to be managed with caution in fiscal 1993, although at year-end STRS was making preparations for increased activity in the coming year. New fundings of \$22.8 million in fiscal 1993 were far less than the \$177.3 million of sales and loan repayments. As a result, the total investment in real estate slipped to \$1.8 billion from \$2.0 billion, and the share of total investment assets allocated to this sector fell to 7.5% from 9.0%. STRS continues to have a larger share of its real estate investment in Ohio than in any other state.

STRS' real estate investments improved in fiscal 1993 under conservative management. Increased activity is planned for fiscal 1994.

Total fund returns continue to significantly exceed long-term goal

During the past five years, returns to holders of financial assets have been well above average compared to the returns of all other five-year periods this century. STRS' overall performance has been better than traditional market measures over that period as well, as detailed on Page 48.

STRS' total fund's annualized rate of return over the preceding five calendar years was 12.1% at year-end 1992 (STRS performance is calculated on a calendar year basis for adequate comparison with other performance publications), surpassing the 11.8% return for the five-year period ending in 1991. Total fund performance continues to exceed, by a significant margin, the 8% to 9% absolute long-term return goal established in the Retirement Board's Investment Objective and Policy. Absolute long-term return goals for each asset category were surpassed by sizeable margins as well, with the exception of real estate.

STRS portfolios also continued to fare well when compared to yardsticks for relative performance established by STRS Retirement Board policy. For the five years preceding 1992, equities surpassed STRS' Criteria and Approved List Index (the universe of eligible stocks), while they trailed Standard & Poor's 500. Fixed-income investments surpassed their yardsticks on a five-year basis by a full percentage point. Real estate outperformed accepted real estate performance indexes for the five-year time period by two percentage points.

As a whole, total return on STRS investment assets over the preceding five year period exceeded the rate of inflation by 8.3 percentage points and the hybrid index, which combines the principal yardsticks for each asset category, by 1.4 percentage points.

STRS' overall performance for the past five years has consistently surpassed Retirement Board policy goals and industry benchmarks.

New investment statutes allow a broader range of investments

In October 1993, changes in statutes regulating STRS investments became effective. These changes were made to allow greater diversification of risk, and to provide STRS more opportunities for attractive investments. The new statutes:

- Raise the share of assets that can be invested in stocks to 50% from 35% of total investment assets;
- Permit investment in foreign stocks and bonds up to 10% of total investment assets, and

- Allow for greater use of derivative securities, such as Treasury bond and stock index futures, to increase flexibility when STRS is increasing or decreasing its participation in a market.

While not a guarantee of improved investment returns, these statutory changes allow an ever-growing STRS to seek the most attractive alternatives from a larger universe of investments. The statutes also allow STRS to move larger amounts into or out of a market without adversely affecting the prices in that market. STRS has developed various strategies to take advantage of the statute changes in fiscal 1994.

48 Investment Performance (Total returns, annualized)

1-YEAR RETURNS (1992)			
ASSET CATEGORY	STRS RETURN	INDEX NAME	INDEX RETURN
EQUITIES	9.92%	Legal List* Standard & Poor's 500 Dow Jones Industrials SEI State Fund	8.75% 7.66% 7.42% 8.50%
FIXED INCOME	8.19%	Shearson Lehman Gov/Corp. Salomon Brothers Broad Market Russell-NCREIF	7.58% 7.59% (4.60%)
REAL ESTATE	(1.51%)	Evaluation Associates, Inc. S&P/Shearson Lehman/FRC** Inflation (GNP Deflator)	(5.17%) 5.17% 2.60%
TOTAL FUND	8.10%	SEI State Fund	8.00%
3-YEAR RETURNS (1990-1992)			
ASSET CATEGORY	STRS RETURN	INDEX NAME	INDEX RETURN
EQUITIES	10.22%	Legal List* Standard & Poor's 500 Dow Jones Industrials SEI State Fund	8.93% 10.80% 9.90% 11.20%
FIXED INCOME	11.73%	Shearson Lehman Gov/Corp. Salomon Brothers Broad Market Russell-NCREIF	10.59% 10.82% (3.07%)
REAL ESTATE	(0.24%)	Evaluation Associates, Inc. S&P/Shearson Lehman/FRC** Inflation (GNP Deflator)	(4.38%) 8.10% 3.45%
TOTAL FUND	10.53%	SEI State Fund	10.30%
5-YEAR RETURNS (1988-1992)			
ASSET CATEGORY	STRS RETURN	INDEX NAME	INDEX RETURN
EQUITIES	14.52%	Legal List* Standard & Poor's 500 Dow Jones Industrials SEI State Fund	13.11% 15.88% 15.33% 14.10%
FIXED INCOME	11.96%	Shearson Lehman Gov/Corp. Salomon Brothers Broad Market Russell-NCREIF	10.70% 10.96% 0.70%
REAL ESTATE	2.79%	Evaluation Associates, Inc. S&P/Shearson Lehman/FRC** Inflation (GNP Deflator)	(0.03%) 10.66% 3.73%
TOTAL FUND	12.06%	SEI State Fund	11.20%

STRS LONG-TERM POLICY OBJECTIVE (5 YEARS)...

EQUITIES: 8%-10% FIXED INCOME: 7%-8% REAL ESTATE: 8%-10% TOTAL FUND: 8%-9%

* The index of stocks receiving total and partial credit...
 ** A fund of equity, fixed income and real estate...
 ... The long-term policy objectives listed above... modifications made effective October 1, 1991

Summary of Investment Assets

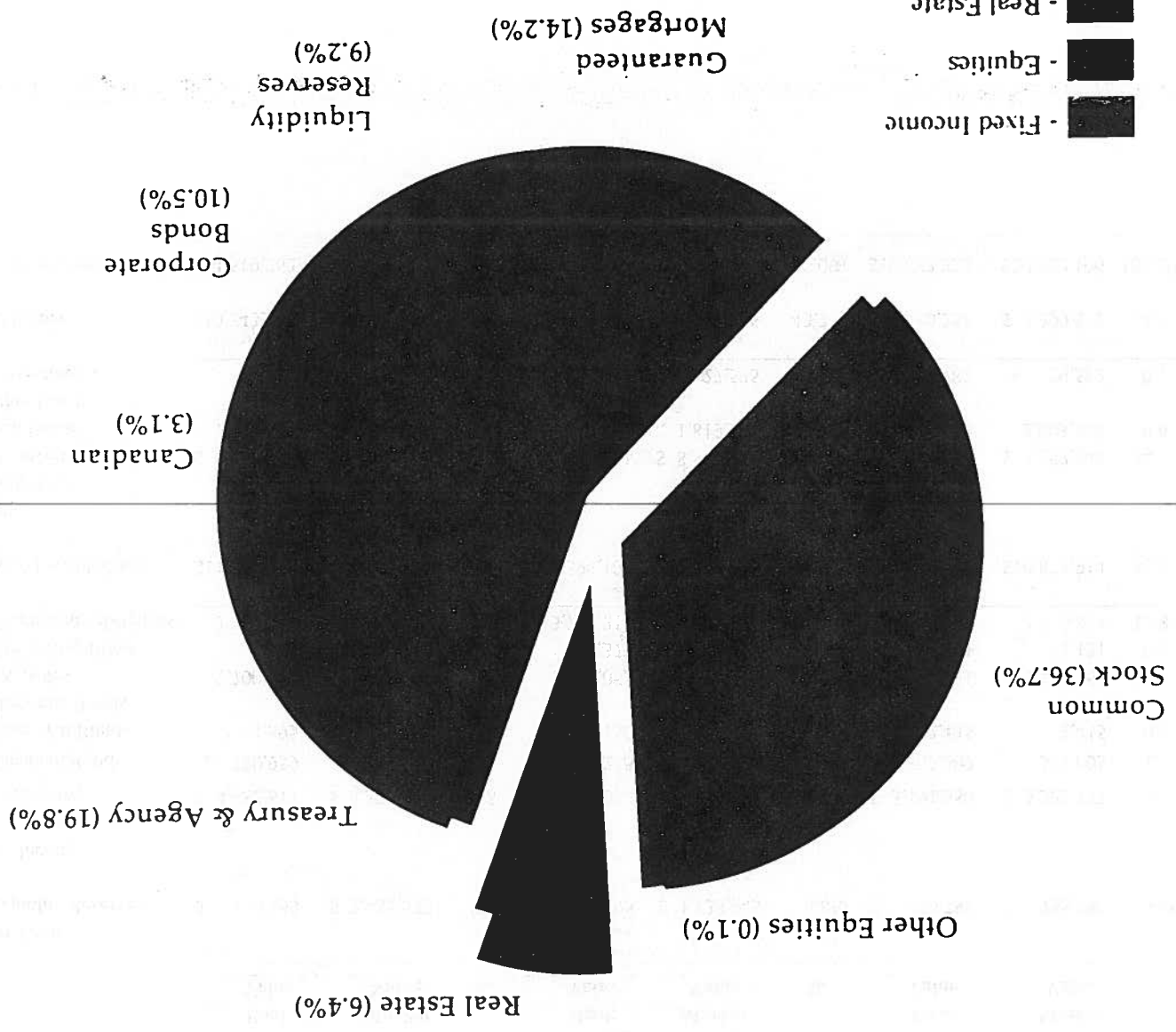
49

Years Ended June 30, 1993, 1992 and 1991

(Dollars Amounts in Thousands)

	1993			1992			1991		
	Book Value	Market Value	%	Book Value	Market Value	%	Book Value	Market Value	%
Short Term/ Liquidity Reserves	\$ 2,470,455	\$ 2,485,573	9.2%	\$ 1,123,795	\$ 1,133,945	4.8%	\$ 750,788	\$ 755,382	3.6%
Fixed Income									
U.S. Government & Agency	\$ 4,482,817	\$ 5,320,588	19.8	\$ 5,162,083	\$ 5,602,089	23.5	\$ 5,191,550	\$ 5,325,177	25.5
Canadian Bonds	790,959	833,566	3.1	658,226	676,922	2.8	363,609	357,005	1.7
Municipal Bonds	1,895	2,180	0.0	2,150	2,293	0.0	2,435	2,415	0.0
Corporate Bonds & Notes	2,700,127	2,832,466	10.5	1,990,055	2,062,850	8.7	1,452,171	1,463,362	6.9
Convertible Bonds	0	0	0.0	5,372	5,108	0.0	13,361	11,121	0.1
Guaranteed Mortgages	3,729,960	3,833,329	14.2	3,776,218	3,927,771	16.5	3,692,553	3,716,834	17.8
Total Fixed Income	\$11,705,758	\$12,822,129	47.6	\$11,594,104	\$12,277,033	51.5	\$10,715,679	\$10,875,914	52.0
Equity									
Common & Convertible Real Estate	\$ 8,482,848	\$ 9,875,312	36.7	\$ 7,346,511	\$ 8,561,300	35.9	\$ 6,069,281	\$ 7,257,648	34.7
Other Equity Investments	1,838,348	1,734,713	6.4	1,992,847	1,819,501	7.7	2,118,190	2,003,580	9.6
	22,353	26,468	0.1	27,095	27,575	0.1	28,787	29,582	0.1
Total Equity	\$10,343,549	\$11,636,493	43.2	\$ 9,366,453	\$10,408,376	43.7	\$ 8,216,258	\$ 9,290,810	44.4
Total Investments	\$24,519,762	\$26,944,195	100.0%	\$22,084,352	\$23,819,354	100.0%	\$19,682,725	\$20,922,106	100.0%

- Fixed Income
- Equities
- Real Estate



Investment Distribution by Market Value as of June 30, 1993

Investment Distribution

Investment Objective and Policy

Note: The following Investment Objective and Policy became effective on October 7, 1993. It is included in this report to reflect legislative changes.

