

COMPREHENSIVE
ANNUAL
FINANCIAL
REPORT

for the year ended June 30, 1990

SCHOOL EMPLOYEES
RETIREMENT SYSTEM
OF OHIO

**COMPREHENSIVE
ANNUAL
FINANCIAL
REPORT**

for the year ended June 30, 1990

**SCHOOL EMPLOYEES
RETIREMENT SYSTEM
OF OHIO**

Prepared By SERS Staff

**Thomas R. Anderson,
Executive Director**

**Joel E. Sofranko,
Director of Finance**

THE SCHOOL EMPLOYEES RETIREMENT BOARD OF OHIO



Seated, left to right: Agnes F. O'Keefe, Loren L. Braverman (Attorney General representative), Lowell B. Davis. Standing, left to right: Orris E. Fields, Jr., McCullough Williams II (State Auditor representative), Thomas R. Anderson, Judy Kelley, William A. Guy.

President: Lowell B. Davis, Euclid, Ohio
Term expires June 30, 1993

Vice President: Agnes F. O'Keefe, Westerville, Ohio
Term expires June 30, 1992

Employee-Member: Orris E. Fields, Jr., Wilmington, Ohio
Term expires June 30, 1991

Employee-Member: William A. Guy, Columbus, Ohio
Term expires June 30, 1992

Employee-Member: Judy Kelley, Akron, Ohio
Term expires June 30, 1993

ExOfficio Member: Anthony J. Celebrezze, Jr.
Attorney General

ExOfficio Member: Thomas E. Ferguson
Auditor of State

Thomas R. Anderson
Executive Director

Directors

Robert E. Hartsook
Deputy Director
Member Services

F. Robert Coe
Management Information Services

Paul M. Kubinsky
Investments

Joel E. Sofranko
Finance

Rita M. Volpi
Planning and Development

ORGANIZATIONAL CHART

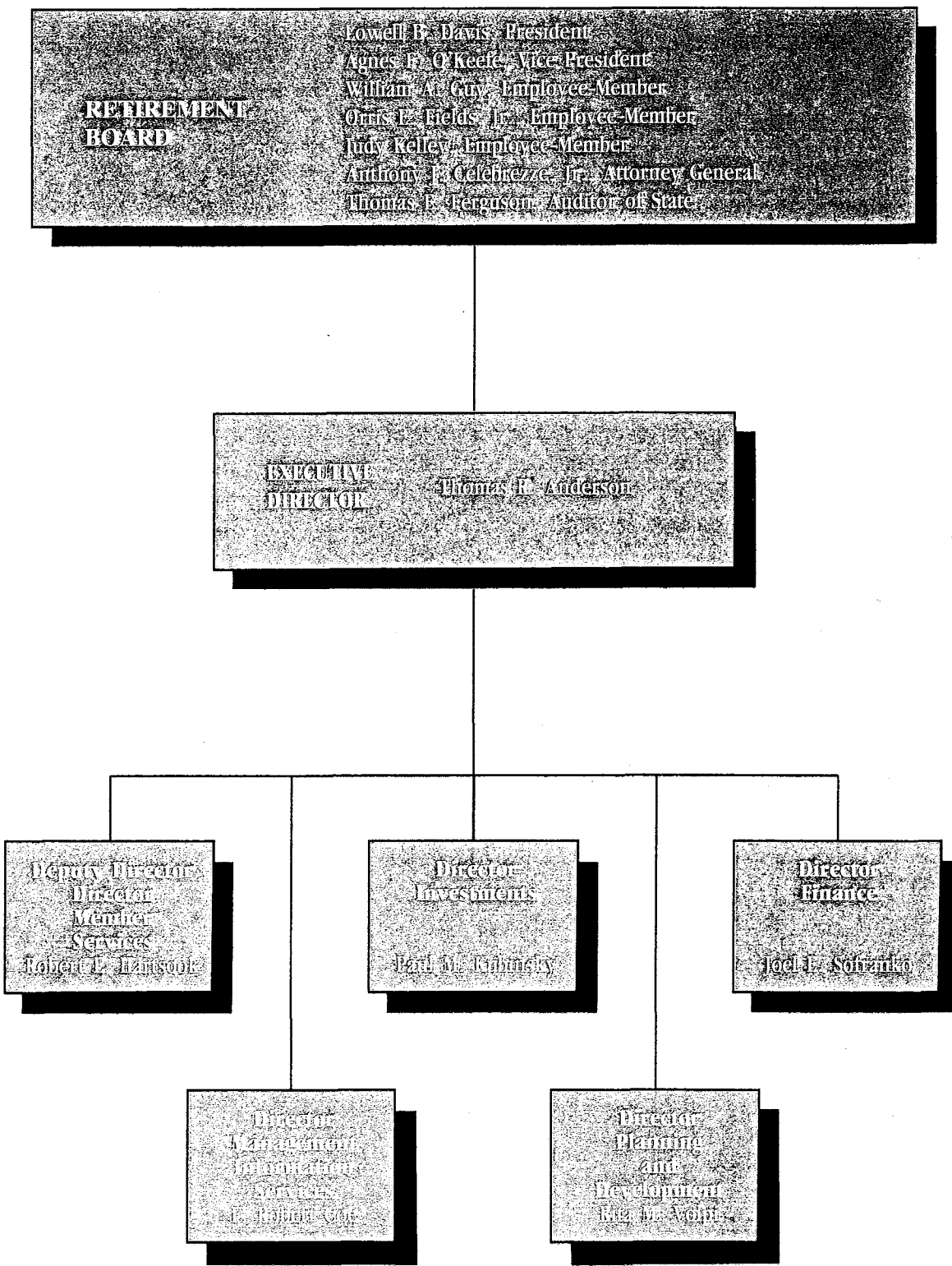


TABLE OF CONTENTS

	Pages
Introductory Section:	
Letter of Transmittal	5-7
Legislative Summary	8-9
Certificate of Achievement	10
Financial Section:	
Independent Auditors' Report	12
Balance Sheets	13
Statements of Revenues, Expenses and Changes in Fund Balance	14
Statements of Cash Flow	15
Notes to Financial Statements	16-22
Schedules:	
I Analysis of Funding Progress	22
II Revenues by Source and Expenses by Type	23-24
III Administrative Expenses	25
IV Investment Summary	26
V Fund Balance Accounts	27
Auditor of State's Letter	28
Actuarial Section:	
Actuary's Letter	30
Statement of Actuary	31-35
Statistical Section:	
Tables:	
I Asset Coverage of Accrued Liabilities	38
II Benefit Expenses by Type	39
III Number of Benefit Recipients by Type	39
IV Number of Participating Employers	39
V Retirement Averages	40
Investment Section:	
Investment Portfolio Distribution	42
Investment Report	43
Schedules	44-45
Exhibits	46-51
Investment Policy	52-55
Plan Summary	56-59



SCHOOL EMPLOYEES RETIREMENT SYSTEM

45 North Fourth Street • Columbus, Ohio 43215-3634 • Telephone (614) 222-5853

December 14, 1990

President and Members of the Retirement Board:

Dear President and Members:

We are pleased to submit to you the comprehensive annual financial report of the School Employees Retirement System of Ohio for the fiscal year ended June 30, 1990.

The report is divided into six sections: an Introductory Section which contains a Letter of Transmittal, along with the identification of the administrative organization, the Certificate of Achievement for Excellence in Financial Reporting and a summary of federal and state legislation affecting the System over the past year; a Financial Section which contains a letter expressing the opinion of our independent certified public accountants, Deloitte & Touche, and the financial statements of the System; an Actuarial Section which contains a letter expressing the opinion of our consulting actuaries, Gabriel, Roeder, Smith & Co. and results of their annual actuarial valuation; a Statistical Section which includes significant data pertaining to the System; an Investment Section which includes the investment report and schedules of portfolio activity for the past year; and a Plan Summary Section which provides a concise explanation of the various benefit plans which we provide to our members.

The School Employees Retirement System of Ohio (SERS) is a cost-sharing multiple-employer public employee retirement system established by the Ohio General Assembly in 1937 to provide retirement benefits to employees of Ohio public schools who are not required to possess a certificate in order to perform their duties. Benefits provided to participants in SERS include age and service retirement, disability benefits, survivor benefits, death benefits and health care benefits.

Economic Environment

SERS operates under constant economic influences from outside sources, including the U.S. Congress, the Ohio Legislature and the everchanging and sometimes volatile financial markets as well as the upward spiraling health care costs experienced by the U.S. in general. These influences are in addition to and sometimes in

conflict with SERS' mission to provide a feeling of financial security and a sense of well-being to all retirees, beneficiaries and members.

Over the past eight years SERS has operated in an economic environment of continuous expansion and moderate inflation. This situation is reflected in the growth of our investment portfolio over this time period. Subsequent to June 30, 1990, however, the economy has slowed significantly and the budget and trade deficit resolutions, as well as the situation in the Middle East, are cause for concern not only to the financial markets but to the effects on SERS' asset and benefit structure.

Regardless of the external pressures placed upon the System, SERS will never lose sight of its mission. SERS management and staff are committed to providing promised benefits when they are needed.

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 the School Employees Retirement System of Ohio for its comprehensive annual financial report for the fiscal year ended June 30, 1989.

In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such reports must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe our current report continues to conform to the Certificate of Achievement Program requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Accounting System and Reports

These financial statements were prepared in accordance with generally accepted accounting principles of governmental accounting and reporting as pronounced by the Governmental Accounting Standards Board.

The financial statements are the responsibility of SERS' management. Our internal accounting controls are designed to ensure the security of member and employer contributions, to assure responsible safeguarding of our assets, and to provide a degree of reliability to all of our financial records.

The principles promulgated by Statement No. 6 of the National Council on Governmental Accounting are used in our accounting and subsequent reporting of financial activities. The accrual basis of accounting is used to record all financial transactions. Gains and losses on sales and exchanges of investments are recognized on the transaction date. Investments in fixed-income securities are reported at amortized cost; discounts and premiums are amortized using the interest method. All other assets are reported at cost, except for real estate investments, which are reported at cost less accumulated depreciation. All investments are subject to adjustment for market decline determined to be other than temporary.

Major Initiatives and Financial Highlights

During fiscal year 1990, the Retirement System experienced the full impact of the implementation of the provisions contained in House Bill 290. Fiscal 1990 saw an increased number of members retire early in the year in order to avoid premiums associated with their post-retirement health care benefit. Fiscal 1990 also was the first year of the collection of the employer surcharge based on low member salaries intended to facilitate level cost funding of health care benefits.

The System implemented changes to our mail order (long term maintenance) prescription drug program emphasizing lower cost generic drugs during fiscal 1990. The System was also instrumental in developing a nationwide preferred pharmacy network which reduces the cost for acute care pharmaceutical needs and requires an electronic transmittal of claims which further reduces administrative costs. These changes will serve to control the rising cost of this high cost part of our overall post-retirement health care program.

Book entry registration of a substantial portion of the System's securities as well as a securities lending program were also implemented during fiscal 1990. Both of these programs will serve to maximize current income yields on our investment portfolio. An early retirement incentive program was made available to certain eligible SERS employees during fiscal 1990. The effect of this program will be reduced administrative personnel cost increases over the long term.

Revenues:

The financing of retirement and health care benefits is derived from employee and employer contributions and through investment earnings. Revenues from employee and employer contributions were \$104.1 million and \$180.5 million respectively, while income from investments totaled \$196.5 million. The employee contribution rate increased from 8.75% in fiscal 1989 to 9% in fiscal 1990. The employer contribution rate during fiscal 1990 remained unchanged from the prior year at 14%. Overall revenues increased 4.3% over those of the prior year primarily due to increased investment earnings, increased employer health care surcharge contributions and increased employer and employee payroll contributions arising from higher levels of gross payrolls of active members as well as the increase in the employee contribution rate.

Expenses:

Expenses are incurred primarily for the purpose for which SERS was created; namely, the payment of benefits. Included in the total expenses for fiscal 1990 were benefit payments, refunds of contributions due to member termination or death, transfers of contributions to other Ohio Systems to provide benefits for those members who hold membership in more than one system, and administrative expenses. Expenses for fiscal 1990 totaled \$277.7 million, an increase of 12.1% over 1989 expenses. Increases in the number of benefit recipients, changes in benefit provisions attributed to House Bill 290 and increased health care expense and refunds were the primary reasons for the increase in total System expenses for the fiscal year.

Funding and Reserves:

Funds are derived from the excess of revenues over expenses, and are accumulated by SERS in order to meet current and future benefit obligations to retirees and beneficiaries. The higher the level of funding, the larger the accumulation of assets and the greater the investment income potential. Net income for the fiscal year 1990 resulted in an increase in the fund balance of \$206.0 million.

The actuarial valuation for funding purposes, dated June 30, 1990, reflects an unfunded accrued liability for basic benefits of \$1,317 million. This liability represents the difference between the computed actuarial accrued liability for basic benefits to be paid members and retirants (\$4,003 million) and total of valuation assets (\$2,686 million). This unfunded accrued liability is being amortized in an orderly fashion over future years. The employer contribution rate of

14% is allocated by Board policy between basic benefits and health care. In addition to the 14%, effective with fiscal year 1990, employers have been paying a surcharge for any member whose salary is less than a minimum pay. The employer contributions from the basic 14% employer rate plus the surcharge, accomplish the goal of putting basic benefits and health care benefits on a level cost funding basis.

Additional information regarding funding is provided within the Actuarial Section (pages 30 to 35) of this report.

Investments

The School Employees Retirement System invests the accumulated funds in order to maximize both current income yield and long-term appreciation. For the fiscal year ended June 30, 1990, investments provided 40.6% of the System's total revenues while employee and employer contributions provided 21.5% and 37.3%, respectively; and other sources accounted for the remaining .6%.

The market value of the investments of the System was \$2.955 billion at June 30, 1990, an increase of \$262.2 million from the previous year. For the last five years, SERS has experienced an average annualized return of 11.5%. At June 30, 1990, our investment portfolio was structured as follows: 48.4% in debt securities; 33.0% in equity securities; 6.5% in short term investments; and 12.1% in real estate.

The primary objective of our investment policy is to assure that the System meets its responsibilities for providing retirement and other benefits. The portfolio is diversified to provide adequate cash flow, and the highest possible total return on System assets with the least possible exposure to risk. Regulatory provisions also serve to limit risk within respective investment portfolios. Details of portfolio composition, rates of return, analysis of significant economic conditions, and additional information concerning our investment policy and operations are provided on pages 42 to 55 of this report.

Cash Management

SERS' investment guidelines included an allocation to short term investments approximating 5% of the total portfolio based on book value. The short term portion of the portfolio is primarily invested in commercial paper and returned 8.8% for fiscal 1990. During fiscal 1990 a lockbox system of collecting revenues from contributing entities was implemented. This system will enhance the timely investing of contribution revenues.

SERS' bank deposits at year-end were entirely covered by federal depository insurance or collateral held in the name of SERS' custodian. Of \$2.9 billion in investments at market value at June 30, 1990, none of the System investments were in the lowest risk categories as defined by the Governmental Accounting Standards Board.

Future Prospects

The School Employees Retirement System of Ohio is being maintained on an actuarially sound basis as certified in this report by our actuary, thus providing protected future benefits for participants. It is anticipated that investment earnings on System assets will continue to meet or exceed actuarially assumed earnings rates. The System's goal is toward a fully funded position as unfunded actuarial liabilities are reduced in future funding periods.

We will continue to explore enhancements when possible to our existing benefits and to explore new benefits when possible. We will continue to meet the challenges in providing the best possible and affordable post-retirement health care coverage in spite of the volatility of the health care industry. Studies are under way to develop a system to identify prescription drug interaction prior to dispensing to avoid unnecessary treatment and possible duplication.

Our employees are dedicated to the prudent investment and safeguarding of System assets, continuing excellent service to members and retirees, and reduction of System costs where applicable. These have been and remain our highest priorities.

Acknowledgements

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

This report is being mailed to all employer members of SERS and other interested parties.

Respectfully submitted,



Thomas R. Anderson
Executive Director



Joel E. Sofranko, CPA
Director of Finance

LEGISLATIVE SUMMARY

State Legislation

During the past year the Ohio General Assembly has considered various pieces of legislation which would impact SERS. The following significant legislation was passed:

■ S.B. 240 eff. 7/24/90

This legislation makes various changes in retirement benefit options. It changes the primary plan of retirement benefit payment to a joint life annuity which pays at least one-half of the retiree's benefit to the surviving spouse upon the retiree's death. An acknowledgment from the spouse is required at the time of application for retirement if another plan of payment is chosen. Where a joint annuity benefiting the spouse has been chosen, upon divorce or annulment, consent of the ex-spouse or an order of court is required for the retiree to revert ("pop up") to a single life allowance. The legislation further provides that SERS will comply with the provisions of Section 415 of the Internal Revenue Code with regard to maximum benefit payments.

■ H.B. 167 eff. 7/24/90

This legislation changes SERS' statutory survivorship law to provide that where parents are the only potential beneficiaries, the benefit will be paid first to the dependent parent, if any, and if none, to the parents to share equally. Prior law provided for the benefit to be paid solely to the elder parent.

■ H.B. 789 eff. 11/8/90

This legislation extends until 12/31/93 SERS' authority to invest in venture capital. This investment authority was scheduled to expire on 12/31/90 under prior legislation.

■ H.C.R. 41 passed 4/4/90

This joint Ohio House and Senate resolution, which was sought by SERS, petitions Congress to review and either repeal or amend the provisions of the Social Security Act known as the Public Pension Offset and Windfall Benefit Elimination. Under the Offset, Social Security spousal benefits which an SERS retiree would receive are reduced by two-

thirds of the retiree's SERS benefit. Under the Windfall, Social Security benefits that an SERS retiree has earned are reduced by up to one-half the amount of the SERS pension. SERS has been actively seeking to have these provisions amended. (See Federal Legislation).

Federal Legislation

In recent years, legislation considered and passed by Congress has had a greater impact on SERS, its membership and beneficiaries than ever before. SERS monitors Congressional activities and seeks to educate members of Congress as to the impact such legislation has on SERS. Significant Congressional activities during the past year include the following:

■ Medicare Catastrophic

In late 1989, Congress repealed the Medicare Catastrophic Coverage Act which provided certain benefits for senior citizens. The benefits were to have been financed by a surcharge on senior citizens' taxable incomes.

