State Teachers
Retirement System of Ohio
Comprehensive Annual
Financial Report
Fiscal Year Ended June 30, 1994

A Tribute to Ohio Teachers

My Favorite Jeacher
A Tribute to Ohio Teachers

State Teachers Retirement System of Ohio Comprehensive Annual Financial Report Fiscal Year Ended June 30, 1994

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

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STRS Philosophy

Mission

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

Vision

To be a premier rettrement system, as evidenced by:

- · Accurate, prompt and courteous service
- · Comprehensive benefits
- · Exceptional investment returns
- Actuarial soundness

Certificate of Achievement for Excellence in Financial Reporting

Presented to

The State Teachers Retirement System of Ohio

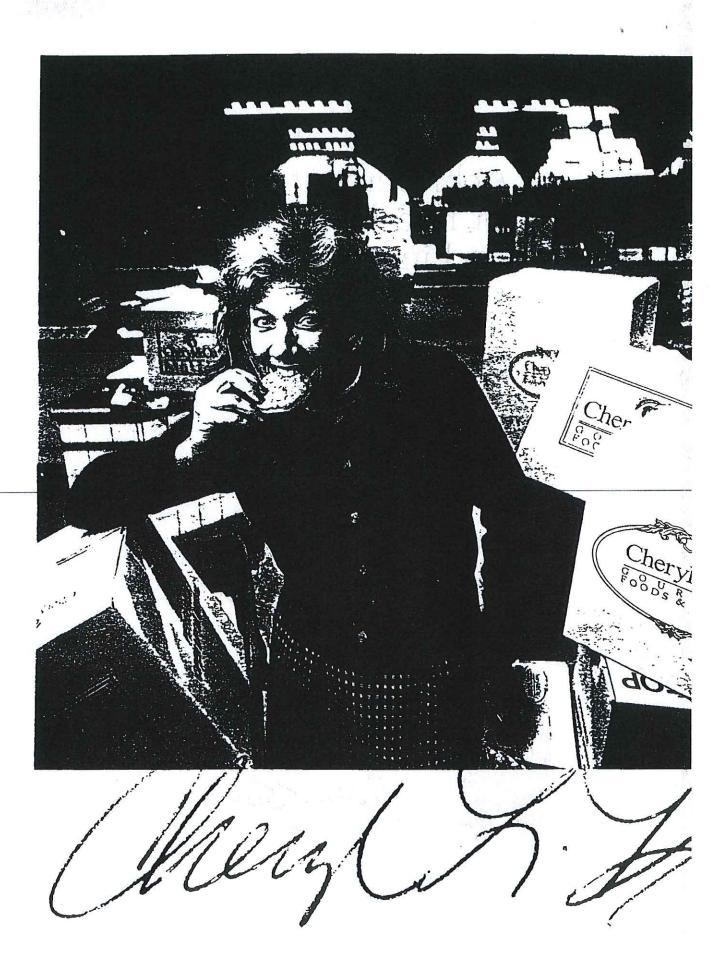
For its Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 1993

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.

WICE OF FROM

President

Executive Director





Betty Ocasek Peters, Chair. Retired teacher member since 1983. Summit County.



William A. Dorsey, Vice Chair. Teacher member since 1990. Painesville City Local Schools, Lake County.



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



Marilyn B. Cross Appointed member from March 1994 to August 1994 Medina City Schools, Medina County



Charles W. Jewell
Teacher member
since 1984
Youngstown City
Schools Mahoning
County.



Hazel A. Sidaway Teacher member since 1986 Canton City Schools Stark County



Thomas E.
Ferguson,
Auditor of State
Ex officio member
of the board since
elected to office
in 1975

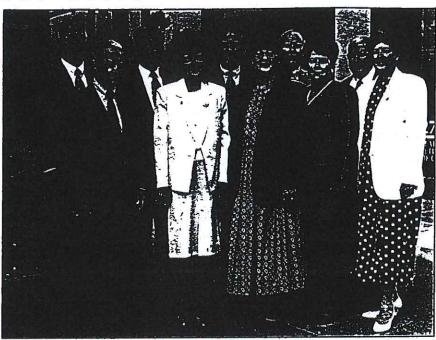


Lee I. Fisher, Attorney General Ex officio member of the board since elected to office in 1991



Ted Sanders,
Superintendent of
Public Instruction
Expriso member of
the board since
appointed to office

The Board



The State Teachers Retirement Board meets monthly to transact business and set policy. Front row, from left to ngot are: 0. Fred Knippenburg, representing the auditor of state; Betty Ocasek Peters; Theresa Schaefer, representing the attorney general; Marilyn B. Cross; Hazel A. Sidaway: Back row, from left to nght are: Herbert L. Dyer, executive director; William A. Dorsey; Jack H. Chapman, Dr. James Van Keuren, representing the supermiserdent of public instruction; and Charles W. Jewell.

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, 1993 through June 30, 1994.



William C. McDonald, longtime Retirement Board member, died March 16, 1994. McDonald was a highly respected and influential Ohio educator. He served on the State Teachers Retirement Board for 17 years, including several terms as board chair and vice chair.

With deep sadness and a sense of great loss, we acknowledge the passing of a good friend and colleague. His contributions to the Retirement Board, education and the community will be missed.

Cheryl L. Krueger President and CEO, Cheryl & Co.

My favorite teacher was, without a doubt, Mrs. Preston, my physical education teacher at Bellevue High School for four years.

Mrs. Preston was always firm, but fair. She asked each student to do his or her best, and she knew when we weren't doing it! She'd push us until she knew that we were doing the best we could possibly do, then she'd congratulate us.

She prompted each of us to obtain individual goals, but still was instrumental in teaching me the value of teamwork. Mrs. Preston was always positive and upbeat. She worked with every student, so that even the most uncoordinated of us felt a great sense of fulfillment.

Mrs. Preston was very busy and involved in many extracurricular activities, but she always had the time to listen to my ideas and concerns. She offered advice freely — usually the best advice!

Mrs. Preston is special because she made a difference in my life, which I believe is what every teacher hopes to accomplish.





Professional Consultants

Independent Public Accountants:

Deloitte & Touche LLP, Columbus, Ohio

Investment Advisors: Frank Russe

Frank Russell Company Real Estate Consulting, Tacoma, Washington

Wellington Management Company, Boston, Massachusetts

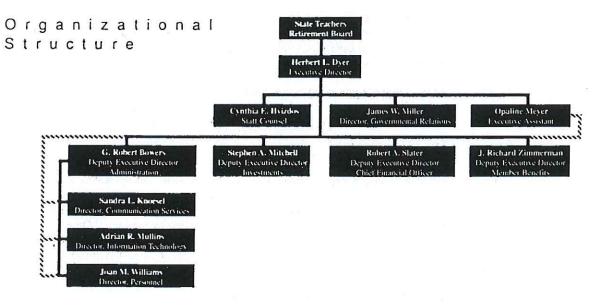
Actuarial Consultant:

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. Seated, from left to right are. G. Robert Bowers, deputy executive director. — Administration; Robert A. Slater, deputy executive director, chief financial officer; Herbert L. Dyer, executive director: Stephen A. Mitchell, deputy executive director.— Investments, J. Richard Zimmerman, deputy executive director.— Member Benefits. Standing, from left to right are. Cynthia E. Hytzdos, staff counsel; Joan M. Williams, director of Personnel; Adrian R. Mullins, director of Information Technology Services, Opaline Meyer, executive assistant; Sandra L. Knoesel, director of Communication Services; James W. Müller, director of Governmental Relations.



Letter of Transmittal

THE STATE TEACHERS RETIREMENT SYSTEM OF OHIO 275 EAST BROAD STREET, COLUMBUS OH 43215-3771

273 EAST BROWN STREET, COLUMBUS ON 43213

TELEPHONE (614) 227-4090

HERBERT L. DYER, Executive Director

DEPUTY EXECUTIVE DIRECTORS
G. ROBERT BOWERS, Administration
STEPHEN A. MITCHELL, Incontinuous
ROBERT A. SLATER, Chief Transchil Officer
PARTIES OF THE PROPERTY AND ADMINISTRATION OF THE PROPE

STATE COURSEL CYNTHIA E HVIZDO

December 1, 1994

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 (STRS) for the fiscal year ended June 30, 1994. This report is intended to provide readers with financial, investment, actuarial and statistical information in a single publication.

The State Teachers Retirement System was created by legislative act on May 8, 1919, as an alternative to separate, often-unstable individual school district retirement plans. This cost-sharing, multiple-employer plan now provides service retirement, disability, survivor and health care benefits to teachers and faculty members of public boards of education, state-supported colleges and universities, and 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 valuation and certification letter of Buck Consultants; (4) the Statistical Section consists of historical data showing the progress of the system; and (5) the Investment Section includes a summary of investment assets and the Retirement Board's Objective and Policy Statement.

Major Initiatives

A research consulting firm was hired to survey active and retired teachers about the level of satisfaction with STRS services. More than 90% of survey participants indicated a high degree of satisfaction with account accuracy as well as staff courtesy and knowledge. The survey findings also showed opportunities for additional services, such as on-line computer information.

Benefit recipients were surveyed separately about the quality of services provided by the two primary STRS Health Care Program administrators: Aetna Health Plans and Blue Cross & Blue Shield of Ohio. Of the 55% of benefit recipients who responded, most indicated overall satisfaction with health care benefits and services.

A series of employer reporting workshops was conducted at the STRS headquarters in Columbus and at other locations around the state. The purpose of the workshops was to provide an overview of STRS reporting procedures and to allow preparers a face-to-face opportunity to ask questions and make suggestions. Based on higher-than-expected participation and favorable evaluations, similar sessions will be provided on a periodic basis.

STRS was an inaugural recipient of the Public Pension Principles Award sponsored and administered by the Public Pension Coordinating Council, a consortium of national organizations. The award recognized STRS' achievements in benefits, investments, financial reporting and actuarial valuations. Additionally, four STRS publications were recognized by the central Ohio chapter of the Public Relations Society of America (PRSA) for content, writing, layout and graphic design. The 1993 Benefits Summary, 1993 Comprehensive Annual Financial Report, Recruitment Brochure and Retirement Planning Seminar Workbook all received PRSA's PRISM award.

A complete Year in Review can be found on Pages 12-17 of this report.

Economic Environment

The period from July 1, 1993 through June 30, 1994, showed strong economic growth nationally. Real growth in the gross domestic product averaged 4%. The lowest long-term interest rates in 28 years sparked spending in housing, autos and capital equipment. In the last half of the year, unemployment fell to 6.0% from 6.7%.

STRS took advantage of lower bond yields to reduce the portfolio's price sensitivity to interest rate changes. Gains were realized on the sale of bonds originally purchased when interest rates were much higher. For 1995, the fixed-income portfolio has been positioned for moderate growth in interest rates.

The Ohio General Assembly passed legislation to allow STRS to invest up to 50% (formerly 35%) of assets in U.S. stocks. With the economy in a growth phase, most of the liquidity reserves were used to increase the allocation of stocks to 42.6% at cost by fiscal year-end. Equity holdings are divided into groups that use complementary approaches to stock selection. Foreign investments were added to the portfolio in the 1993–94 fiscal year. Limited to 10% of assets, the international portfolio totaled 2.7% at June 30, 1994.

Recovery of the real estate market finally began in fiscal 1994. Vacancy rates declined and investors began putting money into the market. Even though the investment in real estate shrunk to 6.4% of total investments at cost by fiscal year-end, the State Teachers Retirement Board remains committed to real estate as a long-term investment class. New investments for 1993–94 totaled \$215 million including \$63 million in real estate investment trusts (REITs).

The forecast for lower investment returns in the future will mean less opportunity for permanent or temporary benefit improvements. Further, financing for education has been tight statewide for several years. Slower-than-expected growth in teacher payrolls has produced actuarial losses for two straight years. However, actuarial assumptions were adjusted last year to reflect economic changes, and steady improvement in STRS' funding status is anticipated.

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 weakness in internal control was reported during the conduct of the audit.

The financial statements for the fiscal year ended June 30, 1994, have been audited by Deloitte & Touche LLP, Columbus, Ohio. Their report is shown on Page 20.

Financial Highlights

Revenues

	1994	1993	(Decrease)
Net investment income	\$2,231,241,000	\$2,394,523,000	(6.8%)
Contributions	1,499,686,000	1,442,802,000	3.9%
Total revenues	\$3,730,927,000	\$3,837,325,000	(2.8%)

Growth in contribution revenues was less than anticipated. Covered payroll increased only 4.3% while transfers from other retirement systems decreased during the year.

The Retirement Board may pay a supplemental benefit to benefit recipients when the annual return on book value of assets exceeds the assumed investment return of 7.5%. The realized return for 1993–94 was 8.8%, and the board allocated \$34 million for payment of a supplemental benefit in December 1994.

Expenses

	1994	1993	Increase (Decrease)
Benefits	\$1,403,843,000	\$1,323,643,000	6.1%
Withdrawals	18,235,000	16.386,000	11.3%
Administrative expense	38,770,000	35,870,000	8.1%
Total expenses	\$1.460,848,000	\$1,375,899,000	6.2%

Pension benefits for service retirement, disability and survivors increased 9.9% for the year. The most significant change was a 16% reduction in net health care costs as a result of implementing managed care networks and retirees paying an increased share of the premium cost.

Funding

Contribution rates are actuarially determined to provide a level basis of funding using the entry age normal cost method, and an actuarial valuation is performed annually by Buck Consultants, Chicago. The July 1, 1994, valuation shows that the amortization period for the unfunded accrued liability decreased to 30.5 years from 31.5 years, and the ratio of assets to total accrued liabilities improved to 77% from 76%.

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, 1994, was \$34.5 billion, excluding health care.

Investments

Providing the financial foundation of STRS, total investment assets grew to \$26.8 billion as of June 30, 1994. Nearly all assets are internally managed and are strategically allocated among three primary portfolios: fixed income, common and preferred stocks, and equity 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 begins on Page 61.

Review of Operations and Activities

i

STRS devotes much time and attention to advising members and retirees about their benefits. A comprehensive account statement is sent each year that shows projected benefits and a history of reported earnings and service credit. In addition, individual counseling sessions are offered at STRS headquarters and at various locations around the state. STRS associates are available to conduct general meetings for active and retired teacher groups. The STRS Retirement Planning Seminar, Life Planning Workshop and annual Information Fair are also popular forums for presenting information about STRS benefits. Periodic newsletters are mailed to both active and retired members.

Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) 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, 1993. 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 whose contents conform to program standards. This report 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 four 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

The 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 making management decisions, for determining compliance with legal provisions, and for determining responsible stewardship of the assets contributed by members and their employers.

Respectfully submitted.

Herbert L. Dyer Executive Director

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

RETIREMENT BOARD

1993-94: Year in Review

The following are highlights of STRS' fiscal year: July 1, 1993 through June 30, 1994.

Board approves 14th supplemental benefit payment

The Retirement Board, at its October 1993 meeting, allocated nearly \$34 million for a December 1993 supplemental benefit payment to approximately 72,000 benefit recipients. The supplemental benefit had a \$12 unit value.

This was the 14th consecutive supplemental benefit since the Retirement Board was granted authority in 1980 to issue supplemental benefits. The 14 supplemental benefit payments have totaled more than \$402 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 actuarial funding requirements for the regular benefit plan.

Cost-of-living increase authorized for 1993-94

STRS retirees who received a benefit before July 1, 1992, received a 3% cost-of-living increase on their cost-of-living adjustment anniversaries in fiscal year 1993–94. The annual inflation rate for 1992 was 2.9%, as measured by the U.S. Department of Labor's Consumer Price Index (CPI).

A cost-of-living increase is awarded if a retiree has enough points in his or her cost-of-living reserve account. A retiree establishes a reserve account on the first anniversary of retirement. At that time, cost-of-living points are deposited into the retiree's reserve bank account. The number of points is determined by the previous year's inflation rate.

Points accrue the same way each year on the retiree's retirement anniversary date. When a reserve account has enough points to qualify for the 3% cost-of-living adjustment, the appropriate points are withdrawn from the account and the cost-of-living adjustment is made on the next anniversary date.

In a year when the CPI increase is under 3%, such as in 1992, a retiree will still get a 3% cost-of-living adjustment if there are at least three percentage points in reserve. If a retiree does not have at least three percentage points in reserve, the retiree will not receive an adjustment but will receive the CPI increase as an addition to the reserve account.

Board member William McDonald dies

Retirement Board member William C. McDonald died on March 16, his 67th birthday. McDonald was first elected to the board in 1977. He won reelection in 1981, 1985, 1989 and 1993. He was board chair in 1985 and 1991, and served as vice chair for several years.

McDonald was an influential and respected Ohio educator. He also left a legacy of goodwill service through his involvement with educational, civic and social organizations. His contributions to STRS, education and the community will be greatly missed.

Marilyn B. Cross, president of the Ohio Education Association, was appointed to fill the board position left vacant by McDonald's death. Upon Cross' resignation in August, Deborah Bell, a Hamilton County teacher, was appointed to and sworn into the position.

STRS wins awards for excellence in communications

For the fourth 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 was for the Comprehensive Annual Financial Report for the fiscal year ending June 30, 1993. 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 governmental financial professionals.

STRS also won four PRISM Awards from the central Ohio chapter of the Public Relations Society of America (PRSA). These prestigious awards were given for STRS' 1993 Benefits Summary, 1993 Comprehensive Annual Financial Report, Recruitment Brochure and Retirement Planning Seminar Workbook and accompanying materials. The PRISM award represents the highest professional standards in publication content, writing, layout and graphic design.

STRS receives pension achievement award

STRS was honored in 1994 with a Public Pension Principles Achievement Award for fiscal year 1993. This was the first year for the awards program, which is administered by the Public Pension Coordinating Council.

The award program was established to promote high professional standards for public employee retirement systems and to commend the systems that adhere to those standards. To receive the award, the system must have complied with stringent principles related to actuarial valuation and review, benefits, financial reporting and auditing, investments and disclosure.

1993-94: Year in Review (cont.)

Surveys reveal high satisfaction with system, health care plans

Two surveys were conducted in the first half of 1994 to gauge members' and retirees' satisfaction with the system in general and with the retiree health care program.

The first study, conducted by CJI Research Corporation of Columbus, showed that a large percentage of members and retirees are highly satisfied with the overall service they receive from STRS. The study consisted of phone interviews and focus groups with both active and retired members.

Among the highlights of the study:

- More than five out of six active and retired teachers rated their overall satisfaction with STRS as "very good" or "excellent."
- Even higher percentages of members rated staff courtesy and account accuracy as "very good" or "excellent."
- More than 93% of active members and 92% of retired members felt that staff knowledge met or exceeded their expectations.

The second study, developed and conducted by STRS, was a mail survey asking retirees to rate the quality of services provided by STRS' Health Care Program administrators: Aetna Health Plans and Blue Cross & Blue Shield of Ohio. The survey asked such questions as: Are claims paid accurately and on a timely basis? Is the explanation of benefits easy to read and understand? Is customer service satisfactory? Retirees were also asked to rate their overall satisfaction with their health care plans.

Fifty-five percent of those surveyed responded. In general, respondents indicated they were highly satisfied with all aspects of the health care programs.

Study completed about lowering service retirement eligibility

In response to questions from teachers, STRS conducted a study about the financial impact of allowing teachers to retire at any age without a reduction in the full benefit calculation if they have at least 25 or 27 years of service. Presently, members who retire at any age with at least 30 years of service receive the full benefit calculation of 63% of final average salary.

The study, conducted by the actuarial firm Buck Consultants of Chicago, showed that the cost of allowing earlier retirement would be prohibitive for most teachers. For example, to receive the full benefit calculation of 63% of final average salary, a teacher's annual contribution to STRS would have to more than double. In addition, health care costs would increase dramatically because the change would increase the number of retirees receiving health care coverage.

The Retirement Board is continuing to study options to improve benefits as additional contributions and investment income become available. The board has no authority to change the benefit plan calculations. The Ohio General Assembly sets the plan design and maximum contribution rates.

Retirement Board adopts actuary's recommendations

In November 1993, Buck Consultants presented to the Retirement Board a report of STRS' funding status as of July 1993.

Based on Buck's recommendations, the Retirement Board approved a comprehensive package of revisions to the actuarial assumptions. The assumption changes were made to more closely reflect actual past experience or expected future conditions, thereby confirming that current contribution rates are sufficient to pay benefits.

Assumption changes included; a longer life expectancy for members; earlier retirement by members; increased service credit at retirement; slower payroll growth; and decreased returns on investments because of market forecasts.

The Buck report also showed continued improvement in funding the system, including a decrease in the amortization period of the unfunded accrued liability to 31.5 years from 32.5 years and an increase in the funding ratio of assets to liabilities to 76% from 73%. In addition, the 10.4% investment return for the fiscal year that ended June 30, 1993, provided \$248 million more than was needed to fund current benefits. As a result, the Retirement Board allocated \$20 million of the surplus to the Health Care Stabilization Fund and \$228 million to special reserves.

Reemployment annuity, money-purchase formula interest rates change

On the recommendation of Buck Consultants, the STRS actuary, the Retirement Board adjusted the rate of interest used in calculating annuity benefits paid to reemployed retirees to 6% from 7.75%.

The previous rate of interest used to calculate an annuity benefit, 7.75%, applied to members who retired before July 1994. For annuity benefits paid after July 1994, interest will be calculated at 7.75% through June 1994 and at 6% from July 1, 1994, until changed by the Retirement Board.