The State Teachers Retirement System of Ohio is governed by a Retirement Board of nine members with broad statutory powers. The investment function is vested in the Retirement Board as set forth in Section 3307.15 of the Revised Code that requires the Retirement 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 this authority.

In addition to the investment function, Section 3307.15 of the Revised Code also sets forth the fiduciary responsibility of the Retirement Board and other fiduciaries in discharging their duties with respect to the fund. Section 3307.01(U) of the Revised Code defines a fiduciary, and Section 3307.14 of the 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 Revised Code.

STAFF AND RETIREMENT BOARD

Participation in the affairs of any public body demands high personal integrity and conduct. This is especially true when funds of others are involved. Members of the Retirement 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 Retirement Board in the best interest of members of the system and in accordance with the code of ethics of the Association for Investment Management and Research. 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 Retirement Board. The Investment Committee is empowered to advise the Retirement Board in all investment matters.

Investment Advisors/Consultants

The Retirement Board shall employ competent, well-qualified organizations to assist in carrying out its fiduciary responsibility. Duties of the investment advisors/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 in-house staff, executive director, or members of the Retirement Board.
4. Participation in bimonthly meetings of the Investment Committee.
5. Review and advise on 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 of investments shall have the following responsibilities:

1. Supervise activities of the in-house staff.
2. In cooperation with the investment advisor and the executive director, formulate an annual investment plan.

3. Make recommendations to the executive director and Retirement Board concerning periodic modification of the annual investment plan.

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 equal to capital growth because of the utilization of fixed income and real estate assets.

The Retirement Board anticipates that contributions and income 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.

Restrictions

The investment standards set forth in Section 3307.15 of the Revised Code are incorporated by reference and made a part of this policy. The Retirement 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 Retirement 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 Retirement Board. Also, the Retirement Board will give equal consideration to investments that involve minority-owned and minority-controlled firms and firms owned and controlled by women.

OBJECTIVES, GUIDELINES AND POLICIES: TOTAL FUND

Objectives

In many if not most instances, payments from the pension fund are the major sources of income to retirees and a principal protection against contingencies of death and disability for active workers. Therefore, the basic policy of the Retirement 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.

Each 1% increase in investment return will finance beneficial 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 below, is an important objective. With strict adherence to statutory investment limitations and restrictions, the Retirement Board sets a total return objective of 8% per annum. This is a long-term (5- to 10-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%. The objective should be pursued consistently with prudent management and at the minimal level of market risk necessary to accomplish them.

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 0.9 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 90% of the decline in the stock market. This should protect the beneficiaries from any undue risk.

OBJECTIVES, GUIDELINES AND POLICIES: FIXED INCOME

BONDS

Objective

For the publicly-traded bond sector of the portfolio, a total return of 6%-7%, averaged over 5 to 10 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 Retirement Board a revised figure.

Restrictions

It is the responsibility of the investment advisor to review and recommend changes in specific criteria for bond investments and to review such criteria at least annually with the Investment Committee and/or the Retirement 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. 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). Fixed-income purchases, including exchanges, shall meet the following criteria in addition to statutory requirements. All bond, note, pass-through security, trust certificate, 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.
4. At time of purchase, be rated A- or higher, or meet statutory coverage ratios.

The publicly traded bond sector of the portfolio will have a volatility level between 80% and 150% of the Shearson Lehman Aggregate Bond Index.

Derivatives may be used to manage the volatility of the fixed-income portfolio. The derivatives to be used are Treasury note and Treasury bond futures, options thereon, or over-the-counter (OTC) options on Treasury securities. All strategies must be of a hedging or positioning nature rather than speculative. Underlying exposure of futures and options positions can not exceed 5% of total portfolio assets.

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 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 and report to the Retirement Board thereon.
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 15% of assets invested in bonds and shall be purchased only when there is significant additional return (defined as approximately 50 basis points over the current yield rate of publicly-traded bonds of similar quality) as an offset for the limited marketability of privately-placed bonds.

The following foreign credits may be purchased under this section provided they do not exceed 2% of total assets:

1. Sovereign credits rated AA or better.
2. Bonds of a United States subsidiary traded in the foreign market, provided they are guaranteed by the United States parent company.
3. State of Israel bonds (not rated) not to exceed \$10 million.

CASH EQUIVALENTS

MORTGAGES

Objectives

It is the Retirement Board's policy to use cash equivalents to provide some protection against downward market movements and to assist in the 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 Retirement Board does not expect that major moves will be made into or out of cash reserves.

Restrictions

Under normal circumstances, a reserve of 15% of the value of the total fund shall be considered the maximum limit. It will be the responsibility of the investment advisor, together with the deputy executive director of investments, to recommend any modification of this position. Positions should not exceed \$60 million in one obligor of commercial paper, certificates of deposit, or bankers' acceptances.

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 (XX) U.S. bank holding companies in terms of assets with short-term debt ratings of P-1 and/or A-1, the 20 largest bank holding companies in Ohio, and the 10 largest savings and loan holding companies in Ohio.

Repurchase agreements shall be collateralized by U.S. Treasury or Agency securities with a market value in excess of funds advanced.

Objective

The Retirement Board agrees with 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 Retirement 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 and it is consistent with current investment strategy.

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.

Categories

1. 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 that convert to permanent loans can be purchased without location restrictions.
2. Mortgage-backed securities:
 - a. *Mortgage-backed bonds:* The Retirement 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 of the outstanding bond.

b. *Pass-through securities:*

The Retirement 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 Retirement 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.

determined by the long-term objectives established by the Retirement Board in conjunction with the investment advisor and by the annual investment plan and its periodic modifications.

The function of a pension plan is to provide for long-term investment positions, and therefore it is not the policy of the Retirement 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 as a volatility level no greater than 15% more than that of the Standard & Poor's 500 stock index (S&P 500), with a range between 1.0 and 1.15 (from equality with the stock market to a level 15% higher). Under normal circumstances, the volatility level of the stock sector should average slightly above 1.0.

No more than 6% of assets of the system invested in the equity sector may be invested in equities of any one corporation. The Retirement 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).

OBJECTIVES, GUIDELINES AND POLICIES: EQUITIES

Objectives

For the equity sector of the portfolio, a total return objective of 8%-10%, averaged over a period of 5 to 10 years, is desired. Should the investment advisor believe attainment of this objective at anytime is not possible without undue risk, it is his responsibility to recommend to the Retirement Board a revised figure. In today's market, the Retirement Board believes an 8%-10% average return objective over a five-year period is prudent and realistic, within the volatility guidelines. The Retirement Board recognizes that there is a level of risk associated with an 8%-10% total equity return objective. This should be sought with the minimum risk necessary. The equity portfolio should reduce non-market risk by being diversified.

Restrictions

The statutes limit State Teachers Retirement System to a 50%-of-assets position in common and preferred stocks. It is the Retirement Board's policy to maintain an investment in common stocks in the range of 30%-50% of assets. The amount invested at any time is

No more than 5% of the assets of the system may be invested in equities in small companies. Small companies generally include companies that have less than \$0.4 billion in market capitalization.

All American depository receipts and foreign stocks legal under division (D)(4) of section 3307.15 of the Revised Code are eligible for purchase under this section.

Derivatives may be used to adjust the exposure to the equity market or to individual securities in the equity portfolios. The derivatives are futures on the S&P 500 Index, options or options on futures on the S&P 500 Index, and options on the S&P 100 Index, S&P Midcap Index, and individual stocks or baskets. Strategies permitted must be of a hedging or positioning nature rather than speculative. Underlying exposure of futures and options positions can not exceed 10% of total portfolio assets.

Quality Standards and Portfolio Construction

Equity portfolios are invested in securities selected from a universe of investments legal under Section 3307.15 of the Revised Code. The investment style of individual portfolios follow STRS guidelines, as described in the annual investment plan, and are monitored based on appropriate portfolio characteristics and risk levels. Stocks are selected for each portfolio based on a set of criteria appropriate for each style. The Retirement Board's investment advisor/consultant must review each equity portfolio to measure the degree of compliance with STRS established parameters and risk levels. The advisor/consultant must report the results to the Retirement Board at least annually.

OBJECTIVES, GUIDELINES AND POLICIES: INTERNATIONAL INVESTMENTS

[Division (D)(12) of Section 3307.15 of the Revised Code]

Objectives

It is the Retirement Board's policy to invest in international investments in order to diversify the investment portfolio. A total return objective of 8%-10% per year over a 5- to 10-year period is expected on these assets. The primary emphasis will be on international equity securities.

Restrictions

International investments shall be limited to 5% of total assets until the Retirement Board determines a higher limit is more appropriate. The Retirement Board will select and monitor all outside money management firms utilized for international investments.

OBJECTIVES, GUIDELINES AND POLICIES: VENTURE CAPITAL

Objectives

The chief objective of venture capital investments is to provide an attractive risk adjusted rate of return to benefit the STRS membership. Venture capital possesses a long-term investment horizon, illiquidity, and a high

Restrictions

Venture capital investments are permitted under Section 3307.15(E) of the Revised Code. Direct investments are allowed provided the entity has one-half of its assets within the state or more than one-half of its employees are employed in Ohio or its principal office is located within the state. Investments in venture capital limited partnership funds are also permitted. Fund managers must agree to use "best efforts" to make investments in Ohio-based small businesses. The aggregate amount of these Ohio-based investments must be at least equal to the Retirement Board's investment in the fund.

