

Mailed under Section 135.14 Postal Manual
LIBRARIES MATERIALS

POSTMASTER: This parcel may be opened for postal inspection if necessary.

FROM: ILL - LSU Libraries (LUU)
Louisiana State University, 241B Middleton Library, Tower
Drive
Louisiana State University
Baton Rouge, LA 70803-3330

BXM - Thomas P. O'Neill Library, Interlibrary
Loan Room 306, Boston College,
140 Commonwealth Avenue
Chestnut Hill, Massachusetts 02467

Ill #: 199034641

Public School Employes' Retirement System
PO Box 125
Harrisburg, Pennsylvania 17108
Telephone: 717-787-8540

Component Unit Financial Report
For The
Fiscal Year Ended June 30, 1991

Bernard J. Freitag
Chairman
Richard C. Harris
Vice Chairman
Board of Trustees

James A. Perry
Executive Director

Report prepared by the Public School Employes' Retirement System staff

Committee Co-Chairpersons

*Yvonne C. Wineholt
Director of Fiscal Control*

*Douglas A. Bonsall
Director of Public Relations*

Table of Contents

Certificate of Achievement for Excellence in Financial Reporting	4
Introductory Section	5
Letter of Transmittal	6
Mission Statement	12
Administrative Organization	13
PSERS Board of Trustees	13
Board Committees	15
PSERS Headquarters Building	15
Chairman's Report	16
Organizational Chart	17
Organizational Structure	18
Administrative Staff	25
Professional Consultants	26
A History of PSERS	30
Financial Section	35
Independent Auditors' Report	36
Balance Sheets	37
Statements of Revenues, Expenses and Changes in Fund Balance	38
Notes to Financial Statements	40
Schedule 1 — Analysis of Funding Progress	47
Schedule 2 — Revenues by Source and Expenses by Type	48
Schedule 3 — Administrative Expenses	49
Schedule 4 — Summary Schedule of Cash Receipts and Disbursements	50
Actuarial Section	51
Actuary's Certification Letter	52
Section I — Financial Results	56
Schedule I — Summary of Principal Results	56
Schedule II — Valuation Balance Sheet	57
Schedule III — Increase (Decrease) in Unfunded Accrued and Supplemental Annuity Liability	58
Schedule IV — Relationship Between Accrued Liabilities and Assets	59
Schedule V — Analysis of Accrued Liability	60
Schedule VI — Pension Benefit Obligation Information	61
Schedule VII — Outline of Actuarial Assumptions and Methods	62
Section II — Membership Data	64
Table A — Active Membership of System	64
Table B — Annuitants and Survivor Annuitants of System	65
Table C — History of Active Membership Data	66
Table D — History of Annuitant and Survivor Annuitant Membership	66
Table E — Summary of Accrued and Unfunded Accrued Liabilities	67
Section III — Summary of Benefit and Contribution Provisions	68
Section IV — Detailed Tabulations of Data	70

Table of Contents (Continued)

Statistical Section	71
Graph — Components of Total Revenue and Expense — 1991	72
Graph — Revenue vs. Expense — 10 Year Trend	72
Graph — Revenue by Source — 10 Year Trend	73
Graph — Expense by Type — 10 Year Trend	73
Graph — Total Assets — 10 Year Trend	74
Graph — Asset Growth	74
Graph — Total Membership — Active & Retired	75
Graph — Retired Members — 10 Year Trend	75
Schedule — Retired Members by Type of Benefit	76
Schedule — Employers	78
Components of Total Contribution Rate	83
Graph — Total Employer Contribution Rate — 10 Year Trend	84
Graph — Unfunded Accrued Liability — 10 Year Trend	84
Investment Section	85
Investment Overview	86
Graph — Portfolio Distribution — 10 Year Trend	86
Graph — Portfolio Distribution — 1991	87
Investment Managers	88
Summary of Investment Fees	88
Summary Schedule of Commissions Paid to Brokers	89
Summary of Investment Transactions	91
Graph — Components of Investment Revenue — 1991	91
Graph — Components of Investment Revenue — 9 Year Trend	92
Portfolio Summary Statistics	93

A detailed listing of the Fund's investments is provided in a separate report entitled, "Investment Portfolio," which can be obtained by contacting the System's main office.

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Commonwealth of Pennsylvania Public
School Employees' Retirement System

For its Component Unit
Financial Report
for the Fiscal Year Ended
June 30, 1990

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 component unit financial reports (CUFR's) achieve the highest standards in government accounting and financial reporting.



Gary R. Horsthem
President

Jeffrey L. Essler
Executive Director

INTRODUCTORY SECTION



Letter of Transmittal



COMMONWEALTH OF PENNSYLVANIA
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM
Telephone (717) 787-8540

Mailing Address
PO Box 125
Harrisburg PA 17108-0125

Building Location
5 North 5th Street
Harrisburg PA 17101

December 1, 1991

The Board of Trustees
Public School Employees' Retirement System
Harrisburg, PA 17101

We are pleased to present the seventy-second Annual Component Unit Financial Report for the Pennsylvania Public School Employees' Retirement System (the System) for the fiscal year ended June 30, 1991. The management of the System is solely responsible for the accuracy and completion of this report, pursuant to section 24 Pa.C.S. §8502(n) of the Public School Employees' Retirement Code (Retirement Code).

The System was established on July 18, 1917 to provide retirement benefits to public school employes of the Commonwealth of Pennsylvania. The System has experienced various benefit modifications over its 74 years in existence which are provided in a plan history included in this **Introductory Section**.

The members eligible to participate in the System include all full time public school employes and part time public school employes who render at least 80 days or 500 hours of service yearly in any of 632 reporting units in Pennsylvania. As of June 30, 1991, the System had 202,600 active members with an annual active payroll of \$5.9 billion.

The annuitant membership was comprised of 103,000 retirees and beneficiaries who receive \$68 million each month. The average yearly benefit paid to annuitants is \$7,900. The average benefits for each option type are detailed in the **Statistical Section** of this report.

The System is a cost-sharing multi-employer defined benefit pension plan, to which 632 reporting units contribute. The Commonwealth of Pennsylvania provides half of the employer contributions to the System. The System is administered by a staff of 235. The System is headquartered in Harrisburg, Pennsylvania and field offices are maintained in strategic areas of the state to enable direct contact with the membership and employers of the System.

The report has been prepared in accordance with the principles of governmental accounting and reporting as promulgated by the Governmental Accounting Standards Board (GASB). The report consists of five sections: the **Introductory Section** containing the Transmittal Letter, the Chairman's Report, and the Administrative Organizational Structure; the **Financial Section** containing the opinion of the independent certified public accounting firm and the financial statements of the System; the **Actuarial Section** containing the opinion of the independent actuarial firm and the results of their latest actuarial valuation; the **Statistical Section** containing significant data pertaining to the System; and the **Investment Section** containing an overview of the System's investment activities. A detailed listing of the System's investments is provided in a separate report which can be obtained by contacting the System's main office.

The Pennsylvania Public School Employees' Retirement System was established by law as an independent administrative board, directed by a governing board which exercises control and management of the System, including the investment of its assets. The System is considered a component unit of the Commonwealth of Pennsylvania as defined by the GASB, based upon the financial interdependence created by the Retirement Code in obligating the Commonwealth for the System's debt.

An annual audit of the System by a certified public accounting firm is required by the Retirement Code. The System has contracted with KPMG Peat Marwick for this audit of its financial statements and has received a favorable opinion as evidenced in the **Auditor's Opinion Letter** in the **Financial Section** of this report.

Economic Summary

Many states are experiencing decreasing revenues and are taking measures to curtail spending. Since Pennsylvania State revenues have been affected, the Commonwealth delayed its contribution payments to the System. For the fiscal year ended June 30, 1991, the Commonwealth had paid only one-half of the required contribution.

Some relief for the Commonwealth fiscal crisis occurred with the passage of legislation to increase various State taxes. As of October 25, 1991, the Commonwealth had completed its contribution obligation for the 1990/91 fiscal year. Thus far, the reporting units continue to make their required contributions on a timely basis.

Throughout the economic downturn, the Board has continued fulfilling its mission to maintain stability and the long-term optimum value of the Fund. This is evidenced in the increasing growth of the System's assets, the favorable performance of the investment portfolio and the increasing strength of the System with respect to funding. Of utmost importance to the Board is to assure that required reserves are available for payment of current and prospective retirement benefits.

Major Initiatives

Over the last six years, the System's funding status has been steadily improving and at June 30, 1990 had reached the 81 percent funded level on a GASB 5 basis. In its continuing efforts to maximize the value of the fund, the Board completed a reallocation of investment assets, targeting equities to 45 percent of total investments. Currently common and preferred stock account for 43.5 percent of the investment portfolio. Since this reallocation should have a favorable impact on future funding, the Board determined that an extensive review of its economic assumptions for investment earnings and member salary increases was necessary. The final result was adoption of more realistic salary and interest rate assumptions which more accurately portray the salary experience and actual investment performance of the Fund. Under these new assumptions, the total employer contribution rate, shared equally by the employers and the Commonwealth, was lowered from 19.18 percent to 16.6 percent. Subsequent legislation, passed in August 1991, enabled the Board to further reduce this rate to 14.9 percent by refinancing the System's liabilities over 20 years.

The Pennsylvania Legislature developed health care legislation which was enacted in August 1991. This legislation provides for \$55 per month of premium assistance for eligible annuitants beginning July 1992. All annuitants with at least 24 and a half years of service and all disability annuitants are eligible.

Within the last year, many advancements have been made in the investment of the System's assets. Three global managers and a real estate consultant were hired. A special fund was established to hire emerging minority managers. The System expanded its investments in farmland and global fixed income and established a global lending program. The Board recently approved a futures program. The Board appointed John C. Lane as Chief Investment Officer to direct all of the System's investment programs.

The internal investment program continues to expand with the hiring of Richard Carpenter as Director of Internal Investment. The allocation to in-house asset management was increased to 5.9 percent of assets. Staff was also added to monitor the real estate portfolio.

The System invested in the City of Philadelphia short term revenue anticipation notes which were paid in full in accordance with the agreed upon terms and yielded a favorable return to the fund.

The System was honored by the National Investment Managers Association with its 1990 Founders Award in recognition of its efforts toward increased awareness of minority participation in America's pension funds.

The staff has begun development of its fifth in a series of videos aimed at educating the membership and public about various System programs and benefits. This video will highlight the investments and investment processes of the System.

The System has been developing a comprehensive business plan to integrate all information and systems. The conceptual design has been completed and accepted by the System's management. An implementation plan is currently being developed.

Financial Highlights

The System maintains a full accrual accounting system. More specific accounting information is detailed in the **Summary of Significant Accounting Policies (Note 2)** in the notes to the financial statements.

The System has established policies and procedures for the review and verification of all payments made from the Fund.

The System's assets totaled \$18.1 billion at book value (\$19.1 billion at market value) as of June 30, 1991. This was an increase of \$1.9 billion over the prior year book value. Based on marked valuation of its assets, the System is the 14th largest public pension fund in the nation and the 21st largest among public and corporate pension funds in the nation.

The System's administrative budget request is appropriated by the Pennsylvania General Assembly from the investment income of the System. For the fiscal year 1990/91, the appropriation was \$14,285,000.

Revenues

Public employe retirement systems are established by law to pay retirement benefits and to accumulate the resources with which to pay such benefits. The System accumulates its resources through collection of contributions from its members and employers and from income earned on invested contributions. Contributions and investment income for 1991 totaled \$2,693.7 million detailed as follows:

Revenue Source	1991 (Millions)	1990 (Millions)
Member Contributions	\$ 337.8	\$ 311.4
Employer Contributions	1,142.1	1,086.5
Investment Income	1,213.8	1,431.4
Total	\$2,693.7	\$2,829.3

The net decrease of \$135.6 million resulted from the decrease in investment income, primarily from the decrease in net realized gains. The investment income is detailed in **Note 4** of the financial statements.

Introductory Section

The increase in contributions resulted from the increase in salaries paid to participating members upon which the members' and employers' contributions to the System are based. The employer rate of contribution was 19.18 percent of salaries for the 1990-91 fiscal year. This rate is shared equally by the school districts and the Commonwealth of Pennsylvania. Additional revenue details are provided in **Schedule 2** of the **Financial Section** of this report.

Expenses

The largest single factor of expense relates to the purpose for which the System was created: payment of benefits. These payments, coupled with the expense to administer the plan, constitute the total expenses of the System. Expenses by type for 1991 and 1990 are shown for comparative purposes.

Expenses	1991 (Millions)	1990 (Millions)
Retirement Benefits	\$792.9	\$774.5
Disabilities	30.9	28.3
Lump-Sum Payments	124.0	112.6
Refunds	11.2	11.2
Administrative	13.6	13.6
Net Transfers	9.4	2.6
Total	\$982.0	\$942.8

Pension payments to the System's 103,000 annuitants now exceed \$68 million per month. Expenses to administer the System were unchanged from the prior year and continue to represent a small fraction of total expenses, constituting only 1 percent of the System's total expenditures. A detailed breakdown of these expenses, with budget comparisons by expenditure category, appears in the **Financial Section (Schedule 3)**.

The ten-year trend in expense by type is presented in **Schedule 2** of the **Financial Section**.

Funding

The System uses an actuarial reserve type of funding which is financed by member contributions, employer contributions and earnings from invested assets. For the year ended June 30, 1991, member contributions constituted 12.5 percent of the annual funding, employer contributions constituted 42.4 percent and investment earnings accounted for 45.1 percent.

The employer rate of contribution as a percent of salaries decreased from 19.18 percent for the fiscal year 1990-91 to 14.9 percent for 1991-92. Of this rate, 14.4 percent represents the contributions required to fund the System and is a decrease of 4.78 percent from the 1990-91 fiscal year. This decrease reflects the impact of the Board's decision to update actuarial assumptions and the Legislature's decision to refinance the amortization of the accrued liabilities from 17 to 20 years. Further information is provided in the **Actuarial Section** of this report.

This rate of 14.9 percent also includes a new component of .5 percent to provide funding for the Health Care Premium Assistance Program enacted by the Legislature in August 1991 and scheduled to take effect in July 1992.

Funding is the process of specifically setting aside money for current and future use. Proper funding entails an actuarial examination of the fund balances to ensure money will be available for future and current benefit payments. With such a systematic approach, reliance can be placed on the balances of these accounts. Continuous improvement in the funding by increased earnings and contributions is sought along with control over expenses. As of June 30, 1991, the Fund balance increased \$1,711.6 million over the prior year — from \$15,885.8 million to \$17,597.4 million after meeting the retirement obligations of the System.

The results of the latest actuarial valuation indicate that the rates of contribution payable by the members and employers, when taken together with the current assets of the System, are adequate to fund the actuarial liabilities on account of all benefits payable under the System. Additional information on the System's pension benefit obligation, actuarial liability and funding progress is contained in the **Actuarial** and **Financial Sections** of this report.

Investments

Earnings from the investment portfolio represent a major source of revenue to the System, accounting for over 45 percent of total revenues for the year.

Investments of the System netted \$1,213.8 million in earnings for the year. The investment portfolio totalled \$18.1 billion, at market value, as of June 30, 1991. This represents an increase of approximately \$1.6 billion over the prior year.

The investment portfolio is of high quality and well-diversified to emphasize a long-term investment approach. The investment objective of the System is to produce a real return over inflation over time. The Board of Trustees recognizes that the objectives of a sound and prudent policy are to produce investment results that will preserve the assets of the System, as well as maximize earnings consistent with its long-term needs. For the fiscal year ended June 30, 1991, the time-weighted rate of return on the System's investments was 8.1 percent.

A detailed listing of the System's investments is available in a separate report that can be obtained by contacting the System's main office.

Federal and State Tax Status

The System is a qualified trust fund under Section 401(a) of the Internal Revenue Code. As a result of the qualified status, the trust fund is entitled to an exemption, under Section 501(a) of the Code, from Federal income taxation on its investment earnings. Additionally, contributions made on behalf of the active members are tax deferred under Section 414(h) of the Internal Revenue Code. The trust fund and any benefits accruing to the members of the System are exempt from Pennsylvania state and municipal taxes.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform services essential to the efficient operation of the System. An annual audit by an independent certified public accounting firm and annual valuation by an actuarial consultant attest to the financial and actuarial soundness of the System. The investment performance of the System is reviewed by investment evaluation firms on a quarterly basis. The consultants providing services to the System are listed in the **Introductory Section** of this report.

Introductory Section

Other Information

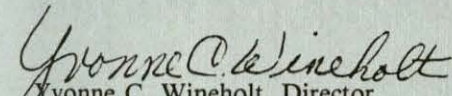
The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Public School Employees' Retirement System for its component unit financial report for the fiscal year ended June 30, 1990. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

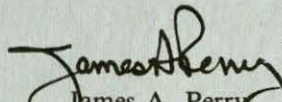
In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized component unit financial report, whose contents conform to program standards. Such component unit financial report must satisfy both generally accepted accounting principles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

A Certificate of Achievement is valid for a period of one year only. The Public School Employees' Retirement System has received a Certificate of Achievement for the last eight consecutive years (fiscal years ended June 30, 1983 — June 30, 1990). We believe our current report continues to conform to the Certificate of Achievement program requirements and we will be submitting this report to GFOA to determine eligibility for the 1991 certificate.

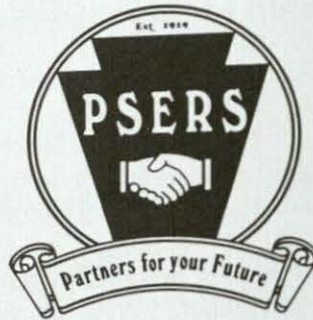
A reproduction of this award appears in this **Introductory Section**. Its attainment represents a significant accomplishment by the Retirement System.

Respectfully submitted,


Yvonne C. Wineholt, Director
Bureau of Fiscal Control


James A. Perry
Executive Director

Mission Statement



The Board of Trustees of the Public School Employees' Retirement System, empowered by statute with the authority and having fiduciary responsibility to ensure the timely and accurate payment of benefits to the members of the System and to maintain the stability of the Fund, shall:

- 1. effectively collect contributions to the Fund*
- 2. prudently invest the assets of the Fund, and*
- 3. diligently obtain and maintain the long-term, optimum value of the total Fund for the members of the System, the Commonwealth and its taxpayers, and the school districts of the Commonwealth.*

*Adopted
4/26/85*

Administrative Organization

PSERS Board of Trustees



Bernard J. Freitag
Chairman



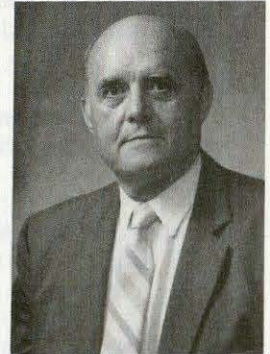
Richard C. Harris
Vice Chairman



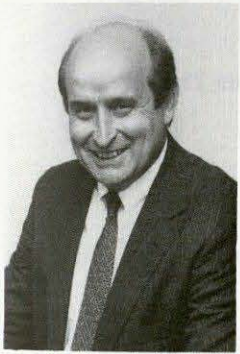
Jacque D. Angle



Mary Ann Caputo



Donald M. Carroll, Jr.



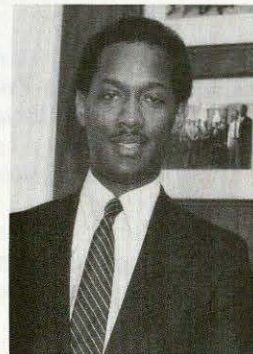
Winston J. Churchill, Jr.



Dennis Ciani



Alma Kay Crawford



Dwight Evans



Albert Fondy



Vincent J. Fumo



Catherine Baker Knoll



Roger A. Madigan



Steven R. Nickol



Joseph V. Oravitz

PSERS Board of Trustees
as of June 30, 1991

Secretary of Education of the Commonwealth of Pennsylvania (ex officio)
Honorable Donald M. Carroll, Jr.

Treasurer of the Commonwealth of Pennsylvania (ex officio)
Honorable Catherine Baker Knoll

Executive Secretary of the Pennsylvania School Boards Association, Inc. (ex officio)
Mr. Joseph V. Oravitz

Two Members Appointed by the Governor of the Commonwealth of Pennsylvania
Mr. Albert Fondy (term expired January 1, 1991)
Mr. Winston J. Churchill, Jr. (term expires February 14, 1992)

Note: Mr. Fondy continues to serve until a new appointment is made by the Governor and confirmed by the State Senate.

Three Members Elected from Among the Professional Contributors of the System for a Term of Three Years
Mr. Bernard J. Freitag (term expires January 1, 1993)
Mr. Dennis Ciani (term expires January 1, 1994)
Mr. Jacques D. Angle (term expires January 1, 1992)

One Member Elected from Among the Nonprofessional Contributors of the System for a Term of Three Years
Ms. Mary Ann Caputo (term expires January 1, 1992)

One Member of the Annuitant Group of the System Elected from Among their Number for a Term of Three Years
Ms. Alma Kay Crawford (term expires January 1, 1993)

One Member Elected by Members of Pennsylvania Public School Boards from Among their Number for a Term of Three Years
Mr. Richard C. Harris (term expires January 1, 1994)

Two Members (nonvoting)* Appointed by the Speaker of the House from the Pennsylvania House of Representatives, One Representing the Majority Party and One Representing the Minority Party
Honorable Dwight Evans
Honorable Steven R. Nickol

Two Members (nonvoting)* Appointed by the President Pro Tempore of the Pennsylvania Senate, One Representing the Majority Party and One Representing the Minority Party
Honorable Vincent J. Fumo
Honorable Roger A. Madigan

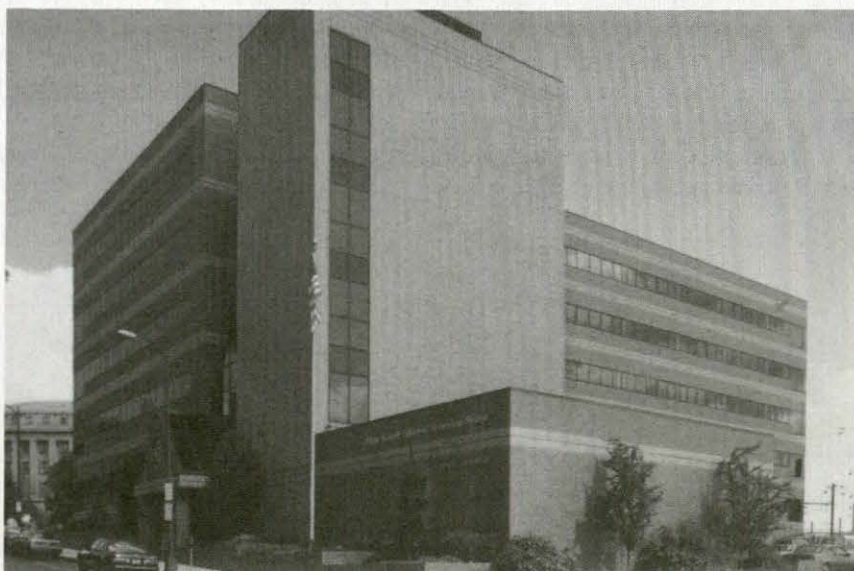
**Legislators or their official designees became voting members as of August 5, 1991 with the passage of Pennsylvania legislation.*

1991 Board Committees

Appeals	Audit/Budget	Building	Election
Mr. Ciani, Chair Ms. Caputo Ms. Crawford Ms. Knoll Mr. Oravitz	Mr. Oravitz, Chair Mr. Angle Mr. Churchill Ms. Crawford Ms. Knoll	Mr. Fondy, Chair Ms. Caputo Mr. Ciani	Mr. Oravitz, Chair Mr. Ciani Mr. Fondy
Finance	Internal Operations Review	Legislative Monitor	Personnel
Mr. Churchill, Chair Mr. Angle Mr. Carroll/Mr. Greene Mr. Fondy Mr. Harris Ms. Knoll	Mr. Freitag, Chair Mr. Angle Mr. Churchill Ms. Knoll	Ms. Crawford	Mr. Angle, Chair Ms. Caputo Mr. Churchill Ms. Crawford Mr. Harris
Proxy	Real Estate		
Ms. Crawford, Chair Mr. Carroll/Mr. Greene Mr. Churchill Mr. Fondy Mr. Harris Ms. Knoll	Ms. Knoll, Chair Mr. Angle Mr. Carroll/Mr. Greene Mr. Ciani Mr. Churchill Mr. Harris		

NOTE: The Chairman of the Board of Trustees is a voting ex-officio member of all committees.