The Retirement Board also adopted the actuary's recommendation for modifications in the calculation of money-purchase benefits. Three changes affect retirees who began receiving monthly money-purchase benefits after Oct. 1, 1994; (1) the money-purchase calculation will include the cost of funding cost-of-living adjustments provided by law; (2) the interest rate paid on money-purchase retirement annuities has changed to 6% from 7.75G; and (3) new mortality tables have been adopted that recognize teachers are living longer.

The board will review rates annually based on investment market returns.

1993-94: Year in Review (cont.)

Retirement Board changes interest rate charged for purchased service. In January 1994, the Retirement Board adjusted the interest rate charged for the purchase of most service credit to the actuarially assumed rate of 7.5%. The new rate is effective Jan. 1, 1995. Members were given from January 1994 to December 1994 to make purchases at the former interest rate.

The change from the current interest rate structure (6.5% through December 1982 and 7.75% from January 1983 through the date of purchase) to a flat 7.5% may increase the cost of purchasing certain types of service credit for some members.

Member contribution rate increase to fund new survivor benefit option. To fund a survivor benefit change, the Retirement Board approved a slight increase in the member contribution rate. Effective July 1, 1994, the rate increased to 9.30% from 9.25% of earnings.

The increase will fund a new survivor benefit option — a service-based benefit — available to surviving dependents of members who die with 20 or more years of service. This benefit improvement, which provides a higher level of survivor protection based on earned service, became available in late 1992 with the enactment of Ohio House Bill 721.

STRS funded the option for two years before requiring members to share its cost.

Substitute Senate Bill 161 not recommended for passage

The Senate Committee on Education, Retirement and Aging voted not to recommend Substitute Senate Bill 161 to the full Senate for passage. However, the legislation may be reintroduced in the new legislative session.

The bill would amend the laws of the five Ohio public retirement systems, including STRS, to separate assets reserved for pension benefits from assets available to fund health care benefits. It would also increase the statutory maximum contribution rates for employees and employers to cover the cost of health care for retirees.

According to STRS Executive Director Herb Dyer, debate on the bill generated some misconceptions about the STRS health care fund, a few of which were reprinted in Ohio newspapers. Dyer explained that a rumor about the STRS heath care fund running out of money by 1998 "was absolutely not true," adding that the Retirement Board will continue careful and deliberate planning for the retiree health care program.

Amended Substitute Senate Bill 43 becomes law

Amended Substitute Senate Bill 43 became law in October, increasing the investment authority of the five Ohio public retirement systems, including STRS. Two characteristics of the legislation have far-reaching effects on increasing investment earnings: the system can now invest up to 50% of total assets in U.S. stocks, and up to 10% of total assets can be invested in foreign stocks, bonds and other obligations. As a result of the legislation, STRS increased stocks and other equities as a percent of total assets and also established an international investment portfolio.

STRS continues responsiveness to members

STRS has a long tradition of providing comprehensive, timely information and quality services to its members. Fiscal year 1993–94 was no exception. Following are statistics on the number of members served for the year through various STRS member services:

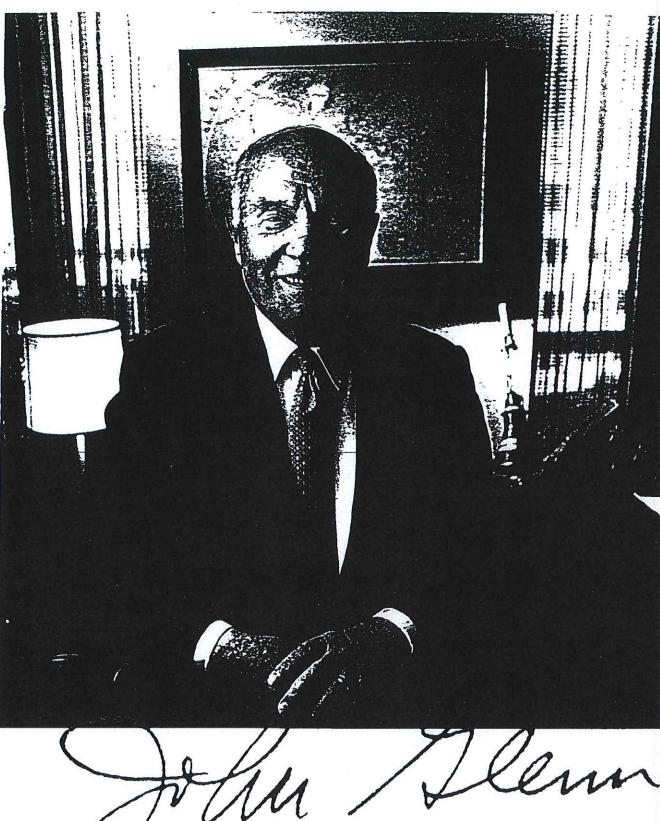
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STRS improves service to employers through new programs To enhance the level of service provided to STRS' reporting employers, STRS began several new programs in fiscal 1994.

First, employer workshops were held at the STRS building in Columbus and in several locations throughout Ohio. These workshops were designed to help school district and university employers better understand STRS policies, procedures and reporting requirements. Similar workshops for employees of county boards of mental retardation and developmental disabilities were also conducted. Response to the workshops was so high that STRS conducted more sessions than originally planned and will continue the program.

A second initiative, the employer liaison program, was designed to improve communications with reporting employers. Selected STRS staff members, called "employer advisors," were assigned groups of employers and will be the primary contact between those employers and STRS.

Through personal visits, training sessions, correspondence and telephone conversations, the assigned employer advisor will become acquainted with employer staff members who prepare STRS reports. One anticipated benefit of the program is more timely and accurate employer reporting. Just as importantly, STRS will gain a better understanding of employer operations so reporting requirements can be made more flexible and less burdensome for employers.



John Glenn

U.S. Senator and Astronaut

Aside from my parents, who were both readers and instilled in me a love of reading and learning that has served me all my life, the person who was most influential in my education was my high school civics teacher, Harford Steele. He demanded the best each student had to offer, and had a sensible, no-nonsense approach to discipline. He encouraged students to explore the unknown and attempt the unfamiliar. He helped me understand the uniqueness and strengths of our constitutional democracy, and it was under his tutelage that I first developed the determination to serve in national government.

Harford Steele made a difference in my life . . . I have the greatest respect for all teachers who share their excitement about the world and inspire young people to create a new world from the best of the past.



We have audited the accompanying statements of net assets available for benefits of the State Teachers Retirement System of Ohio as of June 30, 1994 and 1993, and the related statements of changes in net assets available for benefits for the years 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 audits.

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

In our opinion, such financial statements present fairly, in all material respects, the net assets available for benefits of the System as of June 30, 1994 and 1993, and the changes in net assets available for benefits for the years then ended in conformity with generally accepted accounting principles.

Our audits were conducted for the purpose of forming an opinion on the basic 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 33-37 is presented for the purpose of additional analysis and is not a required part of the basic financial statements. This supplementary information is the responsibility of the System's management. Such supplementary information as of and for the years ended June 30, 1994 and 1993, has been subjected to the auditing procedures applied in our audits of the basic 1994 and 1993 financial statements and, in our opinion, is fairly stated in all material respects when considered in relation to the basic 1994 and 1993 financial statements taken as a whole. The supplementary information as of and for the years ended June 30, 1988, 1989, 1990, 1991 and 1992, was subjected to auditing procedures by other auditors whose report, dated November 25, 1992, expressed an unqualified opinion on those statements and stated that such supplementary information was 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, 1985, 1986 and 1987, marked "unaudited" has not been subjected to the auditing procedures applied in our audits of the basic financial statements and, accordingly, we express no opinion on it.

Deloitte 1 Touche LLP

November 11, 1994 Columbus, Ohio

Statements of Net Assets Available for Benefits

As of June 30, 1994 and 1993

(In Thousands)

	1994	1993
ASSETS:	· · · · · · · · · · · · · · · · · · ·	
Investments:		
Short term	S 462,328	S 2,470,455
Fixed income	12,478,624	11,705,758
Common and preferred stock and venture capital	11,431,175	8,505,201
International	712,150	0
Real estate	1,708,967	1,838,348
Total investments	26,793,244	24,519,762
Cash	16,805	32,545
Receivables:		
Accrued interest and dividends	167.925	173,528
Employer contributions	151,404	149,561
Retirement incentive plan	54,316	58,513
Member contributions	115,349	108,127
State of Ohio appropriations	.3.396	3.755
Securities sold	84,628	69.647
Total receivables	577,018	563,131
Fixed assets, net of accumulated depreciation		
of \$14,319 and \$11,543 in 1994 and 1993, respectively	54,456	53,825
Total assets	27,441,523	25,169,263
LIABILITIES:	0.00 p. 100 p	
Securities purchased	124,726	114,430
Accrued expenses and other liabilities	48,949	57,064
Total liabilities	173,675	171,494
NET ASSETS AVAILABLE		
FOR BENEFITS	\$ 27,267,848	\$ 24,997,769

Statements of Changes in Net Assets Available for Benefits

Years Ended June 30, 1994 and 1993

(In Thousands)

	1994	1993	
INVESTMENT INCOME:	C 007.375	6 1 022 552	
Dividends	\$ 907,375 339,371	\$ 1,033,772 286,626	
Rent	78,858		
Net investment gains	912,299	82,797	
- ,	(997,259	
Subtotal	2,237,903	2,400,454	
Investment-related expenses	(6,662)	(5,931)	
Net investment income	2,231,241	2,394,523	
CONTRIBUTIONS:			
Employer	902,299	869,862	
Member	589,186	564,005	
State of Ohio	3.396	3,755	
Other	4,805	5,180	
Total contributions	1,499,686	1,442,802	
Total increases	3.730.927	3.837.325	
BENEFIT PAYMENTS:			
Service retirement	1,083,335	985,024	
Disability retirement	92.091	83,888	
Survivor benefits	35.198	32,804	
Supplemental benefit	33,586	32,489	
Health care	157,276	187,318	
Other	2,357	2,120	
Total benefit payments	1,403,843	1,323,643	
REFUNDS TO MEMBERS			
WHO HAVE WITHDRAWN	18.235	16,386	
ADMINISTRATIVE EXPENSES	38,770	35,870	
Total decreases	1.460,848	1,375,899	
Net increase	2,270,079	2,461,426	
NET ASSETS AVAILABLE FOR BENEFITS, Beginning of year	24,997,769	22,536,343	
NET ASSETS AVAILABLE FOR BENEFITS, End of year	\$27,267,848	\$24.997,769	

Notes to Financial Statements

Years ended June 30, 1994 and 1993

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

a. Organization — STRS (the Plan) is a costsharing, 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.
 - Currency gains and losses between the trade and settlement date for international investments are recognized on the settlement date.
- 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, international equities 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.
- Federal Income Tax Status During the years ended June 30, 1994 and 1993, 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 certified teachers and other faculty members employed in the public schools of Ohio (the State) or any school, college, university, institution or other agency controlled, managed and supported, in whole or in part, by the state or any political subdivision thereof. At June 30, 1994, the number of participating employers was:

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	Catalogican Missollines	7
	State of Ohio	1 0
	Total	62
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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 returing before age 65 with less than 30 years of service credit receive a percentage reduction in benefit amounts.

Under the "money-purchase benefit" calculation, a member's lifetime contributions plus interest at specified rates are matched by an equal amount from contributed employer funds. This total is then divided by an actuarially determined annuity factor to 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% in the previous calendar year. If the annual increase in the Consumer Price Index is less than 3%, a 3% cost-of-living increase is still paid if cumulative increases in the Consumer Price Index, less previous cost-of-living increases, equal or exceed 3%.

A retiree of STRS or other Ohio public retirement systems is eligible for reemployment as a teacher following the elapse 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 65, 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 with five or more years' credited service who becomes disabled (illness or injury preventing individual's ability to teach) may qualify for a disability allowance. Additionally, monthly benefits are paid to eligible survivors of members who die prior to retirement. 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. All benefit recipients are required to pay a portion of the health care cost 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 not included in the pension benefit obligation. The balance in the Health Care Reserve Fund was \$829,600,000 and \$730,283,000 at June 30, 1994 and 1993, respectively.

The net health care costs paid by the Plan were approximately \$157,276,000 for the year ended June 30, 1994, and \$187,318,000 for the year ended June 30, 1993. Eligible benefit recipients totaled 77,405 and 74,230 at July 1, 1994 and 1993, respectively. As of June 30, 1994 and July 1, 1993, \$60,000,000 and \$20,466,000, respectively, were transferred from the Employers Trust Fund 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 \$33,586,000 and \$32,489,000 were paid as supplemental benefits in December 1993 and 1992, 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, of covered payroll. The rates are established by the Retirement Board based on a valuation of the liabilities of STRS by its actuary.

The actuarial evaluation 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 actuarial assumptions were changed. 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. Disability and survivor benefits were also revised in fiscal 1993. Effective July 1, 1994, the member contribution rate was increased 0.05% to 9.30% to fund the survivor benefit changes.

Contributions consisted of the following components as of July 1, 1994 and 1993:

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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 30.5 years at July 1, 1994, and 31.5 years at July 1, 1993.

Notes to Financial Statements (cont.)

Contribution requirements based on covered payroll were approximately \$848,516,000 and \$814,269,000 for employers and \$560,627,000 and \$537,999,000 for members in 1994 and 1993, respectively. Actual contributions recorded were approximately \$902,299,000 and \$869,862,000 for employers and \$589,186,000 and \$564,005,000 for members in 1994 and 1993, 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, 1994 and 1993. Certain actuarial assumptions were changed effective with the July 1, 1993, actuarial valuation. These assumption changes, along with the changes in disability and survivor benefits, resulted in an increase in the July 1, 1993, pension benefit obligation of \$789,424,000. Significant actuarial assumptions for the July 1, 1994 and 1993 valuations were as follows:

. . . .

1002

	1994	1993
Rate of return on the investment of present and infine assets	75073	750%
Projected annual salary ancreases	925% (143620) 10-025% (143620)	9.25% at age 20 45 to 3.25% at age 65.
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Annual postretirements	<i>M</i>	w _
Member contribution rate	P\$1085	923
Employer contribution rate	TEGE	KF:

At July 1, 1994 and 1993, the unfunded pension benefit obligation was \$8,043,212,000 and \$7,216,987,000, respectively, as follows (dollar amounts in thousands):

	b	1994		1993
	Number of Members	Amount	Number of Members	Amount
Actuarial present value of projected benefits payable to current retirees and beneficiaries	77,405	\$14,025,124	74,230	\$12,869,723
Actuarial present value of projected benefits payable to terminated vested members	17,128	1,254,041	16,865	1.252,180
Total	94.533	15.279.165	91,095	14,121,903
Actuarial present value of credited projected benefits for plan members:				
Member contributions		4,872,035		4.513,196
Employer financed vested		6,206,606		5,269,698
Employer financed nonvested		8,123,654		7,559,210
Total (127,210 and 125,581 vested members; 139,179 and 128,459 nonvested members at July 1, 1994 and 1993, respectively)	266.389	19.202.295	254,040	17.342,104
Total members*	360.922		345,135	
Pension benefit obligation		34,481,460	-	31,464,007
Net assets available for benefits (excluding health care reserves) at cost (market value: 1994 - \$27,009,5 1993 - \$26,598,641)	89;	26.438.248		24,247,020
Unfunded pension benefit obligation		\$ 8,043,212		\$ 7,216,987

^{*}In addition, there were 7.356 and 5,956 reemployed retirees included in the actuarial valuation as of July 1, 1994 and 1993, respectively.

Notes to Financial

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, 1994 and 1993, net assets available for benefits were included in the various funds as follows (in thousands):

6. COMMITMENTS AND CONTINGENCIES

STRS has made commitments to fund various real estate investments totaling approximately \$203.752,000 and \$188,747,000 at June 30,1994 and 1993, respectively.

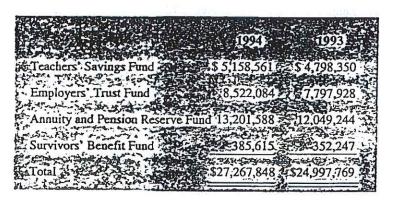
Statements (cont.)

In October 1994, the Retirement Board passed a resolution that provides lump-sum supplemental benefit payments to be paid to eligible retirees in December 1994. Estimated payments to be made are \$34 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.



Investments held by STRS at June 30, 1994 and 1993 are summarized as follows:

(In Thousands)

June 30, 1994

June 30, 1993

A STATE OF THE STA	Fair Marke		Fair Mark
- Category - Cost	Value		
Short term \$ 462.328	\$ 460,203	\$ 2 470 455	**************************************
Fixed income:			A PROPERTY.
Guaranteed mortgages 4,215,769	4,137,146	3.729.960	3,833,329
U.S. government and			
governmental agencies 4,771,642	4.907,937	4,482,817	5,320,588
	2.813,377		
	663,656		
Municipal bonds 1,645	1.748	1,895	2,180
	The state of		at the second
Total fixed income 12,478,624	12,523,864	11,705,758	12,822,129
Common and preferred stock 11,411,307	11 022 544	0.402.040	
Common and preferred stock 11,411,507	و 444ر 11,933 بن معرد فارد المرتوب الم	6,482,848	9,875,312
Real estate (see Note 8):	1.295		
Participating mortgages 205,688	198.174	2734 353 2	215.599
Multitenant properties 566,045			455,203
	275,251		THE ROOM PLANT IN AS AL
Sale-leasebacks 265,595	264 895	411,307	396.253
Separate accounts 176,033	334,928	Man Town of the Control of the Contr	THE RESERVE OF THE PARTY OF THE
Real estate investment trusts 1 62,547	63,902		
Other			47,800
AND THE RESERVE OF THE STATE OF	TANKE CE		7,000
Total real estate 1,708,967	1,699,858	1,838,348	1,734,713
The state of the s	《公司》,《公司》,《公司》		
Venture capital	26,758		26468
International equities 712,150		7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
Total investments 4 \$26,793,244	(77) 187 512	(2)(s107/5) -	176071105
	A CONTRACTOR OF THE PARTY OF TH	<u> </u>	
314			
Fair market valuation - Stocks traded on a nation			
last business day of the fiscal year, stocks traded over by NASDAQ on the last business day of the fiscal y	t the counter are valued	at the closing bid pr	(C)
agency securines fonds, certain guaranteed mortgag	es, and short-term corp	orate and governmen	Links Order
valued based on information from an independent se	rvice organization for it	istitutional investors	guaranteed
mortgages are rained based on their coupon rate rela business day of the fiscal year, short-term cash equiv mates market value; real estate is valued based on ap	alent investments	or similar mortgages	on the last
mates market value; real estate is valued based on ap	praisals performed by it	idependent appraise	S OF TOTAL
the state of the same of the s	Parties and a mentioned	WHITE SERVICE	CHE. STYLE BY
properties not appraised, at the present value of the p based on values established by valuation committees	rojected numbe net incom	ne stream; and yent	ire capital is

Notes to Financial Statements (cont.)

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.

All investments subject to categorization at June 30, 1994, 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 brokerydealers (burrower) 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 1994 and 1993, STRS received \$2.5 million and \$4 million, 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 102% of the market value of securities on loan. The market value of securities loaned at June 30, 1994 and 1993, was \$1.3 billion and \$2.4 billion, respectively.

At June 30, 1994, the carrying amount of STRS' cash deposits was \$16,804,595 and the bank balance was \$19,380,543. Of the bank balance, \$100,000 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, single-tenant and multitenant office space, single-tenant and multitenant warehouses, apartments and other. At June 30, 1994, no single project or group of leases with a single credit represents more than 5% of total real estate 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.

REITs — Real estate investment trusts (REITs) are real estate company stocks with a high dividend income component. REITs divide the ownership of the real estate company and its properties among all the shareholders. REITs are required to distribute 95% of the company's taxable income to their shareholders. Distributions are taxable to shareholders rather than the real estate company.

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. INTERNATIONAL INVESTMENTS

In fiscal year 1994, STRS began investing in international equity investments through the use of outside money managers. It is the intent of STRS and the money managers to be fully invested; however, cash and short-term fixed income investments are held temporarily.

An international equity swap agreement was contracted in fiscal 1994 with a maturity date in fiscal 1995. In exchange for LIBOR (London Interbank Offered Rate) and a negotiated broker commission, STRS will receive dividends and will net the difference in the change in the Europe, Australia, Far East (EAFE) Index at maturity. Commercial paper equal to the initial exposure of the equity swap has been set aside as security.

The cost and market value of :
international investments are:
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Cost Market
International stocks \$358,528,355 \$358,607,480
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International fixed
income 16,804,012 · 17,320,323 ·
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FInternational currency
and liquidity reserves 33,851,387 33,937,957.
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10. 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, 1994, such compensating balances averaged approximately \$17,509,000. The lost earnings from not investing such balances in short-term investments equated to a cost to STRS of approximately \$602,000.

11. 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, 1994 and 1993, for these benefits was approximately \$18,683,000 and \$23,465,000, respectively.

STRS received approximately \$3,396,000 and \$3,755,000 from the State for these increased benefits paid for the years ended June 30, 1994 and 1993, respectively. Funding for these increased benefits is on a pay-as-you-go basis by the State.

12. 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, 1994, was approximately \$13,500,000. STRS' total payroll was approximately \$13,775,000.

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; 8.44% 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, 1994, was approximately \$2,978,000, which consisted of \$1,830,000 from STRS and \$1,148,000 from employees. These contributions represented 13.55% and 8.5% of covered payroll, respectively. There were no changes in actuarial assumptions, benefit provisions, actuarial funding methods or other significant factors for the most recent actuarial study.