Total value of venture capital investments is legally limited to 5% of total assets. However, because of the limited number of suitable investment opportunities located in Ohio, it is the Retirement Board's intent to limit venture capital investment to 0.5% of STRS total assets. Furthermore, it is the Retirement Board's intent to generally limit venture capital investment to opportunities to Ohio-based limited partnership funds. Proposals for direct investments will usually be referred for review to the venture funds in which STRS has made investments. This formal referral process enables STRS to respond to the financing needs of Ohio small businesses in an efficient and timely manner.

Potential venture capital limited partnership funds will be analyzed for possible STRS investment. In addition to meeting the legal requirements, underwriting criteria include: experienced general partners, solid track record, fund headquartered in Ohio, Ohio-based investment history, strong community support, and appropriate partnership terms.

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.

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

The deputy executive director of investments will inform the Retirement 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 of 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.

OBJECTIVES, GUIDELINES AND POLICIES: REAL ESTATE

Objectives

It is the Retirement 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 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.

Restrictions

Real estate investments shall be limited to 12% of total assets.

Diversification:

1. **Property type:** High-quality properties that are relatively general purpose will provide both investment security and maximum equity growth potential. Five such categories of property are:
 - a. Office buildings;
 - b. Multitenant retail properties such as community shopping centers and regional malls;
 - c. Distribution centers, warehouses and industrial parks;
 - d. Multifamily housing;
 - e. Specialty — limited to 2% of book value of total assets.

The specialty category includes, but is not limited to, timberland, farmland, senior living and hotels.

2. **Geographical:** The portfolio will be diversified across eight regions as defined by the National Council of Real Estate Investment Fiduciaries. The maximum book value for any one of these regions will be 25% of the real estate portfolio. The one exception will be the East North Central Region which includes Ohio. This sector will have a 35% book value limit. When properties located within Ohio offer quality, return, and safety comparable to properties outside Ohio, the Ohio investment will be given preference. The investment staff shall pursue an active plan to achieve this objective.
3. **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' total investment strength.

4. *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.

Due Diligence

The real estate investment management process will be subject to a number of procedures to safeguard assets of the system. New investments will have the following documentation:

1. A building and systems evaluation by a qualified engineering firm in the case of an existing building;
2. A review of plans and specifications by an architectural firm in the case of developmental properties;
3. An appraisal by an independent third-party appraisal firm;
4. An environmental review by a qualified consultant in accordance with the Environmental Policy described below.

A financial analysis including, but not limited to, holding period internal rate of return, initial yield and sensitivity to critical assumptions;

Legal review and approval of appropriate documents;

Real estate investments will be subject to the requirements of an Environmental Policy as reviewed by the Retirement Board's real estate consultant. The policy will ensure that STRS will be prudent and diligent in its investments as not to invest in property on which hazardous materials are present or so near the property in such form and quantities as to cause STRS concern about its potentially significant legal or economic liability. The policy will also address potential investments in terms of wetlands, endangered species, or any other environmental issue that would potentially have a material impact on the value of the property or STRS liability.

1. Report to the Retirement Board on a semiannual basis regarding the investment performance of the system's real estate portfolio.
2. On a semiannual basis, review and comment on the annual real estate strategy prepared by the investment staff.
3. Review, on an annual basis, the five-year real estate strategy prepared by the staff.
4. Review annually the general internal management of real estate and its efficiency, with the objective of completing an overall operational audit including items such as write-down methodology.
5. Review certain predefined property-specific transactions.

Performance

Real estate investment performance will be reported to the Retirement Board on a quarterly basis. 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 indexes shall be used as benchmarks to evaluate performance: The Russell-NCREIF Property Index and Evaluation Associates Fund Performance Index.

Valuations

Portfolio performance will be calculated on a quarterly basis, while individual properties will be valued annually. A combination of internal valuations and external appraisals will be used on a rotating basis. The sale-leasback portion of the portfolio will be valued on an internal basis with a random sample of external appraisals each year to validate the internal methodology. Each multi-tenant property will be valued internally each year, with an independent external appraisal no less than every third year. The methodology used in the internal valuations shall be reviewed and approved by the Retirement Board's real estate consultant.

Board Consultant

The role of the real estate consultant is specifically outlined in the contract scope of not limited to, the following:

Real Estate Investment Committee (REIC)

A committee composed of a combination of internal staff and external industry professionals will review proposed transactions before recommendation to the deputy executive director of investments and the executive director. Transactions to be reviewed by the REIC include new acquisitions, dispositions from the existing portfolio, and significant modifications in existing deal structures. The following transactions will not be subject to REIC review prior to executive director approval:

1. Ancillary land purchases, sales or exchanges valued at less than 20% of the total property value;
2. Release of mortgage security as long as the loan-to-value ratio remains below 80%;
3. Transactions allowed under existing investment documents (i.e., conversion options, loan prepayments, etc.);
4. Sales of sale-leaseback properties when the sale price exceeds the book value of the investment or when the investment amount is less than \$1.5 million;
5. Temporary mortgage restructurings, which limit the restructuring to no more than four years and revert back to original terms.

BOARD REVIEW

The Retirement Board adopts policy and monitors performance with the assistance of the real estate consultant. These responsibilities include review of the following documents:

1. Investment objective and policy;
2. Long-term real estate strategy;
3. Annual investment plan;
4. Individual transactions outside policy and/or strategy;
5. Monthly investment activity reports;
6. Semiannual performance reports from the consultant.

PROCEDURES**Long-Term Objectives**

The investment advisor shall recommend long-term (5- to 10-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 Retirement Board at least annually. The objectives shall incorporate statements of investment criteria for both publicly-traded bonds and stocks, as recommended by the investment advisor and approved by the Retirement Board.

Annual Investment Plan

In February of each year, or at such other time as the Retirement 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 Retirement Board, upon 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 bimonthly by the staff and any indicated modifications or changes will be 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;

(6) Status of special projects;

b. Fixed Income:

(1) Summary of fixed-income markets;

(2) Summary of trading markets;

(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

The State Teachers Retirement Board believes that common stock proxies are valuable and should be voted in the best interest of the members and retirees. To this end, the Retirement Board shall maintain a Stock Proxy Voting Policy, and the staff will use it as a guide in meeting the fiduciary responsibility of the State Teachers Retirement Board in voting common stock proxies. Common stock proxies may be executed by the executive director, the deputy executive director of administration, or the deputy executive director of investments.

Ohio Investments

It is the policy of the Retirement 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 Revised Code. Preference will be given to Ohio investments offering competitive returns at risk levels comparable to similar investments currently available to the Retirement 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 Retirement Board shall give equal consideration to minority-owned and controlled firms and to firms owned and controlled by women. The Retirement 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 Retirement 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 Retirement Board shall give equal consideration to Ohio firms providing associated professional services, minority-owned and controlled firms, and firms owned and controlled by women.

Security Lending

The Retirement Board may operate a security lending program to enhance the income of the fund. The program must be operated by a bank trustee under the direction of the treasurer of state and each security lent must be fully collateralized. Results of the program must be reported to the Retirement Board annually.

Measurement

The primary goal of the fund shall be to achieve the absolute return targets described in the "Total Fund" section of this policy. However, a secondary measurement objective of the Retirement Board is to relate the fund's performance to various indexes. The relative measurement of the total fund shall be made against a hybrid index consisting of weightings from equity, fixed incomes and real estate indexes.

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, Shearson Lehman Aggregate Bond Index, and the GNP Deflator. The Retirement Board's objective is an annual rate of return matching or exceeding the indexes measured over a three-year period.

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

Security Valuation

Valuation of investments for purposes of complying with Section 3307.15 of the 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 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.

Schedule of Investments

As of June 30, 1993

COMMON STOCKS

MARKET TOTAL	TOTAL COST	SHARES	
			METALS & MINING (2.30%) *
\$ 81,963,000	\$ 77,999,950	1,170,900	Aluminum Company of America
9,995,175	8,038,210	429,900	AMAX, Inc.
344,575	429,310	17,900	Asarco, Inc.
286,875	220,593	15,300	Bethlehem Steel Corporation
16,390,400	21,555,641	665,600	Cyprus Minerals Company
480,037	281,624	25,100	Homestake Mining Company
58,305,000	48,118,056	2,028,000	Inland Steel Industries, Inc.
1,305,874	622,251	117,382	Insteel Industries, Inc.
1,071,000	851,264	20,400	Newmont Mining Corporation
913,512	706,715	10,700	Nucor Corporation
2,112,500	2,407,239	100,000	Oregon Steel Mills, Inc.
13,222,387	12,630,908	296,300	Phelps Dodge Corporation
1,238,400	1,301,391	25,800	Reynolds Metals Company
4,528,125	2,018,297	262,500	Steel Technologies, Inc.
11,418,109	5,377,428	280,199	USX-U.S. Steel Group
22,534,377	12,771,515	721,100	Worthington Industries, Inc.
	\$195,330,392		
			FOREST PRODUCTS (0.16%)
\$ 1,126,637	\$ 1,095,417	19,300	Georgia-Pacific Corporation
12,352,000	5,902,320	386,000	Louisiana-Pacific Corporation
1,952,227	1,729,948	45,800	Weyerhaeuser Company
	\$ 8,727,685		
			BUILDING MATERIALS (0.27%)
\$ 17,952,375	\$ 30,511,799	977,000	Calmar Company
8,199,135	8,533,050	312,348	Florida Rock Industries, Inc.
430,027	324,963	10,300	Owens Corning Fiberglas Corporation
			OHIO COAL (7.94%)
\$ 41,601,000	\$ 45,967,016	849,000	Amerada Hess Corporation
46,994,950	31,653,991	856,400	Amoco Corporation
13,155,362	14,219,545	545,300	Ashland Coal, Inc.
290,700	290,910	11,400	Ashland Oil, Inc.
64,204,875	44,795,003	552,300	Atlantic Richfield Company
18,158,400	14,061,019	374,400	Burlington Resources, Inc.
12,153,375	4,137,993	138,500	Chevron Corporation
132,931,087	117,850,195	2,010,300	Exxon Corporation
1,791,375	2,054,623	140,500	Getty Petroleum Corporation
805,000	669,088	16,100	Kerr McGee Corporation
531,250	428,353	12,500	Louisiana Land & Exploration Company
23,400	18,603	2,600	Marathon Energy Corporation
58,693,700	31,689,344	785,200	Mobil Corporation

* All common stock percentages are based on settlement market value.