PSERS Headquarters Building



Chairman's Report



COMMONWEALTH OF PENNSYLVANIA
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Bernard J. Freitag, Chairman of the Board
Telephone: 215-757-7420

December 1, 1991

Honorable Robert P. Casey
Governor of Pennsylvania

Members of the Legislature
Members of the Retirement System

Dear Governor Casey, Legislators and Members:

On behalf of the Board of Trustees of the Pennsylvania Public School Employees' Retirement System, I am pleased to present this seventy-second Component Unit Financial Report for the fiscal year ended June 30, 1991. The report provides an in-depth review of the financial, actuarial and investment status of the Retirement Fund.

The growth of the Retirement System is steady. The market value of assets surpassed \$19 billion at fiscal year end; active membership approximates 203,000 and annuitants total over 103,000 receiving pension benefits in excess of \$68 million per month.

The financial integrity and actuarial soundness of the System are attested by the accompanying reports of the independent auditor and consulting actuary.

This report highlights many of the significant activities of the Retirement System for the year ended June 30, 1991, as well as plans to continue improving services to the active and retired members of the System.

The Board of Trustees is committed to assuring that the retirement funds are managed prudently for the sole benefit of the members.

As is reflected in its Mission Statement, the Board of Trustees is also keenly aware of its responsibilities to the Commonwealth, its taxpayers, and the school districts of the Commonwealth.

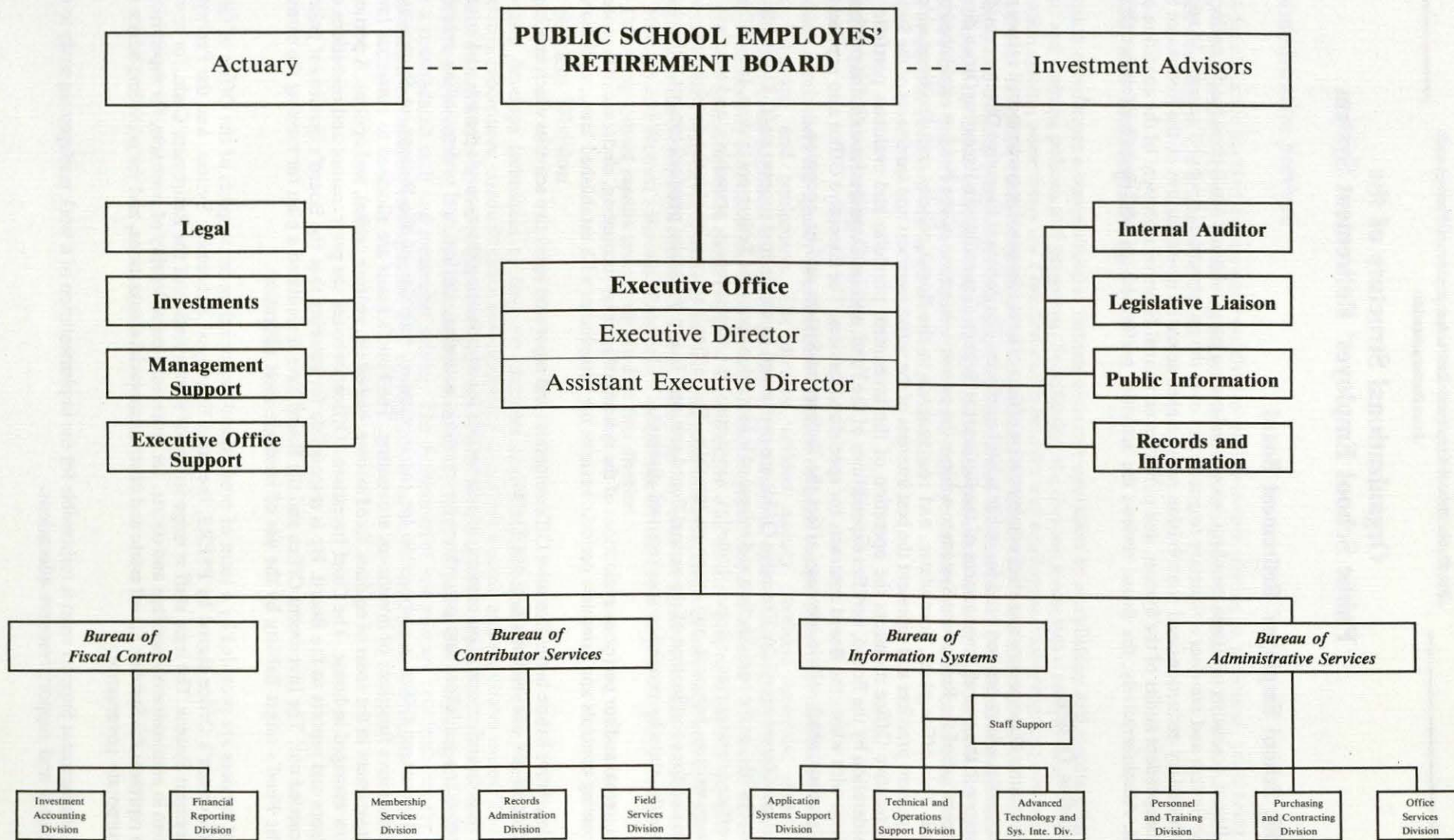
The Board of Trustees appreciates the cooperation extended to it by the Governor's Office and the Legislature which enables and empowers us to meet the challenges which face us currently and to make timely provisions for the challenges ahead.

The Board of Trustees pledges to continue to administer the affairs of the Pennsylvania Public School Employees' Retirement System in the most competent and efficient manner possible.

A handwritten signature in cursive script that reads 'Bernard J. Freitag'.

Bernard J. Freitag
Chairman
Board of Trustees

Organizational Chart of the Public School Employes' Retirement System



17

Organizational Structure of the Public School Employees' Retirement System

Public School Employees' Retirement Board

The Board, consisting of fifteen members, adopts and promulgates rules and regulations for the uniform administration of the System and exercises a fiduciary responsibility over the investment of the Fund's assets. In addition, the Board certifies salary deductions and contribution rates, makes actuarial investigations of the Retirement System, provides for independent audits of the System, and publishes an annual financial statement of the condition of the Retirement Fund. Administratively, the Board reviews the activities performed by the System's Executive Office.

Executive Office

The Executive Director serves as chief administrative officer of a rapidly growing governmental agency which is chartered to administer a large pension fund for public school employes. The Assistant Executive Director provides administrative assistance in the overall management of the Retirement System. Generally, the Executive Office directs and manages the operation of the Retirement System to achieve the primary objectives of the Fund as established by the Retirement Board. This office plans, formulates, and recommends to the Board policies and directions which further sound management practices and represent the best interests of the active members and annuitants of the System. Particularly, the Executive Office monitors the operation of the investment portfolio and evaluates portfolio performance for consideration by the Board, certifies expenditures of the Fund, and measures performance of professional individuals or firms with whom the Board contracts for specialized services. The Executive Office also apprises the Board of any development which will in any way affect the Retirement System and its operation.

Additional functions of the Executive Office are performed by specialized support staff. The Public Relations Office is responsible for the coordination and release of information about the Retirement System. In fulfilling this obligation, this office prepares press releases, bulletins, newsletters, the annual report, pamphlets, and members' handbooks, and answers written, personal, and telephone inquiries. This office is responsible for the development of the agency video series and for coordination of the annual Board seminar. It also maintains personal contact with school retiree groups across the state by providing speakers and displays.

The internal auditor performs evaluations of the systems of internal accounting, electronic data processing and benefit processing controls and conducts periodic reviews for compliance with established laws, regulations and guidelines.

The legislative liaison in the Executive Office monitors and reports on legislative activities which may impact on members' benefits or the administration of the System.

The records and information manager is responsible for coordinating the agency's records and information program by providing guidelines and procedures for creating, accessing, storing, and understanding available information.

The Investment Office is responsible for the investment activities of the Retirement System as opposed to the administrative functions of investment accounting. The Fund's assets are allocated to numerous investment advisors for investment in the areas of equities, fixed income, real estate, venture capital, and options. A portion of the portfolio is now managed in-house. The Chief Investment Officer oversees the performance and operations of the investment advisors and reports to the Board. He is responsible for assuring that the Board's investment policies and decisions are carried out. The Investment Office and the Board have formulated a plan for meeting the earnings requirements of the Fund's target liability by the use of strategic asset allocation.

Legal services are provided by a team of professional personnel under auspices of the Office of General Counsel of the Governor's Office shared by PSERS, the State Employees' Retirement System, and the Pennsylvania Municipal Retirement System. The legal staff is responsible for interpretation of the Retirement Code, for representation of the System in administrative hearings and courts, for determination of legality of contracts, for supervising outside lawyers who represent the Systems in real estate and other commercial transactions, and for providing advice related to matters of corporate governance.

The Management Support team is responsible for the implementation of a work management study to improve PSERS' efficiency and support resource allocations.

Bureau of Administrative Services

The Bureau of Administrative Services directs and coordinates staff activities relating to personnel, purchasing, and office services, as well as preparation and monitoring of the administrative budget. The Bureau Director is responsible for conducting all elections to the Board of Trustees.

Personnel and Training Division

This division coordinates a comprehensive human resources operation by establishing and maintaining personnel and training policies and programs. Specifically, the division maintains a compensation and classification system; administers the Commonwealth benefits and employe services program; oversees the recruitment, selection, and placement of job candidates; develops, conducts, and evaluates employe development and training programs; administers and maintains the automated personnel management system; oversees the labor relations function; and maintains personnel and leave records. Also, the Affirmative Action, State Employe Assistance Program, employe services, retirement counseling, and employe evaluation functions are carried out in this division.

Purchasing and Contracting Division

This division administers the agency procurement function through the purchase and maintenance of supplies, furniture, and equipment. The division reviews agency purchase requests, makes recommendations to management and staff, formulates specifications, secures and awards bids, prepares purchasing documents, determines the need for maintenance agreements and ensures compliance with the agency's and Commonwealth requirements and procedures. The division prepares, maintains, and administers Service Purchase Contracts for services, maintenance and computer software, and controls the agency master file on blueback contracts. The division chief serves as the agency Contract Compliance Officer, Minority and Women's Business Enterprise Compliance Officer, and Surplus Property Control Officer. Office equipment repairs are coordinated in this division.

Office Services Division

This division develops techniques to improve practices and the allocation of resources, develops administrative procedures, conducts space and equipment utilization studies, and negotiates leases. The division also manages a forms and publications program by providing graphic, composition, reproduction, and distribution services. The division coordinates, directs, and tests a Disaster Recovery program and operates a consolidated mail and messenger service. The division chief has primary responsibility for the coordination of building management and security at the agency's headquarters building.

Bureau of Contributor Services

The Bureau of Contributor Services provides professional and technical services to over 203,000 active members and 103,000 retirees from the moment of enrollment through the process of retirement, and administers the \$68 million dollar annuitant payroll. The Bureau is organized into three divisions: Field Services, Records Administration, and Membership Services.

As part of the bureau director's office, requests from members appealing staff decisions are researched and presented to the Appeals Committee of the Board. The staff, with a team of medical doctors, reviews requests for disability benefits. Lastly, as part of the director's office, a team of analysts provide management and system support to bureau personnel.

Field Services Division

Our field program provides service to both active and retired PSERS members, and over 600 reporting units through ten regional offices that are strategically located throughout the Commonwealth of Pennsylvania. Each regional representative is a professional liaison between the agency, the members, and the reporting units.

Our Board of Trustees emphasizes counseling for members before they retire. PSERS offers several types of retirement seminars: general information seminars which target members of PSERS that will be retiring two or more years in the future, benefits counseling which is for members of PSERS retiring in the current school year, and individual counseling, which is provided as needed. On occasion, a Pre-Retirement Education Program which targets members retiring within the next ten to fifteen years is offered. These programs are expanded to include guest speakers such as attorneys, insurance company representatives, Blue Cross/Blue Shield representatives, etc.

The regional representatives also train reporting unit personnel who are responsible for the information reported to PSERS. Problems between the reporting units and PSERS are often resolved by the regional representatives.

Records Administration Division

The Records Administration Division is responsible for the security and accuracy of our members' records, and functions as an information center for the members who call or write about their accounts. The division consists of four sections: Member Communications, Research and Reports, Word Processing/Data Entry, and Files Maintenance.

Member Communications Section — Much of the oral and written communications relative to a member's record in the System is handled by Member Communications. This section has the general telephone number for all of PSERS, and is the main link between PSERS and the outside world (reporting units, members, SERS, legislative offices, regional offices, etc.).

Research and Reports Section — This section determines eligibility for membership in PSERS, reviews beneficiary information for compliance with legal requirements, and maintains an automated master cross-reference file of each member.

Word Processing/Data Entry Section — This section provides typing support to all bureaus within the agency. Recording and transcription services for meetings within the agency are also provided. Information is transferred to machine readable formats, and data entry and verification services are performed by this section. This unit also develops and maintains the automated programs which perform data validation and consistency edits.

Files Maintenance Section — This section is responsible for the security and management of the approximately 375,000 records of current and former public school employees. An updatable microfiche system has been installed to provide maximum disaster recovery capability.

Membership Services Division

The Membership Services Division is responsible for the calculation and processing of all retirement benefits, death benefits, requests to purchase service credit, and refunds. In addition, the division is responsible for the annuitant payroll. The division consists of five sections:

Retirement Support Section — All retirement applications are reviewed and entered into the system by this section. Estimated retirement benefits are generated immediately. This section communicates with members regarding the timeliness of their retirement benefits. This section also communicates with vested members by providing projected estimated benefits.

Retirement Processing Section — This section is responsible for retirement eligibility and computation of all the types of retirement benefits: normal, early, disability, frozen annuity, and multiple service.

Purchase of Service Section — This area establishes a member's eligibility to purchase over 16 types of service and calculates cost. This section determines the effective dates for the member's payroll deduction plan and communicates with members regarding their purchase of service requests.

Annuitant Processing Section — This section is responsible for the maintenance of the annuitant payroll file. Deductions for health insurance premiums, Federal Withholding Tax, Tax Levies, and Child and Spousal Support are processed by this section. Benefit payments are adjusted and recalculated when corrected information is reported.

Refund and Closing Section — This section calculates and processes all types of refund payments to both members and beneficiaries of deceased members. This section also calculates and determines eligibility to receive death benefits. The benefits are paid to beneficiaries of active members and beneficiaries or survivor annuitants of retirees. This section answers questions on such issues as capital gains, ordinary income, death benefit exclusions, federal estate tax, inheritance tax, and Pennsylvania State income tax.

Bureau of Information Systems

The Bureau of Information Systems has the responsibility for planning, administering, and controlling all electronic data processing activities within PSERS. Additionally, this bureau interprets and applies agency policies and objectives across all automated technology activities, provides professional services for feasibility studies, system analyses, system design and programming, data communications and data management, hardware and software selection and computer operations. The bureau also formulates short-term and long-range developmental plans to permit the agency to meet directed missions.

Director's Office

The administrative assistant and the secretary in the Director's Office perform a variety of independent, responsible assignments for personnel within the Bureau of Information Systems, primarily the director and the division chiefs, which enables them to meet program needs and bureau goals. Some of the responsibilities include assisting in the preparation of the PSERS' administrative budget, the Automated Technology Multi-year Plan, Service Purchase Contracts, Requests for Proposals, and monthly reports by gathering and assembling information. Special status and statistical reports are prepared to be used at staff, planning and steering committee meetings, and presentations. Other responsibilities include maintaining an automated inventory of hardware and software, and various clerical duties such as maintaining leave records, making training arrangements, typing expense vouchers and various forms, letters and memos.

The Staff Support Section is responsible for testing and training of all end-user software and application systems which reside on the mainframes and microcomputers. Responsibilities include the development of training material and course outlines; training individuals and groups of end-users; development of test files; system integration testing; development of user and operational manuals. Another major responsibility of this group is centralized end-user contact for the bureau. All problems and requests related to hardware, software, training, information, and services will be directed to this group.

Responsibilities include identification and tracking of problems or requests; processing requests with end-user software, if possible; forwarding all problems/requests to appropriate divisions; summarizing problems and requests reported; recommending to bureau management methods to eliminate problems and improved methods to handle requests.

Application Systems Support Division

This division has two main functions: data administration and development and maintenance of all application systems.

Responsibilities for data administration include design, definition, and control of all data collected by this agency; planning for future data needs; development of data standards; development of procedures for the collection and use of data; data dictionary administration.

Responsibilities for the application systems support function are systems analysis and design which includes: feasibility and workflow analysis, conceptual system design, detailed system design, program and system specifications, identifying potential applications for automation, developing program logic and translating logic into machine readable code, program testing and debugging, creation of screen and image printer formats, and development of system and source library routines; maintenance and enhancements to existing systems; implementation of federal and state legislation; implementation of federal and state court decisions; development of operational, program and system documentation.

Technical and Operations Support Division

This division has the responsibility for the administration and operation of the agency's mainframe and microcomputer systems and all associated software.

This division provides software support in the areas of data communications, data management, end user software, operating systems, compilers, system utilities, vendor supplied applications, and microcomputer packages. This support includes the modification and enhancement of existing software and the development of supporting software when necessary. It develops and enforces efficiency and usage standards for the various software products and evaluates their performance on a continuing basis. The division provides technical training and assistance to management and BIS staff in the areas of project development, problem analysis and resolution, and development of long and short range plans. It develops backup and recovery procedures for data management, data communications, and other critical system resources. It provides for the security and integrity of data, system access security, and change control security.

This division monitors system hardware and software for acceptable performance and resource utilization, making adjustments to configurations and parameters when necessary. It analyzes current workload and usage trend data to ensure sufficient availability of resources to meet future agency needs.

This division provides for the operation and control of the computer mainframes, associated peripherals, and data entry equipment. In addition, support is provided for the agency's data communications networks and microcomputer clusters. The division evaluates performance and assures effective availability and utilization of this hardware consistent with agency needs and priorities. It is also accountable for the organization and execution of control functions (input-output validation, computer job accounting, output distribution, and quality checks of completed work), the performance of data entry and verification services, and the programs necessary to perform the verification and editing.

Advanced Technology and Systems Integration Division

This division has the responsibility for performing research into technological developments within the information processing industry, the evaluation of the impact and implications of those advancements relative to the hardware components and software products in use within the agency, and the selection, testing, and application of systems integration engineering principles to assure proper merger of new technology into the existing environment.

Specifically, the division provides the expertise to evaluate new vendor offerings and ascertain their applicability toward the improvement of services to users of electronic information processing systems. Additionally, the division is responsible for the development of strategic plans to assure the successful integration of selected new technology while minimizing the impact, disruption, and displacement of those products currently being utilized within the agency.

Bureau of Fiscal Control

This bureau has responsibility for planning, organizing, and directing a complete accounting system. Fulfilling this responsibility includes recording of all financial transactions, preparing financial statements, determining and collecting member, employer and Commonwealth contributions, accounting for the investment portfolio transactions, consulting with the Board of Trustees on financial matters, and serving as liaison with financial consultants, actuaries, fund evaluators, investment advisors, other state and federal agencies, and all reporting units.

Financial Reporting Division

The Financial Reporting Division has responsibility for the classification, analysis, and reporting of all financial transactions. The Division consists of four sections: General Ledger, Active Members Review and Control, Post-Retirement Review and Control, and Accounts Receivable.

The General Ledger Section — This section records all financial data including outgoing payments from the Fund and incoming receipts to the Fund. It maintains the cash receipts journal, cash disbursements journal, the general ledger, and is responsible for the preparation of financial statements.

The Active Members Review and Control Section — This section collects all membership salary and service data, provides services to the reporting units by interpreting the Rules and Regulations regarding membership and by ensuring the proper application of reporting codes and procedures. It also controls all updates of salaries, contributions, interest, and service to the individual members' accounts, reconciles these accounts prior to retirement and reviews the benefit calculations at retirement.

The Post-Retirement Review and Control Section — This section controls all updates to the annuitant payroll file, reviews adjustments to original benefit calculations, controls and reconciles the federal withholding and medical insurance deduction accounting processes, controls and reconciles the payment history file, and reviews the data required for death benefit calculation and final account closings.

The Accounts Receivable Section — Accounts Receivable handles all employe and employer billing and receivable procedures.

Investment Accounting Division

The Investment Accounting Division has responsibility for processing and monitoring all investment transactions to guarantee adherence to guidelines and objectives prescribed by the Board. It serves as intermediary with custodial banks, the State Treasury Department, brokers, and the investment evaluator. The Division accounts for the \$18 billion investment portfolio by the reconciliation of each investment asset class and income category between the general ledger and the sub-custodial banks.