Notes to Financial Statements (cont.)

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

December 31, 1992
Pension benefit obligation \$21,579,000
Net assets available for benefits \$20,783,000
(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, 1993, the plan had approximately 348,000 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, 5.1%, or approximately \$690,000, 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, 1992, valuation (most recent available) were: (a) investment rate of return of 7.75%, (b) no change in the number of active employees, (c) base pay rate increases of 5.25% related to inflation and annual merit pay increases of 0% to 5.1%, and (d) health care increases of 5.25% annually.

The total of PERS' actuarial present value of accrued postemployment benefits as of December 31, 1992, was \$7.04 billion. The net assets available for these benefits at that date were \$5.6 billion.

13. 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 33–35.

Supplementary Information on Analysis of Funding Progress

1985–1994
(Dollar Amounts in Thousands)

	Unfunded Pension
Net Assets Pension Pension Annual	Benefit Obligation as a
Available Benefit Percentage Benefit Covered	Percentage of Covered Payroll
	To count a course
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 14,258,680 19,324,598 74% 5,065,918 4,380,287	116%
1989 **	127%
1990 17,902,141 23,744,659 75% 5,842,518 4,974,442	117%
1991 19,655,034 25,812,754 76% 6,157,720 5,272,709	117%
1992 - 21,785,970 28,113,954 77% 6,327,984 5,598,238	113%
1993 *** 24,247,020 -31,464,007 -77% -7,216,987 -5,816,209	124%
1994 26,438,248 34,481,460 77% 8,043,212 6,060,828	133%
	3

The fertine in a summents are in themselves

- At controce Note I of financial distensency Eschules assets allocated us the Health Care Reserve Fund.
- In fixed year 1989, plan benefit provious were amended to increase the benefit formula. The amendment increased the pension benefit obligation in fixed 1989 by approximately Societies.
- *** Certain a tuarial 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

1985–1994 (In Thousands)

Revenues by Source

	va s			_		
Fiscal Year	Member Contributions	Employer Contributions	Investment Income	State Appropriations	Other	Total
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	396,655	676,536	1,494,435	5,704	3,392	2,576,722
1989 *	423,639	703,773	1,617,196	5,287	3,468	2,753,363
1990	455,264	754,726	1,663,600	4.876	3,934	2,882,400
1991 **	511.269	793,132	1,719,115	4,490	3,841	3,031,847
1992 ***	548.841	862,655	2,294,646	4,099	4,540	3,714,781
1993	564,005	869,862	2,394,523	3,755	5,180	3,837,325
1994	589,186	902,299	2,231,241	3,396	4,805	3,730,927

Expenses by Type

Fiscal Year	Benefits	Refunds	Administratio	on Total
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	 845,476	15,526	13,610	874,612
1989	 925,557	17,695	16,291	959,543
1990	 1,009,464	17,070	20,415	1,046,949
1991	 1,131,877	18,088	29,486	1,179,451
1992 ***	 1,226,843	17,488	28,956	1,273,287
1993	 1,323,643	16,386	35,870	1,375,899
1994	 1,403,843	18,235	38,770	1,460,848

The following amounts are in thousands:

- 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 \$768 for fiscal year 1989.
- ** Effective July 1, 1960) the member contribution rate was increased to 9,25% from 8.77% of compensation. The effect was an increase in member contributions of \$25,300 for fiscal year 1991.
- *** I ffective lats 1 1991 investment administrative expenses are deducted from gross investment income.

Supplementary Information on Employer Contributions

1985-1994
(Dollar Amounts in Thousands)

Fiscal Year	Employer Contributions*	Annual Covered Payroll	Employer Contributions as Percentage of Annual Covered Payroll
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	676,536	4,380,287	15.45%
1989	703,773	4,657,975	15.11%
1990	754,726	. 4,974,442	15.17%
1991	793,132	5,272,709	15.04%
1992	862,655	5,598,238	15.41%
1993	869,862	5,816,209	14.96%
1994	902,299	6,060,828	14.89%

^{*} Employer contributions included payments under voluntary retirement incentive plans.

Supplementary Information on Investment Summary

Year Ended June 30, 1994

(In Thousands)

The second secon					
٠ (﴿ ﴿ ﴿ ﴿ ﴿ ﴿ ﴿ ﴿ ﴿ ﴿ ﴿ ﴿ ﴿ ﴿ ﴿ ﴿ ﴿ ﴿	Carrying Value	Purchases	Sales,	Carrying Value	Market Value
to a state popular	as of	and **	Redemptions	as of A	
Investment Category	June 30, 1993	Accretions	and Accruals	June 30, 1994	June 30, 1994
Short term 32	\$ 2,470,455	- \$19 766 666	\$21,774,793	\$ 9.462,328	160 202
		317,700,000	243	402,320	2 2 2 2 2 400,203
Fixed income:	Charles of William	1 1 1 1 1 1 1 X	The state of the state of		
Guaranteed mortgages	3,729,960	2,600,881	2,115,072	4,215,769	4,137,146
U.S. government/agencies	4,482,817	4.531,952	4,243,127	4,771,642	4.907.937
Corporate bonds	2,700,127	875,025	752,870	2,822,282	2.813.377
Canadian bonds	790,959			9 E 667,286	
Municipal bonds	1,895	1000	250	1,645	
the fraction of the state of th		-	And the second		
Total fixed income	11,705,758	8,069,819	7,296,953	12,478,624	12,523,864
		1997 A STATE			
Common and preferred stock	8,482,848	6,032,734	23.104.275	man or	11.933.544
		A COLUMN			
Real estate		100			
Participating mortgages	G 2 17734 353 G 1	40 584	@29	205(638)	108 174
Multitenant properties	527,528	30 73	0014	200,000	国の は は は は は は は は は は は は は は は は は は は
Joint ventures					493,272
Sale-leasebacks	2300,702	30,332	30,451,	366,783	275,251
Sale-leasedacks	411,307 wing a	S 74 S S S S S S S S S S S S S S S S S S	145,769	265,595	264,895
Separate accounts	259,522	CALL SECTION	83,489	176,033	334,928
Real estate investment trusts		63,002	图25455	62,547.2	63,902
Other	+ 44,936	26.575		66.276	69,436
Total real estate	1,838,348	- 4-	Pol 1	2000	
The state of the s	F(= 1,020,040 D	- 213,101	15 77 344,302	1,708,967	1,699,838
No. of the second second	A STAN AND STAN OF THE STAN OF		第一个大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大		10000000000000000000000000000000000000
r Venture capital	22,353			中 19,868	
International	(1) 一种的	* 3,463,969 2	2,751,819	712,150	738,285
	1100	Company of the Company	A Lorente	The state of the s	A TOTAL PROPERTY.
Total investments	\$24.519.762	\$37 553 780	C35 280 207	\$26,793,244	17 COT 200 E10
43.00		451,555,189	25. \$33,260,301 8	\$26,793,244	\$41,384,312.
	THE REAL PROPERTY OF THE PERSON NAMED IN COLUMN 2 IN THE PERSON NAMED IN THE PERSON NA		A. Brief Hillard and but Berlind Chi	The state of the same of the s	the distriction of the second second

Supplementary Information or Administrative Expenses

Years Ended June 30, 1994 and 1993

	1994	1993
PERSONNEL:		
Salaries and wages	\$ 9,595,837	\$ 8,895,469
Retirement contributions	1,277,836	1,157,424
Benefits	1,992,229	1,673,199
Total personnel	12,865,902	11,726,092
PROFESSIONAL AND		
TECHNICAL SERVICES:		
Computer support services	11,836,319	12,567,150
Health care services	411,232	394,023
Actuary	446.640	259,736
Auditing	97,231	106,680
Legal	233.054	210,462
Total professional and technical services	13,024,476	13,538,051
COMMUNICATIONS:		
Postage and courier services	1,445,283	1,719,929
Printing and supplies	1,998,260	1,682,211
Telephone	315,685	330,786
Total communications	3.759.228	3.732.926
OTHER EXPENSES:	*****	
Equipment repairs and maintenance	1,309,220	1,715,048
Building utilities and maintenance	785,880	792,145
Transportation and travel	416,251	422,287
Equipment rental	2,555,298	12,700
Depreciation	2,875,636	2.690,717
Insurance	253.593	224,224
Memberships and subscriptions	85.598	85,091
Retirement study commission	170,844	172,624
Miscellaneous	668.013	757.640
Total other expenses	9.120.333	6,872,476
TOTAL ADMINISTRATIVE EXPENSES	\$ 38,769,939	\$ 35,869,545

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

Supplementary Information on Cash Receipts and Disbursements

Years Ended June 30, 1994 and 1993 (In Thousands)

	1994	1993	
CASH BALANCE Beginning of year	S 32,545	\$ 28,489	
ADD RECEIPTS:			
Member contributions	581,964	556,194	
Employer contributions	904,653	863,498	
Miscellaneous contributions	8,561	9,279	
Interest, rent and dividends	1.359.528	1,295,846	
Investments sold or matured	36.177,625	24,169,440	
Total cash receipts	39.032,331	26,894,257	
LESS DISBURSEMENTS:			37
Benefit payments	1,411,209	1,321,533	
Administrative expenses	43,258	39,276	O O
Investments purchased	37.571.813	25,510,149	Askell
Refunds	18,235	16,386	State Teachers Retirement System of Ohio
Fixed asset purchases	3,556	2.857	Retire
Total cash disbursements	39.048.071	26.890,201	achers
CASH BALANCE			ā Ē
End of year	\$ 16,805	\$ 32,545	Stat



Mary Ellew Me

Mary Ellen Withrow United States Treasurer

It is difficult to identify just one favorite teacher, so I've taken the liberty of selecting two favorites. Mary Joe Stafford was my political science teacher at Harding High School in Marion, Ohio, and Loma Mills was my sixth-grade teacher at Grand Prairie School, also in Marion. These wonderful women were instrumental in my decision to enter public service. They introduced me to the study of government and the practical applications of political science.

Mary Joe Stafford taught my very first political science class. She encouraged the concept of participation and opened my eyes to the opportunities our system of government provides. Loma Mills, my sixth-grade teacher, not only guided my studies at this formative time, but years later, encouraged me to enter my first race for public office as a candidate for the Elgin Local School Board. It goes without saying that I have special respect and admiration for these two individuals.

As a student, I liked my teachers. They made me feel I should keep striving for higher goals. Although I have recognized only two teachers here, I would like to thank all my teachers. Together, they helped ensure this student ended up "on the money."





Actuary's Certification Letter

BUC CONSULTANTS

> 55 West Monroe Street Chicago, Illinois 60603

Suite 1700

November 9, 1994

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, 1994, prepared in accordance with Section 3307.20 of Chapter 3307 of the Ohio Revised Code. The valuation takes into acount all of the promised benefits to which members are entitled, including pension and survivor benefits.

The valuation was based on the same actuarial assumptions and methods that were adopted by the Retirement Board for use in the July 1, 1993, valuation, including a valuation interest rate of 71/2% per annum compounded annually.

The valuation was also 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 23.3% from employers and members, 2% is dedicated to the health care fund with 21.3% remaining for pension and survivor benefits. The valuation indicates that the contribution rate of 21.3% is sufficient to provide for the payment of the promised pension and survivor benefits, while reducing the funding period of the deficiency by the expected one year from last year's funding period (i.e., reduced from 31.5 years to 30.5 years).

The valuation indicates that for the fiscal year 1993-94, the actuarial experience of STRS was favorable and generated net actuarial gains of \$34 million. The Retirement Board elected to use the \$34 million actuarial gain to fund the supplemental benefit payments to retirees to be made during December 1994.

Our report, which follows, describes the detailed results of the valuation as of July 1, 1994.

Respectfully submitted.

Ohn Y. Thompson Consulting Actuary Kim M. Nicholl, F.S.A.
Consulting Actuary

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

' Ag	ge Withda	rawal Death	Disability	Years, Service	Years, Service	Service	Salary
			9	MEN			
20 30 40 50 55 60 65 70	.023 012	4	.0054	2588 2381 2846 4399 4140	3600	0765 2565 3150	0925 0725 0525 0405 0375 0350 0325
			W.C	OMEN			
20 30 40 50 55 60 65 70		0005 9 0012 1 3 0019 3 0030	0012 0048 0070	4658		1440 2970 2700	0925 5 0725 5 0525 5 0405 5 0375 7 0350 0 0325 7 0325
** **		Commission become	and the second second	Maria and Chief	The state of the s		

Death After Retirement: According to the 1983 Group Annuity Mortality Table (Projection 1992-Scale H), 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 Member Valuation Data

1985-1994

Active Members

Valuation Date	Number	Annual Payroll (In thousands)	Annual Average Pay	% Increase in Average Pay
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%
1994	167,770	5,986,084	35,680	3%

Schedule of Retirees and Beneficiaries

1985-1994

Retirees and Beneficiaries

Valuation Date	Number	Annual Allowances (In thousands)	% Increase in Annual Allowances	Average Annual Allowances
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
1994	77.405	1,230,671	10%	15,899

Summary of Accrued and Unfunded Accrued Liabilities

1985–1994
(Dollar Amounts in Thousands)

	Valuation Date	الربيء ن	Aggregate Accrued Liabilities*		, Valuation , Assets	- · · · · · · · · · · · · · · · · · · ·	Assets as % of Accrued Liabilities	Accrued Liabilities		Annual . Active . Member . Payroll .	UAL as % of Annual Active Member Payroll
	1985	٠	\$15,539,374		\$ 9,469,194	: "	61%	\$6,070,181		\$3,531,209	172%
	1986		-17,309,201		10,895,158	٠,٠٠	63%	6,414,042	ار آن کا انتخاب است. در انتخاب است.	3,788,137	169%
	1987	•	19,291,792		12,911,072		67%	6,380,720		4,074,129	€ 1157%
	1988		21,372,968		.14,613,182		68% -	6,759,786	1. 2.5	4,336,723	£5-156%
	1989	٠	23,618,688	3 3,0	16,407,002		69%	7,211,686 بيت		4,624,119	156%
	1990		25,883,339		18,242,453		70%	7,640,885		4,941,916	155%
	1991		28,109,360	3	20,094,849		71%	8.014,512		5,237,832	£153%
	1992		30,800,238		22,536,343	8	73%	8.263,895		5,509,947	150%
	1993	d	34,488,976		26,259,447		76%	8,229,529	7 3335	5,742,577	143%
e e	1994	120	36,871,809		28,543,410	٠.	77%	8,328,399		5,986,084	139%
		575			150.9C-	1150 500					

^{*}Based on the actuarial method used for funding purposes, which is different from the standard measure of the pension benefit obligation prescribed by

Concentrate Accounting Standards Board Statement No. 5

Solvency Test

1985-1994

(Dollar Amounts in Thousands)

Aggregate Accrued Liabilities For:

(1) (2) (3) Active Retirees Active Members Valuation Member and (Employer Financed) (2) (3) (2) (3) (Employer Financed) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	Portion of Accrued Liabilities Covered by Valuation Valuation Assets (1) (2) (3)
21985 2 (2421532 20 23) 5,831,343 4 2 (37286500 39) 219866 2 (3377612 27 6490300 2 (3181) 20 10	895F1585 10000 10000 2000
7.1987 2.2900.598 2.7,079.880 9.311314 12 1988 3.153.950 2.7,932.553 110.286.465 14	SCHOOL OF A SHEEPING CONTRACT OF THE PROPERTY OF
1989 123,446,312 48,618,907 11,553,469 16,1990 3,729,945 9,576,506 12,576,8874 18,	407,002 1100% 100% 38%
1991 4,076,990 10,440,584 13,591,787 22, 1992 4,434,876 11,506,994 14,858,368 22,	094,849 1 100% 100% 141%
1993 4,798,350 12,869,723 1,216,820,903 2,25 26, 1994 5,158,561 14,025,124 1,25 17,688,124 2,28,	259,447 (100%) 100% 51%

Summary of Benefit, 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 calculation percentage of 2.5% will apply; or (ii) \$86 multiplied by years of service credit, and adjusted by the following percentage:

Years
of Ohio % of Attained Service Base Age or Credit Amount

58 25 75%
59 926 80%
60 27 85%
61 88%
61 88%
62 91%
63 91%
63 94%
65 97%
65 90%
65 90%
65 90%

Annual Salary is subject to a limit of \$200,000 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 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.

Effective July 1, 1994, member contributions are credited with 6% interest compounded annually.

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% of the average salary during the three highest paid years. For service in excess of 30 years, the 2.5% calculation will apply, or \$86 times total service plus years and months from date of disability to age 60. Maximum allowance is 75% of final average salary. Minimum allowance is 30% of final average salary.

DEATH AFTER RETIREMENT

Lump-sum payment of \$1,000 upon death after service or disability retirement.

SURVIVOR'S BENEFIT

Eligibility

Upon death after at least 11/2 years of credit for Ohio service with at least 1/4 year of such service in the 21/2 years preceding death or upon death of a disability retiree.

Benefits

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

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

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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.

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%. (See Page 24 for more information.)

HEALTH CARE

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

CONTRIBUTION

By members:

9.30% of salary effective July 1, 1994.

By employers:

14% of salaries of their employees who are members.



Ima

Some

Erma Bombeck

Writer

His classroom was tucked away in the basement of the school with small windows that revealed passing feet and a ceiling of billowing pipes.

It didn't matter. Here, for an hour a day, his students were Brenda Starr, Ernie Pyle and Dorothy Thompson all rolled into one.

What made Jim Harris so different from other teachers I had? To him, a dream was never insignificant or impossible. If you were willing to work and to believe, he could get you from here to where you wanted to be . . . even if no one in your family had ever graduated from high school . . . even if you didn't have a dime or a bit of support for college.

I wrote a story one day with a first sentence that contained 41 words. I even knew what a couple of them meant. He didn't say anything. He just opened the top drawer of his desk and handed me a Bible and instructed me to turn to the first page and to read it aloud.

"In the beginning, God created the heavens and the earth."

"How many words are in that lead?" he asked.

"Ten."

He asked, "Did you understand them?"

I nodded.

He closed the book and said, "That is what you write for ... to be understood. Without meaning, they're just words."

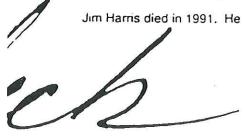
I never forgot it.

Actually, a lot of teachers impacted my life because I admired them so, and I took a little of each of them with me.

But mostly I took away a lot of Jim Harris, who saw something in me worth encouraging. He took the time and he didn't give up on me. As a good teacher should, Jim Harris was still giving me advice when I had written six books and was syndicated in 800 newspapers.

He still had a lot to teach. I still had a lot to leam.

Jim Harris died in 1991. He was 89 years old.