	SHARES	TOTAL COST	TOTAL MARKET
OIL/COAL (continued)			
Occidental Petroleum Corporation	4,115,000	\$ 85,509,980	\$ 86,415,000
Oryx Energy Company	18,200	398,545	373,100
Pennzoil Company	13,200	709,044	826,650
Phillips Petroleum Company	1,310,100	35,268,573	36,682,800
Sun Company	25,000	657,557	600,000
Texaco, Inc.	1,933,400	118,073,207	122,287,550
USX-Marathon Oil Group	3,609,797	74,950,255	60,915,324
Unocal Corporation	2,559,100	48,392,592	74,853,675
Westmoreland Coal Company	600	7,299	3,750
Witco Chemical Corporation	139,900	7,316,705	7,729,477
		\$679,119,440	\$782,021,800
OIL/GAS PIPELINES (1.89%)			
Coastal Corporation	660,400	\$ 21,190,660	\$ 17,252,950
Columbia Gas System, Inc.	1,648,200	38,962,918	40,792,950
Enron Corporation	617,300	23,272,276	40,664,637
Enserch Corporation	2,400	39,672	43,500
Panhandle Eastern Corporation	23,300	425,682	570,850
Sonat, Inc.	1,292,100	50,549,242	86,247,675
Transco Energy Company	1,300	19,701	21,777
Williams Companies, Inc.	6,800	259,120	372,300
		\$134,719,271	\$185,966,639
PETROLEUM SERVICES (1.48%)			
Baker Hughes Corporation	2,344,800	\$ 42,042,663	\$ 61,551,000
Halliburton Company	2,211,000	61,177,123	84,294,375
Helmerich & Payne, Inc.	7,900	192,153	275,514
Rowan Companies, Inc.	7,500	66,787	75,000
		\$103,478,726	\$146,195,889
ENGINEERING & CONSTRUCTION (0.63%)			
Crane Company	5,300	\$ 122,640	\$ 153,700
Ecology & Environment, Inc.	21,100	287,740	345,512
Flour Corporation	229,200	9,206,104	9,626,400
Foster Wheeler Corporation	1,765,500	35,756,049	52,082,250
JWP, Inc.	14,100	55,049	17,625
Morrison Knudsen Corporation	6,300	134,695	159,864
		\$ 45,562,277	\$ 62,385,351
INDUSTRIAL MACHINERY (2.64%)			
Amcast Industrial Corporation	219,000	\$ 2,932,525	\$ 4,078,875
Binks Manufacturing Company	144,053	3,674,342	3,457,272
Cincinnati Milacron, Inc.	503,600	10,306,232	12,275,250
Dresser Industries, Inc.	39,900	736,614	937,650
Duriron, Inc.	235,100	5,138,413	5,113,425
General Signal Corporation	894,800	55,794,904	58,609,400
Giddings & Lewis, Inc.	300	5,934	6,412
Goulds Pumps, Inc.	956,400	22,563,409	23,551,350
Graco, Inc.	88,300	2,199,157	2,803,525

INDUSTRIAL MACHINERY (continued)

MARKET	TOTAL COST	SHARES	TOTAL MARKET
	\$ 10,860,684	582,900	\$ 12,168,037
	\$ 1,077,322	33,800	\$ 1,263,275
	7,150	2,100	9,187
	4,676,000	202,000	5,403,500
	26,137,477	974,500	26,798,750
	111,666	11,100	101,287
	1,062,625	25,000	1,050,000
	48,831,298	1,617,300	53,573,062
	2,334,950	38,900	2,708,412
	2,236,500	36,200	2,678,800
	188,488	7,100	236,077
	30,583,610	1,368,800	42,946,100
	\$ 231,459,300		\$ 259,769,646
ALTO PARTS/ORIGINAL EQUIPMENT MFG. (3.11%)			
	\$ 4,370,120	272,600	\$ 5,383,850
	87,237,204	1,423,500	106,584,562
	198,415	10,200	353,175
	35,376,668	455,100	38,683,500
	65,840,260	1,610,600	87,375,050
	688,257	17,300	1,148,287
	22,794,263	587,200	26,350,600
	27,076,850	1,007,700	34,135,837
	142,186	3,100	156,162
	495,186	8,500	518,500
	22,995	1,100	17,325
	3,483,929	165,625	5,734,767
	\$ 247,726,333		\$ 306,441,615
BUILDING PRODUCTS (0.85%)			
	\$ 319,695	11,300	\$ 364,425
	975,939	41,500	967,489
	20,756,862	503,000	24,458,375
	1,078,567	119,100	565,725
	39,628,763	1,655,500	19,458,064
	5,602,014	248,100	8,063,250
	\$ 68,361,840		\$ 83,877,328
ELECTRICAL PRODUCTS (4.00%)			
	\$ 50,669,251	1,674,200	\$ 84,547,100
	86,016,417	1,616,400	94,155,300
	69,348,235	1,887,100	180,689,825
	14,678,947	499,700	19,738,150
	15,270,286	700,000	13,125,000
	585,984	9,000	573,750
	911,427	71,000	1,127,127
	\$ 237,480,547		\$ 393,956,252

	SHARES	TOTAL COST	TOTAL MARKET
OFFICE EQUIPMENT SUPPLIES (0.45%)			
Pitney-Bowes, Inc.	1,031,600	\$ 42,939,046	\$ 42,811,400
Xerox Corporation	23,600	1,808,336	1,885,052
		\$ 44,747,382	\$ 44,696,452
MULTI-SECTOR COMPANIES (3.23%)			
Allied-Signal, Inc.	383,100	\$ 13,056,343	\$ 25,571,925
Ametek, Inc.	1,099,000	13,885,467	14,836,500
Dial Corporation/DE	840,900	33,620,680	33,530,887
Dover Corporation	13,900	601,070	651,562
Honeywell, Inc.	29,900	969,204	1,110,037
ITT Corporation	32,300	2,219,596	2,753,575
Litton Industries, Inc.	16,400	703,343	1,049,600
Minnesota Mining & Manufacturing Company	49,200	5,064,311	5,313,600
National Service Industries	4,800	124,041	122,400
Pittston Company	237,200	3,861,470	4,328,900
TRW, Inc.	1,218,100	64,035,469	76,892,562
Teledyne, Inc.	659,600	13,061,679	13,934,050
Tenneco, Inc.	1,475,400	68,328,966	75,245,400
Textron, Inc.	14,200	576,734	796,975
Tyco Laboratories, Inc.	1,432,900	57,202,327	59,286,239
Valmont Industries, Inc.	161,500	2,634,737	2,503,250
		\$279,945,437	\$317,927,462
ENVIRONMENTAL SERVICES (0.07%)			
Browning-Ferris Industries, Inc.	27,000	\$ 948,464	\$ 732,375
Mid-American Waste, Inc.	250,400	3,377,974	3,067,400
WMX Technologies, Inc.	105,300	4,111,298	3,409,089
Zum Industries, Inc.	1,500	56,359	48,000
		\$ 8,494,095	\$ 7,256,864
CHEMICALS (5.25%)			
Arco Chemical Company	652,600	\$ 27,665,824	\$ 26,593,450
Air Products & Chemicals, Inc.	572,100	14,210,712	22,454,925
American Cyanamid Company	25,600	1,455,995	1,369,600
Betz Laboratories, Inc.	774,900	39,447,372	34,192,462
Church & Dwight, Inc.	68,700	2,063,997	2,061,000
Dow Chemical Company	1,774,700	103,613,251	100,492,387
duPont (EI) de Nemours & Company	1,689,800	74,340,714	79,631,825
Ecolab, Inc.	8,400	308,228	360,150
Englehard Corporation	322,300	13,453,835	12,086,250
Ethyl Corporation	21,500	609,318	645,000
FMC Corporation	8,000	370,507	362,000
First Mississippi Corporation	1,800	14,229	17,325
Goodrich (B.F.) Company	167,200	6,978,255	7,106,000
Grace (W.R.) & Company	19,000	698,937	769,500
Great Lakes Chemical Corporation	17,000	1,148,695	1,170,875
Hanna (M.A.) Company	449,400	11,358,676	13,931,400
Hercules, Inc.	14,900	872,773	1,156,612
IMC Fertilizer Group, Inc.	383,900	15,796,201	11,277,062
Lawter International, Inc.	348,933	4,008,392	4,928,678

INDUSTRIAL SPECIALTIES (0.60%)

ACX Technologies, Inc.	303,600	\$ 4,418,016	\$ 12,447,600
Albany International Corporation Cl-A	867,500	12,077,713	14,639,062
Avery Dennison Corporation	301,600	6,407,938	8,859,500
Bicings Corporation	259,800	3,822,180	6,365,100
Coming, Inc.	485,300	16,817,217	16,136,227
Millipore Corporation	11,800	409,774	380,550
Pall Corporation	32,800	701,239	582,200
Total		\$248,272,863	\$277,189,764

PAPER/CONTAINERS (2.81%)

Ball Corporation	160,800	\$ 5,754,440	\$ 4,542,600
Bemis Company, Inc.	434,900	8,074,522	9,785,250
Boise Cascade Corporation	6,000	124,514	141,000
Champion International Corporation	1,628,200	49,605,091	54,951,750
Crown Cork & Seal, Inc.	20,500	755,199	768,750
Federal Paper Board Company, Inc.	328,500	8,033,989	7,473,375
Graphic (P.H.) Company	333,000	6,888,520	6,327,000
International Paper Company	1,043,800	63,930,330	66,803,200
James River Corporation of Virginia	5,100	92,977	100,725
Kimberly-Clark Corporation	136,500	6,818,478	6,756,750
Mead Corporation	753,600	31,488,876	33,723,600
Molson Paper Corporation	284,100	6,615,284	6,889,425
Polarich Corporation	7,200	333,756	300,600
Scott Paper Company	18,300	695,118	606,189
Sealed Air Corporation	700,000	1,000	16,975,000
Stone Container Corporation	10,400	226,525	93,600
Temple-Inland, Inc.	10,200	518,620	464,100
Union Camp Corporation	1,410,500	57,799,498	59,946,250
Westaco Corporation	15,900	514,126	540,600
Total		\$458,128,258	\$516,639,958

CHEMICALS (continued)

Lilly Industrial Coatings, Inc. Cl-A	492,454	\$ 4,212,970	\$ 8,494,831
Locite Corporation	453,900	14,227,601	17,815,575
Monsanto Company	31,500	1,764,957	1,858,500
Morton International, Inc.	13,000	782,093	1,005,875
Nalco Chemical Company	15,600	524,479	540,150
PGI Industries, Inc.	1,106,000	61,136,559	72,443,000
Praxair, Inc.	10,800	179,290	167,400
Quantum Chemical Corporation	2,252,000	29,481,595	42,788,000
RPM, Inc. of Ohio	626,250	3,884,798	10,333,125
Rohm & Haas Company	20,300	1,136,223	1,088,587
Schulman (A.), Inc.	803,000	11,547,535	22,283,250
Sherwin-Williams Company	15,300	458,082	495,337
Sipac Company	100,600	3,319,036	3,181,477
Union Carbide Corporation	20,400	322,312	392,700
Valspar Corporation	370,300	6,734,867	13,145,650
Total		\$4,212,970	\$8,494,831