Administrative Staff



James A. Perry
Executive Director



Arthur J. Granito
Assistant Executive
Director



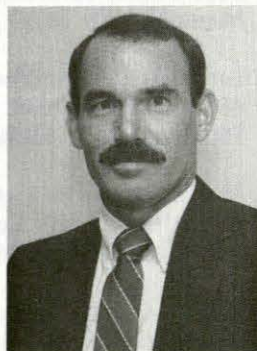
John C. Lane
Chief
Investment Officer



Jeffrey B. Clay
Acting Chief Counsel



Yvonne C. Wineholt
Director of
Fiscal Control



Dale W. Houck
Director of
Information Systems



Linda L. Weidner
Director of
Contributor Services



Thomas E. Yagel
Director of
Administrative Services

Professional Consultants Investment Advisors

Acorn Asset Management (*Options*)
One Water Street, 2nd Floor
White Plains, NY 10601

Bankers Trust Co. (*Equity*)
West Building, 6th Floor
280 Park Avenue
New York, NY 10017

CEO Venture Fund (*Venture Capital*)
4516 Henry Street, Suite 402
Pittsburgh, PA 15213

Cashman, Farrell & Associates (*Equity*)
1235 Westlakes Drive
Berwyn, PA 19312

Columbus Circle Investors, Inc. (*Equity*)
Metro Center
One Station Place, 8th Floor
Stamford, CT 06902

Commonwealth of Pennsylvania (*Short Term*)
Treasury Department
Harrisburg, PA 17120

Commonwealth Ventures Partners - Century IV
(*Venture Capital*)
Century IV Partners
Bellevue Building, 8th Floor
200 South Broad Street
Philadelphia, PA 19102

CoreStates Bank (*Custodial Bank & Security
Lending*)
Center Square West, 10th Floor
16th & Market Streets
Philadelphia, PA 19101

Criterion Investment Management Co.
(*Fixed Income*)
1000 Louisiana Street, Suite 6000
Houston, TX 77002

Darien Capital Management (*Options*)
66 Fieldpoint Road, 3rd Floor
Greenwich, CT 06830

Delaware Investment Advisors (*Equity & Fixed
Income*)
One Commerce Square
Philadelphia, PA 19103

Dreman Value Management, Inc. (*Equity*)
10 Exchange Place
Jersey City, NJ 07302

Eagle Asset Management (*Equity*)
880 Carillon Parkway, Box 10520
St. Petersburg, FL 33716

Genesis Seed Fund, Ltd. (*Venture Capital*)
Two Penn Center Plaza
Philadelphia, PA 19102

Glenmede Trust Co. (*Fixed Income*)
229 South 18th Street
Philadelphia, PA 19103

Hudson Capital Advisors (*Equity*)
3 East 54th Street, 10th Floor
New York, NY 10022

Jones Lang Wootton Realty Advisors (*Real Estate*)
101 East 52nd Street, 20th Floor
New York, NY 10022

Latimer & Buck (*Mortgages & Real Estate*)
121 South Broad Street
Philadelphia, PA 19107

Loomis, Sayles & Co. (*Options*)
5100 Poplar Avenue, Suite 2200
Memphis, TN 38137

Loyalhanna Commonwealth Fund (*Venture Capital*)
681 Andersen Drive
Pittsburgh, PA 15220

Mellon Bank, N.A. (*Equity & Fixed Income*)
One Mellon Bank Center
Pittsburgh, PA 15258-0001

Mellon Capital Management (*Balanced*)
595 Market Street, Suite 2900
San Francisco, CA 94105

Introductory Section

Investment Advisors (Continued)

Miller Anderson & Sherrerd (*Equity & Fixed Income*)
One Tower Bridge
West Conshohocken, PA 19428

Morgan Grenfell Capital Management (*Fixed*)
885 Third Avenue
New York, NY 10022-4802

Morgan Stanley Asset Management, Inc. (*Farmland
& Fixed Income*)
1221 Avenue of the Americas, 21st Floor
New York, NY 10020

NEPA Management Corp. (*Venture Capital*)
Goodman Drive
Lehigh University
Bethlehem, PA 18015

Newbold's Asset Management (*Equity*)
937 Haverford Road
Bryn Mawr, PA 19010-3845

Oppenheimer Capital Corp. (*Equity*)
Oppenheimer Tower, 37th Floor
World Financial Center
New York, NY 10281

Oppenheimer Option Management (*Options*)
Oppenheimer Tower, 37th Floor
World Financial Center
New York, NY 10281

PNC Financial Corp.
Advanced Investment Management (*Equity*)
Two Oliver Plaza, Suite 2020
Pittsburgh, PA 15222

Pacific Investment Management Co. (*Fixed Income*)
840 Newport Center Drive, 3rd Floor
P.O. Box 9000
Newport Beach, CA 92658-9030

Pennsylvania Investment Private Placement (*CIGNA*)
(*Venture Capital*)
Connecticut General Life Insurance Co.
P.O. Box 2975
Hartford, CT 06152

Pennsylvania Venture Capital Fund (*APA/Fostin*)
(*Venture Capital*)
Fostin Capital Associates
Fostin Plaza VI
681 Andersen Drive
Pittsburgh, PA 15220

Pilgrim Baxter Greig & Associates (*Equity*)
1255 Drummers Lane
Suite 200
Wayne, PA 19087

Putnam Companies (*Fixed Income*)
One Post Office Square
Boston, MA 02109

Security Pacific Investment Managers (*Equity*)
300 South Grand Avenue, Suite 2200
Los Angeles, CA 90071

TDH Venture Funds (*Venture Capital*)
C/O KS Sweet Associates
Fidelity Court Suite 200
259 Radnor-Chester Road
Radnor, PA 19087

Investment Evaluator

Evaluation Associates, Inc.
200 Connecticut Avenue
Norwalk, CT 06854

Private Placement Consultants

Blue Bell Corporation
1767 Sentry Parkway, Suite 100
Blue Bell, PA 19422

Weymouth & Associates
5 Radnor Corporate Center
100 Matsonford Road, Suite 500
Radnor, PA 19087

Real Estate Consultants

Institutional Property Consultants, Inc.
5 Piedmont Center, Suite 310
Atlanta, GA 30305

MacFarlane Realty Advisors
One Penn Center
1617 JFK Boulevard, Suite 1350
Philadelphia, PA 19103

Venture Capital Consultant

Springhouse Associates
Springhouse Corporate Center, Suite 1
321 Norristown Road
Ambler, PA 19002

Actuary

Buck Consultants
George B. Buck Consulting Actuaries, Inc.
Xerox Centre
55 West Monroe Street
Chicago, IL 60603

Auditor

KPMG Peat Marwick
225 Market Street, Suite 300
Harrisburg, PA 17108-9987

Medical Examiners

Dr. Stanley R. Goldman, M.D.
4700 Union Deposit Road, Suite 120
Harrisburg, PA 17111

Dr. Jonathan Tocks, M.D.
4470 Valley Road
Enola, PA 17025

Dr. Richard Davis, M.D.
4470 Valley Road
Enola, PA 17025

Dr. Robert Little, M.D.
3544 North Progress Avenue
Harrisburg, PA 17110

Developmental Fund Managers

Advisors Investment Managers (*Fixed Income*)
5 Post Oak Park, Suite 2300
Houston, TX 77027

Acadian Financial Research, Inc. (*Equity*)
260 Franklin Street
Boston, MA 02110

Birmingham Capital Management Co., Inc. (*Equity*)
31 Inverness Center Parkway, Suite 100
Birmingham, AL 35242

Dietche & Field Advisers, Inc. (*Equity*)
437 Madison Avenue
New York, NY 10022

Duncan-Hurst Capital Management (*Equity*)
4370 La Jolla Village Drive
Suite 600
San Diego, CA 92122

Equinox Capital Management (*Equity*)
126 East 56th Street
New York, NY 10022

Introductory Section

Global Fixed Income Advisors (*Fixed Income*)
820 Morris Turnpike
Short Hills, NJ 07078

Globe Finlay, Inc. (*Equity*)
200 Park Avenue
New York, NY 10166

Gulf Investment Management (*Equity*)
820 Gessner, Suite 720
Houston, TX 77024

Heartland Capital Management, Inc. (*Equity*)
36 South Pennsylvania Street
Suite 610
Indianapolis, IN 46204

IDS International, Inc. (*Equity*)
IDS Tower 10
Minneapolis, MN 55440

Income Research & Management, Inc. (*Fixed
Income*)
155 Federal Street, 4th Floor
Boston, MA 02110

London & Bishopgate International, Inc. (*Fixed
Income*)
866 Third Avenue
New York, NY 10022

Marathon Asset Management Limited (*Equity*)
140A Gloucester Mansions
Cambridge Circus
London, England WC2H8HD

Morgan Stanley Asset Management (*Equity*)
1221 Avenue of the Americas, 21st Floor
New York, NY 10020

Munder Capital Management (*Equity*)
260 East Brown Street, Suite 100
Birmingham, MI 48011

NCM Capital Management (*Fixed Income*)
2 Mutual Plaza
501 Willard Street
Durham, NC 27701

Payden & Rygel (*Fixed Income*)
333 South Grand Avenue, Suite 3250
Los Angeles, CA 90071

Pilgrim Baxter Greig & Associates (*Equity*)
1255 Drummers Lane
Suite 200
Wayne, PA 19087

Putnam Companies (*Fixed Income*)
One Post Office Square
Boston, MA 02109

Rogge Global Partners (*Fixed Income*)
5-6 St. Andrew's Hill
London, England EC4V5BY

Roxbury Capital Management (*Equity*)
1800 Avenue of the Stars, Suite 1100
Los Angeles, CA 90067

Scudder Stevens & Clark (*Equity*)
345 Park Avenue
New York, NY 10154

State Street Bank & Trust Company (*Equity*)
P.O. Box 470
Boston, MA 02102

World Invest Ltd. (*Equity & Fixed Income*)
56 Russell Square
London, England WC1B4HP

A History of the Public School Employees' Retirement System

The following is a brief history of PSERS.

- 1917 — The Pennsylvania Public School Employees' Retirement Act became law on July 18.
- 1918 — Henry H. Baish became the System's first Secretary. The first Board was comprised of seven members.
- 1919 — The law went into full effect July 1 with the merger of 13 school district retirement systems into the new statewide system. Membership was 37,503.
- 1920 — By July, 204 members had been granted full retirement and 50 had been granted disabilities. The average annuity was \$275 a year.
- 1920-1923 — The Institute for Government Research called PSERS one of the nation's "safe and sound systems". (Ninety percent of the country's systems were found to be unsafe.)
- 1924 — PSERS membership had grown to 54,677. The balance in the retirement fund was \$7.3 million.
- 1929 — Membership totaled 71,313. Funds were invested exclusively in Pennsylvania state, county, city, borough, and township bonds with preference for school district bonds. The System was not threatened by the "Crash".
- 1933 — Membership had grown to 74,698. U.S. government bonds were added to the list of legal investments.
- 1935 — At the height of the depression, the year's annual report noted that through PSERS bond investments, jobs had been created building schools and roads in Pennsylvania.
- 1941-1942 — Even with nationwide conscription to fight a war on two fronts, PSERS membership grew from 82,956 to 83,482.
- 1944 — The System's first Secretary, Mr. Baish, left after 25 years. He was succeeded by J.Y. Shambach.
- 1949 — The minimum compensation paid former teachers from the Fund was set at \$50 a month.
- 1950 — Mr. Shambach was replaced by Dr. George C. Richwine who served as acting Secretary until 1953. At mid-century, membership was 91,000, with assets of \$576.7 million.
- 1953 — Rex T. Wrye was appointed as Secretary.
- 1960 — Membership had grown to 141,000, and total assets were \$1.5 billion.
- 1963 — The minimum benefit paid to retirees became \$100 a month.

History (continued)

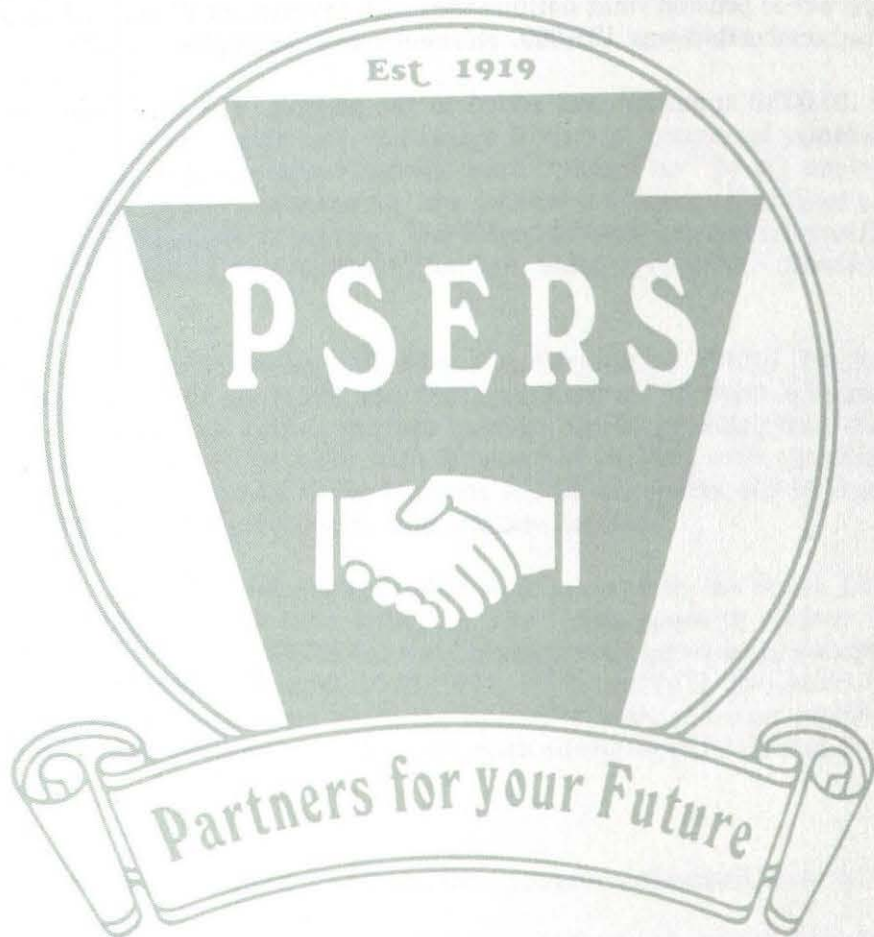
- 1965 — Membership was 171,000 and assets were \$2.1 billion.
- 1967 — The first ad hoc cost-of-living adjustment was granted; subsequent adjustments were granted in 1974, 1979, 1981, 1984, and 1989.
- 1970 — Mr. Wrye died and was succeeded by Frank R. Cashman as executive director. Annuitants totaled 32,140 with an annual payroll of \$104 million. The basic benefit formula increased to 2 percent of final average salary. The System's computerization began.
- 1972 — The first report was presented by the actuary hired for the examination of the actuarial soundness of the Fund.
- 1973 — A field staff was formed with offices around the state to counsel members and to instruct reporting units.
- 1974 — Final average salary was redefined as average compensation in the highest three periods of 12 consecutive months.
- 1975 — Act 96, a new Retirement Code, was enacted in 1975 with a profound effect on the System:
 - PSERB became an "independent administrative Board".
 - Board membership increased.
 - The System's authority to invest in common stock was liberalized.
 - The lump-sum withdrawal of accumulated deductions at retirement was permitted.
 - Part-time employes were made eligible for PSERS membership.
 - Withdrawal (early) retirement eligibility was lowered from 25 to 10 years.
 - Eligibility for full death benefit was reduced from 25 to 10 years.
 - Eligibility for disability was lowered from 10 years to 5 years.
- 1976 — PSERS moved into City Towers, combining an operation that was scattered in three different locations in Harrisburg.
- 1977 — Assistant Executive Director M. Andrew Sheffler succeeded Mr. Cashman as Executive Director.
- 1979 — The System's first "outside" audit occurred.
- 1980 — The Board joined George Washington University in financing an office building/retail center in the District of Columbia. A security system was installed at the headquarters building.

History (continued)

- 1982 — The Fund could invest up to 50 percent of its total assets at book value in common stock. Various investment advisors were hired, and the portfolio was diversified. Four appointed legislators were added to the Board as non-voting members, bringing membership to 15. The number of days an annuitant could return to work without a loss of annuity was changed from 60 to 75 days.
- The Tax Equity and Fiscal Responsibility Act had significant impact on the members and automated systems.
- 1983 — The member contribution rate was raised from 5.25 percent of payroll to 6.25 percent for new members. Member contributions were "picked up" by the employer for federal tax purposes. The System received its first annual prestigious Certificate of Achievement for Excellence in Financial Reporting. The Board adopted sex-neutral actuarial tables as a result of a U.S. Supreme Court Ruling "Norris v. State of Arizona". Disaster recovery planning began.
- 1984 — James A. Perry became the sixth Executive Director of PSERS. The System began to buy microcomputers for the staff. The Fund was enabled to invest in limited partnerships and separate accounts as well as venture capital. Act 95 provided for a one-year window for members 53 years old or older with 30 years of credited service to retire with no penalty. It also provided a cost-of-living increase for all annuitants and for investments in limited partnerships, separate accounts, and venture capital.
- 1985 — A mission statement and strategic plan were adopted by the Board. Electronic transfer of benefits to financial institutions began. The Commonwealth made its final payment on a \$90 million debt owed PSERS for the Commonwealth portion of the employer contribution for fiscal years ended June 30, 1970, 1971, 1972, and 1973. (No interest was paid.) Retiring or refunding members were given the option to withdraw their contributions and interest in up to four installments. Legislation enabled the Board to deduct for child and spousal support.
- 1985-1986 — After many years of steady increases, the System's unfunded accrued liability was decreased.
- 1986 — The Board adopted a resolution on divestment of assets in companies doing business in South Africa. Mandatory retirement counseling was enacted. The conversion of all retirement records to microfiche was begun, and the correspondence unit was established to answer mail and telephone calls more quickly and efficiently. The employe contribution rate was reduced for the first time in 23 years. An automated general ledger system was installed to provide PSERS with more timely financial information and to reduce the level of manual account postings required.
- 1986-Present — Retirement windows were enacted to allow for early retirement without penalties. A provision in the U.S. Tax Reform Act eliminating the "three year rule" for taxation of retirement benefits had a negative impact on the System's members and automated processes.
- 1987 — The System moved into a new headquarters building at 5 North Fifth Street, Harrisburg.

History (continued)

- 1988 — The technical corrections bill amending the U.S. Tax Reform Act was passed. This provided tax relief for members of the System on pre-1983 member contribution withdrawals.
- 1989 — Act 112 provided a cost-of-living increase for all annuitants who retired on or before July 1, 1987, starting January 1, 1989. Assets topped \$14 billion making PSERS the 14th largest public pension fund nationwide, with investment income of \$1 billion for the year. Active membership was 195,000. Retirees numbers 96,000.
- 1990 — The 100,000th annuitant was added to the payroll. The investment and legal staffs were expanded.



FINANCIAL SECTION



Independent Auditors' Report

KPMG Peat Marwick

Certified Public Accountants

Peat Marwick Main & Co.

225 Market Street
Suite 300
P.O. Box 1190
Harrisburg, PA 17108-1190

Telephone 717 238 7131

Telecopier 717 233 1101

The Board of Trustees
Commonwealth of Pennsylvania
Public School Employees' Retirement System

We have audited the accompanying balance sheets of the Commonwealth of Pennsylvania Public School Employees' Retirement System as of June 30, 1991 and 1990, and the related statements of revenues, expenses, and changes in fund balance 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, the financial statements referred to above present fairly, in all material respects, the financial position of the Commonwealth of Pennsylvania Public School Employees' Retirement System at June 30, 1991 and 1990, and the results of its operations for the years then ended, in conformity with generally accepted accounting principles.

The analysis of funding progress on Schedule 1 is not a required part of the basic financial information of the System but is supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit this information and express no opinion on it.

Our audit was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information included in Schedules 2 through 4 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information 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.

October 7, 1991

KPMG Peat Marwick

Financial Section

Balance Sheets
 June 30, 1991 and 1990
 (Amounts in Thousands)

Assets	1991	1990
Investments, at cost (note 4):		
Fixed income investments and mortgage investments (market value \$9,106,629 in 1991 and \$8,542,550 in 1990)	\$ 8,976,553	\$ 8,525,271
Common and preferred stocks (market value \$7,399,648 in 1991 and \$6,092,843 in 1990)	6,454,630	5,144,729
Other long-term investments (market value \$608,558 in 1991 and \$695,884 in 1990)	665,474	651,241
Short-term investments (market value \$961,002 in 1991 and \$1,206,676 in 1990)	962,741	1,204,793
Total investments	17,059,398	15,526,034
Receivables:		
Contributions:		
Employes	53,731	52,318
Employers	206,314	186,199
Commonwealth of Pennsylvania	285,429	135,317
Investment:		
Income	207,218	200,536
Proceeds	302,788	149,926
Other	1,103	145
Total receivables	1,056,583	724,441
Cash	6	4
Fixed assets (net of accumulated depreciation of \$3,123 and \$2,110 in 1991 and 1990, respectively)	5,228	5,642
TOTAL ASSETS	\$18,121,215	\$16,256,121
Liabilities and Fund Balance		
Liabilities:		
Accounts payable and accrued expenses	\$ 33,895	\$ 29,893
Installment benefits payable	52,969	45,111
Investment purchases payable	436,951	295,350
Total liabilities	523,815	370,354
Unfunded Actuarial Liability (note 1d)		
Fund balance (note 3):		
State accumulation account	7,443,943	6,740,158
Members' savings account	3,771,931	3,458,222
Reserve for retirement	6,157,432	5,489,181
Reserve for disabilities	224,094	198,206
Total fund balance	17,597,400	15,885,767
TOTAL LIABILITIES AND FUND BALANCE	\$18,121,215	\$16,256,121

See accompanying notes to financial statements.

Statements of Revenues, Expenses and Changes in Fund Balance
Years ended June 30, 1991 and 1990
(Amounts in Thousands)

	Year ended June 30, 1991				
	Total	State Accumulation Account	Members' Savings Account	Reserve for Retirement	Reserve for Disabilities
Revenue:					
Contributions:					
Employers	\$ 571,228	\$ 571,228	\$ —	\$ —	\$ —
Employees	337,768	—	337,768	—	—
Commonwealth of Pennsylvania	570,858	570,858	—	—	—
	1,479,854	1,142,086	337,768	—	—
Investment revenue, net of related expenses (note 4)	1,213,809	740,911	141,327	320,348	11,223
Total revenue	2,693,663	1,882,997	479,095	320,348	11,223
Expenses:					
Benefits	947,798	—	—	916,858	30,940
Refunds	11,173	—	11,173	—	—
Net transfers to (from) State Employees' Retirement System	9,431	8,578	853	—	—
Administrative expenses	13,628	13,628	—	—	—
Total expenses	982,030	22,206	12,026	916,858	30,940
Excess (deficiency) of revenues over expenses	1,711,633	1,860,791	467,069	(596,510)	(19,717)
Transfers between reserves for:					
Retirements by members	—	(842,705)	(156,517)	947,383	51,839
Annuitants who returned to service	—	8,065	544	(5,348)	(3,261)
Actuarial requirements	—	(319,791)	—	322,764	(2,973)
Other	—	(2,575)	2,613	(38)	—
Net transfers between reserves	—	(1,157,006)	(153,360)	1,264,761	45,605
Fund balance at beginning of year	15,885,767	6,740,158	3,458,222	5,489,181	198,206
Fund balance at end of year	\$17,597,400	\$7,443,943	\$3,771,931	\$6,157,432	\$224,094

See accompanying notes to financial statements.

Financial Section

Statements of Revenues, Expenses and Changes in Fund Balance (Continued)
 Years ended June 30, 1991 and 1990
 (Amounts in Thousands)

	Year ended June 30, 1990				
	Total	State Accumulation Account	Members' Savings Account	Reserve for Retirement	Reserve for Disabilities
Revenue:					
Contributions:					
Employers	\$ 545,181	\$ 545,181	\$ —	\$ —	\$ —
Employes	311,434	—	311,434	—	—
Commonwealth of Pennsylvania	541,266	541,266	—	—	—
	1,397,881	1,086,447	311,434	—	—
Investment revenue, net of related expenses (note 4)	1,431,387	1,006,108	129,986	285,237	10,056
Total revenue	2,829,268	2,092,555	441,420	285,237	10,056
Expenses:					
Benefits	915,414	—	—	887,065	28,349
Refunds	11,177	—	11,177	—	—
Net transfers to (from) State Employees' Retirement System	2,566	5,764	(3,198)	—	—
Administrative expenses	13,598	13,598	—	—	—
Total expenses	942,755	19,362	7,979	887,065	28,349
Excess (deficiency) of revenues over expenses	1,886,513	2,073,193	433,441	(601,828)	(18,293)
Transfers between reserves for:					
Retirements by members	—	(820,410)	(150,504)	927,657	43,257
Annuitants who returned to service	—	9,017	322	(5,076)	(4,263)
Actuarial requirements	—	(98,728)	—	104,239	(5,511)
Other	—	(4,019)	3,905	114	—
Net transfers between reserves	—	(914,140)	(146,277)	1,026,934	33,483
Fund balance at beginning of year	13,999,254	5,581,105	3,171,058	5,064,075	183,016
Fund balance at end of year	\$15,885,767	\$6,740,158	\$3,458,222	\$5,489,181	\$198,206

See accompanying notes to financial statements.