Benefit Expenses by Type

1985-1994

(In Thousands)

Fiscal Year Ended	Service Retirement	Disability Retirement	Survivor Benefits	Supplemental Benefit	Health Care	Other	Total
1985	\$ 451,787	\$36,978	\$18,535	522,211	\$ 64,495	\$1,241	\$ 595,247
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	925,557
1990	774,625	63,174	26,735	36.885	136,563	1,482	1,039,464
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
1994	1,083.335	92.091	35.198	33,586	157.276	2,357	1,403,843

Number of Reporting Employers by Type

1985-1994

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
1985	191	375	87	49	52	3-4	*	1	789
1986	191	375	87	49	52	3-4	*	1	789
1987	191	376	87	49	52	3-4	*	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
1994	192	371	81	49	48	38	82	1	862

^{*}County Boards of Mental Retardation and Developmental Disabilities were added as reporting employers in fiscal year 1990,

Selected Funding Information

1985–1994
(Dollar Amounts in Thousands)

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1985	-8.75%	14.00%	7.75%	5.500%	\$ 6,070,181	40.5 Yrs.
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1986	8.75%		2 200	THE STATE OF THE S	是是"是是我们的人"	
1700	0.13%	14.00%	7.75%	5.500%	6,414,042	39.5 Yrs.
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1987	-8.75%	14.00%	7.75%	5.500%	6,380,720	35.0 Yrs.
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1988	8.75%	14.00%	7.75%	5.500%	6,759,786	35.0 Yrs.
			133 Frank 1355		md +	
				1 3 x x x x x x x x x x x x x x x x x x	100	
1989	8.77%	14.00%	7.75%	5.875%	7,211,686 `:	34.5 Yrs.
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1990	8,77%	14.00%	7.75%	5.0750	7.640.885	
1770		14.00%		5.875%	7,040,885	34.0 Yrs.
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1991	, 9.25%	. 14.00%	7.75%	5.875%	8.014.512	33.5 Yrs.
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1992	9.25%	14.00%	7.75%	5.875%	8,263,895	32.5 Yrs.
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1993	10.250	vertices 114 000	73			
1773	29,25%	14.00%	7.50%	5.000%	8,229,529	of the said and th
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1994	9.30%	14.00%	7.50%	5.000%	8,328,399	305 Ve
	in the property	المرادة مسد المادية	ALC:		120, 140, 100, 200, 200, 200, 200, 200, 200, 20	115.
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^{*}Excluding health care

Number of Members: Active, Inactive, Retirees and Beneficiaries 1985-1994

Number of Members

Fiscal Year Ended	Active	Inactive	Retirees & Beneficiaries	Total
1985	147,790	73,733	58,348	279,871
1986	149,428	75,496	60,960	285,884
1987	150,607	78,583	62,819	292,009
1988	152,200	81,107	64,957	298,264
1989	153,830	83.633	66,453	303,916
1990	157,650	85,856	68,739	312,245
1991	160,012	88.591	70.583	319,186
1992	162,898	97,718	72.599	333,215
1993	165,711	105,194	74,230	345,135
1994	167,770	115,742	77,405	360,917

Assumed Rate of Interest and
Realized Rate of Return on Assets
1985-1994

Realized Internal Yield on Assets

Fiscal Year	Interest	Interest, Rent.	Capital	
Ended	Assumption	Dividends	Gains	Total
1985	7.50%	9.58%	0.79%	10.37%
1986	7.75%	8.85%	3.15%	12.00%
1987	7.75%	8.40%	7.87%	16.27%
1988	7.75%	7.50%	3.93%	11.43%
1989	7.75%	7.72%	3.15%	10.87%
1990	7.75%	7.74%	2.20%	9.94%
1991	7.75%	7.10%	2.09%	9.19%
1992	7.75%	6.62%	4.64%	11.26%
1993	7.50%	5.99%	4.45%	10.44%
1994	7.50%	5.11%	3.65%	8.76%

Number of Benefit Recipients by Type 1985–1994

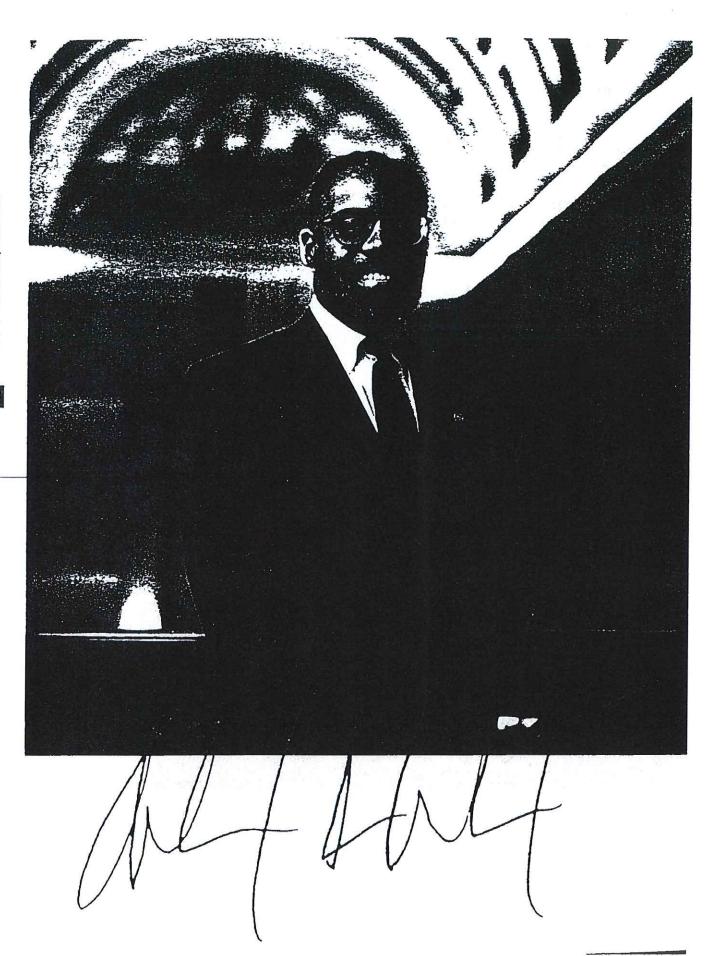
As of July	Service Disability Beneficiaries Receiving Survivor Retirement Optional Allowances Benefits	Total
1985	49.000	ा । राज्यस्य स्टब्स् राज्यक्षिण्डार्वे राज्यस्य
1986	51.004	. \$58,348
1987	50 420	
1988		62,819
1989	155.024	64,957
1990		66,453
1991		68,739
- 1992	50.00	70,583
1993		72,599
1994		74:230
, 1994	63,182 5,217 4,739 4,267	77,405
	The second secon	

Average Monthly

Allowance by Type

1985-1994

As of July 1	Retirement	Retirement .	Optional Allowance	Benefits !	Average
نع ر . 1985	\$ 763	S 913	\$\$545	\$512	1 W/S 749
1986	5314 824	968	568	504	804
1987	871	1,027	599	526	850 p
1988	37 941 77	1,081	643	556	915
1989	1,000		661	581	970
1991	1417	122	- 699t	606	1036
1992	1727	350	7770	****	11108
11993	U304	1433	***************************************	7/17	1258
1994	1,388	1 504	843	707	1325
5 7 - 2 - 2 - 3 - 3			10.17	78.00	The same of the sa



Michael R. White Mayor of Cleveland

As I look back on my childhood and my public education, I can think of many teachers who left an indelible impression on me as a person and a student. But the one who left the greatest impression was Mrs. Elizabeth Clark. I remember her for her tenacity, brilliance and an inner belief that convinced every child that they were special and the only young person in the class. Mrs. Clark also had the great capability of forcing us as children to reject mediocrity and incompetency. She made us believe that we were capable of doing anything we wanted to do, if we were willing to work hard to achieve our goals. And during our worst encounters, when the tears were the largest and the sting on the behind was the greatest, there was never any doubt that Mrs. Elizabeth Clark loved us all, and only wanted the very best for each of us.

It is because of what Mrs. Clark was and did as a teacher that, in part, I have been able to achieve. That gift can never be repaid. I only hope I am able to help other young people along their pathways to success.



Investment Review

Robust growth spreads across the economy in fiscal 1994

Declining interest rates sparked strong economic growth during the STRS fiscal year that ran from July 1, 1993, to June 30, 1994. The real economy grew at an average annual rate of 4.5% in the first six months of the fiscal year followed by 3.5% average growth during the last six months. Both rates were well above the long-term trend of roughly 2.75% growth. Real gross domestic product growth for the entire fiscal year averaged 4.0%.

Benign inflation and steady short-term interest rates created the environment for the drop in long-term interest rates. The Consumer Price Index rose only 2.4% during the fiscal year — nearly three-quarters of a point less than in fiscal 1993. Meanwhile, the Federal Reserve kept short-term interest rates at 3.0% for more than half the fiscal year.

At the beginning of the fiscal year, the yield on the 30-year Treasury bond stood at 6.75%. Within 3½ months, the yield hit a low for the current business cycle, falling to nearly 5.75%. Mortgage rates fell as well, hitting a low of 6.75% in the same period.

Lower long-term interest rates provided the opportunity for many homeowners to refinance their mortgages. At the same time, potential first-time homebuyers and homeowners looking to move into newer dwellings entered the housing market. Total home sales grew to 5.2 million homes by year-end 1993 from an annual rate of 4.3 million homes in June 1993.

Much of the savings from mortgage refinancings ignited a durable-goods spending boom by consumers. Auto sales rose to 9.8 million units in the first nine months of the fiscal year from an 8.8-million-unit annual rate. Total real personal consumption averaged 4.2% during the same period — again, well beyond the long-term trend growth rate. Consumption of household furniture, autos and other durable items led the growth in total spending.

Lower interest rates also helped capital equipment investment by businesses. Nonresidential fixed investment on producers' durable equipment averaged 20.8% over the first three quarters of the fiscal year. That matched the growth rates experienced in that category since the second quarter of 1992. Much of the capital investment went toward information processing and other related equipment, reinforcing the trend since the last recession of employing more efficient and productive equipment before turning to workers.

Because of strong consumption and long employee workweeks, businesses were forced in 1994 to hire more workers to produce the goods and services demanded by consumers. Payroll employment grew by nearly 3 million during the fiscal year, with two-thirds of that gain coming in the final seven months. The unemployment rate fell to 6.0% from 6.7% in just six months.

Once the economy showed signs in late 1993 of a sustainable expansion, members of the Federal Reserve began talking about a shift toward restraint in monetary policy. The first move came in early February when the Federal Reserve raised short-term interest rates for the first time in five years. As a result, longer-term interest rates, including mortgage rates, rose, putting a damper on housing activity. Personal consumption slowed dramatically during the second quarter of 1994 from the heady pace it had set since early 1993.

Higher wages from enhanced employment gains during the first half of 1994 will offset the loss of consumer buying power from the slowdown in mortgage refinancings. Moderate income growth also offers hope of a continuing moderate economic expansion in fiscal 1995. The vigilant Federal Reserve, which had raised short-term rates by 1.25 percentage points in the closing five months of the fiscal year, will contain most of the pressure for higher inflation during fiscal 1995. U.S. exports to other countries should improve as our main trading

partners experience recoveries in their own economies. But federal and state government spending will continue to provide very little support to total economic growth during the year.

Fixed-income investment strategy modified; returns higher than benchmark

Interest rates hit a 28-year low early in the fiscal year and then rose in response to increased economic activity. The decline in bond yields was partly due to the steady short-term interest rate policy of the Federal Reserve. By keeping rates at 3.0% for over a year, financing costs remained low, allowing hedge funds and other investors to speculate in bonds. However, most of the drop in yields was a result of investors reevaluating bonds in the face of declining inflation and slow economic growth at the beginning of the fiscal year.

Falling interest rates finally stimulated the interest-sensitive sectors of the economy, leading to strong growth that carried into the first half of calendar 1994. Once the economy was on sounder footing, the Federal Reserve began to raise interest rates, forcing leveraged investors to liquidate positions. The 30-year Treasury bond rose during the fiscal year and ended at 7.61%.

STRS took advantage of the initial decline in yields to reduce the fixed-income portfolio's duration and, thus, reduce the portfolio's price sensitivity to changes in interest rates. In addition, about half of the \$300 million secular bond portfolio, which was set up in 1989 in an environment of higher interest rates, was sold. That portfolio had doubled in market value as

interest rates reached their lows. When the Federal Reserve restrained monetary policy in early 1994, the fixed-income portfolio's defensive posture began to produce significantly better relative returns versus the STRS benchmark, the Lehman Brothers Aggregate Bond Index.

The strategy for fiscal 1995 is to begin the year with a more aggressive structure than the market's positioning. Interest rates have risen about two percentage points from the lows, causing STRS to anticipate a moderation in economic growth from 1993's robust pace. In the context of moderate inflation, lower yields are, therefore, expected.

The net results of trading the past 12 months include an increase in the duration of the portfolio (and thus an increase in its aggressiveness), longer average maturities and increased yields — all achieved while maintaining a quality level near AAA. In addition, the share of the total fund allocated to this area was reduced to 46.7% at cost from 47.8% at cost in fiscal 1993. Using the book value of sales and maturities as a measure, turnover of the fixed-income portfolio rose to 57% from 45% 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 Lehman Brothers Aggregate Bond Index had a total return of -1.3%, down from 11.8% 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 surpassed this benchmark, but STRS performance reports follow the industry convention of reporting on a calendar-year basis. This report appears on Page 58.

Allocation to stocks and other equities raised; excellent performance results In fiscal 1994, the Standard & Poor's Composite Index of 500 Stocks (S&P 500) had a total return of 1.3%. The Dow Jones Industrial Average, which represents many cyclical companies, returned 5.9%. The performance of STRS equities compares favorably with these indexes. Both indexes rose from the beginning of the fiscal year until the Federal Reserve restrained money growth in early February. The S&P 500 fell sharply from February to mid-May, regained about half of those losses over the subsequent month, then fell again to a level only slightly above the year-ago comparison. The drop in the Dow Industrials was not as steep, but the pattern was the same as the S&P 500.

Throughout 1993, stocks that captured the pickup in industrial production performed very well and fueled the performance of the STRS equities portfolio. Later in the year, pricing power returned for some companies in basic industries - the late, or price-driven, cycle had arrived. This abrupt change from the prior two years of expansion was in response to strong consumer demand. The economy had shifted into a stronger growth phase, held back only by weak export growth and severe cutbacks in federal government spending early in 1993. Commodity prices began rising at the end of 1993, and those increases were beginning to show up at the early stages of production by the end of the fiscal year.

STRS continued raising the share of total assets allocated to stocks and other equities because of the cyclical pickup in growth. At the end of fiscal 1994, 42.6% of assets at cost (compared to 34.6% at cost in fiscal 1993) were in stocks and other equities. During fiscal 1994, new statutes allowed STRS to make a broader array of investments to diversify risk. One change raised the share of assets that can be invested in stocks to 50% from 35%.

Another change permitted investment in foreign stocks and bonds up to 10% of total investment assets. By the end of the fiscal year, 2.6% of total assets at cost resided in the international portfolio.

Much of the increased share of equities investment came at the expense of the liquidity reserves portfolio that exists to meet STRS' liquidity needs for investment opportunities. This portfolio provides a stable store of value when there is uncertainty in other investment asset categories. During fiscal 1994, the share of total investment assets allocated to the liquidity reserves portfolio fell to 1.7% from 10.1% at the end of the prior fiscal year. The portfolio held \$2.47 billion in assets in fiscal 1993, but only \$462 million at the end of fiscal 1994.

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. The valuation portfolio makes heavy use of computer-driven models to select stocks with low market valuations and strong balance sheets. The industry index portfolio concentrates on individual stock selection and is indexed to the percentage weightings of 25 industry groupings of the S&P 500. The small-company portfolio pursues opportunities in companies that are smaller than most of those in the major indexes. The growth portfolio selects stocks principally for earnings growth and market valuation. Finally, the passive index portfolio exists to get pure market exposure by matching the names and weightings of the S&P 500 to the greatest extent possible.

STRS common stock holdings, grouped by economic sector, are shown in the schedule of investments starting on Page 72. The excellent performance of the equity portfolio is shown on Page 58.

Real estate assets strongly outperform indexes

Fiscal 1994 was a watershed year in the real estate industry — the long down-cycle finally bottomed and the recovery began. With the real estate recovery came renewed investor interest.

Absorption of the existing supply of real estate and limited new construction caused a continual drop in vacancy rates during the fiscal year. Liquidity returned as pension funds and wealthy individuals began putting money back into the real estate market. The biggest story of the fiscal year was the resurgence of real estate investment trusts (REITs). These investment vehicles have been in existence since the 1970's, but failed to find a wide audience because of their mixed performance record. The difference for most of the REITs this time around can be found in stronger balance sheets and an alignment of interests between investors and management.

STRS reentered the market during the fiscal year with new investments of about \$215 million. At the same time, STRS took advantage of the improving real estate market to dispose of certain assets that no longer met the portfolio's strategy. The net result was a reduction in the real estate portfolio as a percentage of total investment assets to 6.4% at cost from 7.5% at cost in fiscal 1993. That share should increase over the coming fiscal year as new investment activity picks up.

Investment performance over the fiscal year was strong on both an absolute and relative basis. Benefiting from a strong market for commercial timberland, the STRS real estate total return increased to 7.3% in fiscal 1994 from 1.03% in fiscal 1993. The leading industry index, Russell-NCREIF, turned in a positive, but anemic, return for the first time in several years. More information concerning performance can be found on Page 58.

Total fund returns significantly exceed long-term goals

The annualized rate of return for the total STRS fund was 11.47% at year-end 1993 (STRS performance is calculated on a calendar-year basis for adequate comparison with other performance publications). The rate of return for the five-year period ending December 31, 1993, was 12.3% — significantly greater than the 8% return in 1992. Absolute long-term return goals for each asset category were surpassed by sizable margins as well, with the exception of real estate.

The relative performance of STRS portfolios compared to industry benchmarks also continued to fare well. For the five years ending in 1993, the equities portfolio surpassed the performance of the S&P 500, but fell slightly below that of the Dow Industrials, Fixed-income investments surpassed their yardstick, the Lehman Brothers Aggregate Bond Index, by nearly a full percentage point. Real estate investments outperformed the Russell-NCREIF index by over three percentage points.

As a whole, total return on STRS investment anety over the preceding five year period exceeded the rate of inflation by nearly nine percentage points, and exceeded the hybrid index (which combines the industry benchmarks of each asset category) by more than two percentage points. The past one-year and three-year returns for the total fund have exceeded the hybrid index by nearly three percentage points each.

Investment Performance (Total returns, annualized)

1-YEAR RETURNS (1993)

ASSET CATEGORY	STRS RETURN	INDEX NAME	INDEX RETURN	
EQUITIES	14.09%	Standard & Poor's 500 Dow Jones Industrials SEI Public Median*	10.09% 16.96% 12.50%	
FIXED INCOME	FIXED INCOME 9.52%		9.74% 11.03%	
REAL ESTATE	7.03%	Russell-NCREIF Evaluation Associates, Inc.	.88% 2.54%	
TOTAL FUND	11.47%	S&P/Shearson Lehman/FRC/Hybrid** Inflation (GDP Deflator) SEI Public Median*	8.67% 2.17% 11.10%	
	3-YEAR RETUR	RNS (1991–1993)		
ASSET CATEGORY	STRS RETURN	INDEX NAME	INDEX RETURN	
EQUITIES	17.55%	Standard & Poor's 500 Dow Jones Industrials SEI Public Median*	15.64% 16.02% 17.00%	
FIXED INCOME	11.78%	Shearson Lehman Aggregate Shearson Lehman Gov./Corp.	10.99% 11.52%	
REAL ESTATE	0.94%	Russell-NCREIF Evaluation Associates, Inc.	(3.31%) (3.41%)	
TOTAL FUND	12.96%	S&P/Shearson Lehman/FRC/Hybrid** Inflation (GDP Deflator) SEI Public Median*	10.08% 2.94% 13.00%	
	5-YEAR RETURN	NS (1989–1993)		
ASSET CATEGORY	STRS RETURN	INDEX NAME	INDEX RETURN	
EQUITIES	14.68%	Standard & Poor's 500 Dow Jones Industrials SEI Public Median*	14.51% 15.48% 14.20%	
FIXED INCOME	12.20%	Shearson Lehman Aggregate Shearson Lehman Gov/Corp.	11.27% 11.40%	
REAL ESTATE	REAL ESTATE 2.76%		(0.52%) (0.98%)	
TOTAL FUND 12.29%		S&P/Shearson Lehman/FRC/Hybrid** Inflation (GDP Deflator) SEI Public Median*	10.25% 3.54% 11.80%	

STRS Long-Term Policy Objective (5 Years)***

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

SELF Public Funds consist of 20 tunds with a median size of \$3.2 billion. STRS is a \$27 billion fund. The median fund has an average commitment

^{**} A hybrid of equity, fixed income and real estate vardsticks

^{***} The long term policy objectives listed here were valid prior to modifications made effective September 15, 1994

Summary of Investment Assets

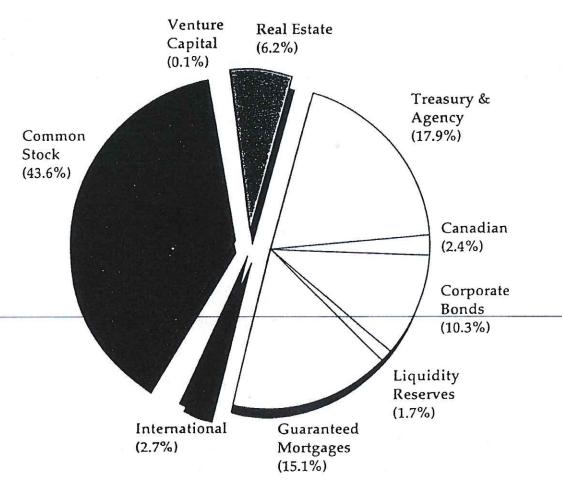
As of June 30, 1994, 1993 and 1992

(Dollar Amounts in Thousands)

		1994		<u>.</u>	1993			1992		
	Book Value	Market Value	%	Book Value	Market Value	%	Book Value	Market Value	%	
Short Term/ Liquidity Reserves	\$ 462,328	\$ 460.203	1.7%	6 \$ 2,470,455	\$ 2,485,573	9.2%	\$ 1,123,795	\$ 1,133,945	4.8%	
Fixed Income U.S. Government										
& Agency	\$ 4,771,642	\$ 4,907,937	17.9	\$ 4,482,817	\$ 5,320,588	19.8	\$ 5,162,083	\$ 5,602,089	23.5	
Canadian Bonds	667,286	663.656	2.4	790,959	833,566	3.1	658,226	676,922	2.8	
Municipal Bonds	1,645	1,748	·0.0	1,895	2,180	0.0	2,150	2,293	0.0	
Corporate Bonds & Notes	2,822,282	2,813,377	10.3	2,700,127	2,832,466	10.5	1,990,055	2,062,850	8.7	59
Convertible Bonds Guaranteed	0	0	0.0	0	0	0.0	5,372	5,108	0.0	Ohro
Mongages	4,215,769	4,137,146	15.1	3,729,960	3,833,329	14.2	3,776,218	3,927,771	16.5	cui of
Total Fixed Income	\$12,478,624	\$12,523,864	45.7	\$11,705,758	\$12,822,129	47.6	\$11,594,104	\$12,277,033	51.5	III Syst
Equity Common and					· Kitt · Mich				•	State Teachers Retirement System of Ohio
Preferred Stock	\$11,411,307	\$11,933,544	43.6	\$ 8,482.848	\$ 9,875,312	36.7	\$ 7,346,511	\$ 8,561,300	35.9	thers R
Real Estate	1,708,967	1,699,858	6.2	1,838,348	1,734,713	6.4	1,992,847	1,819,501	7.7	te Teau
Venture Capital	19,868	26,758	0.1	22,353	26,468	0.1	27,095	27,575	0.1	Sta
Total Equity	\$13,140,142	\$13,660,160	49.9	\$10,343,549	\$11,636,493	43.2	\$ 9,366,453	\$10,408,376	· -43.7	
International	\$712,150	\$738,285	2.7		0'	0.0	وحائدت		- 0.0	
Total Investments	\$26,793,244	\$27,382,512	100.0%	\$24,519,762	\$26,944,195	100.0%	\$22,084,352	\$23,819,354	00.0%	







- International

- Fixed Income

- Equities

- Real Estate

Investment Objective and Policy (Effective September 15, 1994)

GENERAL POLICY STATEMENT

Introduction

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

In addition to the investment function, Section 3307.15 of the Revised Code also sets forth the fiduciary responsibility of the Board and other fiduciaries in discharging their duties with respect to the fund. Section 3307.01(U) of the 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 Board and staff must discharge their responsibilities without prejudice or favor, avoiding at all times any conduct that could create or appear to create a conflict of interest.