MARKET TOTAL COST SHARES

	SHARES	TOTAL COST	TOTAL MARKET
DIVERSIFIED COMMERCIAL SERVICES (0.33%)			
G & K Services, Inc. CI-A	456,900	\$ 5,635,663	\$ 7,995,750
Interpublic Group of Companies, Inc.	658,700	20,092,502	18,114,250
Kelly Services, Inc. CI-A	187,500	4,439,712	4,781,250
National Ed Corporation	2,600	18,278	19,500
Safety-Kleen Corporation	11,700	318,730	213,527
Unifirst Corporation	53,800	1,018,746	1,587,100
		\$ 31,523,631	\$ 32,711,377
FINANCIAL SERVICES (0.92%)			
American Express Company	88,200	\$ 1,967,825	\$ 2,844,450
Deluxe Corporation	14,600	649,870	558,450
R.R. Donnelley & Sons Company	527,900	15,666,150	14,913,175
Dow Jones & Company, Inc.	26,700	776,801	740,925
Dunn & Bradstreet Corporation	1,199,700	57,635,254	70,632,339
Harland, John H. & Company	800	19,955	21,900
McGraw Hill, Inc.	8,400	505,708	495,600
		\$ 77,221,563	\$ 90,206,839
WHOLESALE DISTRIBUTORS (0.41%)			
Alco Standard Corporation	7,000	\$ 253,526	\$ 341,250
Fleming Companies, Inc.	8,000	243,389	265,000
Granger (W.W.), Inc.	9,000	516,974	558,000
Handleman Company	725,550	8,567,488	9,522,843
Lawson Products, Inc.	532,100	13,631,587	13,701,575
McKesson Corporation	1,000	40,405	44,000
National Intergroup, Inc.	1,900	23,332	24,700
Rykoff-Sexton, Inc.	455,850	9,360,222	6,552,843
Super Valu Stores, Inc.	13,600	436,717	457,300
Sycor Corporation	184,300	4,865,321	4,630,537
Waxman Industries, Inc.	435,300	3,771,122	1,469,137
Willcox and Gibbs, Inc.	400,666	1,733,576	2,704,497
		\$ 43,443,659	\$ 40,271,682
TRANSPORTATION (3.24%)			
AMR Corporation	910,900	\$ 55,789,548	\$ 57,614,425
Airborne Freight Corporation	585,000	12,742,615	14,625,000
Burlington Northern, Inc.	19,400	781,941	1,040,325
CSX Corporation	813,700	45,192,166	58,179,550
Consolidated Freightways, Inc.	958,100	23,386,760	15,329,600
Consolidated Rail Corporation	320,000	11,980,643	17,160,000
Delta Air Lines, Inc.	10,000	548,100	483,750
Federal Express Corporation	9,800	468,740	456,925
Norfolk Southern Corporation	28,300	1,735,860	1,843,037
Roadway Services, Inc.	300,600	11,449,150	17,434,800
Santa Fe Pacific Corporation	23,100	305,124	424,464
Southwest Airlines Company	496,000	4,273,427	21,638,000
UAL Corporation	705,200	92,886,897	86,915,900
Union Pacific Corporation	43,900	2,526,028	2,677,900
USAir Group, Inc.	909,000	21,217,432	14,998,500
Yellow Corporation	455,000	13,415,676	8,758,750
		\$298,700,107	\$319,580,926

SEMICONDUCTORS/COMPONENTS (2.16%)

SHARES	TOTAL COST	MARKET TOTAL
17,000	\$ 292,103	\$ 410,125
2,089,000	111,724,117	127,951,250
1,443,900	40,800,752	49,092,600
72,400	2,534,433	3,982,000
2,200	9,966	18,150
343,000	20,960,439	29,969,625
21,500	265,419	346,688
20,000	636,108	1,397,500
Texas Instruments, Inc.		
National Semiconductor Corporation		
Motorola, Inc.		
M/A-Com, Inc.		
Intel Corporation		
Avnet, Inc.		
AMP, Inc.		
Advanced Micro Devices, Inc.		

ELECTRONICS (1.86%)

SHARES	TOTAL COST	MARKET TOTAL
150,400	\$ 3,909,388	\$ 4,173,600
73,100	5,082,699	6,094,712
6,400	118,346	324,800
4,400	84,267	84,700
128,700	5,129,440	5,437,575
1,719,200	55,774,988	66,619,000
5,700	252,144	340,575
855,400	15,975,085	15,717,975
817,800	20,963,048	26,987,400
241,900	13,240,338	14,846,612
8,250	191,627	267,094
1,604,000	39,509,448	42,105,000
Tektronix, Inc.		
Scientific Atlanta, Inc.		
Raytheon Company		
Petric Elmer Corporation		
Mesaurex Corporation		
Loral Corporation		
Harris Corporation		
E-Systems, Inc.		
EG&G, Inc.		
DSC Communications Company		
Computer Sciences Corporation		
Andrew Corporation		

AEROSPACE (1.76%)

SHARES	TOTAL COST	MARKET TOTAL
74,500	\$ 2,663,544	\$ 2,756,500
5,300	533,192	468,387
200	4,188	7,950
10,300	513,201	679,800
683,800	34,760,730	53,934,725
8,900	388,234	659,712
7,800	207,806	325,650
3,037,400	78,912,094	100,993,550
183,800	5,494,204	8,156,126
96,900	4,458,680	5,232,600
United Technologies Corporation		
Sundstrand Corporation		
Rockwell International Corporation		
Northrop Corporation		
McDonnell Douglas Corporation		
Martin Marietta Corporation		
Lockheed Corporation		
Grumman Corporation		
General Dynamics Corporation		
Boeing Company		

COMPUTERS (3.51%)

SHARES	TOTAL COST	MARKET TOTAL
16,300	\$ 262,071	\$ 89,650
23,600	1,320,086	932,200
13,800	578,486	676,200
7,700	169,232	213,675
8,500	98,105	81,812
2,604,700	138,211,675	108,746,225
1,155,000	14,172,878	13,426,875
250,900	10,349,324	20,322,900
7,700	105,500	69,300
2,546,100	190,957,500	125,713,687
75,300	1,139,785	1,148,326
Amdahl Corporation		
Apple Computer, Inc.		
Compaq Computer Corporation		
Cray Research, Inc.		
Data General Corporation		
Digital Equipment Corporation		
Cerber Scientific, Inc.		
Hewlett-Packard Company		
Intergraph Corporation		
International Business Machines Corporation		
National Computer Systems		

	SHARES	TOTAL COST	TOTAL MARKET
COMPUTERS (continued)			
Tandem Computers, Inc.	5,478,700	\$ 66,579,035	\$ 68,483,750
Telxon Corporation	574,000	7,336,244	5,453,000
Unisys Corporation	26,000	243,159	315,250
		\$431,523,080	\$345,672,850
TECHNOLOGY SERVICES (0.60%)			
Autodesk, Inc.	283,500	\$ 13,285,142	\$ 15,982,312
Automatic Data Processing, Inc.	26,700	1,171,857	1,281,600
Ceridian Corporation	15,600	252,156	234,000
Computer Associates, Inc.	36,700	678,706	1,091,825
Lotus Development Corporation	105,500	1,806,188	3,652,937
MacNeal-Schwendler Corporation	577,600	7,049,286	8,230,800
Novell, Inc.	64,300	1,950,516	1,671,800
Oracle Systems Corporation	31,800	698,808	1,566,150
Sun Microsystems, Inc.	866,100	30,416,718	25,658,213
		\$ 57,309,377	\$ 59,369,637
AUTO/PARTS (2.51%)			
Armor All Products Corporation	200,000	\$ 3,200,000	\$ 3,500,000
Bandag, Inc.	126,700	5,605,335	5,780,687
Bandag, Inc. C1-A	730,700	36,973,890	32,607,487
Chrysler Corporation	56,500	1,615,277	2,669,625
Clareor, Inc.	438,050	6,749,242	7,994,412
Cooper Tire & Rubber Company	1,017,100	23,476,824	25,681,775
Echlin, Inc.	7,000	142,380	196,000
Ford Motor Company	406,800	17,650,195	21,255,300
General Motors Corporation	2,753,300	101,432,125	122,521,850
Genuine Parts Company	13,300	431,363	460,512
Goodyear Tire & Rubber Company	36,000	935,910	1,530,000
Lancaster Colony Corporation	286,852	2,999,018	10,972,089
Myers Industries, Inc.	100,000	2,300,000	2,287,500
WD 40 Company	206,900	5,142,794	9,569,126
		\$208,654,353	\$247,026,363
HOUSING RELATED (0.46%)			
Bassett Furniture Industries, Inc.	750	\$ 22,068	\$ 24,562
Centex Corporation	5,300	161,977	180,862
Fedders Corporation	1,100	6,220	5,362
Kaufman & Broad Home Corporation	12,200	187,696	227,225
La-Z-Boy Chair Company	24,200	496,751	701,800
Ladd Furniture, Inc.	285,800	2,669,346	2,572,200
Lennar Corporation	454,000	13,425,240	13,563,250
Maytag Company	203,100	3,032,072	3,046,500
National Presto Industries, Inc.	116,300	5,975,037	6,163,900
Newell Companies	17,400	727,470	578,550
Oneida Ltd	40,700	473,577	488,400
Pulte Corporation	6,500	178,289	205,562
Rubbermaid, Inc.	30,300	1,007,519	859,762
Skyline Corporation	900	14,989	15,187