Notes to Financial Statements
 June 30, 1991 and 1990

(1)

Organization and Description of the System

(a) Organization

The Commonwealth of Pennsylvania Public School Employees' Retirement System (the "System") was established as of July 18, 1917, under the provisions of P.L. 1043, No. 343. The System is a cost-sharing multiple-employer plan and its designated purpose is to provide retirement allowances and other benefits to members. Membership in the System is mandatory for substantially all full-time public school employes in the Commonwealth. At June 30, 1991 there were 632 reporting units, generally school districts. Membership as of June 30, 1990, the most recent year for which actual amounts are available, consisted of:

Retirees and beneficiaries currently receiving benefits and terminated employes entitled to, but not receiving benefits	<u>132,000</u>
Currently employed members:	
Vested	125,000
Nonvested	<u>76,000</u>
	<u>201,000</u>

All members are fully vested in their individual balance in the Members' Savings Account which is described in note 3(b).

Responsibility for the organization and administration of the System is vested in the Board of Trustees.

The System, based primarily upon the criterion of financial interdependency, is considered a component unit of the Commonwealth of Pennsylvania financial reporting entity and is included in the Comprehensive Annual Financial Report of the Commonwealth of Pennsylvania.

(b) Benefits

Significant amendments to the System were made in the 1975 revision of the PA Public School Employees' Retirement Code ("the Code") by the Pennsylvania General Assembly. Under the provisions of the Code, members are eligible for monthly retirement benefits upon reaching (a) age 62; (b) age 60 and 30 or more years of service or; (c) 35 or more years of service regardless of age. For a period expiring September 30, 1993, the Code

currently permits school employes with at least 30 years of credited service to retire without a reduction in benefits. This so-called "early retirement window" does not require a minimum age in conjunction with length of service for a member to be eligible for full benefits.

Such benefits are generally equal to 2 percent of the member's final average salary (as defined) multiplied by the number of years of credited service. After completion of 10 years of service, a member's right to the defined benefit is vested and early retirement benefits may be elected. Under certain features of the System, active members may purchase credit for types of prior educational or military service on a lump-sum or installment purchase basis.

In addition to regular retirement benefits, the System also provides for disability retirement benefits and death benefits. Participants are eligible for disability retirement benefits after completion of 5 years of eligible service. Such benefits are equal to 2 percent of the member's final average salary (as defined) multiplied by the number of years of credited service, but not less than one third of such salary, nor greater than the benefit the member would have had at superannuation retirement age.

Death benefits are payable upon the death of an active member who has reached age 62 or who has at least 10 years of eligible service. Such benefits are actuarially equivalent to the benefit which would have been effective if the member had retired on the day before death.

Members with credited service in the State Employees' Retirement System may elect to transfer such service to the Public School Employees' Retirement System upon commencement of employment in the public school system. Similarly, a member with credited service in the System may transfer such service to the State Employees' Retirement System upon becoming a member of that system.

Upon termination of a member's employment in the public school sector, the member's accumulated contributions plus interest are refundable from the Members' Savings Account.

(c) Contributions

The contribution policy is set by the Code and requires contributions by active members, employers and the Commonwealth. The rate of contribution for most active members was set by law at 5.25 percent of the member's compensation. For members joining the System on or after July 22, 1983, the rate of contribution is 6.25 percent. The contributions required of employers and the Commonwealth are based upon an actuarial valuation.

Notes to Financial Statements (Continued)

using the "entry age normal" method, computed as a percentage of the total compensation of all active members during the period for which the amount is determined. The combined amounts required from the employers and Commonwealth were 19.18 percent and 19.68 percent of active member payroll for the years ended June 30, 1991 and 1990, respectively, and consisted of:

	(Amounts in Thousands)			
	1991 Amount	% of Current Covered Payroll	1990 Amount	% of Current Covered Payroll
Employer normal cost	\$ 493,038	8.28	\$ 465,936	8.44
Amortization of unfunded actuarial accrued liability	435,279	7.31	409,626	7.42
Amortization of supplemental annuities	213,769	3.59	210,885	3.82
	\$1,142,086	19.18	\$1,086,447	19.68

For the year ended June 30, 1991, contributions were made in accordance with the actuarially determined amounts. Employers and the Commonwealth share such cost equally. For the fiscal year ended June 30, 1991, employers contributed \$571,228,000 and the Commonwealth contributed \$570,858,000 to the System. The difference between these two amounts results from timing differences in cash payments to the System. The Commonwealth contribution approximates 10 percent of current covered payroll and includes two payments of \$142,714,500 due April 30, 1991 and July 31, 1991, respectively, which had not been received by June 30, 1991. The estimated covered payroll for the year ended June 30, 1991 was approximately \$5,954,562,000.

Effective July 1, 1991, the combined contribution rate was decreased to 14.90 percent of covered payroll. The rate of 14.90 percent is comprised of a pension contribution rate of 14.40 percent for pension benefits plus a health care contribution rate of .50 percent for health insurance premium assistance. The decrease in the pension contribution rate is primarily comprised of the following:

- (1) a 2.3 percent decrease due to the revision in economic assumptions adopted as of the June 30, 1990 valuation (see note 1(d));
- (2) a 2.2 percent decrease due to the rescheduling of the amortization of the unfunded liability and supplemental annuity payments over a period of 20

years from July 1, 1991 (compared to 17.2 years in the prior actuarial valuation).

(d) Actuarial Valuation

The contribution policy requires employers and the Commonwealth to make a normal contribution and a past service contribution as determined by a qualified actuary. The System's actuary uses the "entry age normal" method to determine normal costs. As of June 30, 1990, the date of the most recent actuarial report, the actuary computed that, utilizing the present method of funding, the unfunded actuarial accrued liability for prior service decreased by \$2,189,080,000 from the prior year and was \$5,028,484,000. The actuary calculates that the average funding period to amortize total unfunded accrued and supplemental annuity liabilities is 20 years as of July 1, 1991.

Such liability includes \$109,831,000 as of June 30, 1990 and 1989, related to unaccrued interest receivable on Commonwealth contributions which were not paid on a timely basis. Such interest receivable relates to an underfunding of Commonwealth contributions for fiscal years ended June 30, 1970 to 1973, and is not recorded on the System's financial statements. However, the System's actuary considers the interest receivable an asset in the calculation of the actuarial valuation.

Significant assumptions underlying the actuarial computations include: (a) assumed rate of return on investments of 8.50 percent; (b) assumed rate of salary increases of 7.5 percent (allowance for inflation of 4 percent, national productivity of 1 percent and merit or seniority increases averaging 2.5 percent); (c) assets valued at cost; (d) no post-retirement benefit increases assumed in the future; and (e) mortality, vesting, retirement age and withdrawal estimates based on tables furnished by the actuary.

The actuarial valuation as of June 30, 1990 included the following amendments to the System as mandated by Act 23 of 1991.

For the fiscal year beginning July 1, 1991, employer contributions to amortize the unfunded liability on account of active members and supplemental annuity payments to annuitants are to be rescheduled over a period of 20 years from July 1, 1991, with each subsequent annual payment to be 5 percent greater than the previous fiscal year.

A health insurance premium assistance program was established effective July 1, 1991 for all eligible annuitants who elect to participate. Under this provision, an employer contribution rate for premium assistance is to be established for the fiscal year beginning July 1, 1991 in order to provide reserves in the Health Insurance Account as of June 30, 1992 which are sufficient for the payment of premium assistance during the fiscal year beginning July 1, 1992. Effective July 1, 1992, participating eligible annuitants are to receive premium

Notes to Financial Statements (Continued)

assistance payments equal to the lesser of \$55 per month, or the actual monthly premium.

Effective with the June 30, 1990 actuarial valuation, the economic assumptions were revised to implement the use of an interest rate of 8.5 percent per annum compounded annually and projected annual salary increases of 7.5 percent, as adopted by the Board of Trustees. Comparative assumptions used in the June 30, 1989 actuarial valuation were an interest rate of 5.5 percent and annual salary increases ranging from 6.99 percent at age 25 to 1.89 percent at age 69.

(2)

Summary of Significant Accounting Policies

The financial statements of the System are prepared on the accrual basis of accounting and conform to generally accepted accounting principles. In order to assist the reader in understanding the accompanying financial statements, a summary of the more significant accounting policies is presented below:

(a) Investments

Income on investments is primarily recognized on the accrual basis. Income on certain other long-term investments is recognized when received, which is not materially different than that recognized on the accrual basis. Gains and losses on sales of investments are recognized on the trade date.

Corporate and government bonds with fixed maturities are reported at cost as of the trade date of the transaction.

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.

Mortgage investments are carried at the amount of the unpaid principal balance of the loan.

Other long-term investments are carried at cost as of the trade date.

Investments which have incurred other than temporary declines are written down to market value and losses are charged against investment income.

Short-term investments, principally investments in the state treasury investment pool and global investments, are carried at cost, which approximates market value.

(b) Fixed Assets

Fixed assets, consisting primarily of data processing equipment, are carried at cost. The System depreciates fixed assets by the straight-line method over an estimated useful life of seven years.

(c) Federal Income Tax Status

During the years ended June 30, 1991 and 1990, the System qualified under the provisions of Section 501(a) of the Internal Revenue Code and was exempt from Federal income taxes.

(d) Compensated Absences

The System records a liability for employees' vacation and sick pay as earned.

(3)

Description of Funds

The Code requires the following funds to be maintained by the System:

(a) State Accumulation Account

The State Accumulation Account is credited with the contributions of the Commonwealth and the employers. Additionally, interest earnings of the System (after crediting the Members' Savings Account with the 4 percent interest and the reserves for retirement and disabilities with 5.50 percent interest) are credited to this account. Each year, the amounts necessary, as determined by the actuary for the payment of retirement and death benefits, are transferred from the State Accumulation Account to the Reserve for Retirement and Reserve for Disabilities. All administrative expenses necessary for the operation of the System are paid from the State Accumulation Account.

(b) Members' Savings Account

The Members' Savings Account is credited with all contributions made by active members of the System. Interest is added to the member's individual account at an annual rate of 4 percent.

Upon death or retirement of a member the accumulated contributions plus interest are transferred to the Reserve for Retirement or Reserve for Disabilities for subsequent payment of benefits.

(c) Reserve for Retirement

The Reserve for Retirement represents the amounts transferred from the Members' Savings and State Accumulation accounts, plus additional contributions made by the Commonwealth and employers for the payment of supplemental annuities and cost-of-living increases. All death and retirement benefits are paid from this reserve. Annual interest of 5.50 percent is credited to the Reserve for Retirement.

Notes to Financial Statements (Continued)

(d) Reserve for Disabilities

The Reserve for Disabilities represents the amounts transferred from the Members' Savings and State Accumulation accounts, plus additional contributions made by the Commonwealth and employers for the payment of supplemental annuities and cost-of-living increases. All disability benefits are paid from this reserve. Annual interest of 5.50 percent is credited to the Reserve for Disabilities.

(4)
Investments

The Board of Trustees (the "Board") has the exclusive responsibility to invest and reinvest available funds of the System, in accordance with the guidelines and limitations set forth in the Code and other applicable state law. The Board accomplishes the daily management of the System's investments through investment advisors who act as agents for the System and through internal investment managers. Under the Code the Board may make investments in U.S. government and agency obligations, common and preferred stocks, mortgages, real estate, venture capital, and to the extent of not more than 10 percent of the book value of System assets, other prudent investments not otherwise specifically authorized, all in such manner as to maximize return while maintaining a sound portfolio within the guidelines of the Code. By law, investments in common stock are limited to 50 percent of the total assets of the System. Additionally,

the amount invested in common stock of any one entity may not exceed 2 percent of the book value of the assets of the System at the date of purchase, nor may the System own more than 5 percent of the total issued and outstanding common stock of any entity. Under other applicable state law, the Board may also invest System funds in state, municipal, public authority, corporate, and other qualified debt obligations.

The System's investments are categorized below to give an indication of the level of risk assumed by the System at June 30, 1991. In accordance with a contractual relationship between the Commonwealth's Treasury Department and a custodial agent, substantially all investments subject to categorization are held in book-entry form in the Commonwealth's name. Therefore, all such investments as well as certain securities physically held at the Commonwealth's Treasury Department are reflected in Category 1, which is defined as insured or registered investments or investments for which the securities are held by the System or its agent in the System's name.

Investments may also be categorized as Category 2, which is defined as uninsured or unregistered investments for which the securities are held by a financial institution's trust department or agent in the System's name, and Category 3, which is defined as uninsured or unregistered investments for which the securities are held by the broker or dealer or by its agent but not in the System's name. The System has no investments which would be classified in Categories 2 or 3. However, the System does have investments which are not in any of the three defined categories, because the securities are not used as evidence of the investment. Such investments are separately identified.

	Category 1	Not Categorized (Amounts in Thousands)	Market Value
U.S. Government and agency obligations	\$ 4,241,377	\$ —	\$ 4,332,060
Corporate and municipal bonds	1,023,245	—	1,030,972
Convertible bonds	71,871	—	67,719
Common stock	6,151,563	—	7,108,632
Preferred stock	50,348	—	51,360
Mortgage backed securities	2,625,389	—	2,688,450
FHA/VA residential mortgages	124,594	—	113,318
FHA project mortgages	31,926	—	24,799
Adult communities	50,000	—	50,000
Miscellaneous fixed income	152,067	—	153,162
Real estate owned	225,200	—	181,458
Equity real estate	319,238	—	306,064
Equity participating mortgages	94,035	—	104,675
Farmland investments	52,248	—	52,248
Global fixed income	562,049	—	541,474
Global equity	252,719	—	239,656
Global pooled short-term investments	—	383,184	381,445
Venture capital	—	68,788	68,788
Pa. Treasury pooled short-term investment fund	—	579,557	579,557
	\$16,027,869	\$1,031,529	\$18,075,837

Notes to Financial Statements (Continued)

A summary of investment securities as of June 30, 1991 and 1990 and the approximate market values follows:

	(Amounts in Thousands)			
	1991 Book Value	1991 Market Value	1990 Book Value	1990 Market Value
Fixed income and mortgage investments:				
Domestic portfolio:				
U.S. Government and agency obligations	\$ 4,241,377	\$ 4,332,060	\$ 3,971,047	\$ 3,992,356
Mortgage backed securities	2,625,389	2,688,450	2,425,260	2,445,387
Corporate bonds	1,023,245	1,030,972	1,375,858	1,365,090
Miscellaneous fixed income	152,067	153,162	156,185	155,803
Adult communities	50,000	50,000	—	—
FHA/VA residential mortgages	124,594	113,318	143,517	129,863
Equity participating mortgages	94,035	104,675	94,244	102,418
Convertible bonds	71,871	67,719	100,204	98,070
FHA project mortgages	31,926	24,799	32,946	25,508
Global portfolio	562,049	541,474	226,010	228,055
	8,976,553	9,106,629	8,525,271	8,542,550
Common and preferred stocks:				
Domestic portfolio:				
Common stock	6,151,563	7,108,632	5,019,989	5,969,198
Preferred stock	50,348	51,360	50,093	48,351
Global portfolio	252,719	239,656	74,647	75,294
	6,454,630	7,399,648	5,144,729	6,092,843
Other long-term investments:				
Real estate owned	225,200	181,458	214,776	214,661
Equity real estate	319,238	306,064	318,258	363,016
Venture capital	68,788	68,788	68,207	68,207
Farmland investments	52,248	52,248	50,000	50,000
	665,474	608,558	651,241	695,884
Short-term investments:				
Domestic portfolio:				
Pa. Treasury short-term investment fund	579,557	579,557	1,065,680	1,065,680
Global portfolio	383,184	381,445	139,113	140,996
	962,741	961,002	1,204,793	1,206,676
	\$17,059,398	\$18,075,837	\$15,526,034	\$16,537,953

Notes to Financial Statements (Continued)

In accordance with contracts between the Commonwealth and the custodial agent, the System participates in a securities lending program, whereby System securities are transferred to an independent broker or dealer in exchange for collateral equal to 102 percent of the market value of securities on loan. Securities under loan are maintained on the System's financial records and

are classified in the preceding summary of investment risk. As the System does not trade or sell the collateral received in the securities lending program, such collateral is not considered an asset of the System and a corresponding liability is not required on the balance sheet.

The System has authorized investment managers to write covered call stock index options up to an amount of \$1,300,000,000 of the equity portfolio.

The major components of investment revenues for the years ended June 30, 1991 and 1990 are as follows:

	(Amounts in Thousands)	
	1991	1990
Fixed income and mortgage investments	\$ 725,726	\$ 594,520
Common and preferred stocks	209,385	208,784
Other long-term investments	37,545	45,048
Short-term investments	86,484	152,058
Stock index option writing gain (loss)	(14,325)	9,658
Securities lending income	3,287	2,680
	1,048,102	1,012,748
Net amortized discount (premium)	(224)	(224)
Net gain on investment transactions	199,040	448,556
Total investment revenues before investment expenses	1,246,918	1,461,080
Investment expenses	(33,109)	(29,693)
Net investment revenues	\$1,213,809	\$1,431,387

Investment expenses are primarily composed of investment management fees.

The amounts for investment expenses do not reflect \$1,344,000 and \$853,000 in 1991 and 1990, respectively, which were paid on behalf of the System through the use of directed commissions. Additionally, the amounts do not include a portion of master trust fees which were paid through interest earnings on trades funded prior to settlement. The amount of master trust fees not reflected in investment expenses was \$143,000 and \$231,000 in 1991 and 1990, respectively.

During the fiscal year ended June 30, 1991, the System owned no securities issued by school districts, the Commonwealth, or any related parties and made no loans to school districts, the Commonwealth, or any related party.

The System owned and held during the fiscal year certain temporary loan notes of the City of Philadelphia, Pennsylvania ("City"). The System believes that the City is not a party "related" to it within the meaning of applicable provisions of the Internal Revenue Code. However, in purchasing the City's notes the System treated the City as though it were related to the System for the sole purpose of bringing the System into compliance with "safe-harbor" provisions of the "prohibited transaction" rules of the Internal Revenue Code and U.S. Treasury regulations thereunder, in the event it should subsequently be determined that the System's purchase of the notes constituted a transaction with a related party. Such notes were paid in full during the fiscal year and none of the City's temporary loan indebtedness to the System remained outstanding at June 30, 1991.

(5)

Funding Status and Progress

The amount shown on the following page as "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 the System's funding status on a going-concern basis, assess progress made in accumulating sufficient

Notes to Financial Statements (Continued)

assets to pay benefits when due, and make comparisons among public employe retirement systems. The measure is independent of the actuarial funding method used to determine contributions to the System, discussed in notes 1(c) and 1(d).

The pension benefit obligation was determined as part of an actuarial valuation at June 30, 1990, the date of

the most recent actuarial report. Significant actuarial assumptions used include: (a) a rate of return on the investment of present and future assets of 8.50 percent per year compounded annually; (b) projected salary increases of 7.50 percent (allowance for inflation of 4 percent, national productivity of 1 percent and merit or seniority increases averaging 2.5 percent); and (c) no postretirement benefit increases.

At June 30, 1990, the unfunded pension benefit obligation was \$3,597,875,000 as follows:

(Amounts in Thousands)	
Pension benefit obligation:	
Annuitants and survivor annuitants currently receiving benefits, and terminated members not yet receiving benefits	\$ 6,123,851
Current members:	
Accumulated member contributions with interest	3,271,575
System-financed vested	3,072,800
System-financed nonvested	7,015,416
Total pension benefit obligation	19,483,642
Less: Net assets available for benefits, at cost (market value is \$16,897,686,000)	15,885,767
Unfunded pension benefit obligation	\$ 3,597,875

The revisions in the assumptions as discussed in note 1(d) had the effect of decreasing the unfunded pension benefit obligation of the System by \$1,962,700,000 compared to the prior year.

(6)
Relationships With Other Commonwealth Agencies

The System is established by state law as an independent administrative board of the Commonwealth of Pennsylvania, which is directed by a governing board which exercises control and management of the System, including the investment of its assets. The System's Board has fifteen members including the Commonwealth's Secretary of Education, the State Treasurer, the Executive Secretary of the Pennsylvania School Boards Association, two members appointed by the Governor, six elected members (three from among the System's professional members, one from among the System's nonprofessional members, one from among the System's annuitants, and one from among school board members in Pennsylvania), and two members from the Senate and two members from the House of Representatives.

The Treasurer of the Commonwealth of Pennsylvania is the custodian of the Public School Employees' Retirement Fund. The retirement plan of the System is a contributory defined benefit plan for which the benefit

payments to members and contribution rates by employers and employees are specified in state law. The Commonwealth's contribution is disbursed to the Department of Education and the Department remits the contribution to the System in quarterly installments. Changes in benefit and contribution provisions for each retirement plan must be made by legislation. Under statutory provision, all legislative bills and amendments proposing to change the System's retirement plan are to be accompanied with an actuarial note prepared by an enrolled pension actuary providing an estimate of the cost and actuarial effect of the proposed change.

(7)
Litigation and Contingencies

The System is subject to various threatened and pending lawsuits which deal with the question of benefit eligibility. It is the opinion of management that the ultimate liability arising from such litigation and threats of litigation will not have a material effect on the financial statements of the System.

Notes to Financial Statements (Continued)

(8)
Commitments

The System has commitments to fund various venture capital partnerships which amounted to \$24.4 million at June 30, 1991.

(9)
Ten-Year Historical Trend Information

Ten-year historical trend information designed to provide information about the System's progress made in accumulating sufficient assets to pay benefits when due is presented in Schedules 1 and 2.

Schedule 1
Analysis of Funding Progress
Years Ended June 30, 1986 through 1990

(Dollar Amounts in Millions)

	(1)	(2)	(3)	(4)	(5)	(6)
Valuation As of 6/30*	Net Assets Available for Benefits	Pension Benefit Obligation	Percentage Funded (1) ÷ (2)	Unfunded Pension Benefit Obligation (2) — (1)	Annual Covered Payroll	Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll (4) ÷ (5)
(A) 1990	\$15,885.8	\$19,483.6	81.53%	\$3,597.8	\$5,363.5	67.08%
1989	13,999.3	19,601.4	71.42%	5,602.2	5,055.8	110.81%
1988	12,434.5	18,086.5	68.81%	5,652.0	4,641.9	121.81%
1987	11,041.4	16,366.1	67.51%	5,324.7	4,415.1	120.61%
1986	9,348.5	14,870.9	62.91%	5,522.4	4,159.1	132.81%

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

(A) Reflects revisions in assumptions as discussed in note 1(d)

*Information prior to 1986 is unavailable.