■ Betts Legislation

Legislation (S.B. 1511) to clarify that the Age Discrimination in Employment Act (ADEA) applies to benefit plans, overruling the decision of the United States Supreme Court in **Public Employees Retirement System of Ohio v. Betts**, was enacted in October, 1990. To comply with the bill, SERS will have to amend its disability retirement program which currently excludes applicants who have reached sixty years of age. SERS has two years to comply with the provisions of the legislation.

■ Social Security Offset and Windfall

Legislation to amend or repeal the Social Security Offset provision has been introduced in the House. H.R. 201, sponsored by Congresswoman Oakar, would totally repeal the Offset. H.R. 3755, introduced by Congressman Donnelly, would eliminate the Offset for incomes of less than \$300.00 per month and reduce the Offset to one-third for incomes of less than \$600.00 per month.

LEGISLATIVE SUMMARY

Federal Legislation

■ Section 415

Legislation to amend Section 415 of the Internal Revenue Code to lessen its impact on public retirement systems, such as SERS, has been introduced in both the House and the Senate (H.R. 5822, S. 2901). The House version is contained in the 1990 technical corrections bill which may be passed before the end of 1990. Section 415 provides that no retirement benefit can be paid which is in excess of either a set dollar amount that is adjusted annually for inflation or 100% of compensation. The current definition of "compensation" of Section 415 purposes does not include deferred income such as that under Section 414(h) pick up plans or Section 457 deferred compensation plans. The proposed legislation includes deferred income in the definition of "compensation", exempts public pension plan benefits of \$56,000 or less from 100% of final average salary limitation and provides that public plan disability retirement and survivor benefits are not subject to Section 415.

■ Social Security and Medicare

Various measures affecting public plans, their members and retirees were enacted as part of the

budget bill passed in October, 1990. These measures include extension of Social Security coverage as of July, 1991 to public employees, other than students, not covered by a public pension plan. This would affect a number of temporary school employees who are not members of SERS such as coaches and other student activity people and retirees who are reemployed for fifty-nine days or less. The Medicare B premium is increased to \$29.90 beginning January, 1991 and will increase each year, reaching \$46.10 in 1995. The Medicare deductible increases to \$100.00 in 1991. A proposal to extend the Medicare employee tax to those public employees who were hired before April 1, 1986 was not enacted.

■ Taxation of Pension Funds

There has been Congressional interest, but no legislation yet introduced, in taxing pension investments by means of a securities transfer excise tax. Taxing of pension investments or funds is a legislative item which may gain more prominence as the federal government continues to look for sources of revenue.

SERS closely follows the Congressional agenda and will continue to monitor the aforementioned legislation as well as other issues which may impact SERS.

CERTIFICATE OF ACHIEVEMENT

**Certificate of
Achievement
for Excellence
in Financial
Reporting**

Presented to
**School Employees Retirement
System of Ohio**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended
June 30, 1989

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 (CAFR's) achieve the highest standards in government accounting and financial reporting.



Gary R. Norstrom

President

Jeffrey L. Essler

Executive Director

FINANCIAL SECTION

**INDEPENDENT
AUDITORS' REPORT**

BALANCE SHEETS

**STATEMENTS OF
REVENUES, EXPENSES AND
CHANGES IN FUND
BALANCE**

**STATEMENTS OF
CASH FLOW**

**NOTES TO FINANCIAL
STATEMENTS**

SCHEDULES:

**ANALYSIS OF
FUNDING PROGRESS
REVENUES BY SOURCE AND
EXPENSES BY TYPE
ADMINISTRATIVE EXPENSES
INVESTMENT SUMMARY
FUND BALANCE ACCOUNTS**

**AUDITOR OF
STATE'S LETTER**

FINANCIAL SECTION

INDEPENDENT AUDITORS' REPORT

**Deloitte &
Touche**



155 East Broad Street
Columbus, Ohio 43215-3650
Telephone: (614) 221-1000

Facsimile: (614) 229-4647

INDEPENDENT AUDITORS' REPORT

Members of the Retirement Board
School Employees Retirement System of Ohio
Columbus, Ohio

We have audited the accompanying balance sheets of the School Employees Retirement System of Ohio as of June 30, 1990 and 1989, and the related statements of revenues, expenses and changes in fund balances and cash flows 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the financial position of School Employees Retirement System of Ohio as of June 30, 1990 and 1989 and the results of its operations and its cash flows for the years then ended in conformity with generally accepted accounting principles.

Schedules I and II appearing on pages 22 and 23 and Schedules III through V on pages 25 to 27 are not a part of the basic financial statements but are supplemental information. The information for the years ended 1990 and 1989 has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated, in all material respects, in relation to the basic financial statements taken as a whole. The information included in the schedules prior to 1988 was reported upon by other auditors whose reports stated that the information was fairly presented in relation to the basic financial statements.

Deloitte & Touche

December 4, 1990

FINANCIAL SECTION

BALANCE SHEETS

June 30, 1990 and 1989

	1990	1989
Assets:		
Cash (note 5)	\$ 1,464,905	\$ 4,778,568
Receivables:		
Contributions:		
Employers	104,384,126	91,449,642
Employees	9,014,900	8,624,030
State of Ohio subsidies	983,082	1,086,776
Accrued investment income	27,993,850	24,785,589
Investment sale proceeds	16,273,015	5,869,809
Total receivables	<u>158,648,973</u>	<u>131,815,846</u>
Collateral held under securities lending program (Note 5)	<u>90,566,742</u>	
Investments, at cost (market \$2,955,412,276 and \$2,693,246,301, respectively) (notes 5,6 and 8)	<u>2,515,833,425</u>	<u>2,333,487,706</u>
Property and equipment, at cost (note 7)	10,076,987	9,858,368
Less accumulated depreciation	<u>3,338,976</u>	<u>2,795,036</u>
Net property and equipment	<u>6,738,011</u>	<u>7,063,332</u>
Other assets	<u>9,574,198</u>	<u>6,540,865</u>
Total assets	<u>2,782,826,254</u>	<u>2,483,686,317</u>
Liabilities:		
Accounts payable and accrued expenses	743,812	749,654
Investment commitments payable	8,766,875	6,548,387
Health care benefits incurred and unpaid	17,329,503	15,879,459
Notes payable (note 8)	3,054,290	4,317,451
Other liabilities (note 9)	767,480	595,875
Obligations under securities lending program (Note 5)	<u>90,566,742</u>	
Total liabilities	<u>121,228,702</u>	<u>28,090,826</u>
Net assets available for benefits	<u>\$ 2,661,597,552</u>	<u>\$ 2,455,595,491</u>
Fund balance (note 3):		
Pension benefit obligation:		
Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	<u>\$ 2,650,101,948</u>	<u>\$ 2,426,698,804</u>
Current employees:		
Accumulated employee contributions, including allocated investment income	683,812,888	627,076,019
Employer financed portion	<u>1,463,293,974</u>	<u>1,357,494,988</u>
Total pension benefit obligation	<u>4,797,208,810</u>	<u>4,411,269,811</u>
Unfunded pension benefit obligation payable	<u>(2,135,611,258)</u>	<u>(1,955,674,320)</u>
Total fund balance	<u>\$ 2,661,597,552</u>	<u>\$ 2,455,595,491</u>

See accompanying notes to financial statements.

FINANCIAL SECTION

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN FUND BALANCE

Years ended June 30, 1990 and 1989

	1990	1989
Revenues:		
Contributions:		
Employers (note 4)	\$ 180,544,371	\$ 171,094,710
Employees	104,105,361	96,422,050
State of Ohio subsidies	983,082	1,086,776
Transfer from other Ohio systems	1,586,700	1,361,627
	287,219,514	269,965,163
Investment income:		
Interest and dividends	166,326,782	162,557,415
Real estate income, net (notes 6 and 8)	14,056,231	5,213,458
Net realized gain on sale of investments	16,144,030	26,060,014
	196,527,043	193,830,887
Total revenues	483,746,557	463,796,050
 Expenses:		
Benefits:		
Retirement	✓162,866,492	144,870,006
Disability	-18,077,033	15,968,925
Survivor	-10,886,380	10,154,865
Health care	62,746,014	55,688,417
Death	✓ 709,708	651,150
	255,285,627	227,333,363
Refund of employee contributions	12,532,925	11,468,175
Administrative expenses	7,942,036	7,419,675
Transfer to other Ohio systems	1,983,908	1,630,410
Total expenses	277,744,496	247,851,623
Net income	206,002,061	215,944,427
Fund balance, beginning of year	2,455,595,491	2,239,651,064
Fund balance, end of year	\$ 2,661,597,552	\$ 2,455,595,491

See accompanying notes to financial statements.

FINANCIAL SECTION

STATEMENTS OF CASH FLOW

Years ended June 30, 1990 and 1989

	1990	1989
Cash flows from operating activities:		
Contributions received	\$ 273,997,854	\$ 249,116,583
Investment income, net of investment expenses	179,968,464	163,946,853
Benefits paid	(253,835,583)	(226,064,224)
Refunds of employee contributions	(12,532,925)	(11,468,175)
Administrative expenses paid	(9,956,496)	(11,793,572)
Transfers to other Ohio systems	(1,983,908)	(1,630,410)
Net cash provided by operating activities	175,657,406	162,107,055
Cash flows from investing activities:		
Proceeds from investments sold	3,310,507,558	3,639,921,424
Purchase of investments	(3,487,687,677)	(3,785,061,573)
Net cash used in investing activities	(177,180,119)	(145,140,149)
Cash flows from financing activities:		
Repayment of notes payable	(1,263,161)	(13,510,539)
Net additions to property and equipment	(527,789)	(1,711,931)
Increase in collateral held under securities lending program	(90,566,742)	
Increase in obligations under securities lending program	90,566,742	
Cash used by financing activities	(1,790,950)	(15,222,470)
Net increase (decrease) in cash	(3,313,663)	1,744,436
Cash at beginning of year	4,778,568	3,034,132
Cash at end of year	\$ 1,464,905	\$ 4,778,568
Reconciliation of net income to net cash provided by operating activities:		
Net income	\$ 206,002,061	\$ 215,944,427
Adjustments to reconcile net income to net cash provided by operating activities:		
Increase in contributions receivable	(13,221,660)	(20,848,580)
Net realized gain on sale of investments	(16,144,030)	(26,060,014)
Increase in accrued investment income	(3,208,261)	(6,023,775)
Depreciation and amortization (investment), net	2,793,712	2,199,755
Depreciation (non-investment)	853,110	740,411
Increase in other assets	(3,033,333)	(5,175,585)
Decrease in accounts payable and accrued expenses	(5,842)	(78,732)
Increase in health care benefits incurred and unpaid	1,450,044	1,269,139
Increase in other liabilities	171,605	140,009
Total adjustments	(30,344,655)	(53,837,372)
Net cash provided by operating activities	\$ 175,657,406	\$ 162,107,055

See accompanying notes to financial statements.

FINANCIAL SECTION

NOTES TO FINANCIAL STATEMENTS

June 30, 1990 and 1989

(1) Description of the System

(A) Organization — The School Employees Retirement System of Ohio (SERS) is a cost-sharing multiple-employer public employee retirement system established by the Ohio General Assembly in 1937 to provide retirement benefits to employees of Ohio public schools who are not required to possess a certificate in order to perform their duties. Responsibility for the organization and administration of SERS is vested in the Retirement Board. SERS is not considered part of the State of Ohio financial reporting entity.

Employer and employee membership data as of June 30 follows:

Employer Members	1990	1989
Local.....	373	373
City.....	192	192
County.....	84	84
Village.....	49	49
Vocational.....	51	51
Technical.....	11	11
College.....	2	2
Other.....	4	4
	766	766

Employee Members

Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them.....	54,256	52,900
Current employees		
Vested.....	56,023	55,111
Nonvested.....	37,124	36,667
Total.....	93,147	91,778

(B) Benefits — Members are eligible for retirement benefits based upon age and service credit as follows: age 60 and earning 5 years of service credit; between ages 55 and 60 and earning 25 years of service credit; or earning 30 years of service credit at any age. The benefit is equal to 2.1% of the member's final average salary, or a minimum of \$86, multiplied by the number of years of credited service.

In addition to retirement benefits, SERS also provides for disability benefits, survivor benefits, death benefits and health care benefits.

Members are eligible for disability benefits after completion of 5 years of service. Qualified dependents of a deceased member are eligible for monthly survivor benefits. Death benefits of \$500 are payable upon the

death of a retirant to a designated beneficiary. Prior to July 1, 1986, all members receiving a benefit from SERS were eligible to receive health care benefits. Members who retire effective July 1, 1986 or later must have at least 10 or more years of service credit to qualify for the health care benefits.

Members with credited service in the State Teachers Retirement System (STRS) or Public Employees Retirement System (PERS) are eligible to receive transferred credited service and funds from either or both of those systems. Any service which is not concurrent with service within SERS will be included in the determination of retirement benefits. Similarly, a member with credited service and funds in SERS may transfer such service to STRS or PERS upon retirement.

On June 9, 1988, H.B.290 was signed into Ohio law. The law amended both the benefits provided to SERS members (basic retirement and health care) and the contributions required to fund the benefits provided. On July 8, 1988, the SERS Retirement Board adopted several resolutions required to implement the provisions of H.B. 290. The amendments and resolutions which follow were taken into consideration by the actuary in preparing the June 30, 1990 and 1989 actuarial valuations.

Effective October 1, 1988: 1) the retirement formula was increased from 2% to 2.1% of final average salary; 2) the reimbursement to retirees eligible for Medicare Part B coverage was fixed at the rate of \$24.80 per month; and 3) there was an increase in benefits of 2% for all retirants with benefit effective dates prior to February 1, 1983 and an increase of 5% for all retirants with effective dates of retirement of February 1, 1983 through September 30, 1988.

Effective July 1, 1989: 1) a surcharge on employers will be collected for employees earning less than an actuarially-determined minimum pay, pro-rated according to service credit earned (For fiscal years 1990 and 1991 the minimum has been established as \$8,400 and \$9,100 respectively.) The amount of the surcharge accrued for fiscal years 1990 and 1989 and included in contribution revenue from employers in the Statements of Revenues, Expenses and Changes in Fund Balance is \$15,217,909 and \$14,010,283 respectively; 2) the contribution rate for employees was increased from 8.75% to 9.0% of covered earnings; 3) members retiring with more than 10 but less than 25 years of service credit were required to pay from 25% to 75% of the health insurance premium, phased in over a period of five years; and 4) the SERS portion of spouse and dependent health insurance premiums will be reduced from 50% to 30%, over a five-year period.

FINANCIAL SECTION

NOTES TO FINANCIAL STATEMENTS (Continued)

(2) Summary of Significant Accounting Policies

(A) Basis of Accounting — SERS' financial statements are prepared using the accrual basis of accounting. The following are the significant accounting policies followed by SERS:

(B) Investments — Income on all investments is recognized on the accrual basis. Gains and losses on sales and exchanges of investments are recognized on the transaction date. All investments are subject to adjustment for market decline determined to be other than temporary.

Investments in fixed-income securities and mortgage loans are reported at amortized cost with discounts or premiums amortized using the interest method.

Investments in common and preferred stocks are carried at cost. Gains and losses on stock sales are recognized on the basis of the average cost of the stocks sold.

Investments in short-term obligations, principally certificates of deposit, commercial paper and U.S. Treasury bills are carried at cost, which approximates market value.

Investments in real estate are carried at cost. Depreciation on buildings is provided using the straight-line method over the estimated useful lives of the property (40 to 45 years). Investments in commingled real estate funds are carried at cost.

Investments in venture capital are accounted for at the pro-rata share of underlying equity.

(C) Property and Equipment (Non-Investment Assets) — Property and equipment are stated at cost. Depreciation has been provided using the straight-line method over the following useful lives:

Description	Estimated Lives (years)
Automobiles.....	3
Equipment and furniture.....	3-10
Building.....	40

Actuarial Assumption

Rate of return on investments	7.5% compounded annually, increased to 9.5% rate of return annually for the period July 1, 1988 through June 30, 1991.
Projected salary increases	4.5% compounded annually, attributable to inflation; additional increases ranging from 0% to 3% per year attributable to seniority and merit.
Post-retirement mortality	1971 Group Annuity Table projected to 1984 for men and women, set back 1 year for women.
Rates of withdrawal from active service for reasons other than death, rates of disability and expected retirement ages	Developed on basis of actual plan experience.
Health care premiums	4.5% annual increase with 25% of eligible female retirants and 60% of eligible male retirants electing joint survivor form of payment and 25% of eligible female retirants and 50% of eligible male retirants electing to cover spouse for health care.
Medicare	All recipients are eligible for Medicare on attainment of age 65 or immediately if retired for disability.

(D) Federal Income Tax Status — During the years ended June 30, 1990 and 1989 SERS qualified under Section 501(a) of the Internal Revenue Code and was exempt from Federal income taxes.

(E) Health Care Benefits Incurred and Unpaid — Amounts accrued for health care benefits payable are based upon estimates furnished by the claims administrator. Such estimates have been developed from prior claims experience.

(F) Reclassification — Certain 1989 balances have been reclassified to conform with 1990 presentation.

(3) Funding Status and Progress

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

The pension benefit obligation was determined as part of an actuarial valuation of the plan as of June 30, 1990 and 1989. There were no changes in actuarial assumptions or in actuarial funding methods used in the actuarial valuations of June 30, 1990 as compared to the assumptions used as of June 30, 1989. The following significant assumptions were used in the actuarial valuations as of June 30, 1990 and 1989:

FINANCIAL SECTION

NOTES TO FINANCIAL STATEMENTS (Continued)

At June 30, 1990 the unfunded pension benefit obligation was \$2,135,611,258 as follows:

	Basic Retirement Benefits	Health Care Benefits	Total
Pension benefit obligation:			
Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$ 1,926,981,136	\$ 723,120,812	\$ 2,650,101,948
Current employees:			
Accumulated employee contributions including allocated investment income	683,812,888	—	683,812,888
Employer financed — vested	996,967,870	397,084,384	1,394,052,254
Employer financed — non-vested	54,469,406	14,772,314	69,241,720
Total pension benefit obligation	<u>3,662,231,300</u>	<u>1,134,977,510</u>	<u>4,797,208,810</u>
Net assets available for benefits, at cost (market \$3,101,176,403).....	<u>2,513,075,934</u>	<u>148,521,618</u>	<u>2,661,597,552</u>
Unfunded pension benefit obligation	<u>\$ 1,149,155,366</u>	<u>\$ 986,455,892</u>	<u>\$ 2,135,611,258</u>

At June 30, 1989 the unfunded pension benefit obligation was \$1,955,674,320 as follows:

	Basic Retirement Benefits	Health Care Benefits	Total
Pension benefit obligation:			
Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$ 1,747,567,501	\$ 679,131,303	\$ 2,426,698,804
Current employees:			
Accumulated employee contributions including allocated investment income	627,076,019	—	627,076,019
Employer financed — vested	919,454,119	371,562,051	1,291,016,170
Employer financed — non-vested	52,465,187	14,013,631	66,478,818
Total pension benefit obligation	<u>3,346,562,826</u>	<u>1,064,706,985</u>	<u>4,411,269,811</u>
Net assets available for benefits, at cost (market \$2,815,096,954).....	<u>2,311,251,548</u>	<u>144,343,943</u>	<u>2,455,595,491</u>
Unfunded pension benefit obligation	<u>\$ 1,035,311,278</u>	<u>\$ 920,363,042</u>	<u>\$ 1,955,674,320</u>

During the year ended June 30, 1990, the plan experienced a net change in the total pension benefit obligation of \$385,938,999 (\$315,668,474 for basic retirement benefits and \$70,270,525 for health care benefits). None of the net change in total pension benefit obligation was attributable to plan amendments or changes in assumptions.