HOUSING RELATED (continued)		SHARES	TOTAL COST	TOTAL MARKET
Whirlpool Corporation		287,800	\$ 11,872,360	\$ 16,368,626
Zenith Electronics Corporation		2,800	16,184	20,650
			\$ 40,266,795	\$ 45,022,398
MISCELLANEOUS CONSUMER PRODUCTS (2.27%)				
American Greetings Corporation Cl-A	7,800	\$ 372,348	\$ 446,550	
BIC Corporation	413,800	6,800,803	11,948,475	
Black & Decker Manufacturing Company	939,300	20,323,905	20,312,362	
Briggs & Stratton Corporation	295,200	12,761,080	19,520,100	
Brunswick Corporation	12,500	190,574	157,812	
A.T. Cross Company	587,800	12,861,240	9,845,650	
Eastman Kodak Company	1,729,200	81,129,525	86,460,000	
Fleetwood Enterprises, Inc.	7,000	150,653	139,125	
Gibson Greetings, Inc.	300,000	6,991,380	5,512,500	
Husbro, Inc.	1,528,400	28,153,492	57,697,100	
Jostens, Inc.	6,700	180,297	129,812	
Marlet, Inc.	75,100	1,688,892	1,933,825	
Outboard Marine Corporation	5,300	90,295	89,437	
Polaroid Corporation	7,400	236,098	283,050	
Scots Company	197,800	3,416,438	3,412,050	
Snap-On Tools Corporation	7,300	223,630	284,700	
Stanley Works	12,700	482,838	509,588	
Toy Company	240,000	3,596,155	4,470,000	
		\$ 179,649,643	\$ 223,152,136	
FOOD (1.46%)				
Archer Daniels Midland Company	67,400	\$ 1,793,895	\$ 1,592,325	
Borden, Inc.	29,300	808,229	556,700	
CPC International, Inc.	333,500	15,338,668	13,715,187	
Campbell Soup Company	55,400	2,362,292	2,174,450	
Chiquita Brands International, Inc.	475,700	7,827,608	4,994,850	
Conagra, Inc.	45,900	1,449,769	1,158,975	
Curice-Burns, Inc.	410,100	7,378,353	5,280,037	
Dean Foods Company	1,599,350	37,597,409	42,782,612	
DeKalb Genetics Corporation Cl-B	220,600	6,202,269	6,066,500	
General Mills, Inc.	34,700	2,356,025	2,359,600	
Gerber Products Company	11,600	386,308	323,350	
Heinz (H.J.) Company	58,900	2,420,056	2,171,937	
Hershey Foods Corporation	18,700	859,201	881,237	
Kellogg Company	52,400	3,759,996	2,875,450	
Fel, Inc.	15,700	279,680	249,237	
Quaker Oats Company	19,400	1,323,125	1,469,550	
Ralston Purina Company	26,200	1,166,152	1,211,750	
Sara Lee Corporation	495,500	11,259,061	12,263,625	
Savannah Foods & Industries, Inc.	344,600	6,816,177	5,255,150	
Smucker (J.M.) Company	59,100	1,495,821	1,411,012	
Smucker (J.M.) Company Cl-B	322,100	6,884,108	7,206,987	
Toxistic Roll Industries	123,140	3,888,519	8,927,650	
Universal Foods Corporation	527,200	16,026,719	18,188,400	
Wm. Wrigley Jr. Company	32,100	1,128,348	1,067,326	
		\$ 140,804,788	\$ 144,183,897	

	SHARES	TOTAL COST	TOTAL MARKET
BEVERAGE (1.45%)			
Anheuser-Busch Companies, Inc.	66.600	\$ 3,873,329	\$ 3,230,100
Brown-Forman Corporation CI-B	11.200	963,883	975,800
Coca Cola Company	253.900	6,771,558	10,917,700
Coors (Adolph) Company CI-B	961.600	14,819,858	17,909,800
PepsiCo, Inc.	2,973,568	90,887,859	110,022,017
		\$117,316,487	\$143,055,417
TOBACCO (1.61%)			
American Brands, Inc.	57.500	\$ 2,419,367	\$ 1,911,875
Philip Morris Companies, Inc.	3,088,600	173,342,175	149,797,100
UST, Inc.	29,000	961,128	859,125
Universal Corporation - VA	260,200	7,038,278	6,407,426
		\$183,760,948	\$158,975,526
PERSONAL CARE (1.48%)			
Alberto Culver Company CI-A	550,900	\$ 11,767,253	\$ 11,844,350
Alberto Culver Company CI-B	44,700	1,069,334	1,156,612
Avon Products, Inc.	950,900	46,260,850	54,795,612
Clorox Company	8,700	388,514	453,487
Colgate Palmolive Company	517,700	28,371,973	30,156,025
Gillette Company (The)	222,200	8,828,215	12,248,775
International Flavors & Fragrances, Inc.	15,700	1,776,169	1,785,875
Neutrogena Corporation	118,200	2,424,861	2,024,176
Procter & Gamble Company (The)	598,900	26,741,565	31,142,800
		\$127,628,734	\$145,607,712
APPAREL & TEXTILES (0.56%)			
Brown Group, Inc.	559,100	\$ 17,282,428	\$ 17,471,875
Hartmarx Corporation	1,800	9,729	11,250
Liz Claiborne, Inc.	16,600	686,486	514,600
Nike, Inc. CI-B	317,900	25,737,138	17,524,237
Oshkosh B'Gosh, Inc.	2,000	41,614	30,000
Reebok International Ltd	21,200	654,545	590,950
Russell Corporation	472,900	8,867,258	14,068,775
Springs Industries CI-A	6,000	210,947	209,250
Stride Rite Corporation	124,400	2,452,515	1,943,750
V.F. Corporation	14,200	755,708	654,975
WorldTex, Inc.	400,666	3,575,498	2,454,080
		\$ 60,273,866	\$ 55,473,742
PUBLISHING & MEDIA (5.01%)			
Belo (A.H.) Corporation	356,000	\$ 11,351,627	\$ 16,643,000
CBS, Inc.	329,400	64,377,249	77,079,600
Capital Cities ABC, Inc.	45,600	23,796,940	23,392,800
Comcast Corporation	24,100	415,623	530,200
Gannett, Inc.	1,550,900	72,890,923	77,157,275
Knight-Ridder, Inc.	1,708,600	98,376,649	89,274,350
Lee Enterprises, Inc.	300,000	7,888,684	8,175,000
Meredith Corporation	2,100	52,644	75,337
New York Times Company CI-A	2,372,900	68,715,506	57,839,437

PUBLISHING & MEDIA (continued)

MARKET TOTAL	TOTAL COST	SHARES	
\$ 3,523,500	\$ 3,679,300	174,000	TCA Cable TV, Inc.
1,785,876	1,457,185	78,500	Tele Communications, Inc.
73,587,500	79,307,416	2,537,500	Times Mirror Company
19,640,250	16,405,095	365,400	Tribune Company
\$493,033,125	\$494,242,484	194,000	Washington Post Company Cl-B
MISCELLANEOUS CONSUMER SERVICES (1.49%)			
\$ 26,950	\$ 14,784	2,800	Bally Manufacturing Corporation
26,347,950	1,815,113	180,400	H & R Block, Inc.
6,449,300	22,356,900	1,211,400	Blockbuster Entertainment Corporation
12,026,210	11,949,771	677,533	Bob Evans Farms, Inc.
662,527	629,409	30,200	Bowl America, Inc. Cl-A
3,300,000	3,902,294	200,000	Cooker Restaurant Corporation
4,470,275	4,441,021	109,700	Walt Disney Company
542,800	522,773	11,800	Hilton Hotels Corporation
25,561,912	19,068,968	765,900	King World Productions, Inc.
6,412	6,434	300	Lubys Cafeterias, Inc.
497,250	402,424	19,500	Martini Corporation
4,003,687	3,852,819	81,500	McDonald's Corporation
899,250	816,078	119,900	Pancho's Mexican Buffet, Inc.
1,333,800	1,069,617	24,700	Paramount Communications, Inc.
785,150	390,855	16,400	Promus Companies, Inc.
12,950	15,973	700	Shoney's, Inc.
11,882,037	20,487,052	1,558,300	Sizzler International, Inc.
2,781,000	1,862,866	72,000	Time Warner, Inc.
45,585,775	22,081,406	3,116,976	Wendy's International, Inc.
\$249,761,940	\$210,635,243	31,800	Warner-Lambert Company
2,253,826	2,206,660	36,800	L'John Company
1,099,400	1,161,620	1,290	Theapeutic Discovery Corporation
11,521	11,521	1,108,000	Schering-Plough Corporation
77,283,000	47,319,427	631,772	SPI Pharmaceuticals, Inc.
8,607,893	15,644,157	1,244,100	Pfizer, Inc.
83,354,700	61,139,928	817,800	Nylan Laboratories, Inc.
22,285,050	17,703,895	240,400	Nerck & Company, Inc.
8,534,200	11,113,151	67,400	Eli Lilly & Company
3,319,450	4,209,647	136,900	Johnson & Johnson
5,681,350	5,650,365	17,700	Imcera Group, Inc.
531,000	545,833	120,400	Carter-Wallace, Inc.
3,250,800	2,986,860	104,500	Bristol-Myers Squibb Company
6,034,875	4,452,930	478,000	Amergen, Inc.
17,447,000	27,998,546	69,600	American Home Products Corporation
4,489,200	4,833,314	12,900	Alza Corporation Cl-A
354,750	512,164	8,400	Allergan, Inc.
205,800	216,888	185,000	A.L. Laboratories, Inc.
\$ 5,018,125	\$ 2,828,337		DRLCS (2.54%)

	SHARES	TOTAL COST	TOTAL MARKET
HOSPITAL SUPPLY (0.67%)			
Abbott Laboratories	875.100	\$ 7,042,726	\$ 22,424,437
Bard (C. R.), Inc.	8.800	293,159	244,200
Bausch & Lomb, Inc.	354.600	18,323,034	17,508,375
Baxter International, Inc.	64.500	1,241,555	1,846,312
Becton Dickinson & Company	20.200	796,835	808,000
Biomet, Inc.	23.300	375,929	244,650
Kinetic Concepts, Inc.	139.600	1,300,808	628,200
Medtronic, Inc.	15.400	1,496,548	1,039,500
St. Jude Medical, Inc.	7.100	265,423	266,250
U.S. Surgical Corporation	585.300	37,595,767	16,095,750
West Company, Inc.	200.300	3,358,009	4,656,976
		\$ 72,089,793	\$ 65,762,650
HOSPITAL MANAGEMENT (0.75%)			
Beverly Enterprises, Inc.	6.000	\$ 73,602	\$ 74,250
Galen Healthcare, Inc.	26.200	351,892	491,250
Hooper Holmes, Inc.	257.900	2,829,015	3,675,075
Manor Care, Inc.	9.300	203,867	183,676
National Medical Enterprises, Inc.	5,194.200	53,447,553	54,539,100
U.S. Healthcare, Inc.	309.300	15,674,640	14,691,750
		\$ 72,580,569	\$ 73,655,101
RETAIL (6.55%)			
Albertson's, Inc.	26.400	\$ 1,241,834	\$ 1,425,600
American Stores Company	15.700	666,681	728,087
Blair Corporation	216.400	7,373,558	10,657,700
CPI Corporation	413.000	9,435,322	6,453,125
Charming Shoppes, Inc.	2,750.800	44,748,105	37,823,500
Circuit City Stores, Inc.	282.900	2,939,571	9,123,525
Dayton-Hudson Corporation	1,269.900	59,382,766	84,448,350
Dillard Department Stores CI-A	1,126.600	44,348,858	40,839,250
Fabri-Centers of America, Inc.	373.700	7,343,109	5,138,375
Family Dollar Stores, Inc.	996.600	18,865,042	17,315,925
GAP, Inc.	34.100	1,183,726	1,031,525
Genesco, Inc.	2.100	15,550	16,275
Giant Foods, Inc.	10.700	220,843	264,825
Great Atlantic & Pacific Tea Company, Inc.	514.700	14,894,797	16,341,725
Hannaford Brothers Company	442.500	6,342,229	9,624,375
Harcourt General, Inc.	13.600	399,933	511,700
Home Depot, Inc.	462.833	8,497,045	20,248,943
Jacobson Stores, Inc.	141.400	3,253,162	1,714,475
K Mart Corporation	1,856.900	41,275,209	38,994,900
Kroger Company	1,731.400	24,348,930	29,866,650
Lands' End, Inc.	136.400	2,710,366	3,751,000
Limited, Inc.	283.200	5,522,578	6,053,400
Longs Drug Stores, Inc.	4.500	155,672	153,000
Lowe's Companies, Inc.	12.400	188,967	485,150
May Department Stores Company	55.600	1,977,163	2,126,700
Meville Corporation	24.300	1,283,123	1,132,987