Schedule 2
Revenues by Source and Expenses by Type
Years ended June 30, 1982 through 1991
(Dollar Amounts in Thousands)

Revenues by Source

Fiscal Year	Employees Contributions	Employers and Commonwealth Contributions		Investment Revenues	Total Revenues
		Dollar Amount	Percentage of Total Payroll		
1991	\$337,768	\$1,142,086	19.18%	\$1,213,809	\$2,693,663
1990	311,434	1,086,447	19.68%	1,431,387	2,829,268
1989	287,803	989,510	19.27%	1,173,176	2,450,489
1988	275,994	932,532	19.54%	978,063	2,186,589
1987	250,420	888,260	19.90%	1,359,118	2,497,798
1986	228,760	831,840	20.04%	1,119,487	2,180,087
1985	217,946	763,488	19.31%	785,867	1,767,301
1984	197,096	608,617	17.06%	594,135	1,399,848
1983	184,639	541,109	16.00%	559,355	1,285,103
1982	180,562	501,025	15.00%	435,888	1,117,475

Expenses by Type

Fiscal Year	Benefits	Disabilities	Lump-Sums and Installments	Refunds	Administrative	Net Transfers	Total Expenses
1991	\$792,855	\$30,940	\$124,003	\$11,173	\$13,628	\$ 9,431	\$982,030
1990	774,445	28,349	112,620	11,177	13,598	2,566	942,755
1989	709,726	25,382	116,200	12,134	11,055	11,281	885,778
1988	652,258	23,334	76,642	12,684	10,196	18,332	793,446
1987	623,576	22,084	131,683	11,374	9,507	6,658	804,882
1986	585,122	21,835	77,553	12,710	8,506	8,863	714,589
1985	560,484	20,781	75,061	13,623	7,992	4,118	682,059
1984	501,434	19,069	70,785	14,684	6,955	6,677	619,604
1983	476,714	17,564	85,461	18,539	8,219	6,579	613,076
1982	450,863	18,795	53,199	19,206	5,892	5,052	553,007

Schedule 3
Administrative Expenses
Years ended June 30, 1991 and 1990
(Dollar Amounts in Thousands)

	1991		1990	
	Actual	Budget	Actual	Budget
Personnel costs:				
Salaries and wages	\$ 6,254		\$ 5,745	
Social security contributions	671		631	
Retirement contributions	721		710	
Employees' insurance contributions	843		809	
Other employe benefits	146		193	
Total personnel costs	8,635	\$ 9,018	8,088	\$ 8,314
Operating costs:				
Auditor General services	—		2	
Treasury services	545		507	
Civil Service Commission services	26		25	
Classification and pay services	6		5	
Purchasing services	5		9	
Consultant fees	10		9	
Legal fees	41		45	
Specialized services	292		248	
Printing	234		145	
Postage	474		659	
Telephone and telegraph	197		140	
Dues and subscriptions	22		22	
Electricity	57		78	
Motorized equipment supplies and repair	9		8	
Travel	251		223	
Contracted maintenance services	472		411	
Rental of real estate	816		788	
Rental of equipment	36		90	
Office supplies	178		427	
Miscellaneous expenses	63		48	
Total operating costs	3,734	4,450	3,889	4,725
Fixed charges:				
Furniture and equipment	169		565	
Depreciation	1,090		1,056	
Total fixed charges	1,259	1,648	1,621	2,190
Total administrative expenses	\$13,628	\$15,116¹	\$13,598	\$15,229²

¹ Includes \$14,285,000 related to the 1990-91 appropriation and \$831,000 related to the 1989-90 appropriation.

² Includes \$13,757,000 related to the 1989-90 appropriation and \$1,472,000 related to the 1988-89 appropriation.

Schedule 4
Summary Schedule of Cash Receipts and
Disbursements

Years ended June 30, 1991 and 1990
(Dollar Amounts in Thousands)

	<u>1991</u>	<u>1990</u>
Cash balance at beginning of year	\$ 4	\$ 3
Add cash receipts:		
Investment sales and maturities	23,990,803	17,325,916
Contributions:		
Employers	551,928	529,151
Employes	336,355	309,923
Commonwealth of Pennsylvania	420,746	535,110
Interest and dividends	1,061,597	1,052,532
Transfers from State Employees' Retirement System	3,618	1,695
Refund of expenditures	5,033	4,957
Other receipts	683	2,090
Total cash receipts	26,370,763	19,761,374
Less cash disbursements:		
Investment purchases	25,361,067	18,776,104
Benefit payments	947,060	917,083
Refunds	11,509	11,485
Transfers to State Employees' Retirement System	5,550	10,653
Administrative expenses	13,737	13,977
Other disbursements	31,838	32,071
Total cash disbursements	26,370,761	19,761,373
Cash balance at end of year	\$ 6	\$ 4

ACTUARIAL SECTION



Actuary's Certification Letter

BUCK CONSULTANTS

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

August 11, 1991

Retirement Board
Public School Employees'
Retirement System of Pennsylvania
P.O. Box 125
Harrisburg, Pennsylvania 17108

Ladies and Gentlemen:

We have completed the annual actuarial valuation of the Public School Employees' Retirement System of Pennsylvania as of June 30, 1990. The valuation was prepared on the basis of the data submitted by the Retirement System and the recent revisions to the actuarial assumptions adopted by the Retirement Board, and reflects the benefits in effect on the valuation date.

The valuation took into account the following provisions of Senate Bill 405:

- (1) For the fiscal year beginning July 1, 1991, employer contributions to amortize the unfunded liability on account of active members and supplemental annuity payments to annuitants are to be rescheduled over a period of 20 years from July 1, 1991, with each subsequent annual payment to be 5 percent greater than the previous fiscal year.
- (2) A health insurance premium assistance program was established effective July 1, 1991 for all eligible annuitants who elect to participate. Under this provision, an employer contribution rate for premium assistance is to be established for the fiscal year beginning July 1, 1991 in order to provide reserves in the Health Insurance Account as of June 30, 1992 which are sufficient for the payment of premium assistance during the fiscal year beginning July 1, 1992. Effective July 1, 1992, participating eligible annuitants are to receive premium assistance payments equal to the lesser of \$55 per month, or the actual monthly premium.

Effective with the June 30, 1990 actuarial valuation, the economic assumptions were revised to implement the use of an interest rate of 8½ percent per annum compounded annually and projected annual salary increases of 7½ percent, as adopted by the Board resolution of May 15, 1991.

Financing Objective and Employers' Contribution Rate

The financing objective of the System is to:

- (a) Fully fund all current costs based on the normal contribution rate determined under the funding method; and
- (b) liquidate all unfunded accrued and supplemental annuity liabilities based on the amortization schedules set forth in the retirement code, i.e., a schedule of 20 years for each change in the unfunded liability.

On the basis of the current valuation, the total contribution rate payable by the employers for the year commencing July 1, 1991 should be set equal to 14.90 percent of payroll. The rate of 14.90 percent is comprised of a pension contribution rate of 14.40 percent for pension benefits plus a health care contribution rate of .50 percent for premium assistance.

The total contribution rate of 14.90 percent of payroll payable by the employers, when taken together with the contributions payable by the members, is sufficient to achieve the financing objective set forth above.

When compared with the previous year's employers' pension contribution rate of 19.18 percent, the current employers' pension contribution rate of 14.40 percent shows a decrease of 4.78 percent from the prior year. It should be noted that 2.3 percent of this decrease is on account of the revision in economic assumptions adopted as of this valuation, 2.2 percent is on account of the rescheduling of amortization payments over a period of 20 years from July 1, 1991, and the balance of .28 percent is on account of the System's experience during fiscal 1990.

Commonwealth's Assets and Participant Data

The individual data for members of the System as of the valuation date were reported to the actuary by the Retirement System. While the actuary did not verify the data at their source, he did perform tests for internal consistency and reasonability in relation to the data submitted for the previous valuation. It is our understanding that the outside auditor of the System has also made an examination of the data.

A statement of the net assets of the System, and the revenue and expenses of the System for the fiscal year ending on the valuation date was supplied to the actuary by the Retirement System.

The actuary included in the assets an amount of \$109,831,000 representing the accumulated interest receivable on the Commonwealth's deficiency in contributions. The Board decided to freeze the accumulated interest receivable as of June 30, 1985 at the then current amount of \$109,831,000, until the issue of removing this receivable item from the valuation balance sheet is resolved.

Actuarial Assumptions and Methods

The rates of separation and mortality after retirement used in the valuation were those adopted by the Retirement Board upon the recommendation of the actuary. An interest rate of 8½ percent was used in the valuation, together with assumed projected annual salary increases of 7½ percent, as adopted by the Board resolution of May 15, 1991. In our opinion, the actuarial assumptions used in the valuation are, in the aggregate, reasonable.

As a result of the revisions in economic assumptions effective June 30, 1990, the normal contribution rate of the System is reduced by .31 percent and the unfunded liability of the System is reduced by \$2,238,726,000 as of June 30, 1990.

The actuarial cost method utilized is the entry age normal method with open-end accrued liability, as specified in the Statutes. The application of the method produces a rate of employer contribution which should remain fixed as a level percentage of payroll for each individual member included in the valuation. The rate of contribution determined under the method covers both the normal costs of the System on account of currently accruing benefits and the amortization of the total unfunded accrued liability of the System over 20 years from July 1, 1991.

For valuation purposes, the assets of the System were taken at book value.

Unfunded Accrued Liability

The unfunded accrued liability represents the present value of the portion of benefits accrued to the valuation date in respect of active members, annuitants, and survivor annuitants, adjusted for experience gains and losses, which is not covered by the current assets of the System. Under the entry age normal cost method used for valuation purposes, the unfunded accrued liability is determined as the present value of total prospective benefits payable, less the current assets of the System, less the present value of prospective normal contributions payable.

As of June 30, 1990, the total unfunded accrued liability amounted to \$4,918,653,000. The unfunded amount of \$4,918,653,000 reflects the reduction of \$2,238,726,000 as of June 30, 1990 which arises as a result of the revisions in economic assumptions effective June 30, 1990.

Funding Adequacy

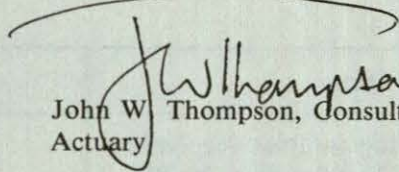
The results of the valuation indicate that the rates of contribution payable by members and employers, when taken together with the current assets of the System, are adequate to fund the actuarial liabilities on account of all benefits payable under the System.

Financial Results and Membership Data

Detailed summaries of the financial results of the valuation and membership data used in preparing the valuation are shown in the schedules which are presented in the body of the report.

The Table of Contents, which immediately follows, indicates the section and page where each schedule is shown.

Respectfully submitted,



John W. Thompson, Consulting
Actuary

Actuarial Valuation

June 30, 1990

Section I — Financial Results

Section I of this report summarizes the major financial results developed in the valuation as well as the actuarial methods and assumptions used.

Schedule I

Summary of Principal Results (Dollar Amounts in Thousands)

Valuation Date	6/30/90	6/30/89
Assets at book value (including interest receivable from State of \$109,831 at 6/30/90 and 6/30/89)	\$15,995,598	\$14,109,085
Employer contribution rate:		
Normal	8.00%	8.28%
Unfunded liability	<u>6.40</u>	<u>10.90</u>
Total pension contribution rate	14.40%	19.18%
Health care contribution rate	<u>.50</u>	<u>—</u>
Total employer rate	14.90%	19.18%
	(Fiscal year: 1991/92)	(Fiscal year: 1990/91)
Member average contribution rate	5.46%*	5.69%*
Total contribution rate (member plus employer)	20.36%	24.87%
Unfunded liability	\$4,918,653	\$7,107,733
Unfunded liability funding period	20.0 years (From July 1, 1991)	3 to 29 years (Average 17.2 years)

*Average weighted member contribution rate.

Schedule II
Valuation Balance Sheet
As of June 30, 1990
(Dollar Amounts in Thousands)

Assets		
Current assets:		
Members' Savings Account	\$ 3,458,222	
Annuity Reserve Account	6,007,178	
State Accumulation Account	<u>6,530,198</u>	
Total Current Assets		\$ 15,995,598
Future assets:		
Member contributions		3,584,622
Employer contributions:		
Normal		5,252,194
Unfunded liability		<u>4,918,653</u>
Total Assets		\$ 29,751,067
Liabilities		
Active membership:		
Benefits payable on account of:		
Member contributions		
accumulated to date	\$ 3,458,222	
Future member contributions	<u>3,584,622</u>	7,042,844
Remaining benefits payable to produce 2% benefit formula amounts	<u>16,701,045</u>	\$ 23,743,889
Retired membership:		
Benefits payable to annuitants and survivor annuitants		<u>6,007,178</u>
Total Liabilities		\$ 29,751,067

Schedule III
Increase (Decrease) in Unfunded Accrued
and Supplemental Annuity Liability

Year Ended June 30, 1990
(Dollar Amounts in Millions)

(1) Unfunded liability as of 6/30/89		\$ 7,107.7
(2) Interest at 5½ percent for 1 year		\$ 390.9
(3) Unfunded liability contribution with interest for ½ year		\$ 638.5
(4) Expected unfunded liability as of 6/30/90 = (1) + (2) - (3)		\$ 6,860.1
(5) Unfunded liability as of 6/30/90		\$ 4,918.7
(6) Increase (decrease) from expected		\$ (1,941.4)
(7) Explanation of net increase (decrease):		
(a) Experience:		
Interest surplus	\$ (634.9)	
Salary increases above expected	715.2	
Retirement and other separations	103.6	
Pensioners' mortality experience	(22.6)	
Other	<u>136.0</u>	
Net experience loss (gain)		\$ 297.3
(b) Revised actuarial assumptions		\$ (2,238.7)
Total net increase (decrease)		\$ (1,941.4)

Schedule IV

Relationship Between Accrued Liabilities
and Assets of System Over Last 10 Years
(Dollar Amounts in Thousands)

Valuation As of June 30	Aggregate Accrued Liabilities For:			Reported Assets**	Portion of Accrued Liabilities Covered By Reported Assets		
	(1) Active Member Contributions	(2) Annuity and Beneficiaries	(3) Active Members (Employer Fin- anced Portion)*		(1)	(2)	(3)
1990	\$3,458,222	\$6,007,178	\$11,448,851	\$15,995,598	100.0%	100.0%	57.0%
1989	3,171,058	6,670,207	11,375,553	14,109,085	100.0	100.0	37.5
1988	2,921,143	6,416,543	10,164,007	12,544,374	100.0	100.0	31.5
1987	2,668,271	5,740,249	9,003,259	11,151,231	100.0	100.0	30.5
1986	2,464,839	5,348,751	8,181,910	9,458,315	100.0	100.0	20.1
1985	2,274,834	4,950,826	7,332,210	7,992,817	100.0	100.0	10.5
1984	2,085,294	4,822,488	6,712,779	6,897,484	100.0	99.8	0.0
1983	1,919,861	4,361,033	5,987,048	6,109,592	100.0	96.1	0.0
1982	1,868,012	4,031,176	5,465,494	5,977,119	100.0	100.0	1.4
1981	1,717,739	3,876,225	5,042,226	5,399,010	100.0	95.0	0.0

* Equal to active members' liabilities (employer financed portion) less present value of future normal contributions based on new entrant normal rate.

**Includes interest receivable of \$109,831 (amount in thousands).

Schedule V

Analysis of Accrued Liability of System
as of June 30, 1990
(Dollar Amounts in Millions)

Item	Amount
(1) Estimated value of accumulated benefits of System:	
Vested benefits	
- Members currently receiving payments	\$ 6,007.2
- Other members	<u>6,461.0</u>
Sub-total	\$12,468.2
Nonvested benefits	<u>1,275.3</u>
Total value of accumulated benefits	\$13,743.5
(2) Value of additional accrued liabilities reflecting effect of anticipated future increases in pay	<u>7,170.8</u>
(3) Total accrued liability of System = (1) + (2)	\$20,914.3
(4) Book value of assets	<u>15,995.6</u>
(5) Unfunded accrued and supplemental annuity liability of System (as shown in Schedule I)	\$ 4,918.7

NOTES:

- (A) Accumulated benefits shown under item (1) above are made up of (a) benefits currently being paid to annuitants and beneficiaries, plus (b) accrued benefits of active membership based on service and pay history up to the current valuation date of June 30, 1990. Thus, accumulated benefits do not reflect the effect of future pay increases on the benefit ultimately payable upon retirement or separation from employment.
- (B) Item (3) shows the total accrued liability of the System as determined under the funding method, i.e., the entry-age normal cost method. Item (3) reflects the effect of anticipated future pay increases on the benefits ultimately payable.
- (C) The calculation of the estimated value of accumulated benefits took into account the probability of future payments by use of the same decrements as to death, disability, withdrawal, and retirement which were used in the regular valuation of the System. These decrements are set forth in Schedule VI. The interest rate used is the same as for the regular valuation, namely 8½ percent. As mentioned in note (A) above, the estimated value does not include any allowance for future pay increases.

Schedule VI

Pension Benefit Obligation Information
as of June 30, 1990

1. Statement No. 5 of the Governmental Accounting Standards Board (GASB) requires in part that a computation and disclosure of a standardized measure of the pension obligation for public employee retirement systems, and state and local governmental employers be made for purposes of assessing the funding status and funding progress of these systems and employers.

This measure is the actuarial present value (APV) as of the valuation date of credited projected benefits prorated on service, which is referred to in Statement No. 5 as the "pension benefit obligation" (PBO).

2. The determination of the pension benefit obligation as of June 30, 1990 includes an adjustment for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to June 30, 1990.

Significant actuarial assumptions used to determine the pension benefit obligation as of June 30, 1990 include the following:

- (1) An assumed rate of return on the investment of present and future assets of 8½ percent per annum, compounded annually.
- (2) Assumed projected annual salary increases of 7½ percent, which reflect an allowance for inflation of 4 percent, national productivity of 1 percent and merit or seniority increases averaging 2½ percent.
- (3) No post-retirement benefit increases assumed in the future.

The relevant amounts as of June 30, 1990 are shown below:

Pension benefit obligation:	(Amounts in Thousands)
Annuitants and survivor annuitants currently receiving benefits and terminated members not yet receiving benefits	\$ 6,123,851
Current members:	
Accumulated member contributions with interest	\$ 3,271,575
System-financed vested	3,072,800
System-financed nonvested	7,015,416
Sub-total	<u>\$13,359,791</u>
Total pension benefit obligation	\$19,483,642

The actuarial present value of credited projected benefits for active members is the portion of the total projected benefits allocated to the accrued liability using the unit credit actuarial cost method.

The revision in economic assumptions as of June 30, 1990 had the effect of decreasing the pension benefit obligation of the System by \$1,962,738 (amount in thousands).

Schedule VII

Outline of Actuarial Assumptions and Methods

Interest Rate: 8½ percent per annum, compounded annually (adopted in 1991) (4 percent used since 1960 in determining actuarial equivalent benefits.)

Separations from Service: Representative values of the assumed annual rates of separation (adopted in 1986):

Age	Annual Rate of:					
	Withdrawal	Death	Disability	Vesting & Early Retirement		Superannuation Retirement
				Less than 25 years of service	25 or more years of service	
Men						
25	10.01%	.07%	.01%	1.52%		
30	7.02	.07	.01	1.52		
35	5.88	.07	.02	1.47		
40	5.24	.12	.06	1.10	.13%	
45	4.85	.20	.11	1.00	.15	
50	4.58	.32	.26	1.30	.30	22.00%
55	4.42	.53	.49	2.30	3.41	20.90
60	4.37	.94	1.01	3.26	4.95	18.15
65		1.74				44.00
69		2.58				16.50
Women						
25	9.96%	.03%	.01%	7.20%		
30	9.02	.03	.02	4.40		
35	7.92	.04	.05	2.10		
40	6.62	.07	.07	1.40	1.32%	
45	5.70	.11	.10	1.50	1.32	
50	5.14	.15	.23	2.05	.86	22.00%
55	4.80	.21	.45	3.00	5.77	19.80
60	4.74	.34	.79	5.15	11.00	19.80
65		.63				36.30
69		1.10				27.50

Salary Increase: Assumed projected salary increases of 7½ percent, which reflect on allowance for inflation of 4 percent, national productivity of 1 percent and merit or seniority increases averaging 2½ percent.

Schedule VII (Continued)

Death after Retirement: The 1984 George B. Buck Mortality Tables (adopted in 1986) for service retirements and dependent beneficiaries. Special mortality tables were used for disability retirements. (The 1963 George B. Buck Mortality Tables, adopted in 1967, used in determining actuarial equivalent benefits.)

Valuation Method: Projected benefit method with level percentage entry age normal cost and open-end unfunded accrued liability. The unfunded liability as of June 30, 1990 is to be amortized over a period of 20 years from July 1, 1991 with annual amortization payments increasing at 5 percent. Subsequent increases (decreases) in unfunded liability are to be amortized over 20 years with installments increasing annually at 5 percent.

Asset Valuation Method: Cost value.

Pension Benefit Obligation: The measure of the actuarial present value (APV) as of the valuation date of credited projected benefits prorated on service, or pension benefit obligation (PBO) as referred to in Statement No. 5 of the Governmental Accounting Standards Board (GASB), includes an adjustment for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to June 30, 1990. Significant actuarial assumptions used to determine the pension benefit obligation as of June 30, 1990 include the following:

- (1) An assumed rate of return on the investment of present and future assets of 8½ percent per annum, compounded annually (adopted in 1991).
- (2) Assumed projected annual salary increases of 7½ percent, which reflect an allowance for inflation of 4 percent, national productivity of 1 percent and merit or seniority increases averaging 2½ percent (adopted in 1991).
- (3) No post-retirement benefit increases assumed in the future.

Miscellaneous: The valuation was based on members of the System as of June 30, 1990 and does not take into account future members.

Section II — Membership Data

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. Tables A and B summarize the membership of the System as of June 30, 1990 upon which the valuation was based. Detailed tabulations of the data are given in Section IV. Tables C, D, and E show historical membership data for the last 10 years.

Table A

**Active Membership of System
 as of June 30, 1990**

Group	Number	Annual Salaries
Active members included in valuation:		
Men	69,178	\$2,239,901,405
Women	<u>131,482</u>	<u>3,123,633,183</u>
Total	200,660	\$5,363,534,588 *

In addition to the above, 32,018 inactive members and vestees were included in the valuation.

* For valuation purposes, salaries of \$5,305,246,445 were reported for the fiscal year ended June 30, 1990, which when annualized amount to \$5,363,534,588.