Staff members shall carry out the duties and responsibilities delegated by the Board in the best interest of members of the system and in accordance with the code of ethics of the 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 Board in all investment matters.

Investment Advisors/Consultants

The Board shall employ competent, wellqualified organizations to assist in carrying out its fiduciary responsibility. Duties of the investment advisors/consultants shall include but not be limited to:

- Preparation of long-term investment objectives, review of these objectives at least annually, and recommendation for changes in the objectives as required.
- Monitoring performance of the investment program.
- Availability to counsel with in-house staff, executive director, or members of the Board.
- 4. Participation in bimonthly meetings of the investment committee.
- Review and advise on detailed investment entena for all investments.
- 6. Review of annual investment plan.
- 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.
- In cooperation with the investment advisor and the executive director, formulate an annual investment plan.

- Make recommendations to the executive director and Board concerning periodic modification of the annual investment plan.
- Assure that the equity portfolios comply with established parameters and risk levels.
- Supervise execution of orders to buy and sell securities (including options) seeking always to maintain reasonable costs for such services.
- Report in required detail to the executive director and the investment committee and/ or the Board on all activities of the investment staff.

OBJECTIVES, GUIDELINES AND POLICIES: TOTAL FUND

Objectives

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

Each 15 increase in investment return will finance benefit improvement in the range of 10%-15%, or will allow a similar reduction in contributions. Such gain may also be used to reduce the actuarial debt of the plan. Therefore, maximization of return, from both current income and capital appreciation consistent with the overall risk parameters described below, is an important objective. With strict adherence to statutory investment limitations and restrictions, the 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 objectives should be pursued consistently with prodent management and at the minimal level of market risk necessary to accomplish them.

The fund does not have a capital return or income return objective separate from the total return objective. However, it is anticipated that for the total account there will be income yield over a long-term period which is equal to capital growth because of the utilization of fixed-income and real estate assets.

The 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 Board and other fiduciaries shall discharge their duties with respect to such funds solely in the interest of the participants and beneficiaries. It is the intent of the Board to give consideration to investments that enhance the general welfare of Ohio provided such investments offer quality return and safety comparable to other investments currently available to the Board. Also, the Board will give equal consideration to investments that involve minority-owned and minoritycontrolled firms and firms owned and controlled by women.

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 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.

The policy asset mix ranges and the "targeted normal weighting" for the major asset classes are listed below. The investment staff has the authority to operate within the policy ranges for each asset class. The "targeted normal weights" were derived based on each asset's long-term (5- to 10-year) expected rate of return and volatility.

Asset Class/ Asset Mix	Policy Ranges at Cost	Targeted Normal Weightings at Cost
Cash Equivalents	0%-6%	2%
Fixed Income ·	22%-50%	35%
Equities	40%-50%	46%
Real Estate	6%-12%	9%
International	4%-10%	8%
•		100%

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 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 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 obligations of the U.S. Treasury and related agencies as Aaa. Fixed-income purchases, including exchanges, shall meet the following criteria in addition to statutory requirements. All bond, note, passthrough security, trust certificate, debenture, Canadian, or medium-term note purchases shall:

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

 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 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 overthe-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 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:

- 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 Board thereon.
- 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.
- 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 (excluding Canadians) rated AA or better.
- Bonds of a United States subsidiary traded or issued in the foreign market, provided they are guaranteed by the United States parent company.
- State of Israel bonds (not rated) not to exceed \$10 million.

MORTGAGES

Objectives

The 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 Board to make regular investments in Ohio single-family FHAVA 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

- Guaranteed project mortgages on such facilities as apartments, nursing homes and elderly housing shall be purchased without location restrictions. Construction loans guaranteed by the United States government shall be restricted to Ohio locations.
 Construction loans guaranteed by the United States government that convert to permanent loans can be purchased without location restrictions.
- 2. Mongage-backed securities:
 - a. Mortgage-hacked bonds: The Board may purchase bonds that are collateralized by Ohio single-family

- mortgages. The bond shall be rated Aa or better, and the mortgage pool shall be at least 150% of the amount of the outstanding bond.
- b. Pass-through securities: The Board may invest in pass-through securities that are backed by Ohio single-family mortgages or Ohio commercial mortgages, provided that: (a) the minimum pass-through certificate is \$5 million; (b) private mortgage insurance is provided on any conventional mortgage with a loan-to-value ratio greater than \$0%; and (c) the selling institution is Ohio-based and has a net worth exceeding \$5 million.
- c. Fixed-rate commercial mortgages:
 The Board may invest in fixed-rate commercial mortgages 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.

CASH EQUIVALENTS

Objectives

It is the 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 Board does not expect that major moves will be made into or out of cash reserves.

Restrictions

Under normal circumstances, a reserve of 6% 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.

- 1. Any commercial paper purchased by the system shall have a maturity of not more than 270 days and shall be rated P-1 by Moody's Investors Service, Inc. and/or A-1 by Standard & Poor's Corporation.
- Certificates of deposit and bankers' acceptances shall be purchased on those banks affiliated with the largest 100 U.S. bank holding companies in terms of assets with short-term debt ratings of P-I and/or A-1, and the 20 largest bank holding companies in Ohio.

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

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 Board a revised figure. In today's market, the Board believes an 8%-10% average return objective over a five-year period is prudent and realistic, within the volatility guidelines. The 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 nonmarket risk by being diversified.

Restrictions

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

the approximate range of 40%-50% of assets. The amount invested at any time is determined by the long-term objectives established by the Board in conjunction with the investment advisor and by the annual investment plan and its periodic modifications.

The function of a pension plan is to provide for long-term investment positions, and therefore it is not the policy of the Board to be engaged in purchase and sale of common stocks on the basis of temporary market swings or other speculative factors. The risk of the equity portfolio has been defined 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 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).

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 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 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 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 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 not more than 10% of total assets. It is the Board's policy to maintain an exposure in international investments in the range of 4%–10%. The staff will select and the Board will monitor all outside money management firms used for international investments. Internal management of international assets will also be utilized.

Derivatives may be used to manage international investments. Underlying exposure of derivatives for international investments cannot exceed 5% of total assets.

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

standard deviation (high risk). For these reasons, expected financial returns must exceed those of other asset classes for venture capital involvement to be worthwhile for STRS. Venture capital returns are expected to be approximately 15% annually during the 1990s. In addition to the higher expected financial returns, venture capital can provide ancillary benefits to the state of Ohio in the form of new jobs, increased research and development, and new taxes,

Restrictions

Venture capital investments are permitted under Section 3307.15(D)(5) 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 Ohiobased small businesses. The aggregate amount of these Ohio-based investments must be at least equal to the Board's investment in the fund.

Total value of venture capital investments is legally limited to 5% of total assets. However, due to the limited number of suitable investment opportunities located in Ohio, it is the Board's intent to limit venture capital investment to 0.5% of STRS total assets. Furthermore, it is the Board's intent to generally limit venture capital investment 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(D)(5) of the Revised Code, the investment staff is encouraged to seek board representation on each entity to further enhance the safety and direction of the State Teachers Retirement System's investment.

The deputy executive director of investments will inform the Board of an individual to serve on a company board and to face election by shareholders of that company. If the named individual is an STRS employee, that individual must sign a letter 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 Board's policy to invest in real estate 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. A total return objective of 8%-9% per year over a 5- to 10-year period is expected on these assets.

Restrictions

Real estate investments shall be not more than 12% of total assets. It is the Board's policy to maintain an investment in real estate in the range of 6%—12% of assets.

Diversification:

- 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;
 - 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, coownership 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:

- A building and systems evaluation by a qualified engineering firm in the case of an existing building;
- A review of plans and specifications by an architectural firm in the case of developmental properties;
- An appraisal by an independent third-party appraisal firm;
- 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 Board's real estate consultant. The policy will ensure that STRS will be prudent and diligent in its investments so 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.

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-leaseback 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 multitenant 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 by the Board's real estate consultant.

Performance

Real estate investment performance will be reported to the 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 indices shall be used as benchmarks to evaluate performance: The Russell-NCREIF Property Index and Evaluation Associates Fund Performance Index.

Board Consultant

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

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

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:

- Ancillary 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%;
- Transactions allowed under existing investment documents (i.e., conversion options, loan prepayments, etc.);
- Sales of sale-leaseback properties when the sale price exceeds the book value of the investment or where the investment amount is less than \$1.5 million;
- Temporary mortgage restructurings which limit the restructuring to no more than four years and revert back to original terms.

Board Review

The 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;
- Individual transactions outside policy and/or strategy;
- 5. Monthly investment activity reports:
- Semiannual performance reports from the consultant.

PROCEDURES

Long-Term Objectives

The investment advisor shall recommend longterm (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 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 Board.

Annual Investment Plan

Each year, an annual investment plan shall be developed by the investment committee.

This plan shall be based on recommendations of the Investment Department and the investment consultant, with approval of the executive director. The annual investment plan shall be based on the following:

- The long-term objectives set forth by the Board, on recommendation of the investment consultant.
- Estimated monthly cash flow for the ensuing year.
- General economic outlook for the short and long term.
- Expected relative values of various investment instruments (i.e. stocks vs. bonds, etc.).
- 5. Short- and long-term interest rates.
- 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 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:

- Monthly Activity Report which shall include:
 - a. Common stocks:
 - (1) Summary of 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. Performance,
- 2. Portfolio summary. Classified by asset type:
- Investment purchases and sales, year-todate.

Proxy Voting

The State Teachers Retirement Board believes that common stock provies are valuable and should be voted in the best interest of the members and retirees. To this end, the Retirement Board shall maintain stock proxy voting policies and the staff and all outside managers will use them as guides 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, the deputy executive director of Investments, or outside money managers.

Ohio Investments

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

To meet this objective, an Ohio Investment Plan incorporating all provisions of the STRS Investment Objective and Policy Statement shall be maintained and implemented by the investment staff. This plan shall set forth procedures to assure that a special effort will be made by the investment staff to examine and evaluate all legal investment opportunities in the state and, where policy objectives are met, to acquire such investments.

Broker-Dealers

Purchases and sales of publicly traded securities shall be executed with broker-dealers from a list reviewed by the investment committee. The list shall be limited, as practicable, to 60 firms plus those in the Ohio and emerging firms sublist. Selection shall be based on an evaluation by the investment staff as to financial soundness, underwriting capabilities, research services, execution capabilities and other factors required by the staff to fulfill its assigned investment responsibilities. Specific transactions will be directed to the broker on that list most capable of providing brokerage services necessary to obtain both the best available price and the most favorable execution.

The Board shall give equal consideration to minority-owned and controlled firms and to firms owned and controlled by women. The Board shall be proactive in its intent to include firms that have an operating office located in Ohio, minority-owned and controlled firms, and firms owned and controlled by women.

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

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

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

Security Lending

The 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 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 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 cash equivalents, equity, fixed-income, real estate and international 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 Lehman Government/
Corporate Bond Index, Lehman Aggregate
Bond Index and the GNP Deflator. The 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 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.

In addition, the Board and its investment advisors/consultants will maintain a performance monitoring system for individual asset categories and total fund.

Security Valuation

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

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

Market valuation of investments shall be the total of:

- The closing price on the principal registered stock exchange for all common and preferred stocks so listed.
- The last sale or, if not available, final bid as reflected by NASDAQ for common and preferred stocks not listed on a registered stock exchange.
- The current value as determined by a qualified independent service for all bonds, notes and certificates of indebtedness.
- Par value for commercial paper, certificates of deposit, repurchase agreements and other short-term investments with a maturity of 270 or fewer days.
- Real estate valued through a combination of independent appraisals and in-house valuations. Methodology underlying internal valuations will be reviewed by the real estate consultant. REIT shares are valued at closing prices on the appropriate stock exchange.
- The most recent valuation for pooled venture capital and direct venture capital.
- Guaranteed mortgages assigned an estimated value based on the most recently posted rate for new Veteran's Administration or Federal Housing Administration guaranteed mortgages.
- International investments are valued by the subcustodian using relevant closing market prices and exchange rates.

Schedule of Investments As of June 30, 1994

COMMON STOCKS

	SHARES		TOTAL		TOTAL
			COST		MARKET
Metals/Mining					
Alcan Aluminum, Ltd.	783,443	S	17,710,334	S	17,823,328
Aluminum Company of America	1,674,800	3	112.272.113	ن	122,469,750
American Barrick	105,824		2,993,699		2,526,548
Armeo, Inc.	38,627		222,558		217.276
Asarco, Inc.	421,485		10,149,598		11,854,265
	34,391		540,956		640,532
Bethlehem Steel Corporation			17.679,864		18,900,000
Birmingham Steel Corporation	700,000				W. C.
Broken Hill Proprietury Co. Ltd. (ADR)			41,131,441		44,125,125 22,230,000
Cleveland-Cliffs, Inc.	585,000		19,633,143		28,336,161
Cyprus Amax Minerals Co.	952,476		28,446,894		
Echo Bay Mines, Ltd.	41,533		496,149		446,479
Homestake Mining Company	51,239		848,989		960,731
Inco Limited	1,341,180		31,508,109		32,691,262
Inland Steel Industries, Inc.	1,816,900		43,208,176		63,364,387
Insteel Industries, Inc.	117.382		622,251		983,074
Newmont Mining Corporation	696,439		29.282,936		28.031.669
Nucor Corporation	32,352		1.287,725		2,216,112
Oregon Steel Mills, Inc.	480,800		10,849,723		9.195.300
Phelps Dodge Corporation	26,240		1.157.011		1.495,680
Placer Dome, Inc.	88,743		2.081,980		1,907,974
Reynolds Metals Company	22,310		1,109,915		1,070,880
USX-US Steel Group	669.458		17,051,103		22.677,889
Worthington Industries, Inc.	1,768,520		25,626,986		32,717,620
Totals		\$	415,911,663	S	466,882,042
Forest Products					
Georgia-Pacific Corporation	33.402	S	2.006,699	S	1,999,944
Louisiana-Pacitic Corporation	41,058	3	843,081	•	1,252,269
Rayonier, Inc.	10.204		241,969		294,640
Weyerhaeuser Company	76,610		3.062.035		3,064,400
weyernaetser Company	70,010		2,002,000		5,004,400
Totals		S	6.153.784	\$	6,611,253
Building Materials					
CalMat Company	757,400	\$	23,653,671	\$	15.337,350
Florida Rock Industries, Inc.	391,048		10,614,675		9,385,152
Owens Coming Fiberglass Corporation	15,923		586,942		497,593
Totals		S	34,855,288	S	25,220,095

	SHARES		TOTAL COST		TOTAL MARKET
Oil/Coal					
Amerada Hess Corporation	669,860	S	36,236,931	9	32,990,605
Amoco Corporation	1.505,600		70,068,449		85,631,000
Ashland Coal, Inc.	564,100		14,658,127		15.089,675
Ashland Oil, Inc.	22,348		636,509		748,658
Atlantic Richfield Company	1.180,300		111,492,520		120,685,675
Burlington Resources, Inc.	48,500		1,984,813		2,006,687
Chevron Corporation	242,352		5,154,602		10,148,490
Diamond Shamrock, Inc.	452,500		10,916,056		11,482,187
Exxon Corporation	3,948,700		241,081,658		224,088,725
Kerr McGee Corporation	508.088		22,243,161		23,943,647
Louisiana Land & Exploration Company	10,750		402,412		456,875
Lyondell Petrochemical Co.	1,405,600		31,001,203		34.612,900
Maxus Energy Corporation	49.977		363,230		243,637
McDermott International, Inc.	19.359		519,200		483,975
Mobil Corporation	148,790		7,125,919		12.126,385
Occidental Petroleum Corporation	8.027,224		163,087,123		151,513,853
Oryx Energy Company	36.049		754,702		540,735
Pennzoil Company	17,036		936,153		873,095
Phillips Petroleum Company	1,474,539		40,034,810		46,079,343
Royal Dutch Petroleum Corporation	199,749		21,161,939		20,873,770
Santa Fe Energy Resources	33,415		338,989		313,265
Sun Company	39,705		1,080,086		1.067,071
Texaco, Inc.	2,687,800		166,628,026		162,275,925
USN-Marathon Group	5.711.291		112,166,430		95.664,124
Unocal Corporation	3,011,300		61,018,642		86.198.462
Valero Energy Corporation	(xx),(xx)		6,453,709	387 594 9	5.250,000
Western Atlas International	16,818		486.837		800,957
Witeo Chemical Corporation	980,800		28,434,673		28.933.600
Totals		S	1,156,466,909	S	1,175,123,321
Oil/Gas Pipelines					
BJ Services Company	270,000	s	5,340,762	S	5.568,750
Coastal Corporation	668,200	3	21,423,052	3	
Columbia Gas System, Inc.	1.609.00x)		38.048.605		13,041,400
Enron Corporation	801,024				43,443,000
ENSERCH Corporation	51'69a		21,336,147		26,233,536
Panhandle Eastern Corporation	11'(X)')		477,423 935,388		354,616
12 12 12 12 12 12 12 12 12 12 12 12 12 1	1,608,868		32,003,647		869,177
Transco Energy Company	15,012				49,475,766
Williams Companies, Inc. (The)	388,064		259,756		243,945
	200,007		10,845,162		11,108,332
Totals		S	130,669,942	\$	155,338,522

	SHARES		TOTAL COST		TOTAL MARKET
Petroleum Services					
Baker Hughes, Inc.	3,435,800	5	64,894,302	S	70,433,900
Halliburton Company	3,547,200		105,548,376		120,161,400
Helmerich & Payne, Inc.	9,132		275,847		241,998
Production Operators Corporation	90,000		2.054.655		2,340,000
Rowan Companies, Inc.	31,242		292,875		273,367
Schlumberger Limited	490.567		27,005,856		29,004,773
Totals		S	200,071,911	S	222,455,438
Engineering & Construction					
Crane Company	11,138	S	287,249	S	293,764
Fluor Corporation	506.8(X)	3	20,601,131	(3).	25,720,100
Foster Wheeler Corporation	1,318,200		26,731,575		47,949,525
JWP, Inc.	14,100		55,043		000
Jacobs Engineering Group	855,000		20,636,221		17,527,500
Morrison Knudsen Corporation	11,803		273,812		253,764
	11,502				
Totals		S	68.585.031	S	91,744,653
Industrial Machinery					
Binks Manufacturing Company	146,934	S	3.674.342	S	3,048,880
Cincinnati Milaeron, Inc.	2,147,600		47,006,676		44,831,150
Dresser Industries, Inc.	64,861		1,346,209		1,329,650
Duriron Company, Inc.	440,150		6.440.913		7.042,400
General Signal Corporation	1,973,814		61,991,459		65,135,862
Giddings & Lewis, Inc	12,715		289,624		197,082
Goulds Pumps, Inc	1,332,2(X)		31,914,050		28.642.300
Harnischfeger Industries, Inc.	650,119		12,270,386		12,677,320
Illinois Tool Works, Inc	42,058		1,411,405		1.640,262
Kaydon Corporation	737,6(X)		16,698,642		15,674,000
Keystone International, Inc.	2.199,430		57.187.717		42,888,885
Parker Hannifin Corporation	1,615,737		48,982,451		68,870,789
Timken Company	1.854.339		59,936,599		60,729,602
Trinova Corporation	1,136,000		25,405,919		39,334,000
Varity Corporation	13,630	1 10 CB 388 H	512,403		495,791
Totals		S	375,068,795	S	392,537,973
Auto Parts/Original Equipmer	nt Mfg.				
Cascade Corporation	297,600	S	4.841.995	S	6,547,200
Caterpillar, Inc.	37,768		2,370,751		3,776,800
Clark Equipment Company	6,471		173,684		386,642
Cummins Engine Co., Inc.	13,132		542,830		569,600
Dana Corporation	1,880,700		38,079,562		53,599,950
Deere & Company	31,291		1.731,646		2,116,053
Eaton Corporation	26,055		1,105,841		1,354,860
Ingersoll-Rand Company	748,447		21,398,859		26,289,200
NACCO Industries CI-A	2,836		139.333		152,435
Navistar International Corporation	27,198		728,956		363,773
PACCAR, Inc.	14,559		769,668		673,353
SPX Corporation	5,138		90,524		79,639
Standard Products Company	165,625		3,483,929	225	4,844,531
Totals	2	S	75,457.578	S	100,754,036