FINANCIAL SECTION

NOTES TO FINANCIAL STATEMENTS (Continued)

(4) Contributions

The Ohio Revised Code requires contributions by active members and their employers. Contribution rates are established by the Retirement Board within the allowable rates established by the Ohio Revised Code. Active members and their employers are required to contribute 9% and 14%, respectively, of active member payroll. Prior to July 1, 1989, the employee rate was 8.75%. The current employer contribution rate is allocated to basic retirement benefits and health care by the Retirement Board. For fiscal year 1990 the allocation of the employer contribution rate to basic retirement benefits has been established as the rate necessary to cover normal cost, plus an amortization of the unfunded actuarial accrued liabilities over a 40-year period. Based on this decision, the current employer contribution rate (14%) is allocated 9.78% to basic benefits and the remaining 4.22% is allocated to health care benefits. The contribution rate allocated to health care, plus the additional rate of contribution provided by the health care surcharge is sufficient to cover normal cost and provide level cost financing of the unfunded actuarial accrued liabilities. The adequacy of employer contribution rates is determined annually using the entry age normal cost method.

Significant actuarial assumptions used to determine the adequacy of contribution rates were the same as those used to compute the standardized measure of the pension benefit obligation.

Employer and employee contributions required and made represented 14% and 9%, respectively, of active member payroll and amounted to \$158,768,000 and \$102,065,000, respectively in 1990. The employer contribution consisted of \$82,322,642 for normal cost and \$76,445,358 for amortization of the unfunded actuarial accrued liability.

Contributions may be refunded, without interest, to a member who withdraws from SERS or to the member's beneficiary following the member's death.

(5) Cash Deposits and Investments

SERS' bank deposits at year-end were entirely covered by federal depository insurance or by collateral held in the name of SERS' custodian, the Treasurer, State of Ohio, as required by statute. The carrying amount of the System's deposits as of June 30, 1990 was \$1,464,905 and the bank balance was \$2,284,131. SERS' deposits covered by federal depository insurance and collateral held in the name of SERS' custodian

amounted to \$304,208 and \$1,979,923 respectively at June 30, 1990.

SERS is authorized to invest in bonds, notes, certificates of indebtedness, mortgage notes, real estate, stocks, shares, debentures, or other obligations or securities as set forth in the Ohio Revised Code. In accordance with Statement No. 3 of the Governmental Accounting Standards Board, SERS' investments are categorized to give an indication of the level of risk assumed by SERS at year-end. Category 1 includes investments that are insured or registered or held by SERS, or the Treasurer, State of Ohio, or custodial agent bank in SERS' name. Category 2 includes uninsured and unregistered investments for which the securities are held by the Treasurer, State of Ohio in SERS' name. Category 3 includes uninsured and unregistered investments for which the securities are held by the Treasurer, State of Ohio but not in SERS' name. In accordance with a contractual relationship between the Treasurer, State of Ohio and a custodial agent bank, all securities subject to categorization are Category 1 investments held in book entry form in a unique account so as to be identified at all times as the possession of the System.

The System participates in a security lending program, administered by the custodial agent bank, whereby certain securities are transferred to an independent broker/dealer (borrower) in exchange for collateral equal to no less than 102% of the market value of the loaned securities. The System has minimized its exposure to credit risk due to borrower default by having the custodial agent bank determine daily that required collateral meets 100% of the market value of securities on loan. The System has not experienced any losses due to credit or market risk on security lending activity since implementation of the program. Securities loaned to brokers/dealers at June 30, 1990 totaled \$90.6 million. Security lending income totaled \$12,914 for the period ended June 30, 1990. Securities under loan are maintained on the System's financial records and are included with first mortgage loans, real estate, commingled real estate funds, and venture capital funds as investments which by their nature are not required to be categorized for level of risk purposes.

Market values of securities are based primarily on quotations from national security exchanges. Market values of real estate are based upon appraisals. Market values of investments in the commingled real estate and venture capital funds are based on information provided by the fund managers.

FINANCIAL SECTION

NOTES TO FINANCIAL STATEMENTS (Continued)

(5) Cash Deposits and Investments (continued)

A summary of investments as of each June 30 follows:

	1990		1989	
	Carrying Value	Market Value	Carrying Value	Market Value
Corporate and government bonds and obligations	\$ 615,720,281	\$ 624,347,959	\$ 545,589,142	\$ 564,262,201
First mortgage loans and mortgage-backed securities	600,815,699	623,682,077	613,885,268	639,618,675
Common and preferred stocks	804,941,388	1,192,193,415	699,578,406	986,297,469
Short term investments	163,974,710	163,974,710	183,876,243	184,386,827
Real estate	304,663,884	326,461,902	263,896,685	292,019,167
Venture capital investments	25,717,463	24,752,213	26,661,962	26,661,962
Total investments	\$ 2,515,833,425	\$ 2,955,412,276	\$ 2,333,487,706	\$ 2,693,246,301

(6) Real Estate and Leases

SERS' investment in real estate as of June 30 consists of:

	1990	1989
Land	\$ 25,534,332	\$ 24,626,318
Buildings	144,795,769	135,618,239
Commingled real estate funds	158,614,857	123,245,998
	<u>328,944,958</u>	<u>283,490,555</u>
Less accumulated depreciation	24,281,074	19,593,870
	<u>\$ 304,663,884</u>	<u>\$ 263,896,685</u>

The following is a summary of minimum future lease revenues on noncancellable operating leases related to SERS' investment in real estate as of June 30, 1990:

Year ending June 30,	
1991	\$ 15,182,119
1992	11,868,394
1993	9,500,595
1994	7,681,112
1995	6,388,193
Future lease revenues	<u>43,483,187</u>
Total minimum future lease revenues	<u>\$ 94,103,600</u>

Depreciation expense on the above real estate aggregated \$4,687,204 and \$4,336,120 in 1990 and 1989, respectively and is included in net real estate income.

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

A summary of property and equipment at June 30 follows:

	1990	1989
Land	\$ 1,178,055	\$ 1,178,055
Building and improvements	3,945,326	3,930,730
Furniture and equipment	4,953,606	4,749,583
	<u>10,076,987</u>	<u>9,858,368</u>
Less accumulated depreciation	3,338,976	2,795,036
	<u>\$ 6,738,011</u>	<u>\$ 7,063,332</u>

(8) Notes Payable

Notes payable at June 30, consist of the following:

	1990	1989
10% unsecured notes payable, interest due quarterly with principal due May 31, 1991, net of discount of \$108,237 in 1990 and \$119,175 in 1989.....	\$ 3,054,290	\$ 3,043,352
10.5% mortgage note payable, due in monthly installments of \$12,353, including interest, through May 15, 1996, with final payment of \$1,130,500 due May 15, 1996. Prepayment option exercised February, 1990.....	0	1,274,099
	<u>\$ 3,054,290</u>	<u>\$ 4,317,451</u>

Total interest expense on the above notes aggregated \$454,030 and \$1,050,739 in 1990 and 1989, respectively and is included in net real estate income.

FINANCIAL SECTION

NOTES TO FINANCIAL STATEMENTS (Continued)

(9) Deferred Compensation

Employees of SERS may elect to participate in the Ohio Public Employees Deferred Compensation Program (Program), created in accordance with Internal Revenue Code Section 457. Under the Program, employees may elect to defer a portion of their pay until a later date, usually after retirement. The deferred pay and any income earned thereon is not subject to income taxes until actually received by the employee.

As of June 30, 1990, market value of investments in the Program totaled \$767,480. Under the terms of the Program agreement, these monies are subject to the claims of SERS' general creditors. Accordingly, this amount is reflected as an asset along with a corresponding liability to the employees participating in the Program. Participating employees are general creditors of SERS with no preferential claim to the deferred funds. Investments in the Program are held by the Program's agent in SERS' name.

(10) Defined Benefit Pension Plan

Substantially all SERS full-time employees participate in the Public Employees Retirement System of Ohio (PERS), a cost-sharing multiple-employer public employee retirement system. The payroll for employees covered by PERS for the year ended June 30, 1990 was \$3,368,079; SERS total payroll was \$3,746,576.

All SERS full-time employees are eligible to participate in PERS. Employees are eligible for retirement benefits at age 60 with 5 or more years of service credit or at any age with 30 or more years of service. The benefit is based on 2.1% of final average salary multiplied by the years of service credit for the first 30 years of credited service and 2.5% for each additional year of credited service up to a maximum of 100% of final average salary. Employees retiring before age 65 with less than 30 years of service credit receive a percentage reduction in benefit amounts. PERS also provides disability and survivor benefits. Benefits are established by State statute.

SERS and employee contributions for the year ended June 30, 1990 were \$469,847 and \$286,287, respectively; these contributions represented 13.95% and 8.5% of covered employee payroll, respectively, as required by State statute. Rates are established by the retirement board upon recommendation by the actuary.

During the most recent actuarial study there were no changes in actuarial assumptions, benefit provisions, actuarial funding methods or other significant factors except for increasing the assumed rate of return on investments from 7.50% to 7.75% and changing the benefit formula to provide 2.50% of final average salary for each year of service in excess of 30 years. During the fiscal year 1990 the statutory rates established by the retirement board and those computed by the actuary were the same.

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

PERS does not make separate measurements of assets and pension benefit obligation for individual employers. The pension benefit obligation as of December 31, 1988, the date of the most recent actuarial valuation, for PERS as a whole was \$15.7 billion. PERS' net assets available for benefits on that date were \$13.3 billion, leaving an unfunded pension benefit obligation of \$2.4 billion. PERS does not hold any securities in the form of notes, bonds or other instruments of any of the entities contributing to the system. SERS' contribution represented less than 1 percent of total contributions required of all participating entities.

PERS' Comprehensive Annual Financial Report for the year ended December 31, 1989 contains historical trend information for three years only.

On April 7, 1989, SERS' Board adopted an early retirement incentive (ERI) program in accordance with O.R.C. Section 145.297. Under the terms of the plan, SERS agreed to purchase up to three years of service credit for eligible employees from January 1 through December 31, 1990. During fiscal year 1990, seven employees opted to take advantage of the ERI program; the cost to SERS of \$173,419 is included in salaries.

FINANCIAL SECTION

NOTES TO FINANCIAL STATEMENTS (Continued)

(11) Contingent Liabilities

SERS is a party in various litigation. 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 SERS' financial position.

(12) Historical Trend Information

Historical trend information designed to provide information about SERS' progress made in accumulating sufficient assets to pay benefits when due is presented immediately following the notes to the financial statements.

ANALYSIS OF FUNDING PROGRESS

NCGA Statement 6, the authoritative guide used for financial reporting, requires that we present ten years of comparative actuarial statistical data, disclosing the progress we have made in accumulating assets to pay benefits when due. Schedule I presents six years and Schedule II presents eight years of data, since ten years are not available.

Schedule I

Basic Retirement Benefits (\$ Amounts in Millions)

Fiscal Year	(1) Net Assets Available for Benefits	(2) Pension Benefit Obligation	(3) Percentage Funded (1) divided by (2)	(4) Unfunded Pension Benefit Obligation (2) minus (1)	(5) Valuation Payroll	(6)
						Unfunded Pension Benefit Obligation as a Percent of Covered Payroll (4) divided by (5)
1985	\$ 1,556	\$ 2,257	68.9%	\$ 701	\$ 804	87.2%
1986	1,747	2,511	69.6	764	869	87.9
1987	1,930	2,646	72.9	716	931	76.9
1988*	2,107	3,017	69.9	910	982	92.6
1989	2,311	3,346	69.1	1,035	1,055	98.1
1990	2,513	3,662	68.6	1,149	1,119	102.7

Health Care Benefits (\$ Amounts in Millions)

1985	\$ 120	\$ 656	18.3%	\$ 536	\$ 804	66.7%
1986	129	830	15.5	701	869	80.7
1987	133	1,006	13.2	873	931	93.8
1988*	133	991	13.4	858	982	87.4
1989	144	1,065	13.5	921	1,055	87.3
1990	149	1,135	13.1	986	1,119	88.1

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation (both basic retirement and health care benefits), 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 SERS' funding status on a going-concern basis. Analysis of this percentage over time indicates whether SERS is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger SERS is. 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 SERS' progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger SERS is.

The actuarial assumptions for investment return, post-retirement mortality, and participation in health care premiums are revised periodically based on SERS' experience.

* In fiscal 1988, plan benefit provisions were amended. The amendments had the effect of increasing the pension benefit obligation for basic benefits by \$119.8 million, and decreasing the pension benefit obligation for health care by \$199.3 million.

See accompanying independent auditors' report.

FINANCIAL SECTION

Schedule II

Revenues By Source

Fiscal Year	Member Contributions	Employer Contributions	Investment Income	Other Revenues	Total	Employer Contribution Rate as a Percent of Covered Payroll
1983	\$ 57,302,477	\$ 86,862,611	\$107,416,567	\$3,489,140	\$255,070,795	12.5 %
1984	67,503,890	106,886,556	145,215,463	2,944,271	322,550,180	14.0
1985	73,117,682	119,145,737	153,934,029	3,004,376	349,201,824	14.0
1986	78,979,863	130,507,996	171,115,676	3,333,819	383,937,354	14.0
1987	84,848,170	135,032,693	175,493,200	2,521,825	397,895,888	14.0
1988	89,667,853	145,784,980	161,724,032	2,280,893	399,457,758	14.0
1989	96,422,050	171,094,710	193,830,887	2,448,403	463,796,050	14.0
1990	104,105,361	180,544,371	196,527,043	2,569,782	483,746,557	14.0

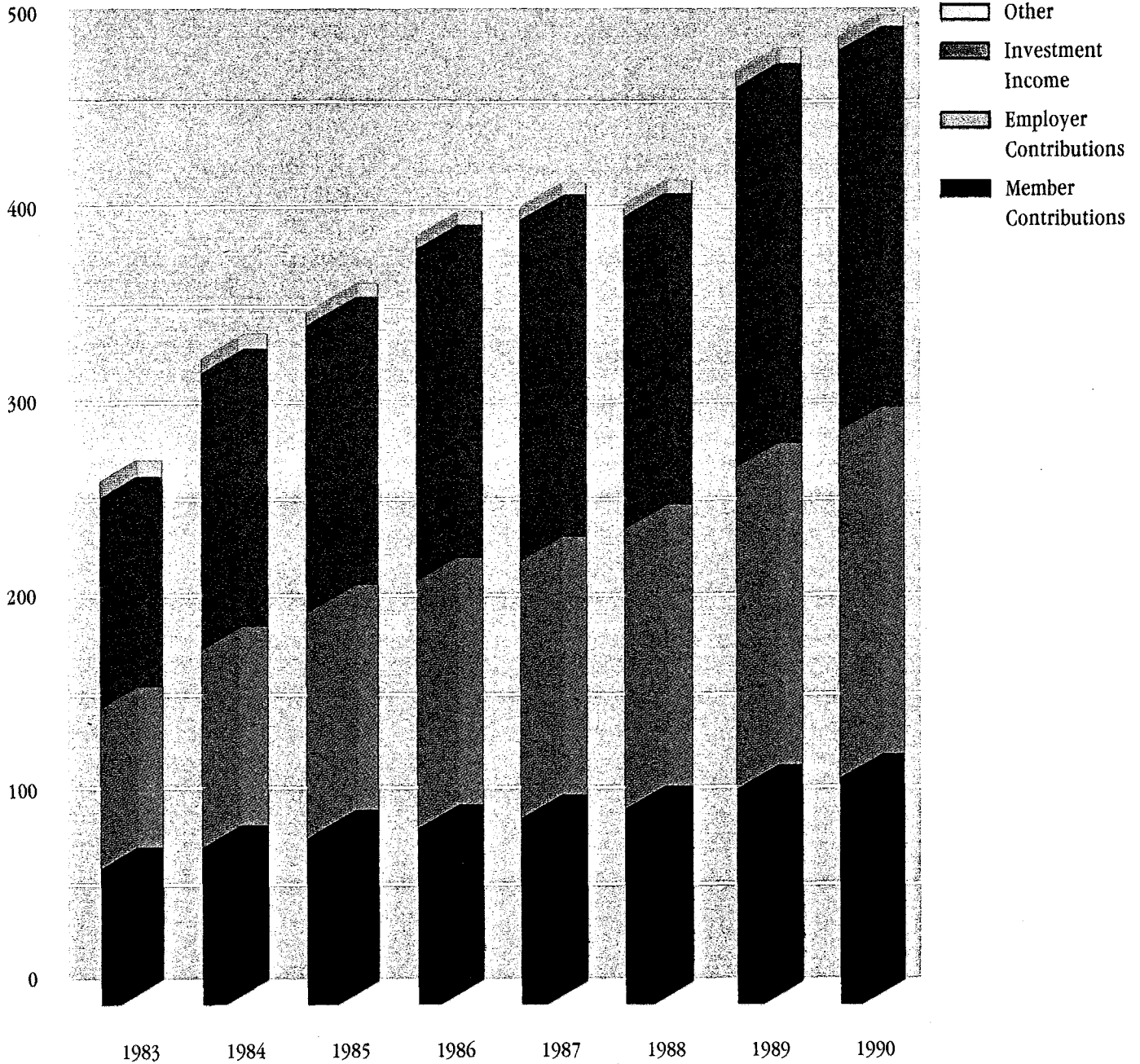
Expenses By Type

Fiscal year	Benefits	Administrative Expenses	Transfers to other Ohio Retirement Systems	Refunds	Other	Total
1983	\$119,831,633	\$4,051,778	\$1,215,546	\$ 8,619,474	\$ —	\$133,718,431
1984	131,848,435	4,658,760	1,181,012	7,827,632	879,498	146,395,337
1985	146,785,150	5,673,205	1,486,990	8,373,795	—	162,319,140
1986	166,606,773	5,863,596	1,901,100	9,058,221	—	183,429,690
1987	192,787,851	6,599,526	1,498,114	10,267,756	—	211,153,247
1988	204,178,239	6,689,009	2,131,150	9,791,762	—	222,790,160
1989	227,333,363	7,419,675	1,630,410	11,468,175	—	247,851,623
1990	255,285,627	7,942,036	1,983,908	12,532,925	—	277,744,496

See accompanying independent auditors' report.