Table B

**Annuitants and Survivor Annuitants of the System
as of June 30, 1990**

Class	Number	Annual Annuities
Retired on account of superannuation and those in receipt of withdrawal annuities:		
Men	29,867	\$281,069,223
Women	61,920	447,130,734
Total	91,787	\$728,199,957
Retired on account of disability:		
Men	1,364	\$ 10,006,433
Women	2,530	15,094,915
Total	3,894	\$ 25,101,348
Survivor annuitants in receipt of benefits:		
Men	521	\$ 2,142,509
Women	3,918	16,284,611
Total	4,439	\$ 18,427,120
Annuities in lieu of return of accumulated deductions:		
Men	—	—
Women	2	134
Total	2	134
Grand Total	100,122	\$771,728,559

Table C

**History of Active Membership Data
for Last 10 Years Valuation**

Valuation As of June 30	Number of Active Members	Percentage Change In Membership	Total Annual Payroll	Percentage Change In Payroll
1990	200,660	.11%	\$5,363,535,000	6.09%
1989	200,430	2.34	5,055,793,000	10.24
1988	195,842	(2.77)	4,586,367,000	3.88
1987	201,415	.92	4,415,102,000	8.57
1986	199,571	(1.07)	4,066,471,000	4.59
1985	201,735	.32	3,887,867,000	5.49
1984	201,083	(1.01)	3,685,611,000	8.30
1983	203,138	(2.90)	3,403,263,000	4.72
1982	209,210	(2.44)	3,249,799,000	3.07
1981	214,438	(1.85)	3,152,967,000	6.24

Table D

**History of Annuitant and Survivor Annuitant
Membership for Last 10 Years**

Year Ended June 30	Number on Roll	Additions	Deletions	Percentage Change in Membership	Annual Annuities (Millions)	Percentage Change in Annuities
1990	100,122	6,439	1,778	4.88%	\$771.7	8.66%
1989	95,461	4,852	2,315	2.73	710.2	11.77
1988	92,924	5,818	3,271	2.82	635.4	4.44
1987	90,377	6,671	2,940	4.31	608.4	6.51
1986	86,646	6,586	2,828	4.53	571.2	5.15
1985	82,888	6,051	2,879	3.98	543.2	3.07
1984	79,716	5,989	2,611	4.43	527.0	12.03
1983	79,338	7,345	2,252	7.15	470.4	7.20
1982	71,245	6,098	2,303	5.63	438.8	4.23
1981	67,450	5,565	2,237	5.19	421.0	3.16

Table E

**Summary of Accrued and Unfunded Accrued Liabilities
for Last 10 Years
(Dollar Amounts in Millions)**

Valuation As of 6/30	Aggregate Accrued Liabilities	Valuation* Assets	Assets As a Percentage of Accrued Liabilities	Unfunded Accrued Liabilities (UAL)	Total Annual Payroll	UAL As a Percentage of Total Payroll
1990	\$20,914.3	\$15,995.6	76.5%	\$4,918.7	\$5,363.5	91.7%
1989	21,216.8	14,109.1	66.5	7,107.7	5,055.8	140.6
1988	19,501.7	12,544.4	64.3	6,957.3	4,641.9	149.9
1987	17,411.7	11,151.2	64.0	6,260.5	4,416.9	141.7
1986	15,995.5	9,458.3	59.1	6,537.2	4,159.0	157.2
1985	14,557.9	7,992.8	54.9	6,565.1	3,887.9	168.8
1984	13,620.6	6,897.5	50.6	6,723.1	3,685.6	182.4
1983	12,267.9	6,109.6	49.8	6,158.3	3,403.3	180.9
1982	11,364.7	5,977.1	52.6	5,387.5	3,249.8	165.8
1981	10,636.2	5,399.0	50.8	5,237.1	3,153.0	166.1

*Includes Commonwealth interest receivable.

Section III — Summary of Benefit and Contribution Provisions

Membership

For valuation purposes, all employes are considered to be members of Class T-C. All employes who become members on and after January 1, 1966 are members of the dual coverage group. Joint coverage members are those who became members prior to that date but subsequent to May 28, 1957. Joint coverage members may elect to become members of the dual coverage group but must make up the difference in accumulated deductions.

“Final average salary” means the highest average annual salary for any 3 years of service.

Benefits

Superannuation Annuity

Eligibility	Age 62, or age 60 with 30 years of service, or 35 years of service regardless of age.
Amount	2 percent of final average salary times years of service. Minimum of \$100 per year of service. Benefit of a joint coverage member is reduced by 40 percent of primary insurance amount (subject to certain limitations) after age at which Social Security benefits become payable.

Vesting Annuity

Eligibility	10 years of service.
Amount	Accrued benefit deferred to superannuation retirement age.

Withdrawal Annuity

Eligibility	Vestee with 10 years of service may elect to receive a reduced vesting annuity which commences earlier than the superannuation retirement age.
Amount	Actuarial equivalent of the vesting annuity which would have commenced at superannuation retirement age. If member separates after age 55 with 25 or more years of service, reduction is $\frac{1}{4}$ percent for each month by which commencement of payments precedes superannuation retirement age. Benefit of a joint coverage member is reduced after age at which Social Security benefits become payable.

Disability Annuity

Eligibility	5 years of service.
Amount	2 percent of final average salary per year of service, but not less than 33 percent of such salary, nor greater than the benefit member would have had at superannuation retirement age. Minimum of \$100 per year of service.

Section III (Continued)

Optional Benefits

Option 1. Reduced benefit with refund of balance of present value of annuity at retirement over payments received. If balance is less than \$5,000, benefit is paid in lump sum; otherwise, beneficiary may elect annuity and/or lump sum.

Option 2. Joint and 100 percent survivorship annuity.

Option 3. Joint and 50 percent survivorship annuity.

Option 4. Benefit of equivalent actuarial value.

Death Benefit

Eligibility Death of an active member or vestee who was eligible to receive an annuity.

Amount Annuity which would have been effective if the member retired on the day before death. Option 1 assumed payable if no other option elected.

Return of Contributions

Eligibility Death or separation from service where no other benefit payable.

Amount Refund of accumulated deductions (less annuity payments received in the case of a retired member).

Contributions

By Members

Members who were hired prior to July 22, 1983 contribute at a rate of 5¼ percent of compensation, while members who were hired on or after July 22, 1983 contribute at a rate of 6¼ percent of compensation. Reduction for a joint coverage member of 40 percent of Social Security tax, exclusive of disability and medical coverage portion.

By Commonwealth and
School Districts

Balance of required contribution determined as normal contribution, accrued liability contribution, and supplemental annuity contribution, is shared equally by the Commonwealth and the School Districts.

Section IV — Detailed Tabulations of the Data

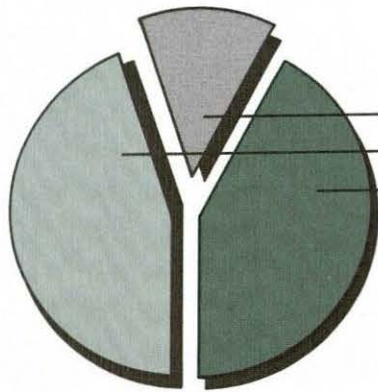
Active Membership Data
as of June 30, 1990

Age	Service									TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 25	3,605 \$15,861	78 \$16,214								3,683 \$15,868
25 - 29	8,110 \$18,881	3,070 \$22,551	193 \$19,242							11,373 \$19,878
30 - 34	6,634 \$16,209	5,074 \$24,022	4,286 \$26,807	140 \$19,706						16,134 \$21,512
35 - 39	9,302 \$15,201	4,451 \$22,498	9,813 \$30,086	10,969 \$33,642	69 \$24,455					34,604 \$26,225
40 - 44	8,899 \$15,852	5,344 \$21,829	4,836 \$27,635	11,946 \$36,064	11,975 \$38,891	49 \$23,016				43,049 \$29,943
45 - 49	5,191 \$14,667	3,898 \$19,123	4,900 \$23,653	3,994 \$31,917	8,259 \$39,440	6,187 \$41,299	24 \$26,182			32,453 \$30,072
50 - 54	3,215 \$13,532	2,948 \$16,190	3,959 \$21,288	3,315 \$26,676	3,193 \$34,343	4,123 \$40,932	3,055 \$42,660	14 \$26,747		23,822 \$28,254
55 - 59	2,310 \$12,174	2,118 \$15,190	2,924 \$18,206	3,502 \$23,535	3,445 \$29,987	1,981 \$37,572	2,606 \$42,276	1,093 \$45,230	15 \$30,585	19,994 \$26,696
60 - 64	1,503 \$11,312	1,569 \$13,960	1,966 \$17,187	1,834 \$22,782	2,226 \$28,062	1,086 \$35,059	611 \$39,520	715 \$44,271	226 \$45,033	11,736 \$23,943
OVER 65	756 \$8,631	573 \$10,195	651 \$14,879	595 \$20,509	511 \$23,184	267 \$29,515	193 \$33,261	134 \$41,842	132 \$43,043	3,812 \$18,807
TOTAL	49,525 \$15,580	29,123 \$20,306	33,528 \$25,184	36,295 \$31,820	29,678 \$36,405	13,693 \$39,859	6,489 \$41,870	1,956 \$44,515	373 \$43,748	200,660 \$26,729

STATISTICAL SECTION

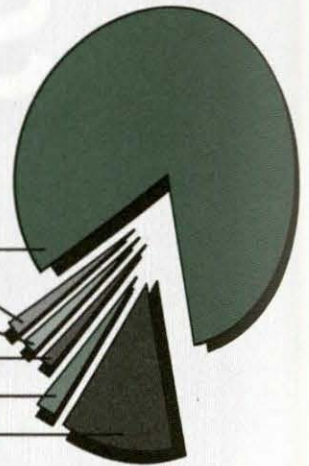
۷۱

Components of Total Revenue and Expense — 1991



Total Revenue

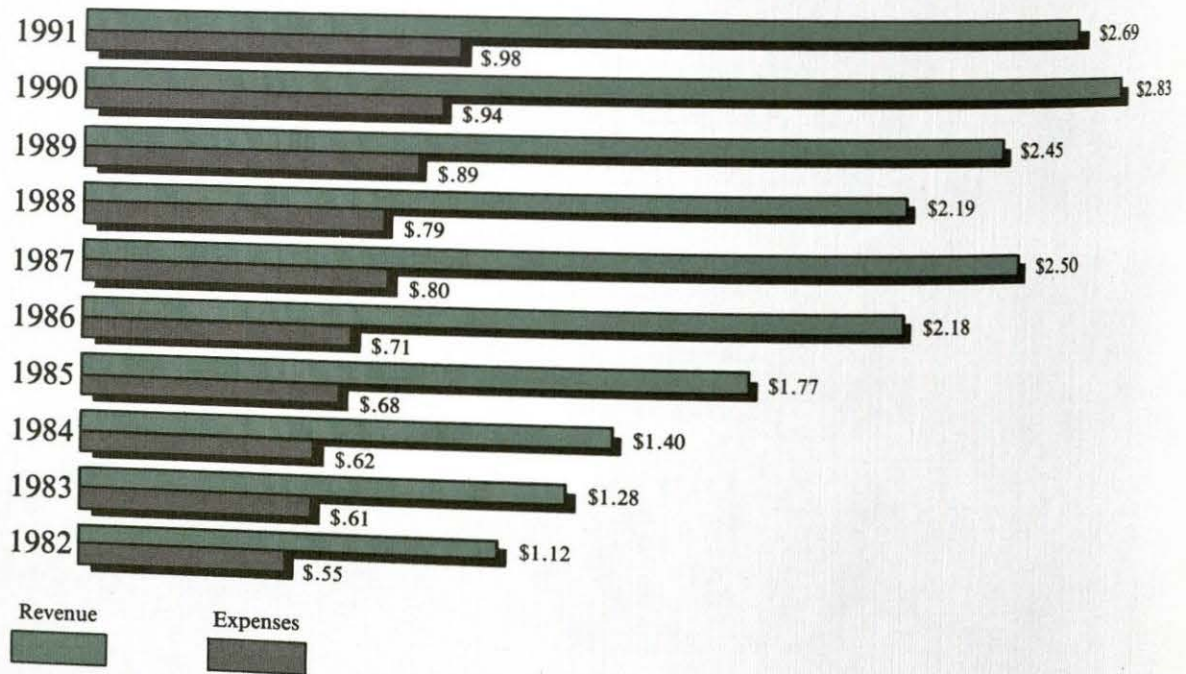
Member Contributions 13%
 Investment Income 45%
 Employer Contributions 42%



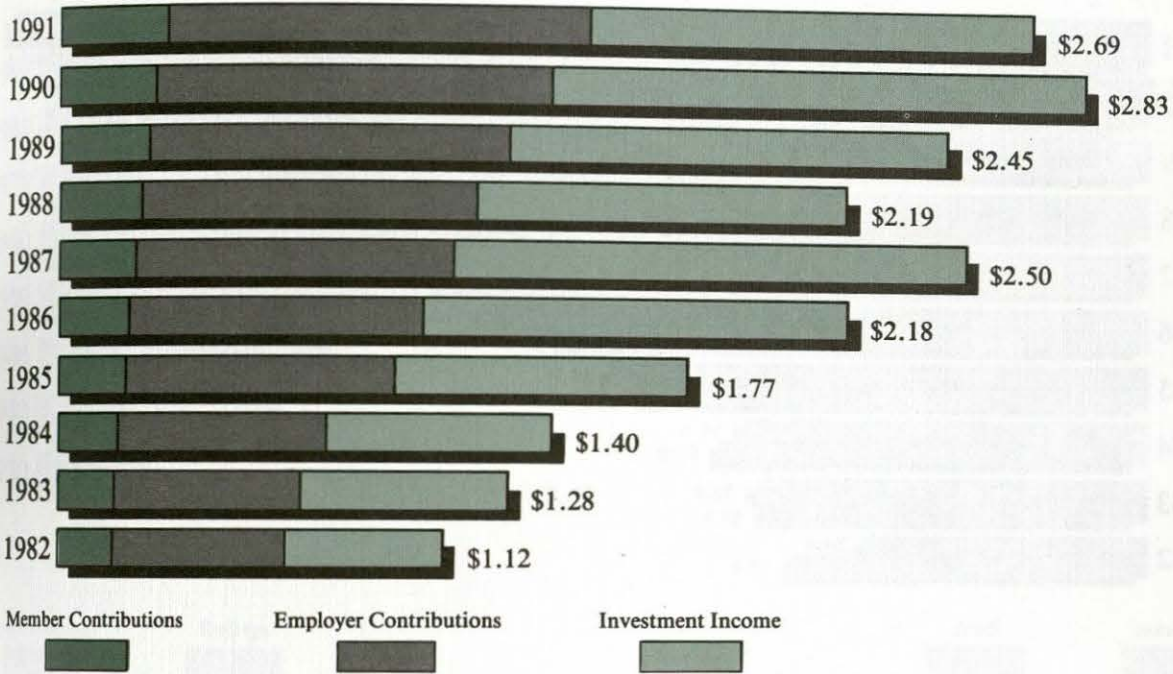
Total Expense

Benefits 81%
 Refunds 1%
 Transfers 1%
 Administrative 1%
 Disabilities 3%
 Lump Sums & Installments 13%

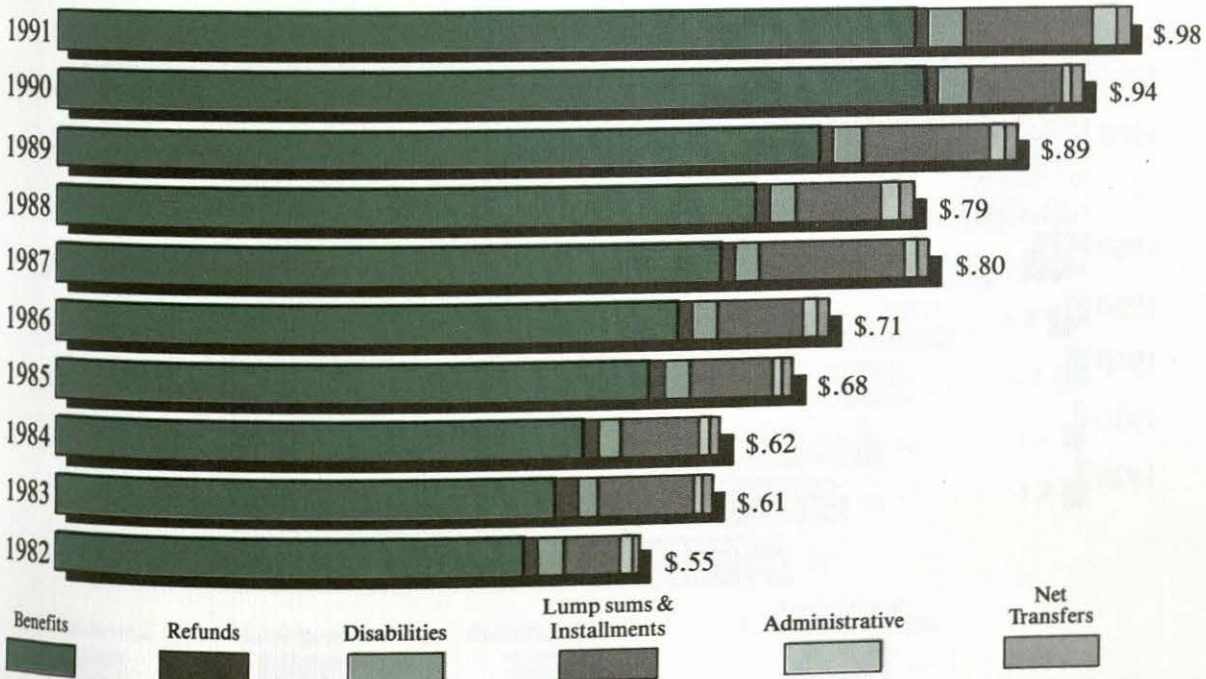
Revenue vs. Expense — 10 Year Trend (Amounts in Billions)



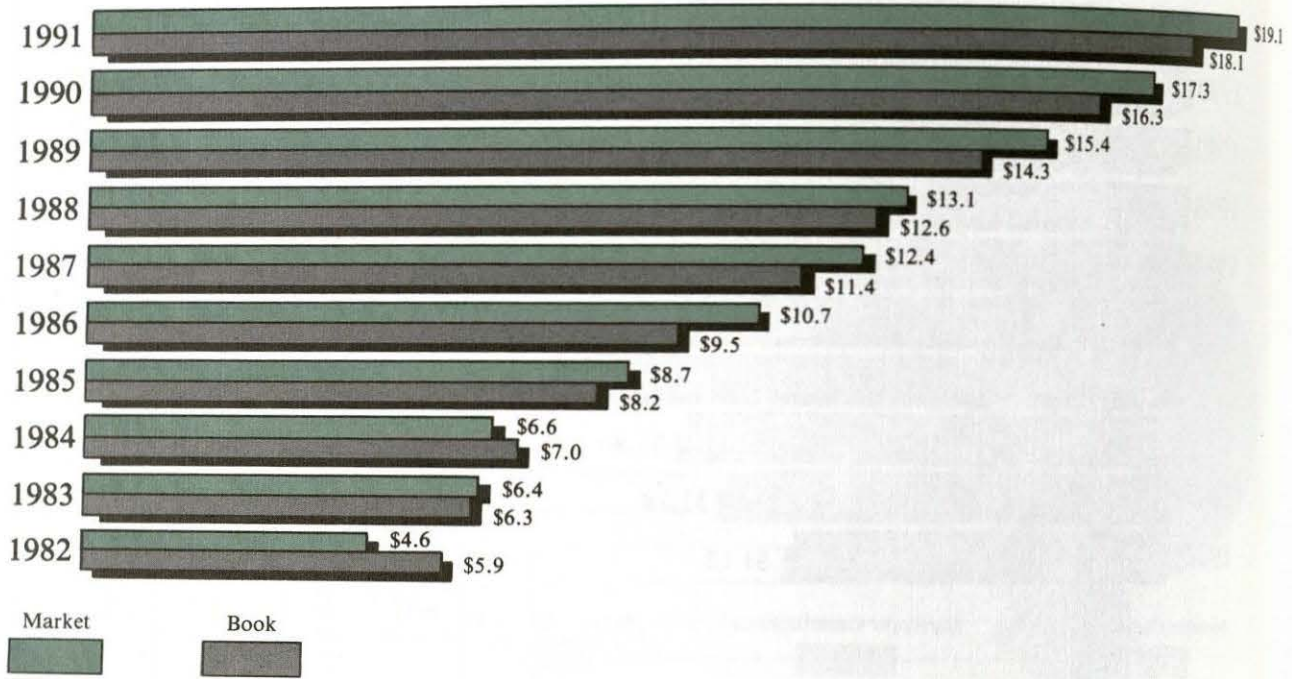
Revenue By Source — 10 Year Trend (Amounts in Billions)



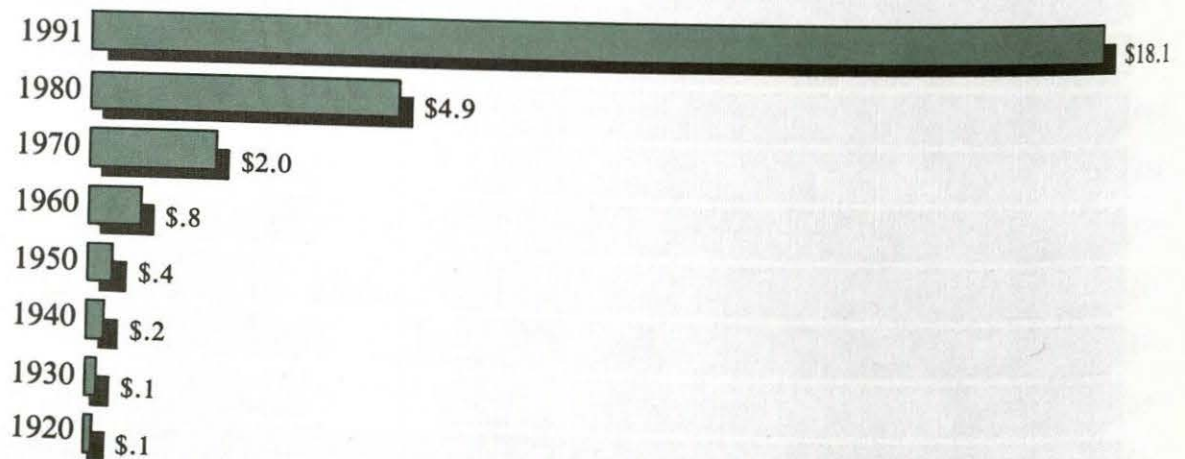
Expense By Type — 10 Year Trend (Amounts in Billions)



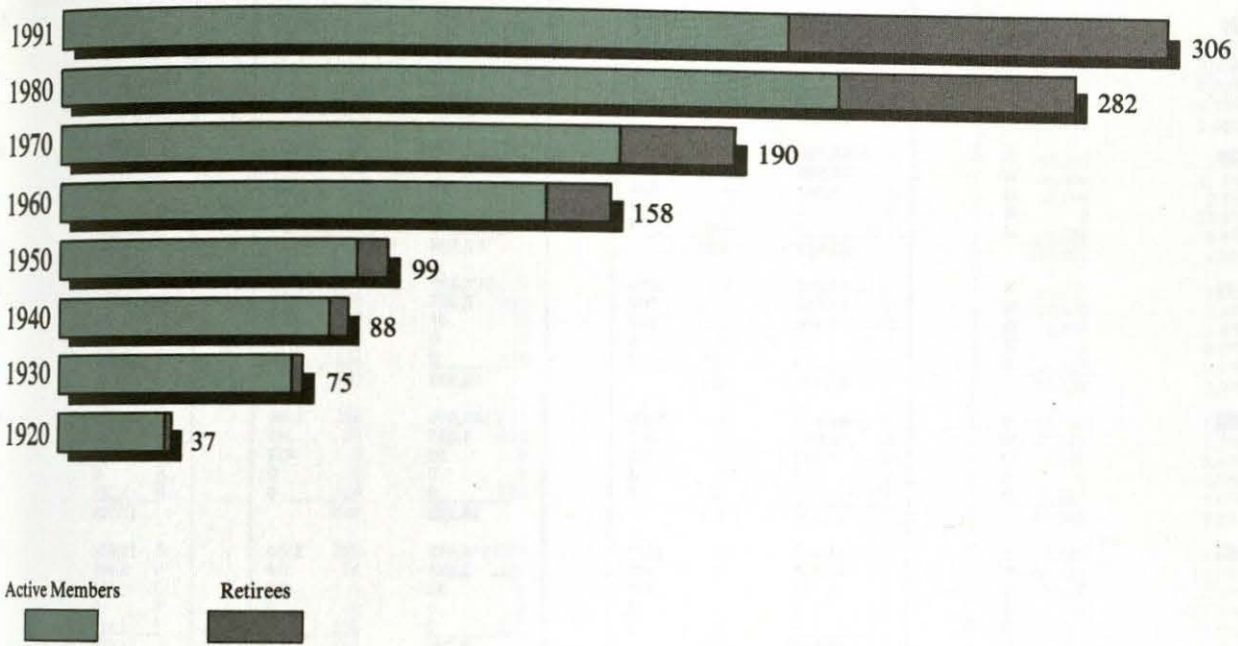
Total Assets — 10 Year Trend (Amounts in Billions)