	SHARES		TOTAL COST		TOTAL MARKET
Building Products					
Armstrong World Industries, Inc.	13,854	S	453,330	S	645,942
Gardner Denver Machine	57,356		490,682	3	501,865
Johnson Controls, Inc.	15.022		650,723		726,689
LSI Industries, Inc.	32.100		290,697		333.037
Masco Corporation	56.958		1,435,603		1,566,345
Totals		S		s	3,773,878
Electrical Products					
Cooper Industries, Inc.	2,673,700	S	90,579,479	S	96.253,200
Emerson Electric Company	2.152,600		116,249,241		122,429,125
General Electric Company	3.514.432		68.719,055		163,860,392
Hubbell, Inc.	174.500		9.296,651		9,684,750
Raychem Corporation	805,700		25,900,583		29,005,200
Reliance Electric Company	1.294,100		25.637,211		23,455,562
Thomas & Betts Corporation	7.012		450,805		431,238
Westinghouse Electric Corporation	130,521		1.764,160		1,517,306
Totals		S	338,597,185	S	446,636,773
046					
Office Equipment Supplies			English Services and Committee		
Pitney Bowes, Inc.	1.384,955	S	56,417,048	S	52,801,409
Xerox Corporation	38,711		3.063.996		3.784,000
Totals		\$	59,481,044	S	56.585,409
Multisector Companies					
AlliedSignal, Inc.	105,166	S	2,221,755	S	3,641,372
Ametek, Inc.	2,296,400	•	29.465,797	3	33.871,900
Dial Corporation	1,140,974		49,160,513		50,060,234
Dover Corporation	21,297		1.021.376		1,253,860
Honeywell, Inc.	50,073		1.724,236		1.552.263
ITT Corporation	44,417		3.094,983		3.625.537
Litton Industries, Inc.	15,518		339.667		521,792
Loews Corporation	835,000		74,420,941		71,810,000
Minnesota Mining & Manufacturing Co.	161,754		8.547.678		8.027.042
National Service Industries, Inc.	18.551		468.699		482,326
Pentair, Inc.	100,000		3,281,000		3,575,000
Pittston Services Group	15.065		381,591		410,521
TRW Inc.	959,400		51,675,287		61.881,300
Teledyne, Inc.	2,234,293		47,283,100		35.748,688
Tenneco, Inc.	1,699,500		80.831,131		78,814,312
Textron, Inc.	32,945		1,576,837		1,725,494
Tyco International, Ltd.	1,444,700		57.719,961		66,275,612
Totals		s	413,214,552	S	423,277,253

Environmental Services Browning-Ferris Industries, Inc. 2,641,637 \$76,371,686 \$80,239,723 Calgon Carbon Corporation 1,034,200 11,885,449 14,220,250 Mid-American Waste Systems, Inc. \$67,500 5,966,871 3,192,187 Rollins Environmental Services, Inc. 179,879 6,226,024 4,766,793 Zum Industries, Inc. 4,708 151,143 95,337 Totals \$100,735,808 \$102,623,758 Chemicals \$80,200 \$34,004,616 \$36,395,287 Air Products & Chemicals, Inc. 1,007,600 32,320,915 42,697,050 American Cyanamid Company 33,541 1,725,847 1,878,296 Betz Laboratories, Inc. 1,441,400 68,609,840 61,079,325 Church & Dwight Co., Inc. 292,700 7,808,036 6,553,925 Crompton & Knowles Corp. 937,000 19,052,667 16,163,250 Cyter Industries 4,305 118,415 8,5561 Dow Chemical Company 2,021,200 117,481,545 32,135,950 duPont (Eli de Nomeura & Company 290,322 10,940,141 13,862,875 Eoglab, Inc. 232,568 461,992 518,396 Englethard Corporation 2,221,507 105,393,498 119,806,666 First Mississippin Corporation 2,221,507 105,393,498 119,806,666 First Mississippin Corporation 2,231,507 105,393,498 119,806,666 First Mississippin Corporation 2,213,507 103,393,498 119,806,666 First Mississippin Corporation 2,213,507 103,393,498 119,806,666 Fuller (H.B.) Company 34,720 1,348,221 1,384,460 Fuller (H.B.) Company 34,720 1,348,221 1,384,600 7,944,616 12,102,600 7,944,616 1,203,230 1,200,000 1,200,401,41 13,365,316 Fuller (H.B.) Company 34,720 1,348,221 1,384,600 7,944,616 1,203,230 1,200,000 7,944,616 1,203,230 1,200,000 7,204,617 1,205,000 7,204,617 1,205,000 7,204,617 1,205,000 7,204,617 1,205,000 7,204,617 1,205,000 7,204,617 1,205,000 7,204,617 1,205,000 7,204,617 1,205,000 7,204,617 1,205,000 7,204,617 1,205,000 7,204,617 1,205,000 7,204,617 1,205,000 7,204,617 1,205,000 7,204,617 1,205,000 7,204,617 1,205,000 7,2		SHARES	TOTAL COST		TOTAL MARKET
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Rollins Environmental Services, Inc. 22,455 134,635 109,468 WMX Technologies, Inc. 179,879 6,226,024 4,766,793 Zum Industries, Inc. 4,708 151,143 95,337 Totals \$ 100,735,808 \$ 102,623,758 Chemical Company 802,100 \$ 34,004,616 \$ 36,395,287 Air Products & Chemicals, Inc. 1,007,600 32,320,915 42,697,050 American Cyanamid Company 33,541 1,725,847 1,878,296 Betz Laboratores, Inc. 1,441,400 68,609,840 61,079,325 Church & Dwight Co., Inc. 292,700 7,808,036 6,658,925 Crompton & Knowles Corp. 937,000 19,052,667 16,163,250 Cytec Industries 4,305 118,415 85,561 Dow Chemical Company 2,021,200 117,481,545 132,135,950 duPont (Ell) de Nemours & Company 2,193,100 99,426,941 127,748,075 Ecolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,					
WMX Technologies, Inc. 179,879 6,226,024 4,766,793 Zum Industries, Inc. 4,708 151,143 95,337 Totals \$ 100,735,808 \$ 102,623,758 Chemicals *** \$ 100,735,808 \$ 102,623,758 Chemical Company 802,100 \$ 34,004,616 \$ 36,395,287 Air Products & Chemicals, Inc. 1,007,600 32,320,915 42,697,050 American Cyanamid Company 33,541 1,725,847 1,878,296 Betz Laboratories, Inc. 1,441,400 68,609,840 61,079,325 Church & Dwight Co., Inc. 292,700 7,808,036 6,658,925 Crompton & Knowles Corp. 937,000 19,052,667 16,163,250 Oyce Industries 4,305 118,415 85,561 Dow Chemical Company 2,021,200 117,481,451 132,135,950 duPont (El) de Nemours & Company 2,193,100 99,426,941 127,748,075 Eastman Chemical Company 20,322 10,940,141 13,862,875 Eoclab, Inc. 23,568 461,992 518,496 <t< td=""><td>:</td><td></td><td></td><td></td><td></td></t<>	:				
Zum Industries, Inc. 4,708 151,143 95,337 Totals \$ 100,735,808 \$ 102,623,758 Chemical Company 802,100 \$ 34,004,616 \$ 36,395,287 Air Products & Chemicals, Inc. 1,007,600 32,320,915 42,697,005 American Cyanamid Company 33,541 1,725,847 1,878,296 Betz Laboratones, Inc. 1,441,400 68,609,840 61,079,325 Church & Dwight Co., Inc. 292,700 7,808,036 6,658,925 Crompton & Knowles Corp. 937,000 19,052,667 16,163,250 Cytec Industries 4,305 118,415 85,561 Dow Chemical Company 2,012,00 117,484,545 132,135,950 duPont (EI) de Nemours & Company 290,322 10,940,141 13,862,875 Ecolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,284,413 Fixt Mississippi Corporation 7,447 76,201 113,566 Ferro Corporation 7,447 76,201 113,566					
Chemicals ARCO Chemical Company 802.100 \$ 34,004,616 \$ 36,395,287 Air Products & Chemicals, Inc. 1,007,600 32,320,915 42,697,050 American Cyanamid Company 33,541 1,725,847 1,878,296 Betz Laboratories, Inc. 1,441,400 68,609,840 61,079,325 Church & Dwight Co., Inc. 292,700 7,808,036 6658,925 Crompton & Knowles Corp. 937,000 19,032,667 16,163,250 Cytee Industries 4,305 118,415 85,561 Dow Chemical Company 2,021,200 117,484,545 132,135,950 duPont (EI) de Nemours & Company 2,193,100 99,426,941 127,748,075 Eastman Chemical Company 290,322 10,940,141 13,862,875 Ecolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,284,413 FMC Corporation 22,13,507 105,393,498 119,806,066 Ferro Corporation 560,000 17,944,613 12,950,000 First Mississipp Corporation					
Chemicals ARCO Chemical Company 802.100 \$ 34,004,616 \$ 36,395,287 Air Products & Chemicals, Inc. 1,007,600 32,320,915 42,697,050 American Cyanamid Company 33,541 1,725,847 1,878,296 Betz Laboratories, Inc. 1,441,400 68,609,840 61,079,325 Church & Dwight Co., Inc. 292,700 7,808,036 6658,925 Crompton & Knowles Corp. 937,000 19,052,667 16,163,250 Cytee Industries 4,305 118,415 85,561 Dow Chemical Company 2,021,200 117,484,545 312,135,950 duPont (EI) de Nemours & Company 2,193,100 99,426,941 127,748,075 Eastman Chemical Company 290,322 10,940,141 13,862,875 Ecolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,284,413 FMC Corporation 250,000 17,944,613 12,950,000 First Mississipp Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 9,627	Totals		5 100 735 808		102 623 758
ARCO Chemical Company Air Products & Chemicals. Inc. 1,007,600 32,320,915 42,697,050 American Cyanamid Company 33,541 1,725,847 1,878,296 Betz Laboratories. Inc. 1,441,400 68,609,840 61,079,322 Church & Dwight Co., Inc. 292,700 7,808,036 6,658,925 Crompton & Knowles Corp. 937,000 19,052,667 16,163,250 Cytee Industries 4,305 118,415 85,561 Dow Chemical Company 2,021,200 417,484,545 4305 418,415 Eastman Chemical Company 2,90,322 10,940,141 13,862,875 Ecolab. Inc. 23,568 461,992 518,496 Englehard Corporation 22,13,507 105,393,498 119,806,066 Ferro Corporation 560,000 17,944,613 12,950,000 First Mississipp Corporation 7,447 76,201 113,566 Feller (H.B.) Company 9,627 403,447 418,774 Grace (W. R.) & Company 17,944,666 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group. Inc. 15,716 1,073,035 3,036,241 4,965 0,006 0,000	i otal,		3 100,733,000	J	102,025,750
Air Products & Chemicals, Inc. 1,007,600 32,320,915 42,697,050 American Cyanamid Company 33,541 1,725,847 1,878,296 Betz Laboratories, Inc. 1,441,400 68,609,840 61,079,325 Church & Dwight Co., Inc. 292,700 7,808,036 6,658,925 Crompton & Knowles Corp. 937,000 19,052,667 16,163,250 Cyte Industries 4,305 118,415 85,561 Dow Chemical Company 2,021,200 117,484,545 132,135,950 duPont (El) de Nemours & Company 2,193,100 99,426,941 127,748,075 Eastman Chemical Company 290,322 10,940,141 13,862,875 Ecolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,284,413 FMC Corporation 560,000 17,944,613 12,950,000 Ferro Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 9,627 403,447 418,774 Goodrich (B. F.) Company 9,627 403,447 418,					
American Cyanamid Company 33,541 1,725,847 1,878,296 Betz Laboratories, Inc. 1,441,400 68,609,840 61,079,325 Church & Dwight Co., Inc. 292,700 7,808,036 66,58,925 Crompton & Knowles Corp. 937,000 19,052,667 16,163,250 Cytec Industries 4,305 118,415 85,561 Dow Chemical Company 2,021,200 117,484,545 132,135,950 duPont (EI) de Nemours & Company 2,903,322 10,940,141 13,862,875 Ecolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,284,413 FMC Corporation 560,000 17,944,613 12,950,000 First Mississippi Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 9,627 403,447 418,774 Grace (W. R.) & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M.A.) Company 476,950 7,794,466 <td< td=""><td>ARCO Chemical Company</td><td>802,100</td><td>\$ 34,004,616</td><td>\$</td><td>36,395,287</td></td<>	ARCO Chemical Company	802,100	\$ 34,004,616	\$	36,395,287
Betz Laboratories, Inc. 1,441,400 68,609,840 61,079,325 Church & Dwight Co., Inc. 292,700 7,808,036 6,658,925 Crompton & Knowles Corp. 937,000 19,052,667 16,163,250 Cytec Industries 4,305 118,415 85,561 Dow Chemical Company 2,021,200 117,484,545 132,135,950 duPont (El) de Nemours & Company 2,193,100 99,426,941 127,748,075 Eastman Chemical Company 290,322 10,940,141 13,862,875 Eeolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,284,413 FMC Corporation 2,213,507 105,393,498 119,806,066 Ferro Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 9,627 403,447 418,774 Grace (W. R., & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478	Air Products & Chemicals, Inc.	1,007,600	32,320,915		42,697,050
Church & Dwight Co., Inc. 292,700 7,808,036 6,658,925 Crompton & Knowles Corp. 937,000 19,052,667 16,163,250 Cytec Industries 4,305 118,415 85,561 Dow Chemical Company 2,021,200 117,484,545 132,135,950 duPont (El) de Nemours & Company 2,193,100 99,426,941 127,748,075 Eastman Chemical Company 290,322 10,940,141 13,862,875 Ecolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,284,413 FMC Corporation 22,213,507 105,393,498 119,806,066 Ferro Corporation 560,000 17,944,613 12,950,000 First Mississippt Corporation 7,447 76,201 113,566 Fuller (H,B.) Company 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M,A.) Company 476,950 7,794,466	American Cyanamid Company	33,541	1,725,847		1,878,296
Crompton & Knowles Corp. 937,000 19,052,667 16,163,250 Cytec Industries 4,305 118,415 85,561 Dow Chemical Company 2,021,200 117,484,545 132,135,950 duPont (EI) de Nemours & Company 2,93,100 99,426,941 127,748,075 Eastman Chemical Company 290,322 10,940,141 13,862,875 Ecolab, Inc. 23,568 461,992 518,496 Englebard Corporation 922,155 24,200,219 23,284,413 FMC Corporation 560,000 17,944,613 12,950,000 First Mississippi Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 9,627 403,447 418,774 Grace (W. R.) & Company 34,720 1348,821 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Harna (M. A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 574,000 22,241,914 19,874,750	Betz Laboratories, Inc.	1,441,400	68,609,840		61,079,325
Cytec Industries 4,305 118,415 85,561 Dow Chemical Company 2,021,200 117,484,545 132,135,950 duPont (EI) de Nemours & Company 2,193,100 99,426,941 127,748,075 Eastman Chemical Company 290,322 10,940,141 13,862,875 Ecolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,284,413 FMC Corporation 560,000 17,944,613 12,950,000 First Mississippi Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 9,627 403,447 418,774 Grace (W. R.) & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M.A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750	Church & Dwight Co., Inc.	292,700	7,808.036		6.658,925
Dow Chemical Company 2,021,200 117,484,545 132,135,950 duPont (EI) de Nemours & Company 2,193,100 99,426,941 127,748,075 Eastman Chemical Company 290,322 10,940,141 13,862,875 Ecolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,284,413 FMC Corporation 2,213,507 105,393,498 119,806,066 Ferro Corporation 560,000 17,944,613 12,950,000 First Mississipp Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 9,627 403,447 418,774 Grace (W. R.) & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M.A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 <	Crompton & Knowles Corp.	937,000	19,052,667		16,163,250
duPont (EI) de Nemours & Company 2,193,100 99,426,941 127,748,075 Eastman Chemical Company 290,322 10,940,141 13,862,875 Ecolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,284,413 FMC Corporation 2,213,507 105,393,498 119,806,066 Ferro Corporation 560,000 17,944,613 12,950,000 First Mississippi Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 9,627 403,447 418,774 Grace (W. R.) & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Harna (M.A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750 Lawter International, Inc. 548,933 6,469,788	Cytec Industries	4,305	118,415		85,561
Eastman Chemical Company 290,322 10,940,141 13,862,875 Ecolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,284,413 FMC Corporation 2,213,507 105,393,498 119,806,066 Ferro Corporation 560,000 17,944,613 12,950,000 First Mississippi Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 9,627 403,447 418,774 Grace (W. R.) & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M.A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750 Lawter International, Inc. 548,933 6,469,788 6,449,962 Loctite Corporation 616,700 20,404,673 26,055,575 </td <td>Dow Chemical Company</td> <td>2,021,200</td> <td>117,484,545</td> <td></td> <td>132,135,950</td>	Dow Chemical Company	2,021,200	117,484,545		132,135,950
Ecolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,284,413 FMC Corporation 2,213,507 105,393,498 119,806,066 Ferro Corporation 560,000 17,944,613 12,950,000 First Mississippi Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 9,627 403,447 418,774 Graet Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M.A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750 Lawter International, Inc. 548,933 6,469,788 6,449,962 Locitic Corporation 616,700 20,404,673 26,055,575 Morton International, Inc. 18,224 1,299,960 1,421,472 Nalco Chemical Company 1,188,137 39,967,111 37,871,86	duPont (EI) de Nemours & Company	2,193,100	99.426.941		127,748,075
Ecolab, Inc. 23,568 461,992 518,496 Englehard Corporation 922,155 24,200,219 23,284,413 FMC Corporation 2,213,507 105,393,498 119,806,066 Ferro Corporation 560,000 17,944,613 12,950,000 First Mississippi Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 9,627 403,447 418,774 Graet (W. R.) & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M.A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750 Lawter International, Inc. 548,933 6,469,788 6,449,962 Loctite Corporation 616,700 20,404,673 26,055,575 Morron International, Inc. 18,224 1,299,960 1,421,472 <td>Eastman Chemical Company</td> <td>290,322</td> <td>10.940.141</td> <td></td> <td>13,862,875</td>	Eastman Chemical Company	290,322	10.940.141		13,862,875
FMC Corporation 2,213,507 105,393,498 119,806,066 Ferro Corporation 560,000 17,944,613 12,950,000 First Mississippi Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 9,627 403,447 418,774 Grace (W. R.) & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M.A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750 Lawter International, Inc. 548,933 6,469,788 6,449,962 Loctite Corporation 616,700 20,404,673 26,055,575 Morson International, Inc. 18,224 1,299,960 1,421,472 Nalco Chemical Company 1,188,137 39,967,111 37,871,866 OM Group, Inc. 200,000 2,800,000 4,	1 Visi				518.496
FMC Corporation 2,213,507 105,393,498 119,806,066 Ferro Corporation 560,000 17,944,613 12,950,000 First Mississipp Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 9,627 403,447 418,774 Grace (W. R.) & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M. A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750 Lawter International, Inc. 548,933 6,469,788 6,449,962 Loctite Corporation 616,700 20,404,673 26,055,575 Morron International, Inc. 18,224 1,299,960 1,421,472 Nalco Chemical Company 1,188,137 39,967,111 37,871,866 OM Group, Inc. 200,000 2,800,000 4,	Englehard Corporation	922,155	24,200,219		23,284,413
Ferro Corporation 560,000 17,944,613 12,950,000 First Mississippt Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 9,627 403,447 418,774 Grace (W. R.) & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M.A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750 Lawter International, Inc. 548,933 6,469,788 6,449,962 Loctite Corporation 616,700 20,404,673 26,555,575 Morion International, Inc. 18,224 1,299,960 1,421,472 Nalco Chemical Company 1,188,137 39,967,111 37,871,866 OM Group, Inc. 200,000 2,800,000 4,000,000 Olin Corporation 100,000 4,687,647 5,387,5			105,393,498		119,806,066
First Mississippi Corporation 7,447 76,201 113,566 Fuller (H.B.) Company 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 9,627 403,447 418,774 Grace (W. R.) & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M.A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750 Lawter International, Inc. 548,933 6,469,788 6,449,962 Loctite Corporation 616,700 20,404,673 26,055,575 Monsanto Company 44,467 2,673,085 3,362,816 Morton International, Inc. 18,224 1,299,960 1,421,472 Nalco Chemical Company 1,188,137 39,967,111 37,871,866 OM Group, Inc. 200,000 2,800,000 4,000,000 Olin Corporation 100,000 4,687,647 5,387,500 </td <td></td> <td></td> <td></td> <td></td> <td>12,950,000</td>					12,950,000
Fuller (H.B., Company) 213,300 7,544,200 7,838,775 Goodrich (B. F.) Company 9,627 403,447 418,774 Grace (W. R.) & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M.A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750 Lawter International, Inc. 548,933 6,469,788 6,449,962 Loctite Corporation 616,700 20,404,673 26,055,575 Monsanto Company 44,467 2,673,085 3,362,816 Morton International, Inc. 18,224 1,299,960 1,421,472 Nalco Chemical Company 1,188,137 39,967,111 37,871,866 OM Group, Inc. 200,000 2,800,000 4,000,000 Olin Corporation 100,000 4,687,647 5,387,500 PPG Industries, Inc. 1,327,412 24,605,438 25,884,53		7.447	76,201		113,566
Goodrich (B. F.) Company 9,627 403,447 418,774 Grace (W. R.) & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M.A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750 Law ter International, Inc. 548,933 6,469,788 6,449,962 Loctite Corporation 616,700 20,404,673 26,055,575 Monsanto Company 44,467 2,673,085 3,362,816 Morton International, Inc. 18,224 1,299,960 1,421,472 Nalco Chemical Company 1,188,137 39,967,111 37,871,866 OM Group, Inc. 200,000 2,800,000 4,000,000 Olin Corporation 100,000 4,687,647 5,387,500 PPG Industries, Inc. 1,327,412 24,605,438 25,884,534 Quaker Chemical Corporation 432,500 7,242,469 8,			7,544,200		7,838,775
Grace (W. R.) & Company 34,720 1,348,221 1,384,460 Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M.A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750 Lawter International, Inc. 548,933 6,469,788 6,449,962 Loctite Corporation 616,700 20,404,673 26,055,575 Monsanto Company 44,467 2,673,085 3,362,816 Morton International, Inc. 18,224 1,299,960 1,421,472 Naleo Chemical Company 1,188,137 39,967,111 37,871,866 OM Group, Inc. 200,000 2,800,000 4,000,000 Olin Corporation 100,000 4,687,647 5,387,500 PPG Industries, Inc. 1,196,968 33,153,064 44,886,300 Praxair, Inc. 1,327,412 24,605,438 25,884,534 Quaker Chemical Corporation 432,500 7,242,469 8,00			403,447		418,774
Great Lakes Chemical Corporation 26,541 1,858,478 1,436,531 Hanna (M,A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750 Lawter International, Inc. 548,933 6,469,788 6,449,962 Loctite Corporation 616,700 20,404,673 26,055,575 Monsanto Company 44,467 2,673,085 3,362,816 Morton International, Inc. 18,224 1,299,960 1,421,472 Nalco Chemical Company 1,188,137 39,967,111 37,871,866 OM Group, Inc. 200,000 2,800,000 4,000,000 Olin Corporation 100,000 4,687,647 5,387,500 PPG Industries, Inc. 1,196,968 33,153,064 44,886,300 Praxair, Inc. 1,327,412 24,605,438 25,884,534 Quaker Chemical Corporation 432,500 7,242,469 8,001,250 RPM, Inc. 566,250 3,512,602 9,626,250		34,720	1,348,221		1,384,460
Hanna (M.A.) Company 476,950 7,794,466 12,102,606 Hercules Inc. 15,716 1,073,232 1,681,612 IMC Fertilizer Group, Inc. 574,000 22,241,914 19,874,750 Law ter International, Inc. 548,933 6,469,788 6,449,962 Loctite Corporation 616,700 20,404,673 26,055,575 Monsanto Company 44,467 2,673,085 3,362,816 Morton International, Inc. 18,224 1,299,960 1,421,472 Nalco Chemical Company 1,188,137 39,967,111 37,871,866 OM Group, Inc. 200,000 2,800,000 4,000,000 Olin Corporation 100,000 4,687,647 5,387,500 PPG Industries, Inc. 1,196,968 33,153,064 44,886,300 Praxair, Inc. 1,327,412 24,605,438 25,884,534 Quaker Chemical Corporation 432,500 7,242,469 8,001,250 RPM, Inc. 566,250 3,512,602 9,626,250 Rohm & Haas Company 25,230 1,386,518 1,570,567		26.541			1,436,531
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Stepan Company 242,900 7.591,676 6.436,850 Union Carbide Corporation 56,413 1,079,813 1,494,944					
Union Carbide Corporation 56,413 1,079,813 1,494,944					
Totals \$ 750,918,311 \$ 848,373,082					
	Totals		\$ 750,918,311	S	848,373,082