FINANCIAL SECTION

Revenues By Source
(Millions of Dollars)



FINANCIAL SECTION

Schedule III

Years ended June 30, 1990 and 1989

	1990	1989
Personnel services:		
Salaries and wages	\$ 3,746,576	\$ 3,264,126
Retirement contributions	469,847	453,456
Insurance	368,608	319,313
Total personnel services	4,585,031	4,036,895
Professional services:		
Computer support services	378,232	461,389
Medical	194,815	210,086
Technical and actuarial	389,726	292,120
Auditing	62,550	60,000
Employee training	77,215	85,613
Total professional services	1,102,538	1,109,208
Communications:		
Postage	251,591	344,971
Printing and publications	59,455	97,809
Telephone	49,609	56,637
Retirement counseling services	11,590	13,460
Total communications	372,245	512,877
Other services and charges:		
Equipment repairs and maintenance	215,229	186,258
Building occupancy and maintenance	235,264	252,977
Interest on notes payable (non-investment)	0	4,153
Supplies	70,996	83,276
Transportation and travel	131,201	144,466
Equipment rental	109,915	126,782
Surety bonds and insurance	81,335	80,688
Memberships and subscriptions	52,317	41,174
Retirement study commission	22,779	20,844
Miscellaneous	110,076	79,666
Total other services and charges	1,029,112	1,020,284
	7,088,926	6,679,264
Depreciation (non-investment):		
Furniture and equipment	753,459	641,223
Building	99,651	99,188
Total depreciation	853,110	740,411
Total administrative expenses	\$ 7,942,036	\$ 7,419,675

See accompanying independent auditors' report.

FINANCIAL SECTION

INVESTMENT SUMMARY Schedule IV

	Year ended June 30, 1990				1990		% of Total Market Value
	1989		Purchases and Accretions	Sales, Redemptions and Accruals	Carrying Value	Market Value	
	Carrying Value	Market Value					
Corporate and govern- ment bonds and obligations	\$ 545,589,142	\$ 564,262,201	\$ 358,629,785	\$ (288,498,646)	\$ 615,720,281	\$ 624,347,959	21.1 %
First mortgage loans and mortgage-backed securities	613,885,268	639,618,675	121,778,009	(134,847,578)	600,815,699	623,682,077	21.1
Common and preferred stocks	699,578,406	986,297,469	179,667,665	(74,304,683)	804,941,388	1,192,193,415	40.3
Short term investments	183,876,243	184,386,827	2,777,591,467	(2,797,493,000)	163,974,710	163,974,710	5.6
Real estate	263,896,685	292,019,167	46,079,689	(5,312,490)	304,663,884	326,461,902	11.1
Venture capital investments	26,661,962	26,661,962	3,881,615	(4,826,114)	25,717,463	24,752,213	0.8
Total investments	\$ 2,333,487,706	\$ 2,693,246,301	\$ 3,487,628,230	\$ (3,305,282,511)	\$ 2,515,833,425	\$ 2,955,412,276	100.0%

	Year ended June 30, 1989				1989		% of Total Market Value
	1988		Purchases and Accretions	Sales, Redemptions and Accruals	Carrying Value	Market Value	
	Carrying Value	Market Value					
Corporate and govern- ment bonds and obligations	\$ 450,780,270	\$ 446,520,724	\$ 409,900,684	\$ (315,091,812)	\$ 545,589,142	\$ 564,262,201	21.0 %
First mortgage loans and mortgage-backed securities	537,329,514	547,207,126	162,377,208	(85,821,454)	613,885,268	639,618,675	23.8
Common and preferred stocks	644,165,584	831,230,626	114,117,137	(58,704,315)	699,578,406	986,297,469	36.6
Short term investments	285,922,781	286,771,027	3,039,723,265	(3,141,769,803)	183,876,243	184,386,827	6.8
Real estate	244,386,050	270,129,033	34,558,789	(15,048,154)	263,896,685	292,019,167	10.8
Venture capital investments	21,836,461	21,836,461	5,543,280	(717,779)	26,661,962	26,661,962	1.0
Total investments	\$ 2,184,420,660	\$ 2,403,694,997	\$ 3,766,220,363	\$ (3,617,153,317)	\$ 2,333,487,706	\$ 2,693,246,301	100.0%

See accompanying independent auditors' report.

FINANCIAL SECTION

FUND BALANCE ACCOUNTS

Schedule V

Description of Accounts (Funds)

Chapter 3309 of the Ohio Revised Code requires the establishment and maintenance of specific funds. These funds are classified as accounts for financial reporting purposes and are noted as follows:

- (A) **Employees' Savings Fund**
The Employees' Savings Fund accumulates the contributions deducted from the compensation of members. Contributions may be refunded to a member who withdraws from SERS or to the member's beneficiary, following the member's death. Upon retirement, a member's accumulated contributions are transferred to the Annuity and Pension Reserve Fund.
- (B) **Employers' Trust Fund**
The Employers' Trust Fund is the depository for employer contributions. Based on actuarial valuations, amounts are transferred out of this fund into the Annuity and Pension Reserve Fund and the Survivors' Benefit Fund.
- (C) **Annuity and Pension Reserve Fund**
The Annuity and Pension Reserve Fund is the fund

from which all retirement, health care and death benefits are paid. Funds are transferred into the Annuity and Pension Reserve Fund from the Employees' Savings Fund and Employers' Trust Fund. In addition, contributions by the State of Ohio for supplemental benefits are recorded in this fund.

- (D) **Survivors' Benefit Fund**
The Survivors' Benefit Fund represents amounts transferred from the Employees' Savings Fund and the Employers' Trust Fund for the payment of survivors' benefits.
- (E) **Guarantee Fund**
The Guarantee Fund records all investment earnings of SERS. Annually, investment earnings are transferred to the Annuity and Pension Reserve Fund, the Survivors' Benefit Fund, and the Expense Fund.
- (F) **Expense Fund**
The Expense Fund is used to record all expenses for the administration and management of SERS. Annually, funds are transferred from the Guarantee Fund to cover expenses incurred.

A summary of the fund balance accounts follows:

	Year ended June 30, 1990							Total	
	Employees' Savings Fund	Employers' Trust Fund	Annuity and Pension Reserve Fund	Survivors' Benefit Fund	Guarantee Fund	Expense Fund	1990	1989	
Fund balance at beginning of year	\$ 627,076,019	\$ (507,983,720)	\$ 2,209,066,502	\$ 127,436,690	—	—	\$ 2,455,595,491	\$ 2,239,651,064	
Changes for the year:									
Contributions:									
Employers	—	180,544,371	—	—	—	—	180,544,371	171,094,710	
Employees	104,105,361	—	—	—	—	—	104,105,361	96,422,050	
State of Ohio subsidies	—	983,082	—	—	—	—	983,082	1,086,776	
Investment income	—	—	—	—	196,527,043	—	196,527,043	193,830,887	
Transfer from other Ohio systems	—	—	1,555,347	31,353	—	—	1,586,700	1,361,627	
Benefits:									
Retirement	—	—	(162,866,492)	—	—	—	(162,866,492)	(144,870,006)	
Disability	—	—	(18,077,033)	—	—	—	(18,077,033)	15,968,925	
Survivor	—	—	—	(10,886,380)	—	—	(10,886,380)	(10,154,865)	
Health care	—	—	(62,746,014)	—	—	—	(62,746,014)	(55,688,417)	
Death	—	—	(709,708)	—	—	—	(709,708)	(651,150)	
Refunds of employee contributions	(12,532,925)	—	—	—	—	—	(12,532,925)	(11,468,175)	
Administrative expenses	—	—	—	—	—	(7,942,036)	(7,942,036)	(7,419,675)	
Transfer to other Ohio systems	—	—	(1,949,424)	(34,484)	—	—	(1,983,908)	(1,630,410)	
Other transfers	(34,835,567)	(253,395,134)	459,087,163	17,728,545	(196,527,043)	7,942,036	—	—	
Net changes	56,736,869	(71,867,681)	214,293,839	6,839,034	—	—	206,002,061	215,944,427	
Fund balance at end of year	\$ 683,812,888	\$ (579,851,401)	\$ 2,423,360,341	\$ 134,275,724	—	—	\$ 2,661,597,552	\$ 2,455,595,491	

See accompanying independent auditors' report.

FINANCIAL SECTION

AUDITOR OF STATE'S LETTER



THOMAS E. FERGUSON
AUDITOR OF STATE
COLUMBUS, OHIO 43266-0040
(614) 466-4514

DEPUTY AUDITORS:

**McCULLOUGH
WILLIAMS, III**
Administration
(614) 466-4514

RICHARD G. NUSS,
CPA
Department of Audit
(614) 466-4971

RUSSELL L. ROUCH
Management Advisory
Service
(614) 466-4717

**ASSOCIATE DEPUTY
AUDITOR**
DWAINE E. GOULD
Information Systems
Audits
(614) 466-4971

School Employees Retirement System
45 N. 4th Street
Columbus, Ohio 43215

We have reviewed the report of examination of the Balance Sheet, and the related statements and schedules for 1989 and 1990, (With Auditors Report Thereon) of The School Employees Retirement System Of Ohio, prepared by Deloitte & Touche, Certified Public Accountants. Based upon this review, we have accepted this report in lieu of the examination required by Section 117.43 of the Revised Code. The Auditor of State has not examined the documentation supporting the financial statements and reports and, accordingly, is unable to express an opinion on them.

Our review was made in reference to the applicable sections of legislative criteria as reflected by the Ohio Constitution; the Revised Code; policies, procedures and guidelines of the Auditor of State; and local resolutions / ordinances.

A handwritten signature in cursive script that reads "Thomas E. Ferguson".

THOMAS E. FERGUSON
Auditor of State

CENTRAL REGION

BRUCE DERN
Regional Administrator

Offices

Regional Administrator
and District 5
4480 Refugee Rd.
Suite-310
Columbus, Ohio 43232
(614) 864-3917
(800) 443-9275

District 6
4292 Old Scioto Trail
Portsmouth, Ohio 45662
(614) 353-2150
(800) 441-1348

December 7, 1990

ACTUARIAL SECTION

**ACTUARY'S LETTER
STATEMENT OF ACTUARY**

ACTUARIAL SECTION

ACTUARY'S LETTER

GABRIEL, ROEDER, SMITH & COMPANY
Actuaries & Consultants

200 Globe Building • 407 East Fort • Detroit, Michigan 48226 • 313-961-3346

December 10, 1990

The Retirement Board
School Employees Retirement System of Ohio
Columbus, Ohio

The basic financial objective of SERS is to establish and receive contributions which, expressed as percents of active member payroll, will remain approximately level from generation to generation of Ohio citizens.

In order to determine SERS present financial position and level contribution rates for the future, annual actuarial valuations are made.

The latest completed actuarial valuation is based upon data and assumptions as of June 30, 1990. Conditions and results are shown in our reports.

Assumptions concerning future financial experiences are needed for an actuarial valuation. These assumptions are established by the Board after consulting with the actuary.

A program of annual actuarial gain/loss analysis is in operation; these analyses determine the relationship between assumed financial experience and actual experience, for each major risk area.

These actuarial gain/loss findings led to the adoption of substantial revised assumptions for the June 30, 1986 actuarial valuation. The assumed premiums for health care coverages are changed annually as premiums are changed by health care providers.

The statutory employer contribution rate is 14% of pay. An SERS policy decision now provides the following allocations: to basic benefits, the portion which will pay normal cost and 40 year amortization for unfunded actuarial accrued liabilities; and to health care benefits, the remainder of employer contributions.

On the basis of the 1990 valuation and the basic benefits and allocated contribution rates then in effect, it is our opinion that the basic benefits portion of SERS is in sound condition in accordance with actuarial principles of level cost financing.

The financial condition of health care benefits is different, and is being significantly affected by the provisions of Act 290 of 1988. Act 290 established a health care surcharge, a program to determine a minimum annual pay for use in calculating employer contribution dollars.

On the basis of the 1990 valuation and the health care benefits and allocated contribution rates then in effect, the allocated contributions are sufficient to provide level percent financing of the health care benefits if future health care cost inflation does not exceed future general price inflation.

Respectfully submitted,

Thomas J. Cavanaugh *RG Roeder*
Thomas J. Cavanaugh Richard G. Roeder

RGR:ct

ACTUARIAL SECTION

STATEMENT OF ACTUARY (Valuation as of June 30, 1990)

Actuarial Cost Method and Assumptions

Basic Retirement Benefits

Employer contribution rates for basic benefits are determined using the entry age normal actuarial cost method. This method produces an employer contribution rate consisting of (1) an amount for normal cost (the estimated amount necessary to finance benefits earned by employees during the current service year), and (2) the amount for amortization of the unfunded actuarial accrued liability. The maximum statutory rate is 14%.

The present employer contribution rate of 14% is allocated between basic benefits and health care on the basis of SERS policy decision. The current policy requires the determination of a rate for basic benefits which will amortize the unfunded actuarial accrued liabilities over a 40-year period, with the remainder of the employer contribution rate allocated to providing health care benefits. At June 30, 1990, the rate thus determined for the funding of basic retirement benefits is 9.78%.

Health Care Benefits

Initially, beginning in 1974, the contribution rate for health care benefits was established at 0.75%, included in a total employer contribution rate of 12.5%. Health care contribution rates have been increased at various times since 1974, and the total employer contribution rate has been increased to the statutory 14% maximum. The portion of the employer contribution rate allocated to health care is 4.22%, which is insufficient by itself to provide level cost financing of the unfunded actuarial accrued health care liabilities. This is primarily due to the relatively low average salaries of the SERS contributing members.

Recent Ohio legislation, Act 290 of 1988, provided for an employer contribution surcharge to fund health care benefits. The surcharge is equal to 14% of the difference between the minimum pay and the member's pay, pro-rated for partial service credit. For the fiscal years 1990 and 1991, the minimum pay has been established as \$8,400 and \$9,100 respectively. The

surcharge rate, added to the unallocated portion of the 14% employer contribution rate, results in a total health care contribution rate of 5.57%. This rate is sufficient to provide level cost financing of the unfunded actuarial accrued liabilities for health care benefits assuming future health care cost inflation does not exceed future general price inflation.

Actuarial Assumptions

The assumptions used for the actuarial valuation were adopted by the Retirement Board after consulting with the actuary. Differences between assumed and actual experience (actuarial gains and losses) become part of unfunded actuarial accrued liabilities. When these differences between assumed and actual experience have been observed to be sizeable and persistent a change is made to the actuarial assumptions.

The valuation assets as of June 30, 1990 were determined on a market related basis. The method used recognizes 20% of the previously unrecognized gains and losses (both realized and unrealized). To this was added the present value of expected future payments for House Bills 284 and 204, or \$4,595,472.

The following significant assumptions were used in the actuarial valuations as of June 30, 1990:

- (1) a rate of return on the investments of 7.5% compounded annually (net after administrative expenses). The real rate of return is the portion of total investment return which is more than the inflation rate. Considering inflation recognition of 4.5 percent, the 7.5 percent investment return rate translates to an assumed real rate of return of 3 percent. (For the period July 1, 1988 to June 30, 1991 the assumed rate of return on investments is 9.5%, reflecting an increase of 2% over the basic rate of return of 7.5%.)
- (2) projected salary increases of 4.5%, compounded annually, attributable to inflation;
- (3) additional projected salary increases ranging from 0% to 3% per year attributable to seniority and merit. Pay increase assumptions for individual ac-

ACTUARIAL SECTION

STATEMENT OF ACTUARY (Continued) (Valuation as of June 30, 1990)

tive members are shown for sample ages in the following table.

Sample Age	Increase Next Year		
	Merit & Seniority	Base (Economy)	Total
20	3.0%	4.5%	7.5%
30	2.3	4.5	6.8
40	1.8	4.5	6.3
50	1.0	4.5	5.5
60	0.0	4.5	4.5

- (4) eligibility for age and service retirement was assumed to be: age 50 with 30 or more years of service; or age 55 with 25 or more years of service, or age 60 with 5 or more years of service. Probabilities of retirement with an age and service allowance are shown in the following table for sample ages:

Probabilities of Age & Service Retirement

Percent of Eligible Active Members
Retiring within Next Year

Sample Ages	Men	Women
50	15%	12%
55	10	18
60	10	25
65	40	35
70	50	50
75	100	100

- (5) mortality of participants based on the 1971 Group Annuity Mortality Table projected to 1984 for men and women, with women's ages set back 1 year;
- (6) rates of separation from active service before retirement are developed on the basis of actual plan experience. Probabilities of separation for sample ages are shown in the following table.

Probabilities of Separation from Active Employment before Age & Service Retirement

(Percent of Active Members
Separating within the Next Year)

Sample Ages	Men		
	Death	Disability	Other
20	0.05 %	0.00 %	13.91 %
30	0.07	0.01	6.55
40	0.15	0.10	4.64
50	0.49	0.33	3.06
60	1.21	—	2.02

Probabilities of Separation from Active Employment before Age & Service Retirement

(Percent of Active Members
Separating within the Next Year)

Sample Ages	Women		
	Death	Disability	Other
20	0.02 %	0.00 %	11.57 %
30	0.04	0.00	6.59
40	0.07	0.05	5.07
50	0.17	0.15	3.55
60	0.41	—	2.46

- (7) health care premium increases of 4.5 % annually with 25 % of eligible female retirants and 60 % of eligible male retirants electing a joint and survivor form of payment and 25 % of eligible female retirants and 50 % of eligible male retirants electing to cover spouses for health care; and
- (8) eligibility of all health care benefit recipients for Medicare on attainment of age 65, or immediately if retired for disability.

Health Care Premium Rates:

Status	Monthly Rates Reported	
	1990	1989
Benefit recipient below age 65	\$ 248.10	\$ 222.98
Spouse below age 65*	47.23	48.24
Benefit recipient above age 65 and eligible for Medicare	44.88	45.02
Spouse above age 65 and eligible for Medicare*	13.97	14.79
Mail order prescription service	29.61	27.08

* System portion.