MARKET	TOTAL COST	SHARES	TOTAL
	5572,145.215		5645,260,976
	1,140,815	54,600	958,526
	7,039,886	460,090	8,166,597
	1,196,059	16,800	940,800
	1,035,356	24,500	989,187
	18,144,202	1,041,600	27,342,000
	15,349,082	933,800	9,104,550
	31,028,228	984,800	36,191,400
	330,676	11,800	354,000
	13,314,026	411,500	13,939,562
	14,498,018	435,900	12,641,100
	1,757,775	97,600	1,159,000
	84,369,845	2,044,400	112,442,000
	9,946,603	787,600	15,850,450
	255,142	10,700	192,600
	394,010	10,700	363,800
	410,214	11,100	641,025
	23,621,880	1,007,700	22,673,250
	1,617,526	52,400	2,364,550
	10,910,857	305,700	8,559,600
	2,606,848	134,700	2,155,200
	24,245,834	1,991,000	21,652,125
S	318,194	9,700	328,587
	2,009,001	230,000	2,070,000
	512,746	9,800	565,950
	9,043,335	404,500	13,651,375
	706,084	17,400	854,775
	18,050,511	415,800	26,091,450
	1,024,089	26,200	1,270,700
	5,260,335	230,950	8,429,675
	837,080	27,000	911,250
	44,713,488	1,335,000	64,086,250
	637,819	13,400	755,425
	11,993,712	556,500	16,973,250
	2,666,909	42,300	2,871,112
	830,504	27,900	903,262
	28,765,756	751,088	37,272,742
	1,260,662	59,400	1,626,075

- BANKS (5 027)
- Baltimore Bancorp
 - Banc One Corporation
 - Bank of Boston Corporation
 - BankAmerica Corporation
 - Bankers Trust of New York Company
 - Bancett Bank, Inc
 - Baughman's Bancshares, Inc
 - Chase Manhattan Corporation
 - Chemical Banking Corporation
 - Citicorp
 - Comerical Bank Corporation
 - Corestates Financial Corporation
 - First Alabama Bancshares, Inc
 - First Chicago Corporation
 - First Fidelity Bancorporation
 - First Interstate Bancorp
 - First Union Corporation
 - First Virginia Bank, Inc
 - First Financial Group, Inc
 - KeyCorp
 - Mellon National Corporation
 - Norwest Bancorporation, Inc
 - NBD Bancorp, Inc
 - NationsBank Corporation
 - Norwest Corporation

- RETAIL (continued)
- Mercantile Stores Company
 - Mery-Goround Enterprises, Inc
 - New England Business Service, Inc
 - Nordstrom, Inc
 - Penney (J.C.), Inc
 - The Pep Boys Manny, Moe & Jack
 - Premark International, Inc
 - Price Company
 - Rite Aid Corporation
 - Ruddick Corporation
 - Sears Roebuck & Company
 - Seaway Food Town, Inc
 - Stahmer, Inc
 - TJX Companies, Inc
 - Tandy Corporation
 - Toys R Us, Inc
 - U.S. Shoe Corporation
 - Wal-Mart Stores, Inc
 - Walgreen Company
 - Winn-Dixie Stores, Inc
 - Wolman Lumber Company
 - Woolworth Corporation

TOTAL MARKET

	SHARES	TOTAL COST	TOTAL MARKET
BANKS (continued)			
PNC Financial Corporation	50,500	\$ 1,395,954	\$ 1,653,875
Republic of New York Corporation	2,190,000	93,056,822	111,416,250
Shawmut National Corporation	16,800	285,594	401,100
State Street Boston Company	165,000	7,618,880	5,465,626
Suntrust Banks, Inc.	26,000	1,056,525	1,225,250
U.S. Bancorp	10,700	252,612	267,500
U.S. Trust Corporation	53,600	2,692,226	2,867,600
Wells Fargo & Company	11,000	807,656	1,212,750
Wilmington Trust Company	250,000	7,261,605	6,812,500
		\$367,779,832	\$494,520,278
SAVINGS & LOANS (0.43%)			
Ahmanson (H.F.) & Company	18,300	\$ 297,968	\$ 317,962
Golden West Financial Corporation	157,700	6,053,526	6,682,538
Great Western Financial Corporation	2,096,800	31,978,838	35,121,400
		\$ 38,330,332	\$ 42,121,900
MISCELLANEOUS FINANCIALS (1.53%)			
Beneficial Corporation	5,900	\$ 360,890	\$ 433,650
Dreyfus Corporation	196,500	6,967,687	8,007,375
Federal Home Loan Mortgage Company	38,900	1,750,195	2,173,537
Federal National Mortgage Association	421,400	21,340,188	34,923,525
Household International, Inc.	312,100	15,263,582	21,573,912
MBIA, Inc.	700,000	36,012,000	46,112,500
MBNA Corporation	18,200	402,075	532,350
Merrill Lynch & Company, Inc.	22,400	1,315,126	1,814,400
Primerica Corporation	632,700	20,376,423	33,295,837
Ryder Systems, Inc.	12,300	316,281	384,375
Salomon, Inc.	26,700	965,137	1,021,276
		\$105,069,584	\$150,272,737
INSURANCE (3.50%)			
Aetna Life & Casualty Company	21,200	\$ 931,813	\$ 1,173,950
Alexander & Alexander Services, Inc.	11,700	305,775	323,212
Allstate Corporation	353,400	9,541,800	10,248,600
American General Corporation	49,800	902,503	1,374,925
American International Group, Inc.	848,700	57,122,273	109,482,300
Cigna Corporation	1,389,600	76,822,647	84,591,900
CNA Financial Corporation	12,000	1,134,608	1,134,000
Capital Holdings Corporation	22,600	345,741	884,225
Chubb Corporation	66,900	5,520,268	5,811,937
Cincinnati Financial Corporation	142,000	2,725,364	8,378,000
Continental Corporation	8,600	227,630	267,675
Gallagher (Arthur J.) and Company	358,800	7,517,209	11,795,550
General RE Corporation	15,400	1,723,448	1,757,525
Hibb Rogal & Hamilton Company	310,100	4,449,777	4,186,350
Jefferson Pilot Corporation	287,300	11,934,223	14,329,087
Lincoln National Corporation	16,200	561,663	629,775
Marsh & McLennan Companies, Inc.	16,200	1,502,326	1,415,475
Ohio Casualty Corporation	87,000	5,436,948	5,568,000
Safeco Corporation	308,400	15,921,512	18,002,850

INSURANCE (continued)	SHARES	TOTAL COST	TOTAL MARKET
St. Paul Companies, Inc.	6,000	435,163	\$ 476,250
TIG Holdings, Inc.	251,100	5,681,137	6,403,050
Torchmark Corporation	389,600	20,894,119	20,697,500
Transamerica Corporation	13,600	620,469	719,100
Travelers Corporation	1,071,500	28,839,726	34,288,000
USF&G Corporation	2,600	35,929	47,125
USLife Corporation	5,850	193,328	242,044
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ELECTRIC UTILITIES (2,507)	38,600	\$ 1,243,077	\$ 1,457,150
American Electric Power Company, Inc.	23,400	545,127	599,625
Baltimore Gas & Electric Company	40,800	1,069,895	1,331,100
Carolina Power & Light Company	29,800	865,460	968,500
Commonwealth Edison Company	44,700	1,640,185	1,251,600
Consolidated Edison Company of New York, Inc.	794,600	16,908,672	28,009,650
Detroit Edison Company	36,700	1,182,982	1,275,325
Dominion Resources, Inc.	33,500	1,324,265	1,490,750
Duke Power Company	42,100	1,504,380	1,678,737
Energy Corporation	842,200	28,207,317	30,529,750
FPL Group, Inc.	32,200	326,106	1,227,625
Houston Industries, Inc.	27,800	1,250,278	1,216,250
NipSCO Industries, Inc.	400,000	10,099,000	13,050,000
Niagara Mohawk Power Company	3,099,000	57,826,487	74,763,375
Northern States Power Company	17,700	761,577	811,987
Ohio Edison Company	16,700	374,031	411,237
PSI Resources, Inc.	2,300	42,563	54,912
Pacific Gas & Electric Company	82,300	2,612,953	2,746,762
PacificCorp	1,070,100	18,836,749	20,331,900
Philadelphia Electric Company	600,800	15,687,007	18,399,500
Portland General Corporation	678,400	16,330,667	15,009,600
Public Services Enterprise Group, Inc.	45,000	1,302,618	1,541,250
SCE Corporation	96,000	2,133,355	2,328,000
Southern Company	65,300	2,389,947	2,750,762
Texas Utilities Company	480,400	17,508,279	21,978,300
Union Electric Company	22,600	827,667	935,076
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NATURAL GAS DISTRIBUTORS (0,267)	424,500	\$ 18,679,518	\$ 22,445,437
Consolidated Natural Gas Eastern Enterprises	9,500	257,147	269,562
El Paso Natural Gas Company	39,810	867,858	1,552,590
Nicor, Inc.	18,600	447,712	506,850
Oncor, Inc.	5,000	91,998	130,625
Pacific Enterprises	5,500	103,227	134,062
Peoples Energy Corporation	11,800	365,690	382,026
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		\$ 20,813,150	\$ 25,421,152
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		\$ 202,800,644	\$ 246,148,723