	SHARES		TOTAL COST		TOTAL MARKET
Paper/Containers					
Ball Corporation	10,931	S	364,977	\$	284,206
Bemis Company, Inc.	499.236		9,475,804		11,108,001
Boise Cascade Corporation	1,695,796		35,892,591		37,519,486
Bowater, Inc.	975,000		22,525,872		24,009,375
Champion International Corporation	4.008.673		122,145,222		131,785,124
Consolidated Papers, Inc.	511,600		21,193,443		22,382,500
Crown Cork & Seal, Inc.	32.760		1,204,838		1,220,310
Federal Paper Board Company, Inc.	406,600		9,678,146		9.300,975
International Paper Company	2,228,100		140,070,035		147,611,625
James River Corporation	30,389		600,311		516,613
Kimberly-Clark Corporation	59,874		2,989,210		3,165,837
Mead Corporation	879,500		36,907,532		38,807,937
Mosinee Paper Corporation	284,100		6,615,284		9,162,225
Potlatch Corporation	10.886		494,342		419,111
Scott Paper Company	27,627		1,021,608		1,443,510
Sealed Air Corporation	479,(XX)		710		13,791,750
Stone Container Corporation	27.364		376,966		400,198
Temple-Inland, Inc.	20,644		980,770		983,170
Union Camp Corporation	2.537,253		105,653,242		115,127,854
Westvaco Corporation	24,880		805,996		765,060
Willamette Industries, Inc.	(XX),(XX)		4.501,250		4.325,000
Totals		s	523,498,149	\$	574,129,867
Industrial Specialties					
ACX Technologies, Inc.	277,600	5	4.570.626	S	10,548,800
Albany International Corporation Cl-A	867,500		12,077,713		16.374.062
Avery Dennison Corporation	527,900		13,106,464		15.309,100
Blessings Corporation	247,(XX)		3,633,866		7,379,125
Coming, Inc.	1.939,921		61,202,994		63,289,922
Millipore Corporation	10,406		373,578		548,916
Pall Corporation	43.328		901,498		649,920
Totals		\$	45,866,739	\$	114,099,845
Diversified Commercial Servi	ces				
G & K Services, Inc. CI-A	660,000	S	5,721,346	\$	10,230,000
Interpublic Group of Companies, Inc.	1,714,(XX)		52,847,871		53.134,000
National Education Corporation	10,943		71.347		61,554
Ogden Corporation	16,131		410,341		354,882
Safety-Kleen Corporation	21,467		440,307		364,939
UniFirst Corporation	77_300		731,864		1,091,862
T		-			

\$ 60,223,076

\$ 65,237,237

Totals

	SHARES	TOTAL COST	TOTAL MARKET
Financial Services			
American Express Company	181,081	\$ 4,335,141	\$ 4,662,835
Dean Witter, Discovery & Co.	918,988	31,611,719	34,462,050
Deluxe Corporation	30.842	1,230,232	813,457
Donnelley (R.R.) & Sons Company	57.743	1.713.583	1,602,368
Dow Jones & Company, Inc.	37.074	1.142.604	1,149,294
Dun & Bradstreet Corporation	1.531.300	78.330,226	84,987,150
Harland (John H.) Company	11,848	279.034	257,694
McGraw-Hill, Inc.	18.337	1,221,565	1,219,410
Totals		\$ 119.864,104	\$ 129,154,258
Wholesale Distributors			
Aleo Standard Corporation	17,809	\$ 768,114	\$ 1,017.339
Fleming Companies, Inc.	13,759	417,874	381,812
Grainger (W.W.), Inc	19,127	1,120,993	1,221,737
Handleman Company	453,250	5,352,642	4,589.156
Lawson Products, Inc	457,400	11,704,811	10,520,200
McKesson Corporation	14.951	840.176	1.078.340
National Intergroup, Inc	7.06-4	102.721	123,620
SUPERVALU Stores, Inc.	26,655	869,877	806.313
Sysco Corporation	1,994,399	54,839,176	45,123,277
Waxman Industries, Inc	213,800	1.852.207	454,325
Totals	3.26 - 63	\$ 77,868,591	\$ 65,316,119
Transportation			
AMR Corporation	1,996,296	\$ 121,736,306	\$ 118,530,075
Atlantic Southeast Airlines, Inc.	50,600	1.461.733	1,227,050
Burlington Northern, Inc.	33,207	1.549.794	1,772,423
CSX Corporation	834,800	51.266.556	63,027,400
Consolidated Freightways, Inc.	769,639	18,735,008	18,278,926
Conrail, Inc.	322,371	12,209,242	17,649,812
Delta Air Lines, Inc.	18,700	991,970	846,175
Federal Express Corporation	20,488	1.119.278	1,531,478
Norfolk Southern Corporation	51,963	3.279,865	3,273,669
Roadway Services, Inc.	14.607	616.021	920,052
Santa Fe Pacific Corporation	68,188	1,152,934	1,406,377
UAL Corporation	S09.5(X)	107,992,706	102,806,500
Union Pacific Corporation	76.406	4,492,230	4,326,489
USAir Group, Inc	1.811,358	12.679,506	11,547,407
Yellow Corporation	790,800	20,878,824	13,740,150
Totals		\$ 360,161,973	\$ 360,883,983



	SHARES		TOTAL COST		TOTAL MARKET
Semiconductors/Componen	ts				
Advanced Micro Devices, Inc.	541.093	S	11,079,854	S	13,527,325
AMP, Inc.	1,433,019		78,878,995		98,878,311
Aynet, Inc.	1,654,900		50,073,577		52,129,350
Intel Corporation	155,297		7,349,470		9,084,874
Lattice Semiconductor Corporation	480,000		7,401,854		8.940,000
M/A-Com, Inc.	9.377		70,161		75,016
Motorola, Inc.	1.730.594		71,912,477		77,227,757
National Semiconductor Corporation	1,065,961		17,389,303		18,387,827
Texas Instruments, Inc.	33,909		1.676,618		2.695,765
Totals		S	245,832,309	S	280.946,225
Electronics					
Andrew Corporation	9,200	S	179,851	S	338,100
Arrow Electronics, Inc.	690,000		27,568,678		25,702,500
Computer Sciences Corporation	18,568		488,946		772,893
DSC Communications Corp.	38,922		866,454		761,431
EG&G. Inc.	1,020,959		17,825,411		15,314,385
E-Systems, Inc.	105,027		4,265,804		3,925,384
Harris Corporation	1,264,500		41,060,886		55,796,062
Loral Corporation	30,827		881,116		1,078,945
Measurex Corporation	\$55,4(X)		15,975,085		15,183,350
Octel Communications Corporation	755.(XX)		19.240,549		12,457,500
Perkin-Elmer Corporation	1.721.379		49.691,636		50,780,680
Raytheon Company	435.613		28,207,189		28,205,941
Scientific Atlanta, Inc.	13.894		388,096		481,079
Tektronix, Inc.	11,373		283,393		321,287
Totals		S	206,923,094	\$	211,119,537
Aerospace					
AAR Corporation	1943(K)	S	2,530,183	S	2,623,050
Aviall, Inc.	6.425		94,539		56,218
Boeing Company	2.144.800		86,624,192		99,197,000
General Dynamics Corporation	23.096		1.095,015		944,049
Lockheed Corporation	23,258		1,378,870		1,520,491
Martin Manetta Corporation	35.358		1,213,069		1,560,171
McDonnell Douglas Corporation	14.576		905,959		1.705,392
Northrop Grumman	17.867		621,267		663,312
Rockwell International Corporation	2,665,003		70,576,214		99.604.487
United Technologies Corporation	46,206		2,347,358		2,968,735
Totals		S	167,386,666	S	210,842,905

	SHARES	TOTAL COST	TOTAL MARKET
Computers			
Amdahl Corporation	42,508	\$ 397,386	\$ 233,794
Apple Computer, Inc.	43,363	1.980,979	1,149,119
Compaq Computer Corporation	91,728	1,625,118	2,969,694
Cray Research, Inc.	605.815	15,686,210	13,706,564
Data General Corporation	13,072	141,361	101,308
Digital Equipment Corporation	5,291,500	174,611,279	103,184,250
Gerber Scientific, Inc.	968,900	11,889,265	15,017,950
Hewlett-Packard Company	94,786	5.553,701	7,132,646
Intergraph Corporation	17,170	200,395	167,407
International Business Machines Corp.	3,664,500	252,060,928	215,289,375
Tandem Computers, Inc.	5,499,313	66,852,387	61,867,271
Telxon Corporation	324,000	4,141,015	5,103,000
Unisys Corporation	60,756	659,606	561,993
Totals		\$ 535,799,630	\$ 426,484,371
Technology Services			
Allen Group, Inc.	1,693,800	\$ 31,080,085	\$ 29,853,225
Analysts International Corp.	200,400	3,292,910	3,306,600
Autodesk, Inc.	228,600	10,169,761	11,315,700
Automatic Data Processing, Inc.	52,601	2,482,587	2,794,428
Ceridian Corporation	115,973	1.857,514	2,870,331
Cisco Systems, Inc.	92,000	3,387,345	2,150,500
Computer Associates, Inc.	62,251	1,858,919	2,490,040
GTI Corporation	500,0(X)	12.305,526	5,125,000
Lotus Development Corporation	16.042	411,319	589,543
MacNeal-Schwendler Corporation	577.600	7,049,286	8,086,400
Microsoft Corporation	214,000	11,598,800	11,047,750
Northern Telecom Ltd.	1.615.743	49,270,223	44,634,900
Novell, Inc.	116.374	2,655,986	1,949,264
Oracle Systems Corporation	105,762	1.909.859	3,966,075
Progress Software Corporation	227,000	9.496.797	6,980,250
Shared Medical Systems Corp.	8.536	219.831	204,864
Sun Microsystems, Inc.	998,700	33.333,481	20.598.187
System Software Associates, Inc.	955,000	14.468.337	12,653,750
Totals		\$ 196,848,566	\$ 170,616,807
Auto/Parts			
Bandag, Inc. C1-B	200,700	s 9,532,963	\$ 10,361,137
Bandag, Inc. CI-A	963,400	48,695,316	44,557,250
Chrysler Corporation	131,127	5,390,490	6,228,532
CLARCOR, Inc.	400,600	6,172,232	6,910,350
Cooper Tire & Rubber Company	803,668	18,543,154	18,584,822
Daimler-Benz AG (ADR)	300,000	14,025,000	13,575,000
Echlin, Inc.	21.647	599,985	652,115
Ford Motor Company	717.056	36,176,361	42,575,200
General Motors Corporation	1.216,066	45,387,885	61,107,316
Genuine Parts Company	46.271	1.640.054	1,671,539
Goodyear Tire & Rubber Company	54.533	1.816,144	1,963,188
Myers Industries, Inc.	300.440	6,495,008	6,046,355
Totals		\$ 194,474,594	\$ 214,232,804

	SHARES		TOTAL COST		TOTAL MARKET
Housing Related					
Bassett Furniture Industries, Inc.	5.300	S	162 625	s	151,050
Centex Corporation	11,662	3		3	300,296
Kaufman & Broad Home Corporation	11,276		386,422		150,816
LADD Furniture, Inc.	510,800		188,409 4,490,105		3,575,600
Maytag Company	1,557,687				28,817,209
Newell Company	29,411		24,861,368 1,161,857		1,360,258
Pulte Corporation	10,180		297,129		234,140
Rubbermaid, Inc.	59.821		1,901,381		1.570.301
Skyline Corporation	4.138		72,936		76,553
Whirlpool Corporation	26,264		1,209,608		1,378,860
Zenith Electronics Corporation	12,231		88.397		107.021
Totals		S	34,821,237	S	37,722,104
		J	34.021.237	3	37,722,104
Miscellaneous Consumer Pro			mercocine vilinizativi		
American Greeting Corporation Cl-A	26,031	S	690,117	S	780.930
BIC Corporation	300,000		4,930,500		8.550,000
Black & Decker Corp.	945,600		20,452,685		16,311,600
Briggs & Stratton Corporation	5.305		399,853		354,771
Brunswick Corporation	35,442		576,710		779,724
Cross (A.T.) Company	297,000		6,498,449		4,752,000
Eastman Kodak Company	1,761,690		66,429,132		84,781,331
Fleetwood Enterprises, Inc.	16.892		375,826		323,059
Gibson Greetings, Inc.	235,000		5,476,581		3,760,000
Hashro Bradley, Inc.	3,360,773		91,285,749		99,562,9(X)
Jostens, Inc.	16,919		355,429		272,818
Mattel, Inc.	62,720		1,324,641		1,591,520
Outboard Marine Corporation	7.242		130,652		144.840
Polaroid Corporation	17,424		591,729		555.390
Scotts Company	217,800		3,752,092		3,593,700
Snap-On, Inc. Stanley Works	15,879 16,764		563,065		591,492
	10,704		663,151		674,751
Totals		S	204,496,361	S	227,380,826
Food					
Archer Daniels Midland Company	1.423.377	S	32,743,719	S	33,271,437
Borden, Inc.	52,671		1,128,658		651.803
CPC International, Inc.	1.074.200		49,728,055		51,830,150
Campbell Soup Company	93,411		3,852,987		3,211,003
Chiquita Brands International, Inc.	300,000		4.936.478		3,637,500
ConAgra, Inc.	93.542		2.699,710		2,853,031
Dean Foods Company	1.537,850		36,305,161		41,521,950
Dekalb Genetics Corporation CI-B	217,600		6,117,923		6,636,800
General Mills, Inc.	59,669		3,932,406		3,259,419
Gerber Products Company	25,726		795,570		1,312,026
Heinz (H.J.) Company	94.167		3.633.747		3,001,573
Hershey Foods Corporation	29,101		1,367,284		262,255
Kellogg Company	85,802		5.308,532		4,665,483
Pet, Inc.	39,132		669,660		728,833
Pioneer Hi-Bred International	34,199		1,255,538		1,120,017
Quaker Oats Company	25.872		1,778,263		1.804.572
Ralston Purina Group	38,707		1,457,421		1.349,906
Sara Lee Corporation	699,800		16,616,564		14,870,750

	SHARES		TOTAL COST		TOTAL MARKET
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Food (continued)	283,900	S	5,615,533	\$	3,371,312
Savannah Foods & Industries, Inc.	84,800	,	2.051.313	•	1.992.800
Smucker (J.M.) Company	1,174,700		24,699,755		24,962,375
Smucker (J.M.) Company Cl-B	151,348		5,990,375		8,948,450
Tootsie Roll Industries, Inc.	627,200		19,111,997		19,835,200
Universal Foods Corporation Whitman Corporation	289,969		4,441,808		4,494,519
Wm. Wrigley Jr. Company	43,444		1,599,820		2,063,590
		· · · · · · · · · · · · · · · · · · ·	237,838,277	S	241,656,754
Totals		•			Control of the Contro
Beverage					
Anheuser-Busch Companies, Inc.	100,840	S	5,413,464	S	5,117,630
Brown-Forman Corporation C1-B	20,862		594,480		589.351
Coca Cola Company	484,547		16,731,173		19.684.721
Coors (Adolph) Company CI-B	513.581		7,936,936		8,987,667
PepsiCo, Inc.	4,148,968		133,242,810		127.062.145
Ralcorp Holdings, Inc.	12,902		198.739		204.819
Seagram Company, Ltd.	138,922		3,970,469		4,202,390
Totals		S	168,088,071	S	165,848,723
Tobacco					
American Brands, Inc	75.117	S	2.874.438	\$	2,375,575
Philip Morris Companies, Inc.	2,196,022		123,145,979		113,095,133
UST Inc.	77,803		2,364,110		2,110,406
Universal Corporation	610,200		14.639.669		11,898,900
Totals		S	143,024,196	S	129,480,014
Personal Care	222 200		10 212 500	s	18,539,325
Alberto Culver Company Cl-A	938,700	S	19,343,599	3	1.012,050
Alberto Culver Company CI-B	46,8(X)		1.114.723		27,056,006
Avon Products, Inc.	459,550		1,020,881		998,271
Clorox Company	20,425		25,270,858		23,935,725
Colgate-Palmolive Company	458,100 82,099		4,131,606		5,346,697
Gillette Company (The)	44,103		1,655,886		1,725,529
International Flavor & Fragrances, Inc.	254,408		11,938,034		13,579,027
Procter & Gamble Company (The)	59,732		6,864,645		6,017,999
Unilever N.V.	37,732	S	93,717,843	S	
Totals		3	75,717,045	•	, 9,2, 5,5
Apparel/Textiles					20.200.007
Brown Group, Inc.	781,100	S	24,163,369	S	29,388,887
Delta Woodside Industries, Inc.	516,700		5.632.207		6.071.225
Fruit of the Loom, Inc.	200,000		5.784,848		5,225,000
Hartmarx Corporation	11,873		80,262		72.722
Liz Claiborne, Inc	30,551		1,041,604		611,020
Nike, Inc. CI-B	20.432		1,576,019		1,220,812 68,642
Oshkosh B'Gosh, Inc	4,903		90,664		00,042

	SHARES		TOTAL		TOTAL MARKET
Apparel/Textiles (continued)					
Reebok International, Ltd.	32,044	S	972,822	S	957,314
Russell Corporation	592,883		12,151,393	•	17,267,717
Springs Industries CI-A	6,532		236,715		195,143
Stride Rite Corporation	18.882		364,214		245,466
V. F. Corporation	23,963		1,188,843		1.138.242
Warnaco Group, Inc.	250,000		7,222,575		7.343,750
Worldtex, Inc.	305,666		2,727,728		1.528,330
Totals		S	63,233,263	S	71,334,270
Publishing & Media					
Belo (A.H.) Corporation	200,000	S	6,377,318	S	8,625,000
CBS, Inc.	5,800	3	1,271,172	3	1,815,400
Capital Citie JABC, Inc.	57,580		3.164,654		4,095,377
Comeast Corporation CI-A	56,000		1,226,975		1,008,000
GC Companies	2.567		87,817		
Gannett Company, Inc.	1,494,700		70,600,914		66,100 73,987,650
Knight-Ridder, Inc.	1,522,700		87,645,039		
Meredith Corporation	5.515		192,443		77,848.037 234,387
Moore Corporation, Ltd.	37,110		731,469		626,231
New York Times Company CI-A	3,157,959		\$7,913,022		
Senpps (E.W.) Company	300,000		7,800,000		75,396,271
TCA Cable TV, Inc.	175,(XX)		3.727.050		8,775,000
Tele-Communications, Inc.	146,193		3,189,061		3,959,375
Times Mirror Company	3,018,973		94,215,354		2,978,682
Tribune Company	632.556		31.341,495		90.946,561 33.683,607
Washington Post Company CI-B	412,100		94,582,288		95,298,125
Totals					
roars		S	194,066,071	\$	479.343,803
Miscellaneous Consumer Serv					
Bally Entertainment Corporation	17,403	5	160,097	S	115,294
Block (H & R), Inc.	34.654		1.153,768		1,556,419
Blockbuster Entertainment Corporation	14.401		1.604.719		2,054,578
Bob Evans Farms, Inc.	1,362,233		25,127,003		29,288,009
Bowl America, Inc. Cl-A	55,200		1.155,909		1,048,800
Cooker Restaurant Corporation	350,000		6.265,881		2,800,000
Disney (Walt) Company	199,555		8.094,524		8.306.476
Hilton Hotels Corporation	17.826		841,398		9-1-1,778
King World Productions, Inc.	819,100		20,942,663		32,661,612
Luby's Cafetenas, Inc.	10,107		226,402		227,407
Marnott International, Inc.	38,700		820,973		1,030,387
McDonald's Corporation	263,646		6,564,170		7.612,778
Prontus Companies, Inc.	38,196		990,570		1,131,556
Ryan's Family Steak Houses, Inc.	19.895		164,620		144,238
Service Corporation International	31.149		768,394		802,086
Shoney's, Inc.	15.085		334,600		230.046
Sizzler International, Inc.	335'7(X)		4.370,080		1.952,850
Time Warner, Inc.	1347354		4,623,461		4.946.179
Wendy's International, Inc	36,938		300,386		577,156
Totals		S	84,509,618	5	97,430.649