Medicare Part B Premium: \$24.80 per month. (This premium is paid by the System.)

The non-economic assumptions are from the June 30, 1986 actuarial valuation and the economic assumptions (except for the additional 2 % investment return to 1991) were established for the June 30, 1981 actuarial valuation.

SERS

ACTUARIAL SECTION

STATEMENT OF ACTUARY (Continued) (Valuation as of June 30, 1990)

Actuarial Accrued Liabilities

Accrued liabilities are the present value of plan promises to pay benefits in the future, based upon service already rendered. A liability has been established ("accrued") because the service has been performed, but the resulting monthly cash benefit may not be payable until years in the future. Accrued liabilities are

the result of complex mathematical calculations performed by a group of specialists, the plan's actuaries. The results of the computed actuarial accrued liabilities, using the entry age normal actuarial cost method, are disclosed in the following schedule.

Actuarial Accrued Liabilities June 30, 1990

Present Value Of	Actuarial Accrued Liabilities	
	Health Care	Basic Benefits
Future monthly benefits and death benefits to present retirants and survivors	\$ 685,985,364	\$ 1,871,650,701
Monthly benefits and refunds to present inactive members	37,135,448	55,330,435
Service allowances and health care benefits to present active members	463,809,439	1,931,671,378
Disability allowances and health care benefits to present active members	6,094,563	53,972,457
Death-after-retirement benefit (\$500) on behalf of present active members	—	1,532,489
Survivor benefits on behalf of present active members who die before retiring	12,402,456	52,685,464
Refunds of member contributions of present active members	—	36,426,869
Benefits for present active members	482,306,458	2,076,288,657
Benefits for present covered persons	\$ 1,205,427,270	\$ 4,003,269,793

Membership Data

Information regarding active, inactive, and retired members is obtained from computer tapes provided by the retirement system. Membership data contained on

the computer tapes is examined and tested for reasonableness.

Active Member Valuation Data, 1982 to 1990

Actuarial Valuation as of June 30	Number of Active Members	Annual Payroll (millions)	Average Annual Salary
1982	85,883	\$ 652.2	\$ 7,594
1983	85,186	682.9	8,017
1984	84,761	737.3	8,699
1985	86,838	804.2	9,261
1986	88,310	869.1	9,842
1987	89,534	931.4	10,403
1988	90,418	981.8	10,858
1989	91,778	1,055.4	11,500
1990	93,147	1,118.7	12,010

Retirants and Beneficiaries Added To and Removed From Rolls, 1982 to 1990

Fiscal Year Ended June 30	Additions During Year	Deletions During Year	Number at End of Year
1982	2,953	924	32,863
1983	3,215	1,108	34,970
1984	3,145	1,315	36,800
1985	3,233	1,325	38,708
1986	3,807	1,478	41,037
1987	3,155	1,522	42,670
1988	3,512	2,215	43,967
1989	3,140	1,432	45,675
1990	3,714	2,072	47,317

ACTUARIAL SECTION

SUMMARY OF UNFUNDED ACCRUED LIABILITIES

Each time a new benefit is added which applies to service already rendered, an "unfunded accrued liability" is created. Laws governing the System require that these "unfunded accrued liabilities" be financed systematically over a period of future years. Also, if actual financial experiences are less favorable than assumed financial experiences, the difference is added to unfunded accrued liabilities.

In an inflationary economy, the value of the dollar is decreasing. This environment results in employee pay increasing in dollar amounts, retirement benefits in-

creasing in dollar amounts, and then unfunded accrued liabilities increasing in dollar amounts; all at a time when the actual substance of these items may be decreasing. Looking at just the dollar amounts of unfunded accrued liabilities can be misleading. Unfunded accrued liabilities divided by active employee payroll provides an index which clarifies understanding. The smaller the ratio of unfunded liabilities to active member payroll, the stronger the system. Observation of this relative index over a period of years will give an indication of whether the system is becoming financially stronger or weaker.

BASIC BENEFITS (\$ In Millions)

Valuation Year	Actuarial Accrued Liabilities (AAL)	Valuation Assets	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as a % of Active Member Payroll
1982	\$1,821	\$ 1,116	\$ 705	61%	\$ 652	108%
1983	1,987	1,221	766	61	683	112
1984	2,166	1,390	776	64	737	105
1985	2,405	1,564	841	65	804	105
1985*	2,422	1,564	858	65	804	107
1986	2,670	1,781	889	67	869	102
1987	2,899	2,007	892	69	931	96
1988#	3,307	2,204	1,103	67	982	112
1989	3,658	2,438	1,220	67	1,055	116
1990	4,003	2,686	1,317	67	1,119	118

HEALTH CARE BENEFITS (\$ In Millions)

1982	\$ 436	\$ 86	\$ 350	20%	\$ 652	54%
1983	539	103	436	19	683	64
1984	627	108	519	17	737	70
1985	681	120	561	18	804	70
1985*	760	120	640	16	804	80
1986	865	131	734	15	869	85
1987	1,051	137	914	13	931	98
1988#	1,051	139	912	13	982	93
1989	1,128	152	976	14	1,055	93
1990	1,205	158	1,047	13	1,119	94

* Revised Financial Assumptions

Legislated Benefit Increases

ACTUARIAL SECTION

STATEMENT OF ACTUARY (Continued) (Valuation as of June 30, 1990)

Short Condition Test

If the contributions to SERS are level in concept and soundly executed, the System will **pay all promised benefits when due — the ultimate test of financial soundness**. Testing for level contribution rates is **the long-term test**.

A **short condition test** is one means of checking a system's progress under its funding program. In a short condition test, the plan's present assets (cash and investments) are compared with:

- 1) Active member contributions on deposit;
- 2) The liabilities for future benefits to present retired lives;

- 3) The liabilities for service already rendered by active members.

In a system that has been following the discipline of level percent of payroll financing, the liabilities for active member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (liability 3) will be partially covered by the remainder of present assets. The larger the funded portion of liability 3, the stronger the condition of the System. Liability 3 being fully funded is rare.

BASIC BENEFITS (\$ In Millions)

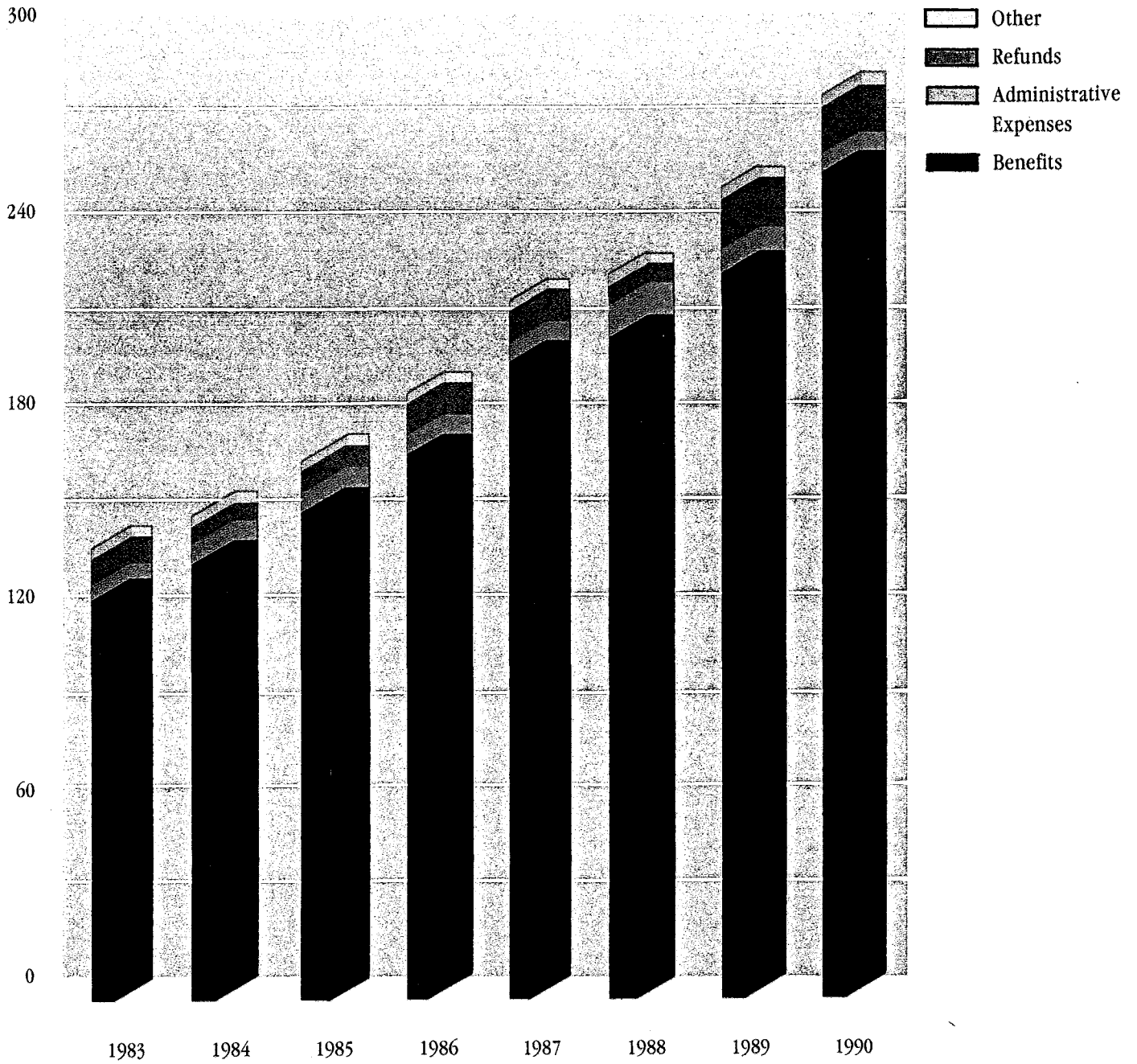
June 30	(1) Member Contributions	(2) Retired Lives	(3) Present Members (Employer Portion)	(4) Valuation Assets	Portion of Accrued Liabilities Covered by Assets		
					(1)	(2)	(3)
1982	\$324	\$ 829	\$ 668	\$1,116	100 %	96 %	0 %
1983	352	909	726	1,221	100	96	0
1984	396	1,011	759	1,390	100	98	0
1985	433	1,126	846	1,564	100	100	1
1985*	433	1,101	888	1,564	100	100	3
1986	475	1,228	967	1,781	100	100	8
1987	524	1,341	1,034	2,007	100	100	14
1988#	577	1,513	1,217	2,204	100	100	9
1989	627	1,696	1,335	2,438	100	100	9
1990	684	1,872	1,447	2,686	100	100	9

HEALTH CARE BENEFITS (\$ In Millions)

June 30	(1) Member Contributions	(2) Retired Lives	(3) Present Members (Employer Portion)	(4) Valuation Assets	Portion of Accrued Liabilities Covered by Assets		
					(1)	(2)	(3)
1982	—	\$243	\$193	\$ 86	—	35 %	0 %
1983	—	304	235	103	—	34	0
1984	—	361	266	108	—	30	0
1985	—	386	295	120	—	31	0
1985*	—	391	369	120	—	31	0
1986	—	461	404	131	—	28	0
1987	—	562	489	137	—	24	0
1988#	—	584	467	139	—	24	0
1989	—	640	488	152	—	24	0
1990	—	686	519	158	—	23	0

* Revised Financial Assumptions

Legislated Benefit Increases



STATISTICAL SECTION

**ASSET COVERAGE OF
ACCRUED LIABILITIES**

**BENEFIT EXPENSES
BY TYPE**

**NUMBER OF BENEFIT
RECIPIENTS BY TYPE**

**NUMBER OF
PARTICIPATING
EMPLOYERS**

RETIREMENT AVERAGES

STATISTICAL SECTION

COMPARATIVE SUMMARY OF ACCRUED LIABILITIES AND PERCENTAGE COVERED BY NET ASSETS AVAILABLE FOR BENEFITS

Table I

Computed Actuarial Accrued Liabilities

Fiscal Year	Member Contributions	Current Retirants and Beneficiaries	Active Members, Employer Financed Portion	Net Assets Available for Benefits	Percentage of Accrued Liabilities Covered by Net Assets Available for Benefits		
					(1)	(2)	(3)
1981	\$ 298,254,671	\$ 958,966,066	\$ 767,525,356	\$ 1,073,577,619	100	81	0
1982	324,180,388	1,071,728,280	860,604,478	1,189,392,619	100	81	0
1983	351,781,439	1,213,688,792	961,162,916	1,314,052,816	100	79	0
1984	396,230,502	1,371,162,368	1,025,589,111	1,488,850,477	100	80	0
1985	432,528,863	1,511,799,217	1,141,424,734	1,675,733,161	100	82	0
1986	475,218,163	1,688,209,450	1,371,411,464	1,876,240,825	100	83	0
1987	524,262,202	1,903,559,908	1,522,516,727	2,062,983,466	100	81	0
1988	577,028,334	2,096,925,418	1,684,513,116	2,239,651,064	100	79	0
1989	627,076,019	2,336,503,192	1,821,748,962	2,455,595,491	100	78	0
1990	683,812,888	2,557,636,065	1,967,248,110	2,661,597,552	100	77	0

NOTE: The ultimate test of financial soundness is the System's ability to pay all promised benefits when due. The System's progress in accumulating assets to pay all promised benefits can be measured by comparing the present assets of the System with (1) member contributions, (2) the liability for future benefits payable to current retirants and beneficiaries, and (3) the employer-financed portion of the liability for benefits payable to active plan participants.

In a System that has been following the discipline of level percent of payroll financing, the liabilities for active member contributions on deposit (1) and the liabilities for future benefits to present retired lives (2)

will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (3) will be partially covered by the remainder of present assets. The larger the funded portion of liability (3) the stronger the condition of the System. Liability 3 being fully funded is rare.

In Table I the entry age normal actuarial cost method was used to determine the actuarial liability. The entry age normal actuarial cost method is the same method used to determine employer and employee contribution rates.

STATISTICAL SECTION

BENEFIT EXPENSES BY TYPE

Last Ten Years

Table II

Year Ending June 30	Service	Disability	Survivor	Health Care	Death Benefits and Refunds	Total
1981	\$ 55,597,625	\$ 6,328,456	\$ 5,567,213	\$ 17,084,324	\$ 8,428,101	\$ 93,005,719
1982	64,708,104	7,294,601	6,240,292	23,460,414	10,340,929	112,044,340
1983	75,497,557	8,076,576	6,756,619	28,959,381	9,160,974	128,451,107
1984	85,444,144	9,270,155	7,389,851	29,153,910	8,418,007	139,676,067
1985	96,910,985	10,527,898	8,004,136	30,778,698	8,937,228	155,158,945
1986	108,321,454	11,785,441	8,360,152	37,499,209	9,698,738	175,664,994
1987	118,726,020	12,780,695	8,958,365	51,728,280	10,862,247	203,055,607
1988	129,330,510	14,138,302	9,479,476	50,568,576	10,453,137	213,970,001
1989	144,870,006	15,968,925	10,154,865	55,688,417	12,119,325	238,801,538
1990	162,866,492	18,077,033	10,886,380	62,746,014	13,242,633	267,818,552

NUMBER OF BENEFIT RECIPIENTS BY TYPE

Last Ten Years

Table III

Year Ending June 30	Service	Disability	Survivor	Total
1981	26,120	2,237	2,477	30,834
1982	27,955	2,343	2,565	32,863
1983	29,839	2,473	2,658	34,970
1984	31,467	2,602	2,731	36,800
1985	33,145	2,754	2,809	38,708
1986	35,266	2,898	2,873	41,037
1987	36,750	2,977	2,943	42,670
1988	37,877	3,084	3,006	43,967
1989	39,408	3,204	3,063	45,675
1990	40,856	3,349	3,112	47,317

NUMBER OF PARTICIPATING EMPLOYERS

Last Ten Years

Table IV

Year	Total	Counties	Locals	Cities	Villages	Colleges	Technical	Vocational	Other
1981	769	86	378	189	49	2	13	51	1
1982	769	87	376	191	49	2	13	50	1
1983	769	87	375	192	49	2	13	50	1
1984	769	87	376	192	49	2	13	49	1
1985	768	86	376	192	49	2	13	49	1
1986	769	86	376	192	49	2	13	49	2
1987	769	86	376	192	49	2	13	49	2
1988	768	84	376	192	49	2	13	49	3
1989	766	84	373	192	49	2	11	51	4
1990	766	84	373	192	49	2	11	51	4

STATISTICAL SECTION

RETIREMENT AVERAGES

Last Ten Years

Table V

Service Retirement

Year Ending June 30	Service Credit	Monthly Amount	Age	Salary
1981	16.626	\$218.08	63.22	\$ 7,495.31
1982	16.578	229.24	63.25	8,069.35
1983	16.617	250.60	63.14	8,603.00
1984	17.427	292.43	63.85	9,939.34
1985	17.821	315.79	63.82	10,525.29
1986	16.846	304.73	63.64	10,292.51
1987	17.635	328.76	63.77	10,458.45
1988	19.019	378.29	62.13	11,989.48
1989	19.231	431.17	61.40	13,015.82
1990	18.734	424.85	60.75	13,034.93

Disability Retirement

Year Ending June 30	Service Credit	Monthly Amount	Age	Salary
1981	12.610	\$275.07	52.52	\$ 7,162.84
1982	13.854	324.63	53.00	8,473.21
1983	13.035	323.05	52.29	8,166.18
1984	14.128	426.96	53.20	10,803.67
1985	12.362	402.31	56.69	10,917.61
1986	13.339	431.18	56.20	10,872.24
1987	13.484	466.02	57.42	12,184.23
1988	13.086	509.27	54.64	13,060.46
1989	14.821	562.42	54.31	13,433.88
1990	14.018	551.12	53.51	13,539.55