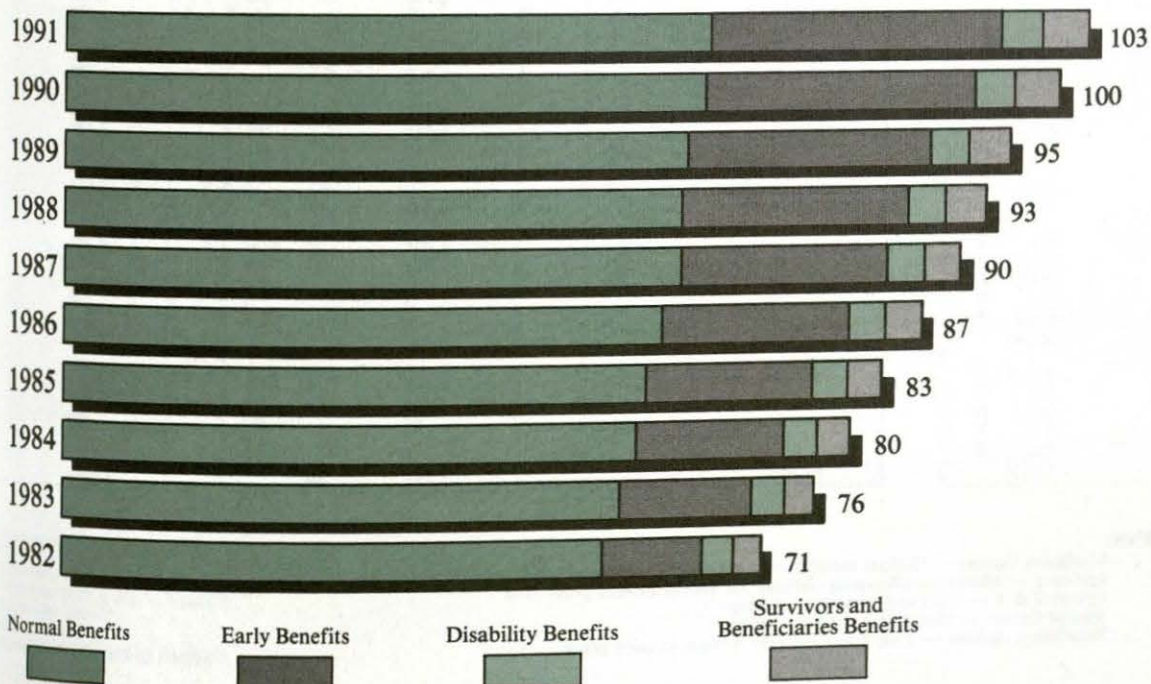
Asset Growth (Book Value — Amounts in Billions)



Total Membership — Active & Retired (In Thousands)



Retired Members — 10 Year Trend (Amounts in Thousands)



Schedule of Retired Members by Type of Benefit

Year	Retirement Type**	Option M*		Option 1*		Option 2, 3*	
		Number of Retirees	Average Mo. Benefit	Number of Retirees	Average Mo. Benefit	Number of Retirees	Average Mo. Benefit
1991	S	46,063	\$693	7,668	\$624	12,234	\$847
	W	20,127	595	3,905	418	3,962	734
	D	3,561	538	27	436	457	662
	R	2	6	0	0	0	0
	B	0	0	0	0	3,991	369
		69,753		11,600		20,644	
1990	S	45,728	\$678	7,498	\$621	11,875	\$831
	W	18,982	559	3,639	403	3,726	703
	D	3,441	524	29	433	424	648
	R	2	6	0	0	0	0
	B	0	0	0	0	3,792	355
		68,153		11,166		19,817	
1989	S	45,064	\$660	7,235	\$618	11,257	\$813
	W	17,059	509	3,273	376	3,311	664
	D	3,346	507	45	474	406	612
	R	3	6	0	0	0	0
	B	0	0	0	0	3,531	338
		65,472		10,553		18,505	
1988	S	44,840	\$603	7,076	\$566	10,990	\$747
	W	16,000	467	3,037	345	3,038	612
	D	3,293	462	50	452	395	558
	R	3	6	0	0	0	0
	B	0	0	0	0	3,285	325
		64,136		10,163		17,708	
1987	S	44,608	\$595	6,919	\$565	10,624	\$736
	W	14,956	449	2,818	336	2,801	596
	D	3,196	447	52	460	366	548
	R	3	6	0	0	0	0
	B	0	0	0	0	3,114	314
		62,763		9,789		16,905	
1986	S	44,047	\$588	6,745	\$565	10,216	\$726
	W	13,224	403	2,540	315	2,477	563
	D	3,095	440	55	464	344	531
	R	4	11	0	0	0	0
	B	0	0	0	0	2,953	303
		60,370		9,340		15,990	
1985	S	43,418	\$587	6,554	\$568	9,781	\$717
	W	11,638	378	2,232	300	2,148	536
	D	2,999	433	57	464	333	523
	R	4	11	0	0	0	0
	B	0	0	0	0	2,791	288
		58,059		8,843		15,053	
1984	S	42,918	\$538	6,372	\$526	9,392	\$666
	W	10,366	363	1,915	291	1,888	529
	D	2,922	390	61	416	314	472
	R	4	11	0	0	0	0
	B	0	0	0	0	2,614	273
		56,210		8,348		14,208	
1983	S	42,224	\$541	6,093	\$535	8,975	\$659
	W	9,235	373	1,621	303	1,682	540
	D	2,804	385	61	416	303	457
	R	4	11	0	0	0	0
	B	0	0	0	0	2,449	261
		54,267		7,775		13,409	
1982	S	41,334	\$546	5,686	\$545	8,389	\$653
	W	7,265	326	1,154	266	1,120	468
	D	2,705	379	65	411	280	454
	R	4	11	0	0	0	0
	B	0	0	0	0	2,303	247
		51,308		6,905		12,092	

***OPTIONS:**

- M — Maximum Option — Highest monthly allowance with guarantee of accumulated deductions only
- 1 — Option 1 — Maximum allowance reduced for Death Benefit protection
- 2, 3 — Option 2 & 3 — Joint and survivor annuities
- SO — Special Option — Plan approved by actuary
- BO — Beneficiary options — Life, 5 and 10 year certain annuity plans

Schedule of Retired Members by Type of Benefit (Continued)

Year	Retirement Type**	Option SO*		Option BO*		Total Retirees	% Increase of Retirees
		Number of Retirees	Average Mo. Benefit	Number of Retirees	Average Mo. Benefit		
1991	S	257	\$1,428	0	\$ 0	66,222	1.30%
	W	47	1,400	0	0	28,041	6.20%
	D	0	0	0	0	4,045	3.90%
	R	0	0	0	0	2	0.00%
	B	156	192	449	313	4,596	4.70%
		460		449		102,906	2.80%
1990	S	290	\$1,281	0	\$ 0	65,391	2.4%
	W	49	1,222	0	0	26,396	11.5%
	D	0	0	0	0	3,894	2.6%
	R	0	0	0	0	2	-33.3%
	B	157	187	439	315	4,388	6.4%
		496		439		100,071	4.9%
1989	S	277	\$1,221	0	\$ 0	63,833	1.0%
	W	29	982	0	0	23,672	7.1%
	D	0	0	0	0	3,797	1.6%
	R	0	0	0	0	3	0.0%
	B	151	178	442	301	4,124	6.1%
		457		442		95,429	2.7%
1988	S	268	\$1,098	0	\$ 0	63,174	1.2%
	W	24	835	0	0	22,099	7.3%
	D	0	0	0	0	3,738	3.4%
	R	0	0	0	0	3	0.0%
	B	156	178	446	303	3,887	4.6%
		448		446		92,901	2.8%
1987	S	282	\$1,073	0	\$ 0	62,433	1.8%
	W	24	823	0	0	20,599	12.8%
	D	0	0	0	0	3,614	3.4%
	R	0	0	0	0	3	-25.0%
	B	150	332	453	291	3,717	4.5%
		456		453		90,366	4.3%
1986	S	296	\$1,049	0	\$ 0	61,304	2.1%
	W	21	745	0	0	18,262	13.9%
	D	0	0	0	0	3,494	3.1%
	R	0	0	0	0	4	0.0%
	B	147	159	456	276	3,556	5.2%
		464		456		86,620	4.5%
1985	S	309	\$1,046	0	\$ 0	60,062	1.8%
	W	21	743	0	0	16,039	13.0%
	D	0	0	0	0	3,389	2.8%
	R	0	0	0	0	4	0.0%
	B	139	152	449	297	3,379	5.3%
		469		449		82,873	4.0%
1984	S	324	\$ 963	0	\$ 0	59,006	2.4%
	W	21	694	0	0	14,190	13.0%
	D	0	0	0	0	3,297	4.1%
	R	0	0	0	0	4	0.0%
	B	141	148	454	296	3,209	6.0%
		486		454		79,706	4.3%
1983	S	333	\$ 952	0	\$ 0	57,625	3.3%
	W	21	694	0	0	12,559	31.4%
	D	0	0	0	0	3,168	3.9%
	R	0	0	0	0	4	0.0%
	B	136	150	443	296	3,028	6.1%
		490		443		76,384	7.2%
1982	S	352	\$ 946	0	\$ 0	55,761	3.1%
	W	20	677	0	0	9,559	22.4%
	D	0	0	0	0	3,050	5.4%
	R	0	0	0	0	4	0.0%
	B	132	143	418	296	2,853	5.4%
		504		418		71,227	5.5%

** RETIREMENT TYPE:
S — Superannuation or Normal Retirement
W — Withdrawal or Early Retirement
D — Disability Benefit
R — Refund Annuity
B — Beneficiaries Receiving Annuities

Schedule of Employers School Districts

A

Abington
Abington Heights
Albert Gallatin
Aliquippa
Allegheny-Clarion Valley
Allegheny Valley
Allentown City
Altoona Area
Ambridge Area
Annville-Cleona
Antietam
Apollo-Ridge
Armstrong
Athens Area
Austin Area
Avella Area
Avon Grove
Avonworth

B

Bald Eagle Area
Baldwin-Whitehall
Bangor Area
Beaver Area
Bedford Area
Belle Vernon Area
Bellefonte Area
Bellwood-Antis
Bensalem Township
Benton Area
Bentworth
Berlin Brothers Valley
Bermudian Springs
Berwick Area
Bethel Park
Bethlehem Area
Bethlehem-Center
Big Beaver Falls Area
Big Spring
Blackhawk
Blacklick Valley
Blairsville-Saltsburg
Bloomsburg Area
Blue Mountain
Blue Ridge
Boyertown Area
Bradford Area
Brandywine Heights Area
Brentwood Boro
Bristol Boro
Bristol Township
Brockway Area
Brookville Area
Brownsville Area
Burgettstown Area
Burrell
Butler Area

C

California Area
Cambria Heights
Cameron County
Camp Hill
Canon-McMillan
Canton Area
Carbondale Area
Carlisle Area
Carlynton
Carmichaels Area
Catasauqua
Centennial
Center Area
Central Bucks
Central Cambria
Central Columbia
Central Dauphin
Central Fulton
Central Greene
Central York
Chambersburg Area
Charleroi Area
Chartiers-Houston
Chartiers Valley
Cheltenham Township
Chester-Upland
Chestnut Ridge
Chichester
Clairton
Clarion Area
Clarion-Limestone Area
Claysburg-Kimmel
Clearfield Area
Coatesville Area
Cocalico
Colonial
Columbia Boro
Commodore Perry
Conemaugh Township Area
Conemaugh Valley
Conestoga Valley
Conewago Valley
Conneaut
Connellsville Area
Conrad Weiser Area
Cornell
Cornwall-Lebanon
Corry Area
Coudersport Area
Council Rock
Cranberry Area
Crawford Central
Crestwood
Cumberland Valley
Curwensville Area

D

Dallas
Dallastown Area
Daniel Boone Area
Danville Area
Deer Lakes
Delaware Valley
Derry Area
Derry Township
Donegal
Dover Area
Downingtown Area
DuBois Area
Dunmore
Duquesne City

E

East Allegheny
East Lycoming
East Penn
East Pennsboro Area
East Stroudsburg
Eastern Lancaster County
Eastern Lebanon County
Eastern York
Easton Area
Elizabeth Forward
Elizabethtown Area
Elk Lake
Ellwood City Area
Ephrata Area
Erie City
Everett Area
Exeter Township

F

Fairfield Area
Fairview
Fannett-Metal
Farrell Area
Ferndale Area
Fleetwood Area
Forbes Road
Forest Area
Forest City Regional
Forest Hills
Fort Cherry
Fort Le Boeuf
Fox Chapel Area
Franklin Area
Franklin Regional
Frazier
Freedom Area
Freeport Area

Schedule of Employers (Continued)

G

Galeton Area
 Garnet Valley
 Gateway
 General McLane
 Gettysburg Area
 Girard
 Glendale
 Governor Mifflin
 Great Valley
 Greater Johnstown
 Greater Latrobe
 Greater Nanticoke Area
 Greencastle-Antrim
 Greensburg Salem
 Greenville Area
 Greenwood
 Grove City Area

H

Halifax Area
 Hamburg Area
 Hampton Township
 Hanover Area
 Hanover Public
 Harbor Creek
 Harmony
 Harrisburg City
 Hatboro-Horsham
 Haverford Township
 Hazleton Area
 Hempfield
 Hempfield Area
 Hermitage
 Highlands
 Hollidaysburg Area
 Homer Center
 Hopewell Area
 Huntingdon Area

I

Indiana Area
 Interboro
 Iroquois

J

Jamestown Area
 Jeannette City
 Jefferson-Morgan
 Jenkintown
 Jersey Shore Area
 Jim Thorpe Area
 Johnsonburg Area
 Juniata County
 Juniata Valley

K

Kane Area
 Karns City Area

Kennett Consolidated
 Keystone
 Keystone Central
 Keystone Oaks
 Kiski Area
 Kutztown Area

L

Lackawanna Trail
 Lake Lehman
 Lakeland
 Lakeview
 Lampeter-Strasburg
 Lancaster City
 Laurel
 Laurel Highlands
 Lebanon
 Leechburg Area
 Lehigh Area
 Lewisburg Area
 Ligonier Valley
 Line Mountain
 Littlestown
 Lower Dauphin
 Lower Merion
 Lower Moreland
 Loysock Township

M

Mahanoy Area
 Manheim Central
 Manheim Township
 Marion Center Area
 Marple Newtown
 Mars Area
 McGuffey
 McKeesport Area
 Mechanicsburg Area
 Mercer Area
 Methacton
 Meyersdale Area
 Mid Valley
 Mid-West
 Middletown Area
 Midland Boro
 Mifflin County
 Mifflinburg Area
 Millcreek Township
 Millersburg Area
 Millville Area
 Milton Area
 Minersville Area
 Mohawk Area
 Monaca
 Monessen
 Moniteau
 Montgomery Area
 Montour
 Montoursville Area

Montrose Area
 Moon Area
 Morrisville Boro
 Moshannon Valley
 Mount Carmel Area
 Mount Lebanon
 Mount Pleasant Area
 Mount Union Area
 Mountain View
 Muhlenberg Township
 Muncy

N

Nazareth Area
 Neshaminy
 Neshannock Township
 New Brighton Area
 New Castle Area
 New Hope-Solebury
 New Kensington-Arnold
 Newport
 Norristown Area
 North Allegheny
 North Clarion County
 North East
 North Hills
 North Penn
 North Pocono
 North Schuylkill
 North Star
 Northampton Area
 Northeast Bradford
 Northeastern York County
 Northern Bedford County
 Northern Cambria
 Northern Lebanon
 Northern Lehigh
 Northern Potter
 Northern Tioga
 Northern York County
 Northgate
 Northwest Area
 Northwestern
 Northwestern Lehigh
 Norwin

O

Octorara Area
 Oil City Area
 Old Forge
 Oley Valley
 Oswayo Valley
 Otto Eldred
 Owen J. Roberts
 Oxford Area

P

Palisades
 Palmerton Area

Schedule of Employers (Continued)

Palmyra Area	Salisbury-Elk Lick	Titusville Area
Panther Valley	Salisbury Township	Towanda Area
Parkland	Saucon Valley	Tredyffrin-Easttown
Pen Argyl Area	Sayre Area	Tri-Valley
Penn Cambria	Schuylkill Haven Area	Trinity Area
Penn Crest	Schuylkill Valley	Troy Area
Penn Delco	Scranton City	Tulpehocken Area
Penn Hills Township	Selinsgrove Area	Tunkhannock Area
Penn Manor	Seneca Valley	Turkeyfoot Valley
Penn Trafford	Shade-Central City	Tuscarora
Penridge	Shaler Area	Tussey Mountain
Penns Manor	Shamokin Area	Twin Valley
Penns Valley Area	Shanksville-Stonycreek	Tyrone Area
Pennsbury	Sharon City	
Pequea Valley	Sharpsville Area	U
Perkiomen Valley	Shenandoah Valley	Union
Peters Township	Shenango Area	Union Area
Philadelphia	Shikellamy	Union City Area
Philipsburg-Osceola	Shippensburg Area	Uniontown Area
Phoenixville Area	Slippery Rock Area	Unionville-Chadds Ford
Pine Grove Area	Smethport Area	United
Pine-Richland	Solanco	Upper Adams
Pittsburgh	Somerset Area	Upper Darby
Pittston Area	Souderton Area	Upper Dauphin Area
Pleasant Valley	South Allegheny	Upper Dublin
Plum Boro	South Butler County	Upper Merion Area
Pocono Mountain	South Eastern	Upper Moreland Township
Port Allegany	South Fayette Township	Upper Perkiomen
Portage Area	South Middleton	Upper Saint Clair Township
Pottsgrove	South Moreland	
Pottstown	South Park	V
Pottsville Area	South Side Area	Valley Grove
Punxsutawney Area	South Western	Valley View
Purchase Line	South Williamsport Area	
	Southeast Delco	W
Q	Southeastern Greene	Wallenpaupack Area
Quaker Valley	Southern Columbia Area	Wallingford Swarthmore
Quakertown Community	Southern Fulton	Warren County
	Southern Huntingdon	Warrior Run
R	Southern Lehigh	Warwick
Radnor Township	Southern Tioga	Washington
Reading	Southern York County	Wattsburg Area
Red Lion Area	Spring Cove	Wayne Highlands
Redbank Valley	Spring-Ford Area	Waynesboro Area
Reynolds	Spring Grove Area	Weatherly Area
Richland	Springfield	Wellsboro Area
Ridgway Area	Springfield Township	West Allegheny
Ridley	State College Area	West Branch Area
Ringgold	Steel Valley	West Chester Area
Riverside	Steelton-Highspire	West Greene
Riverside Beaver County	Sto-Rox	West Jefferson Hills
Riverview	Stroudsburg Area	West Middlesex Area
Rochester Area	Sullivan County	West Mifflin Area
Rockwood Area	Susquehanna Community	West Perry
Rose Tree Media	Susquehanna Township	West Shore
	Susquenita	West York Area
S		Western Beaver County
Saint Clair Area		Western Wayne
Saint Marys Area		Westmont Hilltop
	T	
	Tamaqua Area	

Schedule of Employers (Continued)

Whitehall-Coplay
 Wilkes-Barre Area
 Wilkesburg
 William Penn
 Williams Valley
 Williamsburg Community
 Williamsport Area
 Wilmington Area

Wilson
 Wilson Area
 Windber Area
 Wissahickon
 Woodland Hills
 Wyalusing Area
 Wyoming Area
 Wyoming Valley West

Wyomissing Area

Y

York
 York Suburban
 Yough

Area Vocational Technical Schools

Admiral Peary
 Altoona
 Armstrong County
 Beaver County
 Bedford-Everett
 Berks
 Bethlehem
 Bradford County
 Bucks County
 Butler County
 Carbon County
 Central Montgomery County
 Central Westmoreland County
 Centre County
 Clarion County
 Clearfield County
 Columbia-Montour
 Crawford County
 Cumberland-Perry
 Dauphin County
 Delaware County
 Eastern Montgomery County
 Eastern Northampton County

Eastern Westmoreland County
 Erie County
 Fayette County
 Forbes Road East
 Franklin County
 Fulton County
 Greater Johnstown
 Greene County
 Harrisburg-Steelton-Highspire
 Huntingdon County
 Indiana County
 Jefferson County-DuBois
 Juniata-Mifflin
 Lackawanna County
 Lancaster County
 Lawrence County
 Lebanon County
 Lehigh County
 Mercer County
 Middle Bucks County
 Mon Valley
 Monroe County
 North Fayette County

North Montco
 North Westmoreland County
 Northumberland County
 Parkway West
 Reading-Muhlenberg
 Schuylkill County
 Somerset County
 SUN
 Susquehanna County
 Upper Bucks County
 Venango County
 West Side
 Western
 Western Montgomery County
 Wilkes-Barre
 York County

Intermediate Units

Allegheny #3
 Appalachia #8
 Arin #28
 Beaver Valley #27
 Berks County #14
 Blast #17
 Bucks County #22
 Capital Area #15
 Carbon Lehigh #21
 Central Susquehanna #16

Central #10
 Chester County #24
 Colonial Northampton #20
 Delaware County #25
 Intermediate Unit #1
 Lancaster Lebanon #13
 Lincoln #12
 Luzerne #18
 Midwestern #4
 Montgomery County #23

Northeastern Education #19
 Northwest Tri County #5
 Pittsburgh Mt. Oliver #2
 Riverview #6
 Schuylkill #29
 Seneca Highlands #9
 Tuscarora #11
 Westmoreland #7

Schedule of Employers (Continued)

Colleges/Universities

Bloomsburg University
Bucks County Community College
Butler County Community College
California University
Cheyney University
Clarion University
Community College of Allegheny County
Community College of Beaver County
Community College of Delaware County
Community College of Philadelphia
East Stroudsburg University
Edinboro University
Harrisburg Area Community College
Indiana University
Kutztown University
Lehigh County Community College

Lock Haven University
Luzerne County Community College
Mansfield University
Millersville University
Montgomery County Community College
Northampton County Area Community College
Pennsylvania College of Technology
Pennsylvania State University
Reading Area Community College
Shippensburg University
Slippery Rock University
University of Pittsburgh
West Chester University
Westmoreland County Community College