	SHARES	TOTAL COST	TOTAL MARKET
TELEPHONE UTILITIES (5.34%)			
American Telephone & Telegraph Company	2,207.700	\$ 88,557,431	\$ 139,085,100
Ameritech Corporation	58,000	3,873,858	4,661,750
Bell Atlantic	468,700	22,561,799	27,829,062
BellSouth Corporation	102,800	5,157,642	5,705,400
Century Telephone Enterprises, Inc.	113,100	1,934,017	3,491,962
Comsat Corporation	881,800	16,030,124	26,674,450
GTE Corporation	1,039,100	23,239,087	37,537,487
MCI Communications Corporation	2,527,500	77,034,626	145,331,250
NYNEX Corporation	45,600	3,744,245	4,126,800
Pacific Telesis Group	1,966,700	87,532,014	95,630,787
Southwestern Bell Corporation	772,000	24,762,600	29,915,000
Sprint Corporation	45,100	1,166,298	1,584,137
USWest, Inc.	88,600	3,305,836	4,064,526
		\$ 358,899,577	\$ 525,637,711
WATER SUPPLY (0.14%)			
American Water Works Company, Inc.	522,900	\$ 10,501,144	\$ 14,249,026
Sub Total		\$8,441,946,317	\$9,848,998,448
Net Securities Traded Not Settled		40,901,601	26,313,555
Total Common Stocks		\$8,482,847,918	\$9,875,312,003

MARKET VALUE	BOOK VALUE		MARKET VALUE
500,000	500,000	S	500,000
1,394,711	1,500,000		1,394,711
1,030,970	1,737,793		1,030,970
32,820	50		32,820
11,864	90		11,864
148,736	8,718		148,736
625,000	625,000		625,000
441,061	500,000		441,061
1,131,773	700		1,131,773
2,403,901	700,514		2,403,901
8,907,193	7,080,000		8,907,193
9,700,000	9,700,000		9,700,000
136,786	350		136,786
26,467,815	22,353,215	S	26,467,815

BONDS

MARKET VALUE	BOOK VALUE		MARKET VALUE
460,335,113	928,881,540	S	460,335,113
580,327,502	2,139,859,000		580,327,502
4,279,925,884	8,183,391,901		4,279,925,884
833,565,770	699,346,000		833,565,770
2,180,008	1,895,000		2,180,008
159,125,432	147,259,368		159,125,432
146,839,670	134,880,000		146,839,670
1,403,040,256	1,308,534,000		1,403,040,256
941,924,140	902,427,738		941,924,140
13,326,945	10,500,000		13,326,945
168,209,537	165,895,736		168,209,537
8,988,800,257	514,622,870,283	S	8,988,800,257

SHORT TERM/LIQUIDITY RESERVES

MARKET VALUE	BOOK VALUE		MARKET VALUE
5,000,000	5,000,000	S	5,000,000
1,501,825,000	1,501,825,000		1,501,825,000
775,790,800	753,178,000		775,790,800
202,956,950	195,000,000		202,956,950
2,485,572,750	2,455,003,000	S	2,485,572,750

GUARANTEED MORTGAGES

	BOOK VALUE	PAR VALUE	MARKET VALUE
Government National Mortgage Association	\$ 22,835,208	\$ 23,919,422	\$ 25,720,281
Federal Home Loan Mortgage Corporation	1,437,360,414	1,317,057,009	1,445,194,795
Federal National Mortgage Association	1,135,260,013	1,328,739,367	1,132,371,492
Federal Housing Administration Insured Project Loans	12,250,910	13,194,796	13,635,159
	\$ 2,607,706,545	\$ 2,682,910,594	\$ 2,616,921,727
SINGLE FAMILY DIRECT			
FHA 235	\$ 3,831,112	\$ 4,059,140	\$ 4,977,043
FHA 203	137,462,765	138,747,468	159,324,918
VA 501	86,089,776	88,431,674	100,212,528
FHA 245	15,106,829	15,852,886	18,492,629
FHA 296	30,246,032	29,435,827	33,854,315
FHA 234	2,707,591	2,719,085	3,086,899
VA Vendee Loans	4,255,580	4,575,403	5,151,496
GNMA Certificates	12,167,916	12,420,131	13,435,135
Total	\$ 291,867,601	\$ 296,241,614	\$ 338,534,963
MULTIFAMILY DIRECT			
FHA 207 (Rental Apartment)	\$ 56,368,138	\$ 57,116,835	\$ 62,102,695
FHA 221 (Rental Apartment)	336,199,872	340,950,391	348,897,468
FHA 231 (Senior Citizen)	34,025,853	37,426,631	37,874,095
FHA 232 (Nursing Home)	132,078,687	134,867,105	147,985,377
FHA 220 (Urban Renewal Apt)	33,967,968	34,729,576	38,526,080
FHA 236 (Subsidy Housing)	108,667,562	108,905,652	109,004,231
GNMA Project Certificates	17,716,954	17,867,368	19,968,319
Construction Loans	92,872,585	93,646,648	94,181,648
Total	\$ 811,897,619	\$ 825,510,206	\$ 858,539,913
Sub Total	\$ 3,711,471,765	\$ 3,804,662,414	\$ 3,813,996,603
Net Securities Traded Not Settled	18,488,578	19,000,000	19,332,500
Total Guaranteed Mortgages	\$ 3,729,960,343	\$ 3,823,662,414	\$ 3,833,329,103

REAL ESTATE

	BOOK VALUE	MARKET VALUE	PERCENT
Participating Mortgages	\$ 234,352,895	\$ 215,599,266	12.4%
Multitenant Properties	527,527,978	455,203,370	26.2%
Joint Ventures	360,701,892	285,000,001	16.4%
Sale-Leaseback			
Retail Equities	407,520,252	391,652,846	22.6%
Syndications	44,935,670	47,800,000	2.8%
Non-Retail	3,786,732	4,600,000	0.3%
Total Sale-Leaseback	456,242,654	444,052,846	25.7%
Separate Accounts	259,522,014	334,857,731	19.3%
Total Real Estate	\$ 1,838,347,433	\$ 1,734,713,214	100.0%

Footnotes to Schedule of Investments

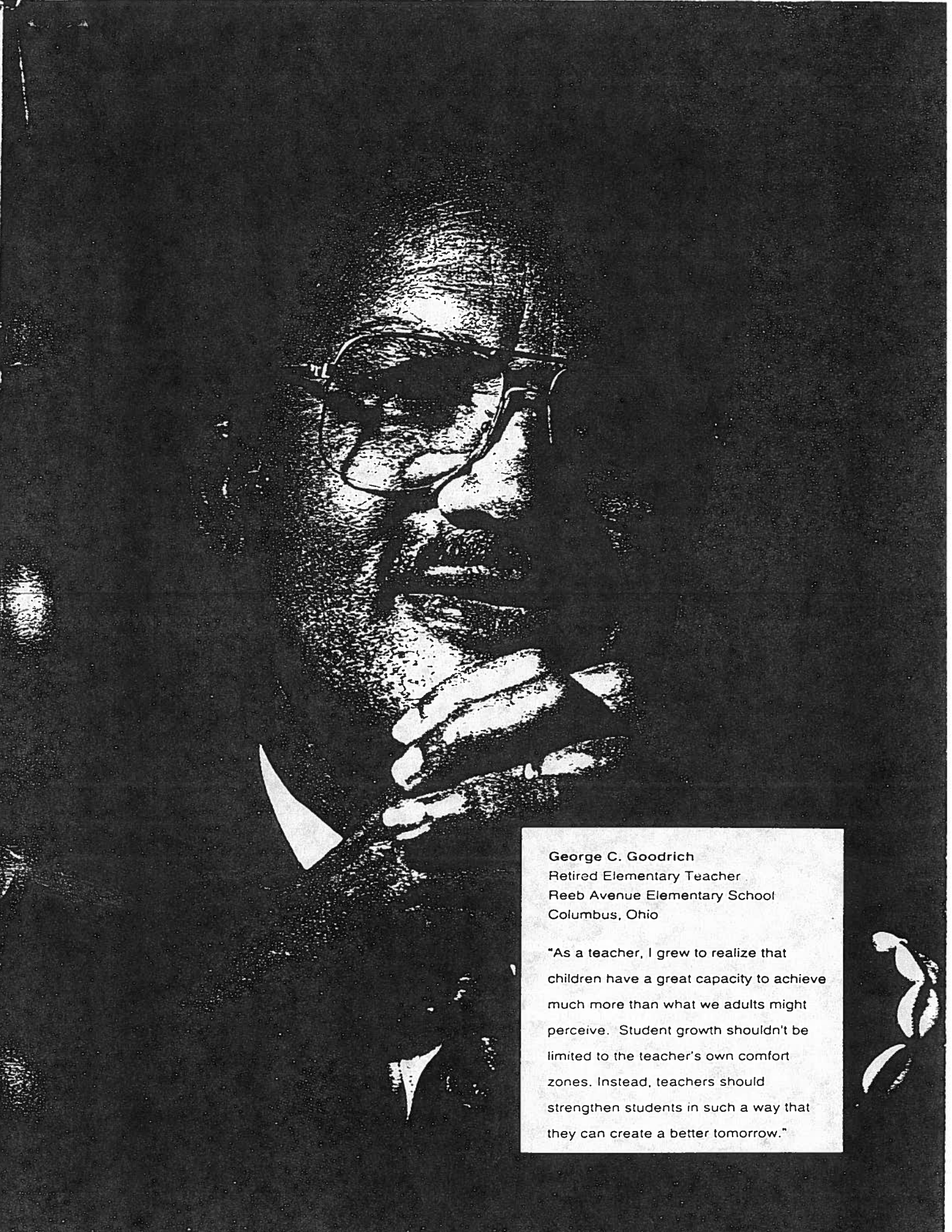
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1. Explanation of market values

- 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. Mortgage values were based on market yields available at the time of evaluation.
- C. Common and 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 on the "Bid Price" provided by the National Association of Securities Dealers' NASDAQ System.
- D. Valuations of real estate: Sale leasebacks were valued based on discounting the property's income stream at current market rates; multifamily properties were valued by an alternating schedule of independent MAI appraisals and STRS staff valuations based on discounted cash flow analysis; commingled funds and separate accounts are valued annually by independent appraisals. All valuation procedures have been approved by the Retirement 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.

The data included in the 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, 1993. Financial market changes beyond that date may significantly affect the reported amounts.

2. The investments listed were purchased and settled by June 30, 1993. 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.



George C. Goodrich
Retired Elementary Teacher
Reeb Avenue Elementary School
Columbus, Ohio

"As a teacher, I grew to realize that children have a great capacity to achieve much more than what we adults might perceive. Student growth shouldn't be limited to the teacher's own comfort zones. Instead, teachers should strengthen students in such a way that they can create a better tomorrow."

The State Teachers Retirement System of Ohio
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Columbus, Ohio 43215-3771
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Comprehensive Annual Financial Report
1993