INVESTMENT SECTION

**INVESTMENT PORTFOLIO
DISTRIBUTION**

INVESTMENT REPORT

PORTFOLIO SUMMARY

SCHEDULES

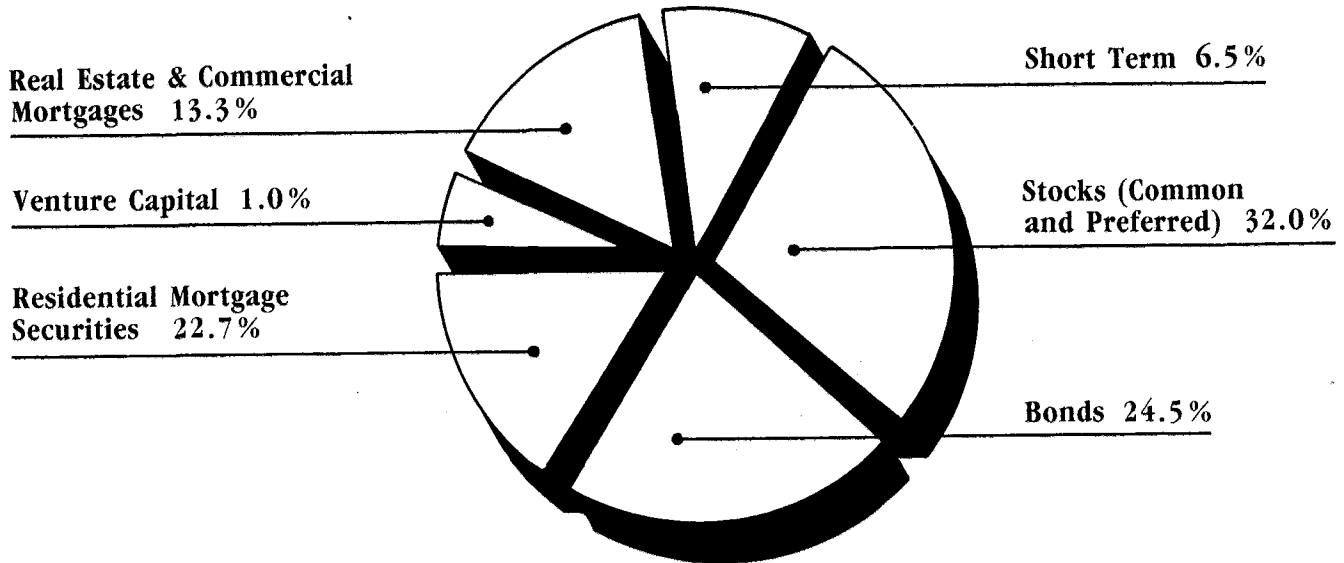
EXHIBITS

INVESTMENT POLICY

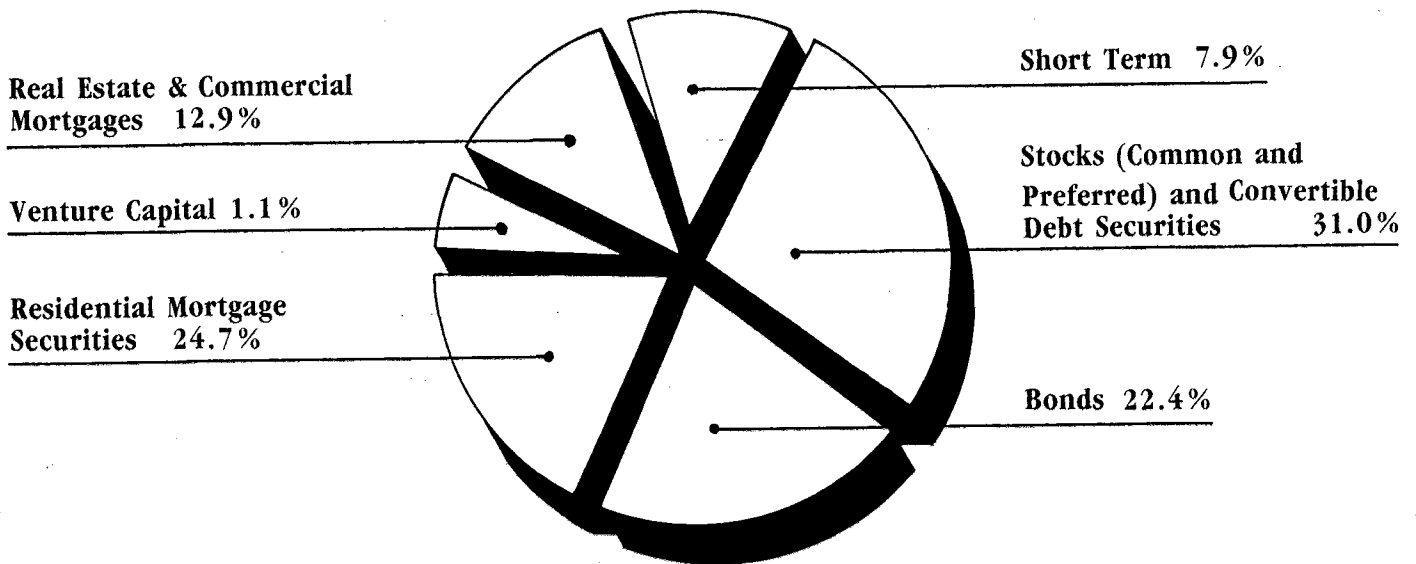
INVESTMENT SECTION

INVESTMENT PORTFOLIO DISTRIBUTION (By Book Value)

June 30, 1990



June 30, 1989



INVESTMENT SECTION

INVESTMENT REPORT

The U.S. economy continued its slow growth path through the end of our fiscal year. We are approaching the end of eight years of continuous economic growth in the U.S., one of the longest expansions in post-war U.S. history. GNP growth for the year ended June 30, 1990 was 1.6% which was quite a bit weaker than the 3% growth experienced in our last fiscal year. The U.S. inflation rate also moderated somewhat during the fiscal year declining from 5.1% last year to 4.7% for the year ended June 30, 1990.

The U.S. Budget Deficit and the U.S. Trade Deficit remain concerns of the financial markets. Although the Trade Deficit declined slightly during the fiscal year from \$108 billion to \$107 billion it is still very high. Of more concern is the Budget Deficit which is expected to be around \$165 billion in 1990 excluding monies needed for the Savings and Loan bailout. This is a \$15 billion increase over 1989's \$150 billion. 1991's Deficit is expected to be even larger, probably around \$200 billion if the Savings and Loan monies are excluded. The Budget Deficit will require large sales of Treasury securities to finance; this in turn makes less money available for the economy and private industry. This large financing requirement by the government will cause interest rates to remain high since the demand for money is expected to remain strong.

The market value of the Fund increased from \$2.69 billion at the end of our last fiscal year to \$2.96 billion at this fiscal year end, an increase of 10.0%. This is the highest market value for the Fund in its 53 year history. Investment income earned by the Fund increased to \$196.5 million versus \$194.0 million for our last fiscal year. This was also a record high for a single year. On June 30, 1990, the percent of the Fund invested in equities, based on book value, was 32.0% versus 31% at the end of our last fiscal year. The percent of the Fund invested in fixed-income securities remained about the same at 47.2% versus 47.1% at the end of our last fiscal year, while the percent of the Fund committed to real estate increased from 12.9% to 13.3% during the fiscal year. And the percent of the Fund invested in short term investments declined from 7.9% to 6.5%. The stock market had another excellent year with a return of 16.4% as measured by the S&P 500 Index. Fixed-Income investments had a mediocre year returning 7.1% as measured by the Shearson Lehman Govt/Corp Index.

The fixed-income markets were not as strong during the fiscal year as the equity markets, but our portfolios still returned 8.9% for the fiscal year and they have returned 10.6% annually for the last five years. We continue to emphasize high quality bonds and mortgage-backed securities with a 5 or 6 year duration in our fixed-income portfolios.

As mentioned above equity returns were very good for the year ended June 30, 1990. Our equity portfolios returned 14.5% for the year and over the last five years these portfolios have returned 16.2% annually. We continue over time to increase the percentage of the Fund invested in equities.

The real estate markets nationwide continue to remain under a lot of pressure and we have been very cautious about committing new money to real estate assets. Our emphasis in the last few years has been to more effectively manage the properties which we already own. Our real estate portfolio has returned 5.1% annually for the last five years.

The return on the Total Fund for the year ended June 30, 1990 was 10.3%; and for the last five years our return has been 11.5% annually for the Total Fund.

For the coming fiscal year, we expect the U.S. economy to demonstrate very little growth and because of the August, 1990 Mideast crisis the U.S. may enter a mild recession during the coming fiscal year. Also as a result of the Mideast crisis we expect inflation to be higher for the coming fiscal year than it was for the year just ended. As mentioned earlier the Budget Deficit is expected to get worse during the coming fiscal year and the Trade Deficit will also probably increase also with the recent increase in the price of oil. As evidenced by the events in Eastern Europe and the Middle East, the U.S. financial markets are affected by events occurring worldwide. We expect the financial markets to remain volatile during the coming fiscal year and we will continue to emphasize high quality assets which seem to represent good long-term value.

We anticipate that by June 30, 1991 the Fund, based on book value, will be invested in the following manner: 45% in fixed-income, 35% in equities, 14% in real estate, 5% in short term investments, and 1% in venture capital.

INVESTMENT SECTION

PORTFOLIO SUMMARY

Schedule I

Investment Category	June 30, 1990			June 30, 1989	June 30, 1988
	Par Value	Book Value	Market Value	Market Value	Market Value
U.S. Government & Agency Bonds	\$ 346,957,937	\$ 345,444,176	\$ 352,299,119	\$ 313,443,840	\$ 216,343,993
Corporate Bonds	179,500,000	177,172,767	177,246,710	129,102,000	98,150,788
Canadian Bonds	92,500,000	93,103,338	94,802,130	99,928,750	109,700,805
GNMA/FHLMC/FHA VA/HUD Mortgages & Mortgage-Backed Pass-Thrus	580,477,447	572,209,697	588,047,077	595,563,608	503,961,117
Common and Preferred Stocks & Convertible Securities	804,941,387	804,941,388	1,192,193,415	1,008,085,081	853,555,764
Investment Real Estate (Including Equity Participating Mortgages)	346,382,010	319,810,173	344,976,902	318,174,233	295,475,042
Commercial & Industrial Mortgages	13,459,713	13,459,713	17,120,000	17,900,000	17,900,000
Venture Capital	25,717,463	25,717,463	24,752,213	26,661,962	21,836,461
Short Term Investments	164,525,000	163,974,710	163,974,710	184,386,827	286,771,027
	<u>\$ 2,554,460,957</u>	<u>\$ 2,515,833,425</u>	<u>\$ 2,955,412,276</u>	<u>\$ 2,693,246,301</u>	<u>\$ 2,403,694,997</u>

PORTFOLIO RATES OF RETURN

(Average annual total returns for the periods ended June 30)

Schedule II

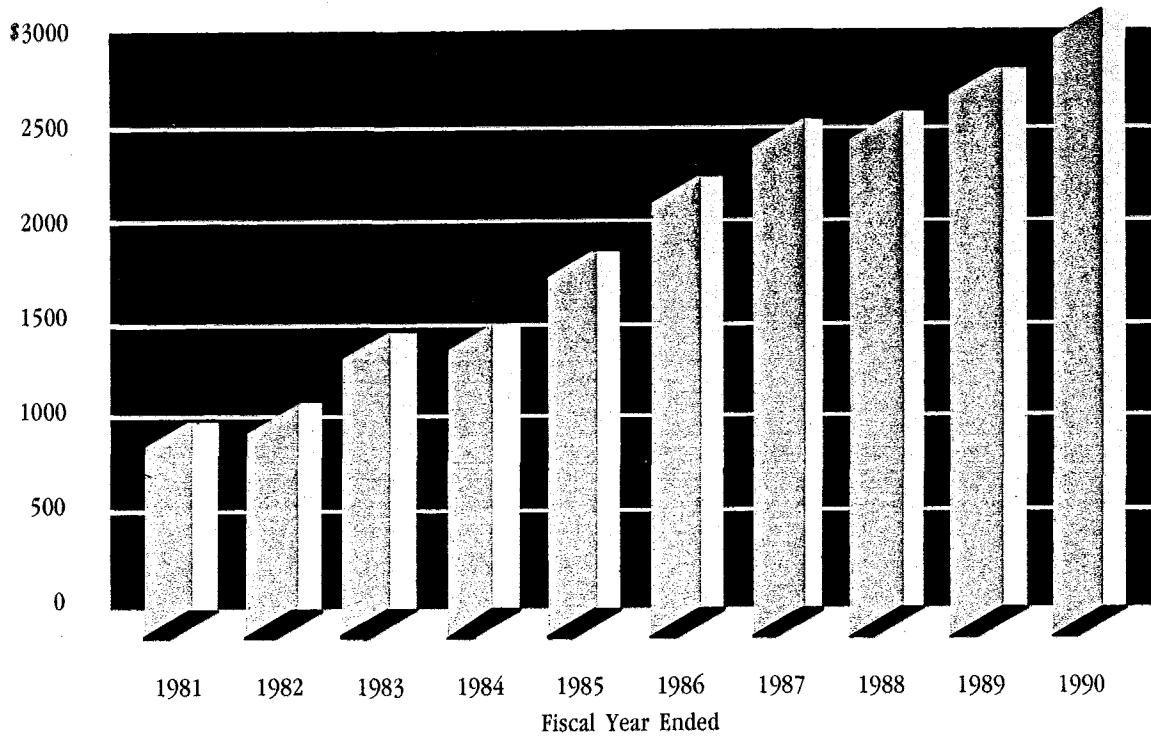
Asset Category	One Year	Three Year	Five Year
Equity Portfolios	14.5%	8.1%	16.2%
Fixed Income Portfolios	8.9	9.7	10.6
Short-Term Investment Portfolio	8.8	8.5	7.9
Total Fund	<u>10.3%</u>	<u>8.0%</u>	<u>11.5%</u>
S & P 500 Index	16.4%	9.2%	17.2%
Shearson Govt/Corp Index	7.1%	9.0%	10.3%
Consumer Price Index	4.7%	4.6%	3.9%

NOTE: Real Estate Portfolio returns are included in the total return of the Fund for each period; and for the last five years these assets have returned 5.1% annually.

INVESTMENT SECTION

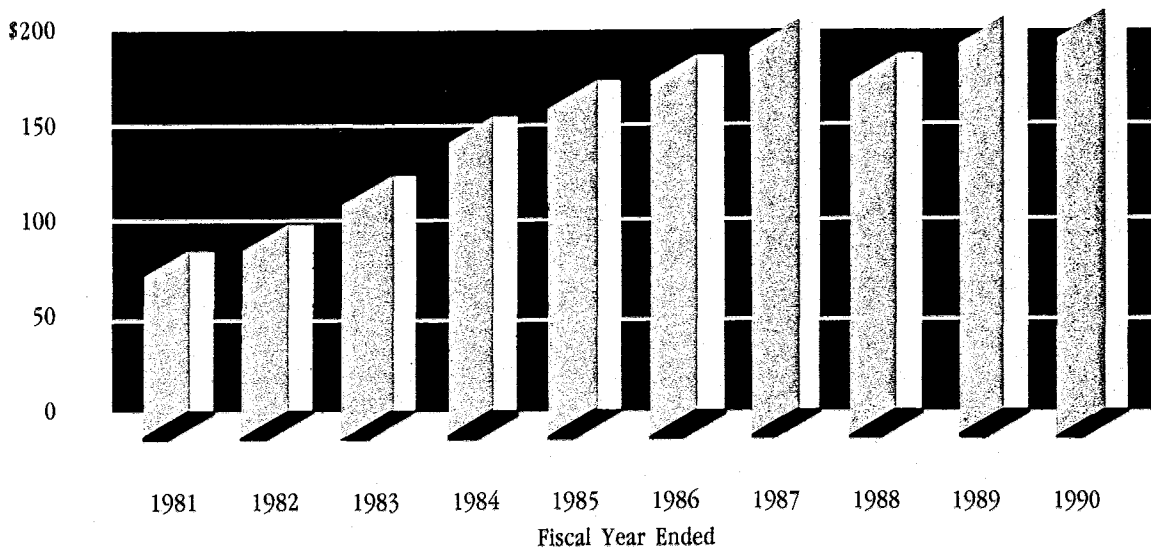
GROWTH OF INVESTMENT PORTFOLIO (By Market Value)

Schedule III
(Millions of Dollars)



GROWTH OF INVESTMENT INCOME (Including Realized Security Gains And Losses)

Schedule IV
(Values in Millions)



INVESTMENT SECTION

QUALITY OF COMMON STOCKS (By Market Value)

Exhibit I

Quality Rating	Percent Of Stock
A+	26.8%
A	25.4
A-	22.6
B+	13.9
B	7.5
B-	2.3
C	0.0
D	0.0
Not Rated	1.5

Of the stocks owned by the System, the majority fall within the top three quality grades as rated by Standard and Poor's Corporation with respect to the relative stability and growth of earnings and dividends. The 1.5 percent in the non-rated category are companies which are not rated by Standard and Poor's as a matter of policy or because there is insufficient data.