	SHARES	TOTAL COST	TOTAL MARKET
Drugs			
A.L. Laboratories, Inc.	350,000	\$ 5,361,630	S 4,812,500
Allergan, Inc.	24,697	601.139	534,072
ALZA Corporation CI-A	28,769	877,292	676,071
American Home Products Corporation	115,438	7,696,110	6,551,106
Amgen. Inc.	50,489	2,834,100	2,164,715
Bristol-Myers Squibb Company	193,252	9,696,890	10,363,138
Johnson & Johnson	243,902	10,005,619	10,457,298
Eli Lilly & Company	109,025	6,178,887	6,200,796
Mallinekrodt Group, Inc.	28,535	984,921	927,387
Merck & Company, Inc.	476.375	18,913,887	14,172,156
Plizer, Inc.	1,774,000	95,065,174	111,983,750
SPI Pharmaceuticals, Inc.	652,149	15.644,157	10,271,346
Schering-Plough Corporation	1,330,912	61,473,259	81,518,360
Syntex Corporation	82,453	1,443,225	1,896,419
Upjohn Company	64,770	1,985,544	1,886,426
Warner-Lambert Company	50,488	3.458.279	3,332,208
Waller-Lambert Company	20,400	5,438,277	3,334,200
Totals		\$ 242,220,113	\$ 267,747,748
Hospital Supply			
Abbott Laboratories	308,574	\$ 4,098,216	\$ 8,948,646
Advanced Technology Laboratories	116,200	1.794,537	1,481,550
Bard (C.R.), Inc.	19.466	559,671	464,750
Bausch & Lomb, Inc.	2,265,200	110,717,248	83,812,400
Baxter International, Inc	103,389	2.225,772	2,713,961
Becton Dickinson & Company	28,270	1.107.070	1,155,536
Biomet, Inc.	43,013	577.935	446,259
Medex, Inc.	232,500	2.703.125	2,702,812
Medtronic, Inc.	21,336	1,802,014	1,709,547
St. Jude Medical, Inc.	17,462	6.34.871	567,515
STERIS Corporation	67,500	1,133,687	1,307,812
U.S. Surgical Corporation	20,602	967,397	460.969
Totals	W.	\$ 128,321,543	\$ 105,771,757
Hamital Managament			
Hospital Management	20.512	6 244.215	\$ 369,958
Beverly Enterprises, Inc.	30,512	\$ 366,215	56,362,837
Columbia/HCA Healthcare Corp.	1,503,009	61,382,110	189,774
Community Psychiatric Centers	15.981	226,315	540,463
Manor Care, Inc.	21,511	484,709	
National Medical Enterprises, Inc.	61.776	669,255	965,250
U.S. Healthcare, Inc.	286,000	9,662,562	10,582,000
Totals		\$ 72,791,166	\$ 69,010,282
Retail			
Albertson's, Inc.	94,453	\$ 2,372,484	\$ 2,597,457
American Stores Company	52,842	1,152,176	1,294,629
Blair Corporation	291,400	10,722,046	11,910,975
Bruno's, Inc.	1.671,629	13,012,897	12,119,310
Charming Shoppes, Inc.	2,198,500	35,747,438	20,610,937
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	SHARES	TOTAL COST	TOTAL MARKET
Retail (continued)			
Circuit City Stores, Inc.	35,765	S 466,277	\$ 733,182
Consolidated Stores Corporation	600,000	10,425,383	7,350,000
Dayton-Hudson Corporation	1,082,900	55,257,935	87,714,900
Dillard Department Stores Cl-A	40,693	1,572,665	1,256,396
Edison Brothers Stores, Inc.	118,000	3,705,436	2,979,500
Fabri-Centers of America, Inc.	553,900	9,872,083	8,308,500
Family Dollar Stores, Inc.	2,841,400	49,411,551	38,714,075
Federated Department Stores	1,036,900	22,876,090	20,738,000
Gap, Inc.	54,039	1,871,232	2,310,167
Genesco, Inc.	8.696	56,999	28,262
Giant Food, Inc.	22,267	514,758	436,989
Great Atlantic & Pacific Tea Co., Inc.	624,900	17,845,235	13,435,350
Hannaford Brothers Company	500,800	7,872,068	11,205,400
Harcourt General, Inc.	28,572	894,937	1,003,591
Home Depot, Inc.	166,897	3,832,353	7,030,536
Jacobson Stores, Inc.	126,400	2,908,060	1,738,000
K Mart Corporation	7.134.796	140,455,226	110,589,338
Kroger Company	1,399,600	19,926,127	32,540,700
Limited, Inc.	2.135.325	38,115,463	36,834,356
Longs Drug Stores, Inc.	7,718	264,893	275,918
Lowe's Companies, Inc.	54,862	883,067	1,879,023
May Dept. Stores Company	92,740	3,571,131	3,640,045
Melville Corporation	39,319	1,905,638	1,523,611
Mercantile Stores Company	13,766	459,451	442,232
Meyer (Fred), Inc.	324,200	11,737,680	11,792,775
Michaels Stores	4-17.3(K)	15,721,989	15.040,462
Musicland Stores Corporation	239,200	4,425,200	3,827,200
Nordstrom, Inc.	30,606	1,095,484	1,300,755
Penney (J.C.) Company	87,805	3,407,859	4,763,421
Pep Boys Manny, Moe & Jack	22.719	542,204	724.168
Premark International, Inc.	203,885	14.275,216	15,418,803
Price/Costco, Inc.	90,271	1,699,611	1,348,468
Rite Aid Corporation	32.815	622,275	664,503
Ruddick Corporation	517,600	6,536,772	8,475,700
Sears Roebuck & Company	130,954	4,031,028	6,285,792
Seaway Food Town, Inc.	97,600	1,757,775	976,000
Smith's Food & Drug Centers, Inc.	309,100	6,320,567	5.834,262
Stanhome, Inc.	310,900	10,340,522	10,259,700
Stein Mart, Inc.	381,225	6,562,025	6.671,437
Stop & Shop Companies, Inc.	351,000	8,497,370	8,424,000
Sun TV & Appliances	255,600	2,875,500	2,172,600
TJX Companies, Inc.	1,127,000	32,733,370	24,653,125
Tandy Corporation	23,787	759,703	820,651
Toys R Us, Inc.	1.345,000	44,567,646	44.048.750
Value City Department Stores	363,500	5,522,680	4,861,812
Vons Companies	410,800	7,010,582	6,983,600
Wal-Mart Stores, Inc.	858,040	16,686,853	20,807,470
Walgreen Company	578,129	23,587,343	21,029,442
Winn-Dixie Stores, Inc.	28,022	1,787,055	1,204,946
Wolohan Lumber Company	478,090	7,351,871	6,573,737
Woolworth Corporation	4,220,2(X)	98,902,494	66,995,675
Totals		\$ 797,329,803	\$ 743,200,643

	SHARES		TOTAL		TOTAL
			COST		MARKET
Miscellaneous Financial					
Miscellaneous Financials (c. Ryder System, Inc.	5	122		_	
Salomon, Inc.	28,601 41,216	S	711,737	S	
Travelers, Inc.	884,908		1,604,308 29,302,824		1,968,064
Table	004,700		29,302,624		28.538.283
Totals		S	149.540,265	S	171,195,593
Insurance					
Aetna Life & Casualty Company	11 151	c	2 102 102	4	2 200 212
Alexander & Alexander Services, Inc.	41,151 15,339	S	2,103,183	\$	2.299.312
Allmerica Property and Casualty Cos.	225,500		378,315		249,258
AMBAC, Inc.	417,000		4,347,863 18,403,507		3,777,125
American General Corporation	80,895		1.812,900		16,367,250
American International Group, Inc.	962,075		56.275,912		2,234,724
AVEMCO Corporation	255,000		4,041,037		83,339,746
CIGNA Corporation	1,387,900		76.803.949		3,538,125
Chubb Corporation	409.080		34.120,872		31,345,755
Cincinnati Financial Corporation	125,000		3,247,645		6,656,250
Citizens Corporation	286,100		5,429,196		5,006,750
Continental Corporation	20.613		593,915		319,501
Gallagher (Arthur J.) and Company	296.200		6,205,678		9.182,200
General Re Corporation	31.623		3,589,836		3.442.954
Hilb, Rogal & Hamilton Company	334,900		4.751.965		4,102,525
Jefferson-Pilot Corporation	18,773		792,419		915,183
Lincoln National Corporation	35,148		1.357,442		1.489.396
March & McLennan Companies, Inc.	420,028		35,963,384		35,019,834
NYMAGIC, Inc.	245.500		4,390,188	,	4,971,375
Ohio Casualty Corporation	374.0(X)		11,295,073		10,518,750
Providian Corporation	37.684		950,290		1,139,941
SAFECO Corporation	. 23.512		1,247,137		1.307,855
St. Paul Companies, Inc.	31.542		1.317.350		1,265,622
TIG Holdings, Inc.	1.500,000		31,500,000		30,000,000
Torchmark Corporation Transamerica Corporation	1,095,330		57,249,635		42,717,870
Transatlantic Holdings	29,254		1,479,341		1,524,864
UNUM Corporation	508,300		25,749,498		26,558,675
USF&G Corporation	28,800		1.593.621		1,288,800
USLIFE Corporation	2,930,066 8,528		37,994,135		35,893,308
	0,,,,,		304,294		302,744
Totals		2 1	35,289,595	\$ 4	68,092,398
Electric Utilities					
American Electric Power Company, Inc.	68,922		2 264 026	2	
Baltimore Gas & Electric Company	54,214	S	2,364,025	S	1.947.046
Carolina Power & Light Company	59.839		1,323,017		1,152,047
Central & South West Corporation	70,171		1.628.918		1,383,776
Commonwealth Edison Company	79.652		2,128,265 2,651,492		1.491,133
Consolidated Edison Co. of New York, In	ne. 87_336		2.030,989		1.812,083
Detroit Edison Company	54,860		1,776.730		2,314,404
Dominion Resources, Inc.	61,665		2.582,209		1.357,785
Duke Power Company	76,471		2.927,173		2,243,064 2,733,838
Eastern Utilities Associates	450,000	1	1,253,238		10,406,250
Entergy Corporation	1,286,925		11.154,932		31,851,393
FPL Group, Inc.	70.064		1.760.080	×.	2.084,404
Houston Industries, Inc.	48,513		2,175,985		1.582,736
Niagara Mohawk Power Corporation	2,843,800	5	3,052,708		13,012,475
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	SHARES		TOTAL COST		TOTAL MARKET
Electric Utilities (continued)					
Northern States Power Company	24,767	S	1,065,072	\$	1,015,447
Ohio Edison Company	56,808	~	1.329,542	1	1,015,443
PECO Energy Company	553,800		14,640,569		14,537,250
PSI Resources, Inc.	21,232		534,891		448,526
Pacific Gas & Electric Company	161,272		5,268,937		3,830,210
PacifiCorp	1,129,748		19,983,803		19,064,497
Pinnacle West Capital Corporation	990,700		21,480,729		16,222,712
Public Service Enterprise Group, Inc.	90,247		2,795,614		2,346,422
SCEcorp	166,559		3.629,148		2,144,447
Southern Company	238,352		4,665,091		4,469,100
Texas Utilities Company	83,240		3.097,142		2,601,250
Union Electric Company	38,195		1,474,109		1,207,916
		S	208,774,421	S	174,275,660
Totals		3	200,774,421	3	174,275,000
Natural Gas Distributors					
Consolidated Natural Gas	425.640	S	18,737,843	S	16,067,910
Eastern Enterprises	8,542		230,469		195,398
NICOR, Inc.	20,701		513,460		545,988
NorAm Energy Corp.	45.614		383,014		267,982
ONEOK, Inc.	9,927		194,764		169,999
Pacific Enterprises	31,152		730,448		619,146
Peoples Energy Corporation	12,964		405,554		303,033
Southwest Gas Corporation	66,800		1,067,356	2	1,202,400
Totals		S	22,262,911	S	19,371,858
Telephone Utilities			10 N U 1000000	2	
American Telephone & Telegraph Co.	2,547,574	\$	109,280,555	\$	138,524,336
AirTouch Communications	599,562		13,276,336		14.164.652
Amentech Corporation	202,980		7.412.075		7,738,612
Bell Atlantic Corporation	162,086		8.144.458		9,076,816
BellSouth Corporation	184,781		9.805.687		11,410,226
GTE Corporation	352,235		8,784,983		10,919,285
MCI Communications Corporation	6.741.900		137,702,820		149,164,537
McCaw Cellular Communications, Inc.	58,560		2.917.957		3,030,480
NYNEX Corporation	154,037		6.441.269		5,834,151
Pacific Telesis Group	154,982		4,200,286		4,765,696
Southwestern Bell Corporation	825,092		28,490,730		35,891,502
Sprint Corporation	126,828		3,999,160		4,423,126
Telefonos De Mexico (ADR)	2,327,500		131,639,972		130,049,062
U S West, Inc.	365,298		16,329,546		15,296,853
Totals		\$	488,425,812	\$	540,289,338
Water Supply					
American Water Works Company, Inc.	501,200	S	10,324,722	\$	13,595,050
Totals		S	10,324,722	S	13,595,050
Subtotal Common Stocks		\$11	,376,170,326	\$11	.903,645,759
Net Securities Traded					
Not Settled		\$	35,136,412	S	29,898,740
Total Common Stocks		\$11	.411.306,738	\$11	,933,544,499

INTERNATIONAL INVESTM	IENTS	BOOK VALUE	MARKET VALUE
Stocks Fixed Income Currency and Liquidity Reserves EAFE Equity Swap		\$ 358,528,355 16,804,012 33,851,387 302,966,634	\$ 358,607,480 17,320,323 33,937,957 328,419,487
Total International Equities		\$ 712,150,338	\$ 738,285,247
VENTURE CAPITAL		BOOK VALUE	MARKET VALUE
Blue Chip Capital Fund Blue Chip Opportunity Fund, L.P. Brantley Venture Partners II Cardinal Development Capital Fund I Datamedia Corporation Devonshire Capital Liquidation Trust Explosive Fabricators, Inc. Northcoast Fund, L.P. Northwest Ohio Venture Fund Palmer Organization Primus Capital Fund Primus Capital Fund II Primus Capital Fund III Primus Capital Fund III Primus Capital Fund III, Preferred Sagamore Financial Corporation Theta-J Corporation		\$ 1,000,000 1,500,000 2,250,000 989,512 50 90 8,718 625,000 1,000,000 700 1,000 622,097 1,085,000 1,085,000 9,700,000 350	\$ 860,680 1,317,122 2,189,221 815,558 13,128 4,746 188,399 572,622 886,627 1,628,183 765,951 5,575,491 1,051,831 1,051,831 9,700,000 136,786
Total Venture Capital		S 19,867,517	\$ 26,758,176
BONDS	BOOK VALUE	PAR VALUE	MARKET VALUE
Dedicated Portfolios Secular Portfolio U.S. Government and	\$ 428,230,687 208,480,027	\$ 2,012,511,735 1,330,537,000	\$ 455,110,553 248,397,271
Agency Bonds Canadian Bonds Municipal Bonds	4,135,891,226 667,285,847 1,645,000	8.187,034,275 593,855,000 1,645,000	4,204,304,600 663,655,920 1,747,763
Utility Bonds Telephone Bonds Finance Bonds Industrial Bonds	167,811,476 180,900,736 1,349,293,146 998,849,998	165,047,891 177,380,000 1,330,123,000 1,000,910,377	168,089,032 178,576,344 1,343,446,971 998,818,256
Railroad Bonds Supranational Bonds Asset-backed Securities	7,47 <u>2,2</u> 31 12,228,337 106,053,710	7,500,000 10,500,000 106,027,954	7,293,150 12,203,220 105,078,530
Subtotal	\$ 8,264,142,421	\$14.923,072,232	\$8.386,721,611
Net Securities Traded Not Settled	(1,287,705)	(280,000)	(3.677)
Total Bonds	\$ 8,262,854,716	\$14,922,792,232	\$8,386,717,934

SHORT-TERM/LIQUIDITY RESERVES

e e · · · · · · · · · · · · · · · · · ·	BOOK VALUE	PAR VALUE	MARKET VALUE
Commercial Paper Corporate Notes	\$ 304,118,938 81,047,186	\$ 304,300,000 77,873,000	\$ 304,300,000 79,168,447
Government Notes	77,162,355	75,000,000	76,734,500
Total Short-Term/			· · · · · · · · · · · · · · · · · · ·
Liquidity Reserves	\$ 462,328,479	\$ 457,173,000	\$ 460,202,947
GUARANTEED MORTGAGES	воок	PAR	MARKET
	VALUE	VALUE	VALUE
Government National Mortgage Association Federal Home Loan	\$ 699.213,203	\$ 754,666,823	\$ 679,896,427
Mortgage Corporation Federal National	1,262,998,458	1,258,841,994	1,240,179,043
Mortgage Association Federal Housing Administration	1,337,715,784	1,328,764,135	1,288,678,687
Insured Project Loans	11.820,445	12,896,526	12,452,420
Total	\$3,311,747.890	\$3,355,169,478	\$3,221,206,577
Single Family Direct.			
FHA 235	\$2,998,812	\$3,207,104	\$3,708,990
FHA 203	81,198,575	82,456,625	88,068,329
VA 501	58,901,264	60.996.310	64.496.781
FHA 245	9.011,533	9,700,734	10.540.731
FHA 296	12,960,197	12,226,778	13,132,322
FHA 234	1,014,894	1,019,313	1,076,771
VA Vendee Loans	3,481,440	3,797,451	3,971,843
GNMA Certificates	6,948,855	7,170,233	7,353,955
Total	\$ 176,515,570	\$ 180,574,548	\$ 192,349,722
Multifamily Direct:			
FHA 207 (Rental Apartment)	\$ 45,401,969	5 45,665,023	\$ 45,933,800
FHA 221 (Rental Apartment)	321,877,032	325,655,659	315,308,715
FHA 231 (Senior Citizen)	33.131.284	35,375.402	34,437,089
FHA 232 (Nursing Home)	203,371,803	206_318_345	211,477,460
FHA 220 (Urban Renewal Apt.)	4.099,976	4.099,976	3.894.976
FHA 236 (Subsidy Housing)	109,648,971	109,885,714	101,987,298
GNMA Project Certificates	10,230,165	10,236,741	10,806,043
Total	\$ 727,761,200	\$ 737,236,860	\$ 723,845,381
Subtotal	\$4,216,024,660	\$4,272,980,886	\$4,137,401,680
Net Securities Traded			
Not Settled	(255,999)	(255,999)	(255,999)
Total Guaranteed Mortgages	\$4,215,768,661	\$4,272,724,887	\$4,137,145,681

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REAL ESTATE	BOOK VALUE	MARKET VALUE	PERCENT
Participating Mortgages Multitenant Properties Joint Ventures Sale-Leaseback	\$ 205,687,947 566,045,128 366,783,129	\$ 198,173,646 493,272,430 275,250,741	11.7% 29.0% 16.2%
Retail Equities Syndications Non-Retail Total Sale-Leaseback	265,594,686 44,323,207 21,952,297 331,870,190	264,894,776 47,483,592 21,952,298 334,330,666	15.6% 2.8% 1.3% 19.7%
Separate Accounts REIT Shares	176,033,385 61,574,589	334,927,954 62,917,459	19.7% 3.7%
Subtotal	\$1,707,994,368	\$1,698,872,896	100.0%
Net Securities Traded Not Settled	972,710	985,004	
Total Real Estate	\$1,708,967,078	\$1.699,857,900	

1. Explanation of market values:

- A. Short term/liquidity reserves: Cash equivalents: because of 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 mortages: 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" or "Last Sale" provided by the National Association of Securities Dealers' NASDAQ System.

 The investments listed were purchased and settled by June 30, 1994. Where applicable, purchases and sales executed prior to June 30 but not yet settled are incorporated in an adjustment that gives the total investments on a trade-date basis.

The data included in 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, 1994. Financial market changes after that date may significantly affect the reported amounts.

D. Valuations of real estate: Sale-lease-

backs were valued based on discounting the property's income stream at current market rates; multitenant 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 periodically by independent appraisals; REIT shares were valued at clining prices on the appropriate stock exchange. All valuation procedures have been reviewed by the Retirement Board's real estate consultant and financial statement auditors.

- E. International investments: All international investments are valued by the subcustodian using relevant closing market prices and exchange rates.
- F. 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.