A+ Highest	B Below Average
A High	B- Low
A- Above Average	C Lowest
B+ Average	D In Reorganization

TWENTY LARGEST COMMON STOCK HOLDINGS (By Market Value)

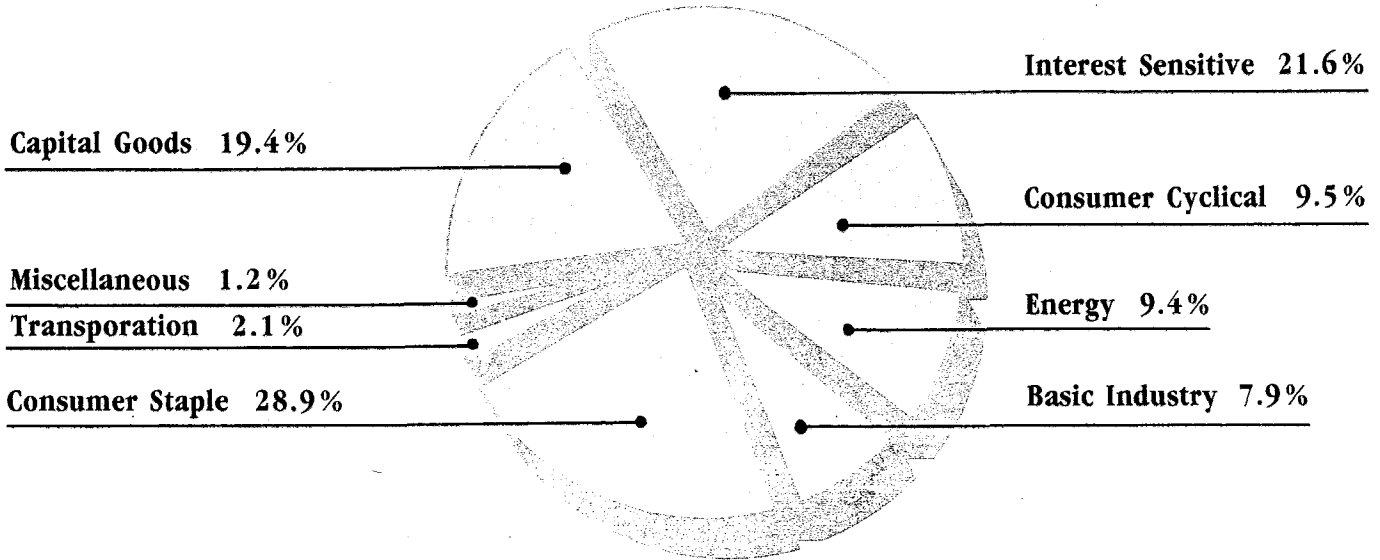
Exhibit II

Company	Shares	Market Value	% Of Stock Portfolio
International Business Machines Corp.	314,200	\$ 36,918,500	3.10%
General Electric Co.	513,400	35,552,975	2.98
Exxon Corp.	668,200	31,990,075	2.68
Phillip Morris Co.	429,400	19,967,100	1.68
DuPont (E.I.) DeNemours & Co.	458,100	17,636,850	1.48
Wal-Mart Stores, Inc.	269,400	16,803,825	1.41
Mobil Corp.	268,600	16,586,050	1.39
Merck & Co.	174,800	15,163,900	1.27
Bristol-Myers Squibb Co.	237,280	15,037,620	1.26
Coca-Cola Co.	317,000	14,066,875	1.18
Chevron Corp.	193,200	13,596,450	1.14
Procter & Gamble Co.	153,273	13,353,910	1.12
American Home Products Corp.	245,000	12,862,500	1.08
General Motors Corp.	266,600	12,696,825	1.07
Amoco Corp.	237,400	12,137,075	1.02
BellSouth Corp.	223,250	11,609,000	0.97
American Information Technologies Corp.	187,200	11,466,000	0.96
Johnson & Johnson	167,600	11,354,900	0.95
American Telephone & Telegraph Co.	292,300	11,253,550	0.94
Westinghouse Electric Co.	301,400	11,076,450	0.93

INVESTMENT SECTION

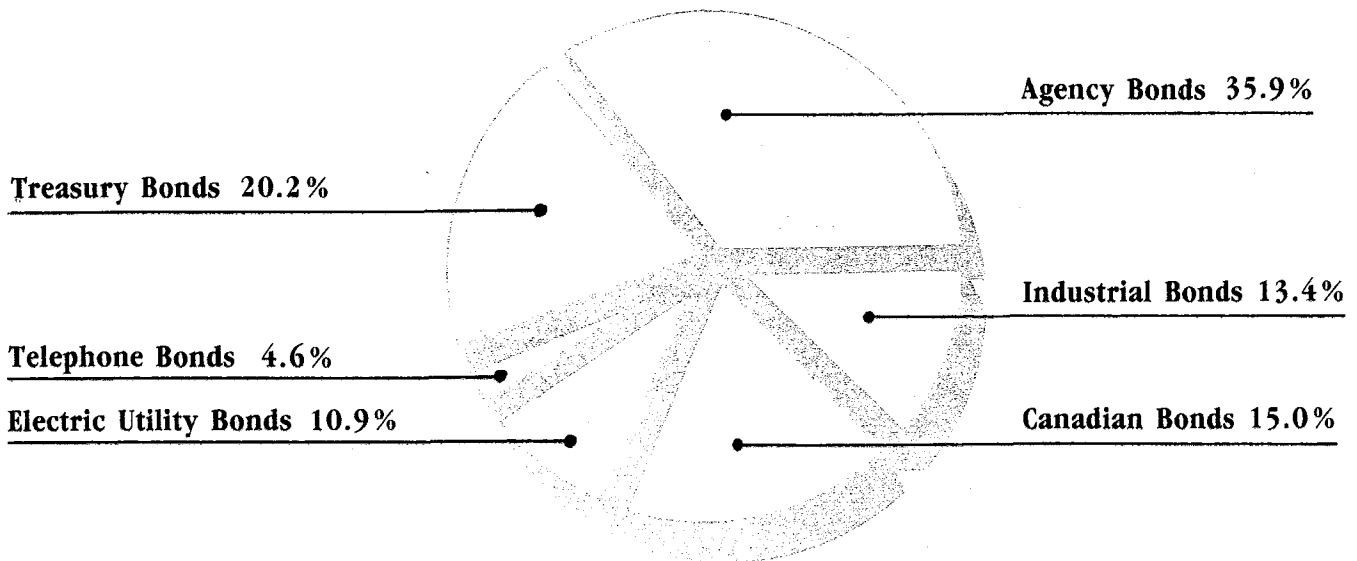
DIVERSIFICATION OF COMMON STOCKS (By Market Value)

Exhibit III



BOND PORTFOLIO BY SECTOR (By Par Value)

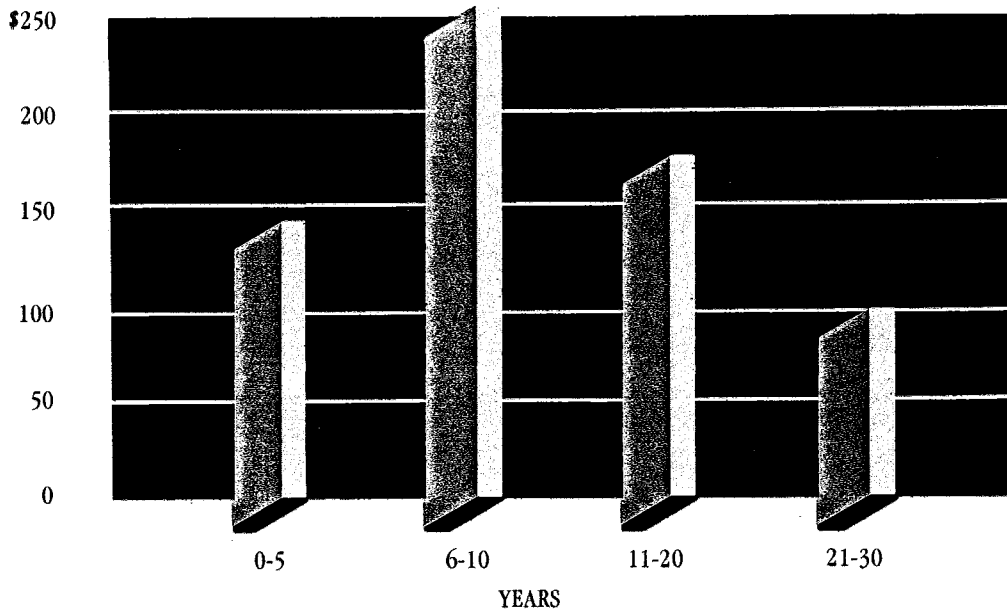
Exhibit IV



INVESTMENT SECTION

BOND PORTFOLIO BY MATURITY (By Par Value)

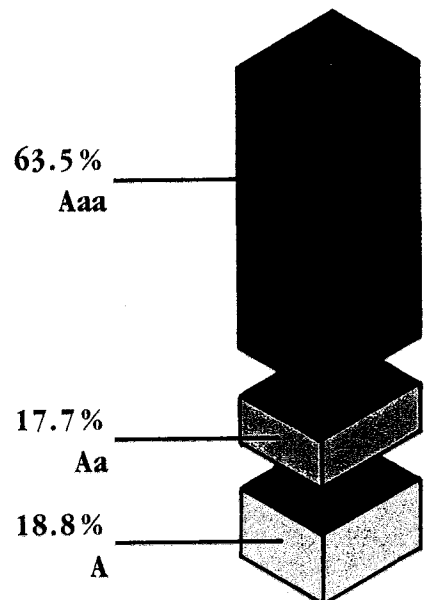
Exhibit V
(Values in Millions)



BOND PORTFOLIO QUALITY RATINGS BY MOODY'S (By Par Value)

Exhibit VI

All of the bonds in the portfolio fall within the top three grades of the nine bond quality ratings established by Moody's Investors Services, Inc.



INVESTMENT SECTION

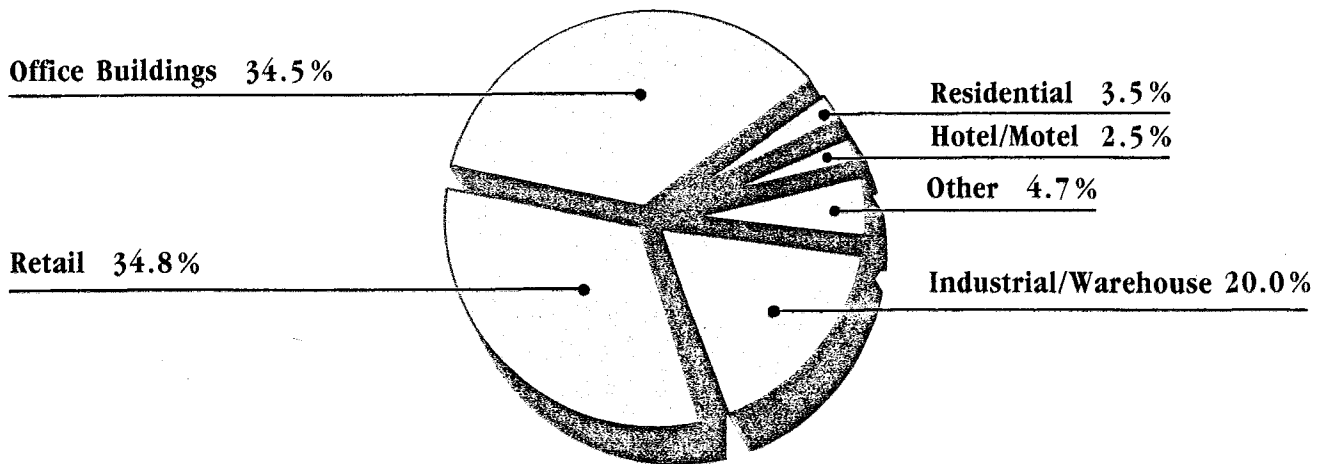
TWENTY LARGEST FIXED INCOME HOLDINGS (By Market Value)

Exhibit VII

Security	Par Value	Market Value	% Of Fixed Portfolio
FHLMC Multifamily 8.75 % 10-1-01	\$ 30,321,944.90	\$ 32,211,494.57	2.5 %
FHLMC Multifamily 9.00 % 5-1-97	29,050,375.81	29,338,071.05	2.3
FHLMC Cap Deb 8.65 % 10-1-96	25,000,000.00	24,828,250.00	1.9
U.S. Treasury Notes 8.875 % 11-15-97	20,000,000.00	20,400,000.00	1.6
U.S. Treasury Notes 8.875 % 2-15-96	20,000,000.00	20,356,000.00	1.6
U.S. Treasury Notes 8.875 % 7-15-95	20,000,000.00	20,350,000.00	1.6
FHLMC Series 20B 9.49 % 6-15-09	19,940,000.00	20,338,800.00	1.6
U.S. Treasury Notes 8.75 % 8-15-93	20,000,000.00	20,206,200.00	1.6
FHLMC CMO M-5 8.65 % 6-1-05	20,000,000.00	19,850,000.00	1.5
FHLB 8.30 % 10-24-94	20,000,000.00	19,800,000.00	1.5
FHLMC Cap Deb 8.60 % 11-13-96	20,000,000.00	19,800,000.00	1.5
FHLMC Cap Deb 8.80 % 10-27-99	20,000,000.00	19,800,000.00	1.5
FHLMC Part Ctf 10.50 % 2-1-19	19,196,760.00	19,796,658.75	1.5
FHLMC Part Ctf 10.00 % 9-1-17	19,251,323.00	19,395,707.63	1.5
FHLMC GMC 12.45 % 9-15-09	15,523,200.00	18,627,840.00	1.4
FHLMC Multifamily 9.00 % 6-1-97	18,570,737.00	18,524,309.78	1.4
FHLMC Series 21D 9.25 % 6-15-07	18,000,000.00	17,964,594.00	1.4
Hydro-Quebec 10.00 % 2-1-09	17,000,000.00	17,340,000.00	1.3
FHLMC Multifamily 9.25 % 6-1-02	17,368,424.00	17,194,739.46	1.3
Province of Ontario 9.875 % 9-20-09	16,500,000.00	17,036,580.00	1.3

REAL ESTATE PORTFOLIO BY PROPERTY TYPE (Including Commingled Funds)

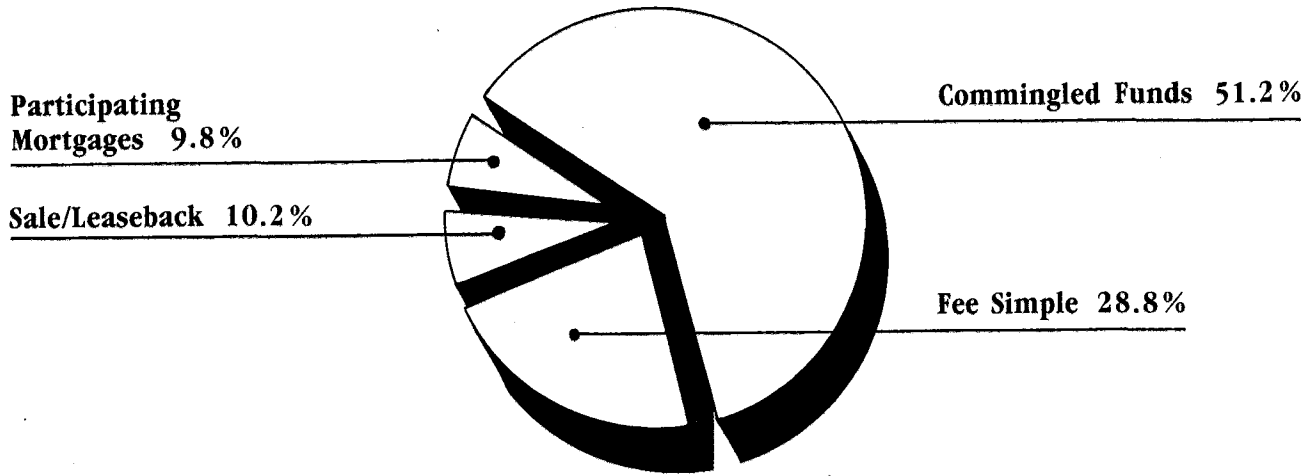
Exhibit VIII



INVESTMENT SECTION

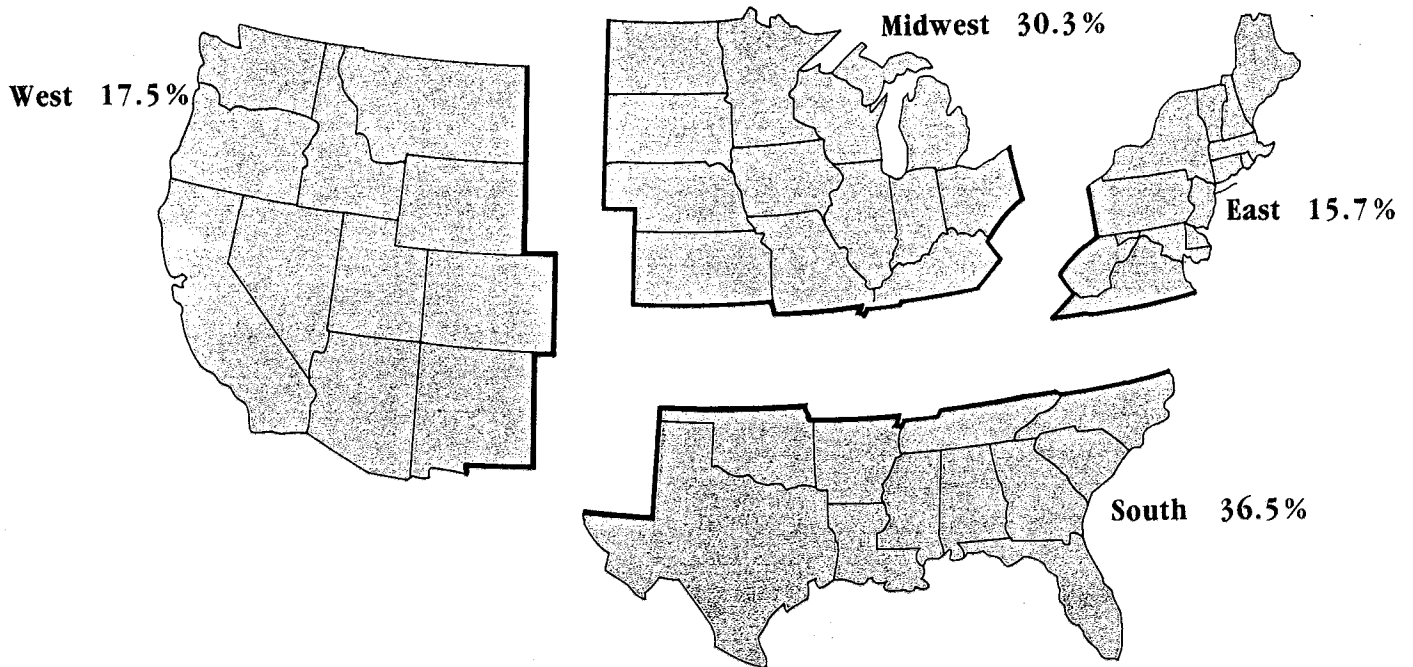
REAL ESTATE PORTFOLIO BY TYPE OF OWNERSHIP

Exhibit IX



PERCENTY OF REAL ESTATE PORTFOLIO BY GEOGRAPHICAL LOCATION (Including Commingled Funds)

Exhibit X



INVESTMENT SECTION

TEN LARGEST REAL ESTATE HOLDINGS (By Market Value)

Exhibit XI

Property	Location	Estimated Market Value	% Of Real Estate Portfolio
Prudential Realty Group-PRISA	Nationwide	\$ 57,548,146	15.9%
NCNB-Real Estate Fund	Southeast	39,553,668	10.9
Equitable Real Estate-Prime Properties Fd.	Nationwide	28,610,717	7.9
Morgan Guaranty Real Estate Fund	Nationwide	25,330,579	7.0
Equitable Real Estate-Hawaiian Properties	Hawaii	24,267,389	6.7
88 East Broad Building	Columbus, OH	21,200,000	5.9
Tech Park & Shadyview Warehouses	Eden Prairie, MN	21,090,000	5.8
Metro Center V	Dublin, OH	16,400,000	4.5
Prestige Plaza	Dayton, OH	10,445,000	2.9
Prudential Realty Group-PRISA II	Nationwide	10,236,403	2.8

INVESTMENT SECTION

INVESTMENT POLICY

This Investment Policy was adopted by the School Employees Retirement Board Of Ohio at its August 2, 1985 meeting and revised on April 7, 1989.

A. Purpose

The purpose of this Statement of Investment Policy is to define the Retirement Board's investment philosophy and objectives for the School Employees Retirement System of Ohio. This statement sets forth policies and describes the organization and division of responsibilities to prudently implement the Board's philosophy and objectives in accordance with Section 3309.15 of the Ohio Revised Code. It also establishes the framework and specific objectives to monitor investment performance and promote effective communication between the Board and the Investment Staff and Investment Managers.

The contents of this Statement of Investment Policy and the associated Guidelines and Objectives are subject to change at any time by the Board. The Statement will be reviewed and revised periodically to assure that it continues to reflect the attitudes, expectations and objectives of the Board.

B. Background

The School Employees Retirement System of Ohio was established by the state legislature to provide retirement and disability benefits for all non-certificated persons employed by the state's school districts. This purpose is sustained by the member and employer contributions and returns realized from investment of those contributions.

The System is governed by a seven member board, including the Ohio Attorney General and State Auditor, with responsibility for the investment function as set forth in the Ohio Revised Code. In addition to the investment function, the Ohio Revised Code also sets forth the fiduciary responsibility of the Board and of other fiduciaries in discharging their duties with respect to the fund. This Statement of Investment Policy incorporates and is subject to all restrictions, guidelines and obligations set forth by the Ohio Revised Code.

C. Investment Philosophy

Risk Posture

The Board realizes that its primary objective is to assure that the Plan meet its responsibilities for providing retirement and other benefits. Therefore, it shall always act to assure that the level of investment risk in the portfolio shall be prudent and shall not jeopardize that primary objective.

Return

The Board believes, however, that over the long-term there exists a relationship between the level of investment risk taken and rate of investment return realized. The Board feels that assumption of a moderate level of risk associated with investments is reasonable and justified in order to enhance potential long-term investment results.

Diversification

The Board seeks diversification by asset class and by investment approach and individual investments within asset classes to reduce overall portfolio risk.

Liquidity Requirements

The System anticipates positive cash flow over the near-term and intermediate-term. Liquidity, for the purpose of immediate and intermediate-term benefit payments, is therefore not a major consideration in the investment of funds for the foreseeable future.

D. Investment Objectives

In defining investment objectives the Board seeks to enhance the investment returns of the fund in order to permit higher benefits and to achieve lower costs. Therefore, it adopts the following general investment objectives:

Performance Objectives

- A. Maximize Total Return on Assets: Recognizing the System's obligations will increase as a result of inflation, to maximize the total return on assets available for the provision of benefits while operating in accordance with applicable regulatory restrictions and within prudent parameters of risk.
- B. Preservation of Principal: To protect the System from severe depreciation in asset value during

INVESTMENT SECTION

INVESTMENT POLICY (Continued)

D. Investment Objectives (Continued)

Performance Objectives (Continued)

adverse market conditions. This objective shall be attained by broad diversification of assets and by careful review of risks.

- C. **Competitive Results:** To achieve investment results competitive with those of the broad market and of similar funds. Long-term results shall be emphasized.

Risk

- A. **Stability:** While the Board seeks higher long-term investment results, it also seeks to avoid major fluctuations in year-to-year results.
- B. **Risk Level:** The Board seeks to maintain a reasonable degree of total portfolio risk, defined as that which would be experienced by similar retirement systems.

Other Objectives

Ohio Investments: Where investment characteristics, including return, risk and liquidity, are equivalent, the Board will give careful consideration to investments which will have a positive impact on the economy of Ohio.

E. Implementation Approach

In order to monitor and control the activities within the investment function, the Board has reserved certain responsibilities for itself. It has also delegated certain responsibilities to the Investment Staff, to organizations serving as Investment Managers and, from time to time, to other consultants or advisors. These are enumerated in Section F, Investment Organization and Responsibilities.

In fulfilling its fiduciary duties, the Retirement Board employs a competent and qualified Investment Staff for the management of the major portion of portfolio assets. In those areas where specialized expertise is required, the Retirement Board employs the services of outside Investment Managers.

The Board has also established a reporting process for regular and timely review and evaluation of investment

results. This is described in Section G, Review and Evaluation. Finally, the Board has adopted Investment Guidelines and Objectives for each asset class and each investment management accountability unit within those asset classes. These guidelines also specify long-term target ratios for asset allocations, as well as permissible ranges related to those target allocations. These guidelines and objectives are regularly evaluated and updated based on market conditions, investment results and the recommendations of the Investment Staff, Investment Managers and other consultants or advisors.

F. Investment Organization and Responsibilities

Responsibilities of the Retirement Board

The Retirement Board recognizes its responsibility to ensure that the assets of the Plan are managed effectively and prudently, in full compliance with all applicable laws, and for the exclusive benefit of participants and beneficiaries. The Board believes it can best manage those responsibilities by delegating certain specific duties to others, as described below. In addition, the Board may designate certain of its members to act as an Investment Committee or a Subcommittee from time to time, and may delegate certain decision-making or fact-finding responsibilities to that committee or subcommittee.

Specific responsibilities of the Retirement Board or its Investment Committee or Subcommittee are as follows:

- A. Ensure that all fiduciaries comply with the Ohio Revised Code and any other applicable regulations and legislation.
- B. Establish investment policies, guidelines and objectives for the assets of the Plan and communicate them to the Investment Staff and Investment Managers.
- C. Appoint and discharge those with responsibility for managing the Plan's assets, including investment managers, consultants and any others involved.
- D. Request, receive and review reports from the Investment Staff and Investment Managers.

INVESTMENT SECTION

INVESTMENT POLICY (Continued)

F. Investment Organization and Responsibilities (Continued)

Responsibilities of the Investment Staff

The Investment Staff, headed by the Executive Director and the Assistant Director for Investments, shall accept the following responsibilities. The Executive Director shall:

- A. Obtain necessary reports on the investment results of the Plan's assets on a timely basis as specified in Section G, Review and Evaluation.
- B. Retain any consultants or advisors deemed necessary or desirable for assistance in the investment of Plan assets, and for meeting his responsibilities.
- C. Oversee the investment function.

The Assistant Director for Investments shall accept the following responsibilities:

- A. Administer the policies, guidelines and objectives adopted by the Retirement Board of the School Employees Retirement System of Ohio in compliance with the relevant sections of the Ohio Revised Code.
- B. Inform and communicate to other Plan fiduciaries, including all Investment Managers, the requirements of the Ohio Revised Code and the policies, guidelines and objectives adopted by the Retirement Board, and monitor their compliance.
- C. Prepare annually an Annual Plan for the investment of the Plan's assets with recognition of the target asset mix ratios and the permissible ranges for asset allocation established by the Board.
- D. Implement the Annual Plan, exercising the judgments allowed by the Board as to the asset allocation ranges for that year.
- E. Report to the Board or its Investment Committee any intra-year changes in the Annual Plan or in the policy, guidelines or objectives which the Investment Staff deems desirable or which are recommended by an Investment Manager or other consultants or advisors.
- F. Oversee the activities of the Investment Staff.

Responsibilities of the Investment Managers

Each Investment Manager, including Investment Staff with respect to internally managed assets, shall accept the following responsibilities for the specified investment management accountability unit which it manages.

- A. Manage the assets within its control in compliance with the relevant sections of the Ohio Revised Code and with the policies, guidelines and objectives adopted by the Retirement Board.
- B. Exercise investment discretion within the guidelines and objectives specified, including decisions to buy, hold or sell securities based on the manager's current investment strategy and outlook and compatible with such objectives.
- C. Inform the Retirement Board or the Investment Committee of any substantial changes in investment strategy, portfolio structure, value of assets, and of any organizational changes, including that of ownership, affiliation, organizational structure, financial condition, or changes in professional personnel staffing the investment management organization.
- D. Prepare reports for the Board or Investment Committee prior to any scheduled meetings but at least on a quarterly basis.
- E. Recommend to the Board or Investment Committee any changes in policy, guidelines or objectives which the Investment Manager believes to be desirable.

G. Review and Evaluation

The Board shall review and evaluate periodic reports on the investment results of the Plan's assets, as described below, obtained by the Executive Director. In addition, the Board shall review the periodic reports of each Investment Manager. In these reviews, it is intended that greater emphasis shall be given to long-term results than to short-term results. Following is the intended frequency for the review and evaluation, although these may be altered by the Board as deemed necessary:

INVESTMENT SECTION

INVESTMENT POLICY (Continued)

G. Review and Evaluation (Continued)

Quarterly

Summary Investment Reports — including highlights and commentary of investment performance, asset composition and holdings for each asset class and each investment management accountability unit. These reports shall identify any results which require the attention of the Board.

Investment Manager Reports — prepared by the manager of each investment management accountability unit, reporting on the results of the most recent period.

Annually

Detailed annual investment reports — these reports will include the contents of the quarterly summary reports, as well as additional detail regarding the investment results for each investment management accountability unit.

Written and/or verbal reports presented by the manager of each investment management accountability unit. These shall be scheduled on a staggered basis throughout the year, as determined appropriate by the Board.

PLAN SUMMARY

Purpose

The School Employees Retirement System of Ohio was established in 1937 by the state legislature to provide retirement and disability benefits for all non-certificated persons employed by the state's 766 school districts. This purpose is sustained by the member and employer contributions and the income realized from investment of those contributions.

Administration

The functioning of SERS is supervised by a seven member Board which works in conjunction with the System's Executive Director. Four of the seven Board members are elected by the general membership (those who contribute to SERS) and one is elected by retirants. The Ohio Attorney General and State Auditor, by virtue of their elected office, serve as the remaining two Board members in an ex officio capacity.

The Executive Director is appointed by the Board. This person oversees the administrative operation of the System, and is aided by five directors. Their areas of responsibility are finance, investments, member services, planning and development, and management information services.

Employer Participation

The school employers served by SERS include public schools within the state's cities, villages and counties, as well as local districts, vocational and technical schools, and The University of Akron.

Employers contribute to SERS at the rate of 14.0% of payroll. Some employers pay the System directly on a monthly, quarterly, or annual basis, while others make payments through participation in the Ohio Department of Education's School Foundation Fund.

In addition to forwarding appropriate contribution amounts to SERS, it is the responsibility of the employers to supply SERS with new membership records, members' contribution information, and any data needed at the time of a member's application for benefits or refund of deposits on termination of employment.

Employer Participation

Membership in SERS is divided into several groups based on the activity of a member's SERS account.

Member groups are:

- A. Active Members** — These are persons currently employed by a school employer. Membership is required for most employees working in a position that does not require certification by the Ohio Department of Education. These persons include clerical workers, maintenance personnel, bus drivers, food service workers, playground supervisors, data processing personnel, etc. Two exceptions to the membership requirements are: (1) Persons with student status within a school district may choose to become members of SERS. (2) Persons retired from one of the other Ohio state retirement systems may not become members of SERS. Active members have an amount equal to 9.0% of their earnings deducted from their gross salaries for each payroll period. These amounts are then forwarded to SERS by the payroll officer, and applied to the member's account at SERS.
- B. Inactive Members** — These are persons who have contributions on deposit with SERS, but are not currently employed by a school district in the state of Ohio.
- C. Retired/Disabled Members** — These are persons who have either (1) met the age and service requirements for retirement from service; or (2) become eligible to receive benefits as a result of an injury or illness that prevents the member from performing regularly assigned duties.
- D. Members' Survivors** — When a member dies before retirement, the qualified beneficiaries become eligible for monthly benefits from SERS.

Refund of Contributions

A member is entitled to a full refund of contributions with SERS upon termination of school employment. Only the money the member has contributed is refundable.

In accordance with Ohio Revised Code, there is a 90-day waiting period after the member's last day of service before the refund can be paid. A refund cancels any claim to benefits offered by SERS.

The refunded amount, plus interest, may be

PLAN SUMMARY

redeposited if, at some later date, the member returns to school service or to any other public service with the state of Ohio. This purchase may be made after the member has been credited with 1.5 years of contributing service.

Service Retirement

Members may retire from school employment if they have attained one of three combinations of age or service:

1. Five years of service and age 60, or
2. Twenty-five years of service and age 55, or
3. Thirty years of service at any age.

A member's age is defined to be the actual age a person has reached on the day of retirement. Any change of the date of birth on our records must be substantiated by submitting proof of date of birth to the System.

Service Credit

Service credit is the actual number of years or fraction thereof a person worked within a school district or districts in Ohio schools, plus any other free or purchased service the System recognizes.

Free service is service for which no contributions are required. This includes military service performed while on leave from the school district; service with a school system before establishment of SERS in 1937; or service granted for a period (three years or less) spent off the district's payroll while drawing state worker's compensation for a school job-related accident.

Purchased service is service for which payment plus interest is required. The interest rate is 7.5%. Service must be purchased before the date of retirement if it is to be considered in calculating the member's benefits. Payment may be made in a lump sum or in multiples of one month or more so long as the complete amount due is tendered before retirement. The types of service that can be purchased are:

Military — A member may purchase up to five years of credit in SERS for active service in the armed forces of the U.S. There is no restriction placed on time elapsed between school employment and the time spent in the military. A member may purchase additional service credit if the military service includes prisoner of war time. Purchased credit may

not be greater than the member's actual Ohio school employment credit.

Federal, Other State, Or School Service — The member may purchase credit for service rendered in a school or government position outside the State of Ohio. The service cannot be greater than the member's SERS service nor can it exceed five years.

Refunded Service — Service lost due to the payment of a refund may be restored after the member has returned to work and accrued 1.5 years of service covered by SERS, STRS, PERS, PFDPF, or SHPRS. An interest charge is payable in addition to the restored funds.

Compulsory Service — This is service for which the member should have made contributions while working, but did not, for whatever reason. The full amount, plus interest, must be paid before retirement benefits are granted.

Optional Service — This is service during a period when the member was given a choice of contributing or refraining from doing so. In order for the member to purchase this credit, the employer-school district must likewise make its contribution, and the employer is under no obligation to make payment.

Leave Of Absence — A member returning to work after a period of authorized leave may purchase service credit for the period involved. As with optional service, an employer contribution is required for this service to be granted, but the employer is under no obligation to make payment.

A member who has contributions not only at SERS, but also at State Teachers (STRS) or Public Employees (PERS) Retirement Systems is eligible to receive transferred credit from either or both of those systems. Any service which is not concurrent with (served at the same time as) SERS service will be included in determination of retirement benefits.

Early Retirement Credit

Employers may purchase up to five years of service credit for their eligible employees under an early retirement incentive plan authorized by 1983 legislation.

PLAN SUMMARY

Adoption of a plan is optional and only employers may purchase such credit.

Benefit Calculation

The final average salary is the average of the member's highest three years of earnings while in the school service.

The benefit amount is calculated in this way:

The final average salary amount is multiplied by 2.1% to determine the value of a year of service credit. This value cannot be less than \$86. If it is, \$86 is used.

The value is then multiplied by the number of years of service credit. This calculation yields the annual retirement benefit amount for a person who has reached age 65 or who has 30 years of service at retirement time.

For "early retirement" (the member is under age 65 or has less than 30 years of service) there is a corresponding percentage of decrease in the required benefit amount to allow for an extended period of retirement. Reduction factors are required by Ohio state law and set by the Board as recommended by the actuary.

Retirement Options

Should the retiring member wish to provide a benefit amount for a beneficiary upon the retiree's death, this may be done by the selection of one of the optional retirement plans provided for this purpose. Optional plans may be altered by the retired member should the beneficiary die before the retirant or in the event of a divorce, with consent of the ex-spouse.

Disability Retirement

A member prevented from performing regular duties on the job after incurring an injury or illness and before reaching age 60 may apply for monthly disability benefits. To qualify, the member must have at least 5 years of service credit. In addition to the age and service requirements, the member must:

- Have developed the disabling illness or injury after last becoming a member of SERS;
- Have been recommended for approval by a SERS-sponsored medical review board;
- Have applied for benefits within 2 years of the last day of service with the school district;

- Not have withdrawn contributions or retired on service retirement.

The benefit is calculated in the same way as a regular service retirement benefit, except that no reduction is made for being under 65 years of age. SERS grants free credit for each year between the member's date of disability retirement and age 60. Benefits range from a minimum of 30% of final average salary to a maximum of 75% and are granted as long as the member remains disabled (subject to re-examination) or until death.

Death Benefits

The designated beneficiary of any SERS retirant will receive a \$500 lump sum payment upon the retirant's death. If there is no beneficiary, payment is made to the person responsible for the burial expenses or to the retirant's estate.

Survivor Benefits

Qualified dependents of a deceased member may apply for monthly survivor benefits. Such benefits are payable if the member had at least 18 months of Ohio service credit, three of which were served in the 2.5 years prior to the member's death, or if the member was receiving a disability benefit.

If the member was eligible for service retirement but had not yet applied for benefits, the surviving spouse or other single dependent beneficiary of any age can draw a monthly lifetime benefit known as the joint survivor option. Duration of survivor benefits depends primarily on the age and marital status of the dependent(s).

Health Care and Other Benefits

Eligible benefit recipients receive medical insurance from SERS. Coverage for a spouse and/or dependent children can be provided by means of a monthly deduction from the benefit. Coverage is offered by the selection of the Aetna insurance company, for those persons in the Cleveland area, the Kaiser health plan, or for those in the Marion area, HealthOhio, Inc., or for those in the Central Ohio area, United Health Plan.

If the benefit recipient participates in Medicare B, SERS reimburses the recipient \$24.80 per month.

An optional prescription drug program is available to

PLAN SUMMARY

benefit recipients of SERS and their dependents who are covered under the Aetna health care plan. Participants may either choose to obtain prescription drugs from their local pharmacy and receive reimbursement from the Aetna health care plan or they may elect to receive the drugs by mail from a licensed mail order pharmacy for a minimal fee per medication.

Members retiring after June 1, 1986 must have 10 or more years of service credit to qualify for the health care benefits.

Members retiring on and after August 1, 1989 with less than 25 years of qualified service credit pay a portion of their premium for health care. The portion is based

on years of service up to a maximum of 75% of the premium.

Cost of Living Increases

After 12 months on the benefit rolls, and each year thereafter, SERS retirants are entitled to an automatic cost of living increase of 3%, provided the Consumer Price Index shows a 3% gain over the previous year. This increase will be paid each year by the Retirement System until the accumulated excess cost of living points fall below 3%. In addition, the legislature has granted several permanent ad hoc increases to SERS retirees, the last such increase being in 1988.