Other

Berks County Earned Income Tax Bureau
Department of Education - Commonwealth of Pennsylvania
Northern Area Special Purpose School
Overbrook School for the Blind
Pennsylvania Council on Vocational Education
Pennsylvania School Boards Association
Pennsylvania School for the Deaf

Scotland School for Veterans Children
Scranton School for the Deaf
Thaddeus Stevens School of Technology
Washington County Alternative School
Western Pennsylvania School for the Blind
Western Pennsylvania School for the Deaf

Components of Total Contribution Rate
 (In Percentages)

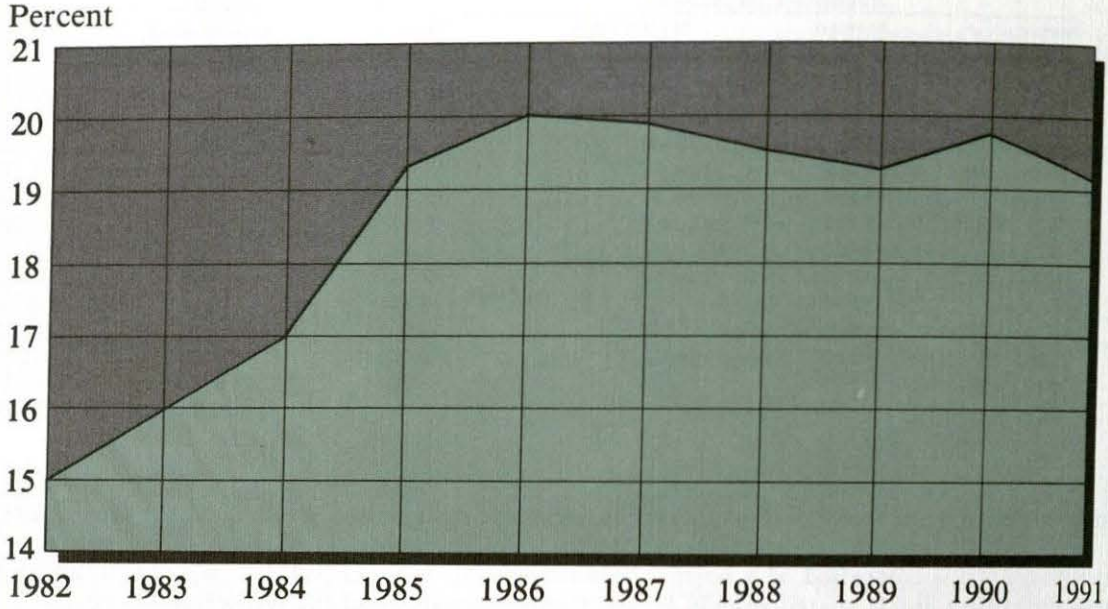
Fiscal Year	Employer Contribution				Employee Contribution (Average)	Total Contribution Rate
	Normal Requirement (A)	Accrued Liability (B)	Health Care Contribution (C)	Total Employer		
91-92	8.00	6.40	.50	14.90	5.46	20.36
90-91	8.28	10.90		19.18	5.69	24.87
89-90	8.44	11.24		19.68	5.53	25.21
88-89	8.63	10.64		19.27	5.37	24.64
87-88	8.72	10.82		19.54	5.34	24.88
86-87	9.13	10.77		19.90	5.29	25.19
85-86	9.16	10.88		20.04	5.27	25.31
84-85	8.35	10.96		19.31	5.25	24.56
83-84	8.75	8.31		17.06	5.25	22.31
82-83	7.93	8.07		16.00	5.25	21.25
81-82	6.93	8.07		15.00	5.25	20.25
80-81	6.93	8.07		15.00	5.25	20.25

The total contribution rate is the total of the employer and employee rates actuarially required for funding of the PSERS.

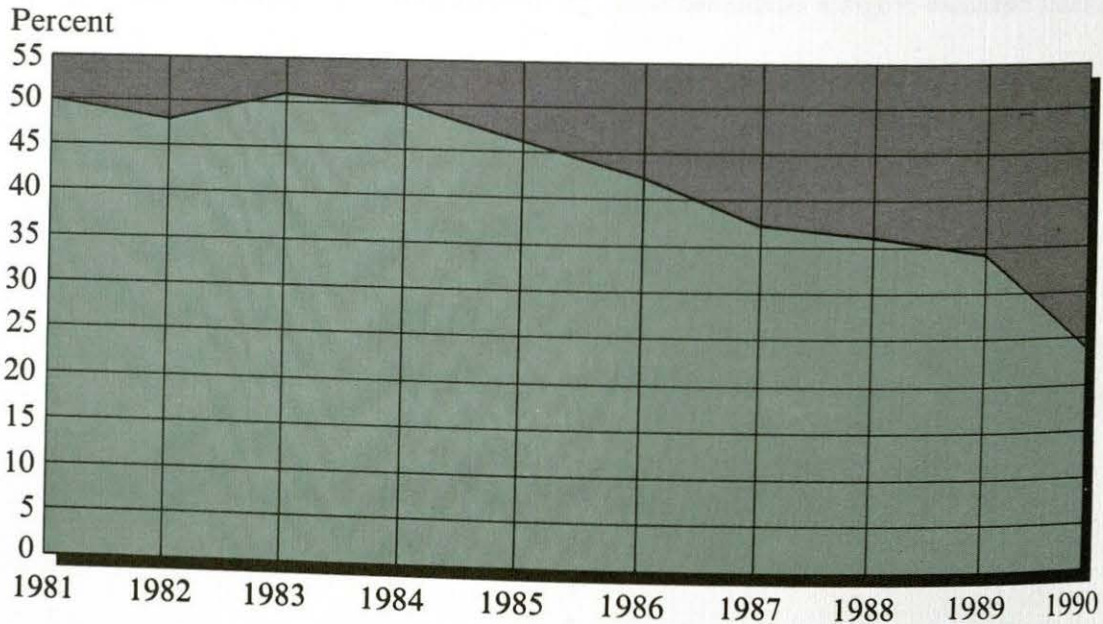
The total employer rate is comprised of a normal requirement, an accrued liability requirement and a health care contribution requirement and is shared equally by the Commonwealth and the Reporting Units:

- (A) The normal requirement portion is the percentage of compensation necessary to fund any prospective benefits payable to the member.
- (B) The total accrued liability portion is the percentage of compensation necessary to fund past increased benefits or supplemental annuities.
- (C) The health care contribution portion is the percentage of compensation necessary to fund the health insurance premium assistance program established under the provisions of Act 23-1991.

Total Employer Contribution Rate — 10 Year Trend



Unfunded Accrued Liability as Percent of Aggregate Accrued Liability — 10 Year Trend



INVESTMENT SECTION

۱۳۸۵

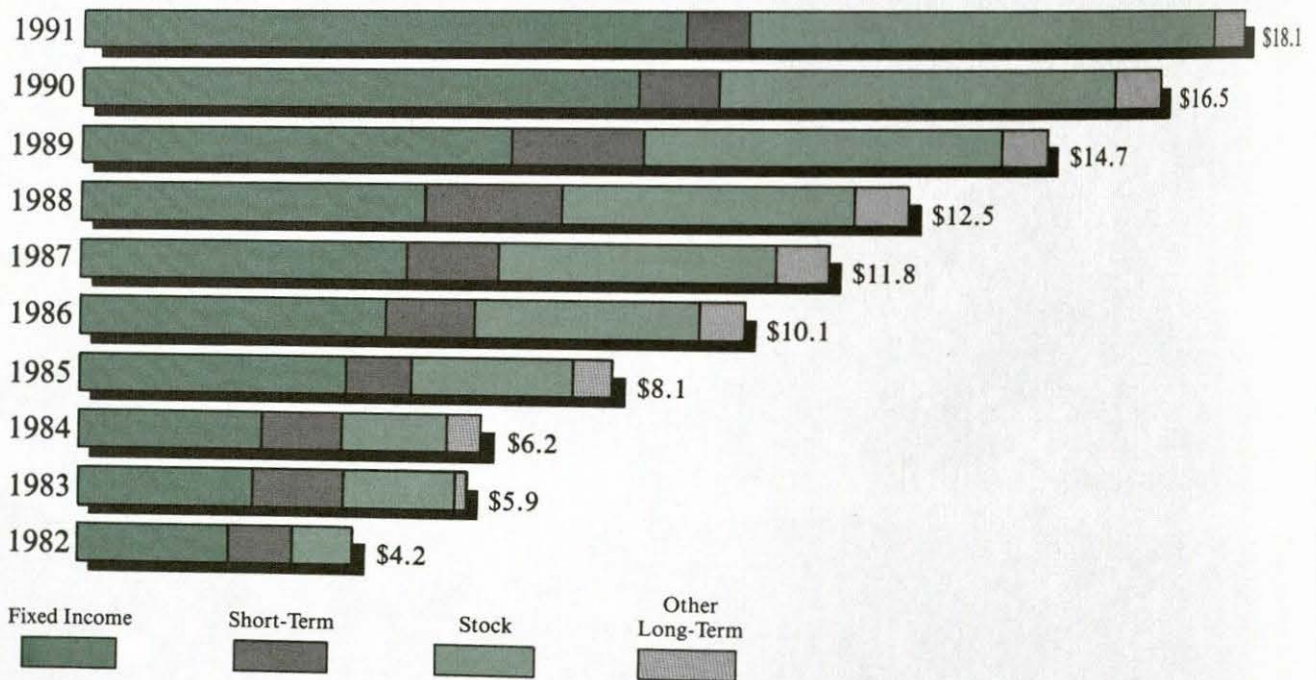
Investment Overview

The Board of Trustees' Mission Statement provides the foundation for a sound and prudent strategic investment policy. This policy insures the long-term financial health of the System for the retirement security of its members. This financially driven investment policy maximizes returns within acceptable levels of risk through strategic asset allocation decisions to meet the actuarially projected long-term liabilities of the System. From the strategic investment policy, an operating plan is developed to implement the Board's decisions. This operating plan is under constant scrutiny by the Board, the investment consultant, and the System's investment staff to insure its effectiveness in the ever changing economic environment.

The System's assets are managed by both internal and external professionals under investment guidelines adopted by the Board. The internal investment program was initiated during fiscal year 1989-1990 with investments in two asset classes, equities and fixed income. This investment program is designed to be active and innovative, but conservative in its investment approach, fulfilling the high standards and performance objectives established by the Board.

The market value of the investments of the Public School Employees' Retirement System reached \$18.1 billion as of June 30, 1991. This is an increase from \$16.5 billion at June 30, 1990. A graphical representation showing the ten year trend of assets at market value follows.

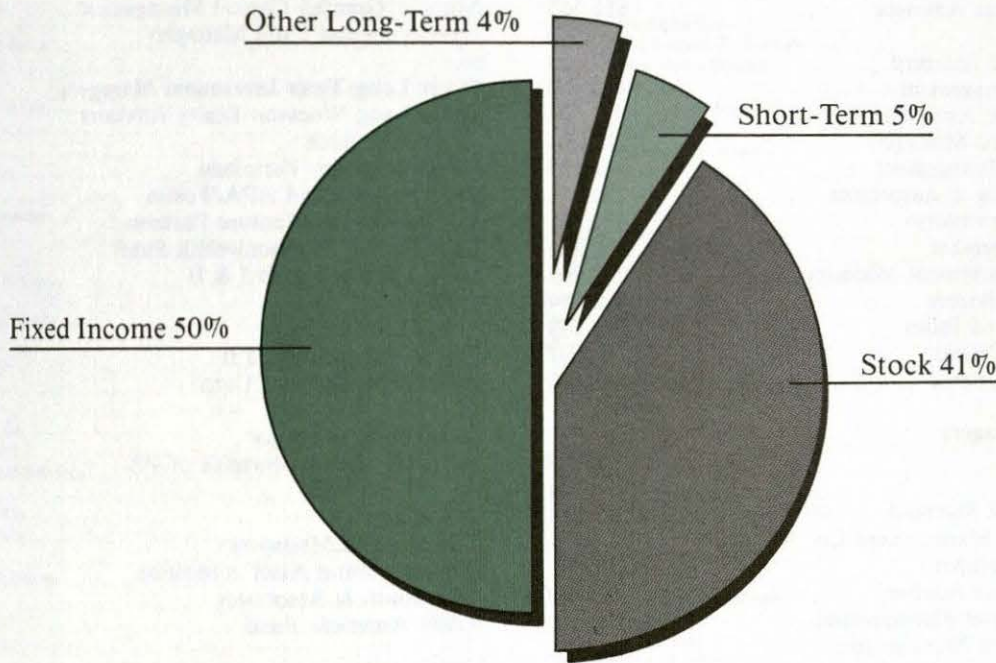
Portfolio Distribution — 10 Year Trend (Market Value — Amounts in Billions)



Investment Overview (Continued)

The composition of the Fund at market value was: fixed income, \$9.1 billion; common and preferred stocks, \$7.4 billion; other long-term investments, \$.6 billion; and short-term investments, \$1 billion. The distribution by percent is illustrated in the chart below.

Portfolio Distribution — 1991
(Market Value)



The time weighted rate of return for the Fund's investments was 8.1% for the fiscal year ending June 30, 1991. This compares to a 9.2% return for the year ending June 30, 1990 and an 9.2% annualized return for the five years ending June 30, 1991.

Equities in the domestic portfolio returned 5.3% this fiscal year, somewhat less than the return of 7.4% for the Standard and Poor's 500 Index during that period. Equities had an 11.8% return for the fiscal year ending June 30, 1990.

The domestic fixed income segment of the portfolio, consisting of corporate and government debentures and mortgage backed securities, returned 11.1% for the fiscal year compared with a 10.2% return for the Shearson-Lehman Government Corporate Index. The fixed income return for the prior fiscal year was 7.1%.

Other long-term investments returned 6.6% compared with 8.6% the prior year.

Short-term investments returned 7.4% compared to a 7.6% return on 90-day Treasury Bills.

The global portfolio, consisting of fixed income and stocks, returned 6.0% this year. Total global investments, including global short term investments, increased from 3% to 6% of the Fund's total assets this fiscal year.

Investment Overview (Continued)

The following chart lists the market value of assets, using a settlement date basis, under management by the System's funded investment advisors at June 30, 1991. The dollar value of cash equivalents held by the managers is also included in the Treasury portfolio total.

**Investment Managers
Market Value (in thousands)**

Equity Managers		Latimer & Buck	242,792
PSERS Equity	1,693,463	Putnam Advisory Co	209,916
Oppenheimer Capital Corp	1,033,795	Loomis Sayles & Company	144,540
Delaware Investment Advisers	851,865	Morgan Grenfell Capital Management	113,921
Mellon Bank, N.A.	746,514	Developmental Fund Managers	89,866
Miller, Anderson & Sherrerd	635,983		
Dreman Value Management	482,624	Other Long-Term Investment Managers	
Cashman, Farrell & Associates	423,742	Jones Lang Wootton Realty Advisors	244,671
Developmental Fund Managers	318,086	Latimer & Buck	242,851
Newbold's Asset Management	241,093	Morgan Stanley Farmland	52,248
Pilgrim Baxter Greig & Associates	224,952	PA Venture Fund APA/Fostin	19,286
Columbus Circle Investors	214,921	Commonwealth Venture Partners	18,508
Eagle Asset Management	209,343	Loyalhanna Commonwealth Fund	11,679
Security Pacific Investment Managers	208,962	CEO Venture Funds I & II	10,764
Hudson Capital Advisors	203,754	CIGNA	4,567
PNC/AIM Enhanced Index	199,549	Genesis Seed Fund	2,000
Glenmede Trust Company	56,607	Edison Venture Fund II	1,000
Bankers Trust Company	5,521	NEPA Management Corp	984
		Short-Term Manager	
Fixed Income Managers		Treasury, Commonwealth of PA	579,557
Mellon Bank, N.A.	2,186,809		
PSERS Fixed	1,098,789	Miscellaneous	
Miller, Anderson & Sherrerd	1,041,094	Global Fund Managers	1,162,575
Pacific Investment Management Co	964,531	Mellon Capital Asset Allocation	351,153
Glenmede Trust Company	861,590	Weymouth & Associates	50,000
Delaware Investment Advisers	708,352	EAI - Americas Fund	38,750
Morgan Stanley Asset Management	614,132		
Criterion Investment Management	344,881		

The System also has four option managers, Darien Capital Management, Oppenheimer Option Management, Acorn Asset Management, and Loomis-Sayles, who write covered index call options on \$1,300,000,000 of the equity portfolio. Investment management fees totalled \$33,108,928 this fiscal year compared to \$29,692,672 last fiscal year. A breakdown of investment fees paid follows:

**Summary Of Investment Fees
Year Ended June 30, 1991**

Equity Managers	\$17,660,958
Fixed Income Managers	7,111,161
Real Estate Managers	3,081,340
Option Managers	2,182,576
Miscellaneous	3,072,894
Total Fees	\$33,108,928

The Public School Employees' Retirement System of Pennsylvania

Investment Section

Investment Overview (Continued)

Brokers' fees on investment transactions for the fiscal year ending June 30, 1991 were \$11,617,439. A breakdown of brokers' fees paid follows:

Summary Schedule of Commissions
Paid to Brokers
Year Ended June 30, 1991

Broker Name	Commissions Paid(\$)	Broker Name	Commissions Paid (\$)
Able Noser	5,106	Dominion Securities	2,844
Abner Herman & Brock	876	Donaldson Lufkin & Jenrette	189,511
Abraham & Sons	3,480	Dow Jones News Service	738
Access	5,384	Dunlevy & Co	1,008
Adams Harkness & Hill	13,382	Edwards, A G & Sons	27,588
Adler Stafford & Co	360	Elliott Ledgerwood	25,310
Advest	206,267	Eppler Guerin & Turner	29,604
Alpha Management	51,355	Equitable Securities	2,468
Aminvest	360	Ernst & Co	33,711
Arnhold S Bleichroeder	16,903	Execution Services	18,088
Asiel & Co	360	Factset Data System	20,987
Autranet	143,540	Fechtor Detwiler & Co	9,668
Baird, Robert W & Co	4,260	Feeley & Wilcox Securities	6,000
Balis & Zorn	600	Ferris & Co	3,576
Barclays De Zoete Wedd	3,048	Fidelity Brokerage Services	625
Baron Capital	1,800	Fidelity Capital Management	72
Bear Stearns & Co	345,655	Fidelity Capital Market	1,346
Ben Gordon	600	First Analysis Securities	652
Black & Co	750	First Boston	159,448
Blair, William & Co	11,710	First Hanover Securities	1,790
Blunt Ellis & Loewi	6,030	First Manhattan	19,184
Boston Institutional Services	3,400	Flomehaft	325
Brad Peery	480	Fox Pitt Kelton	8,487
Bradford, J C & Co	4,071	Furman Selz Mager Dietz & Birney	5,892
Branch Cabell & Co	244	Gabelli & Co	1,654
Brandt, Robert	6,465	Garrison Brothers	1,200
Bridge Trading Company	46,629	Gelderman	4,000
Brimberg & Co	9,360	Gerard Klauer & Mattison	510
Broadcourt Capital	982,507	Gilder Gagnon	9,611
Broadstreet Equities	4,625	Gilford Securities	2,942
Broker West	1,512	Glazer, C L & Co	21,753
Brown Brothers Harriman & Co	11,722	Goldman Capital	15,780
Brown, Alex & Sons	43,809	Goldman Sachs & Co	291,110
Buckingham Research	22,775	Goldsmith & Harris	2,372
Bunting Warburg	5,238	Goldstein, L J & Co	8,222
Burns Fry Hoare Govett	4,730	Goldstein, Larry	860
Campbell Waterman	648	Goodrich Securities	16,572
Cantor Fitzgerald & Co	63,694	Gordon Capital	27,798
Capital Institutional Services	208,233	Gordon Haskett & Co	19,506
Chapman Company	13,095	Gruntal & Co	2,926
Chicago Corporation	15,636	H M E Intl Advisory Associates	7,356
Christopher, B C & Co	300	Hambrecht & Quist	2,547
Citation Group	33,972	Hanifen Imhoff	450
City Securities	600	Hoening & Co	36,515
Costello, F	1,000	Hopper Soliday & Co	1,716
County Securities USA	64,860	Howard Weil Labouisse Friedrichs	6,510
Cowen & Co	32,281	Hunnicut & Co	19,308
Credit Lyonnais Securities U S	2,210	Indata	480
Crowell Weedon & Co	9,085	Inferential Brokerage Services	594
Cruittenden & Co	750	Instinet	38,832
Dain Bosworth	24,018	Interstate/Johnson Lane	42,042
Daugherty Cole	5,225	Invemed Associates	3,120
Davis, Mendel & Regenstein	900	Investment Management Research	2,076
Dean Witter Reynolds	33,483	Investment Management Services	3,804
Decision Services	642	ISI Group	1,428
Derby Securities	5,860	Janney Montgomery Scott	142,230
Dillon Read & Co	132,339	Jefferies & Co	137,892
Dominick & Dominick	207,931	Jesup & Lamont Clearing	3,214

The Public School Employees' Retirement System of Pennsylvania

Investment Section

Investment Overview (Continued)

Broker Name	Commissions Paid (\$)	Broker Name	Commissions Paid (\$)
Jesup Josephthal Securities Co	1,913	Robertson Stephens & Company	3,351
Johnson Rice	674	Robinson-Humphrey Co	8,728
Jones & Associates	13,048	Rochdale Securities	46,998
Josephthal & Co	99,587	Rosenthal Silberberg	1,500
Kalb Voorhis Company	4,838	Rothschild L F & Co	430
Kayne Anderson	4,544	Rothschild Securities	240
Keefe Bruyette & Woods	8,416	Roulston Research	45,324
Kidder Peabody & Co	311,249	Russell, Frank	17,196
King, C L & Associates	8,394	Rutherford, Brown & Catherwood	1,108
L I K Securities	6,690	Ryan, S W	188,191
Labe Simpsons	12,492	S E I Financial Services	1,128
Ladenburg Thalman & Co	2,560	S E I Funds Evaluations	6,498
Lawrence, C J Morgan Grenfell	172,820	Salomon Brothers	189,545
Legg Mason Wood Walker	37,859	Sanford C Bernstein	125,337
Levesque Beaubien	2,760	Securities Settlement	578
Lewco Securities	3,176	Seidler Amdec Securities	2,616
Lipper Analytical Securities	21,984	Shaw Data Securities	6,954
Lovett Mitchell Webb & Garrison	480	Shearson Lehman Brothers	625,175
Lynch Jones & Ryan	545,748	Shields Capital	132,112
Mabon Nugent & Co	604,099	Smith Barney Harris Upham & Co	228,258
MacDougall, MacDougall & MacTier	78,825	Smith, E W & Co	156
Makefield Securities	542,703	Soundview Financial	7,494
Maples & Goldschmidt	90	Southcoast Capital	3,448
Martin Sosnoff Securities	840	Southwest Securities	600
McDaniel Lewis & Co	8,068	Stamford Co	836
McDonald & Company Securities	18,632	Standard & Poor Securities	35,010
McGraw Hill Securities	420	Stephens	600
Merrill Lynch Pierce Fenner & Smith	256,518	Sturdivant & Co	100,739
Midland-Walwyn	3,689	Sutro & Co	2,256
Midwood Securities	4,602	Swiss Bank	59,696
Monness Crespi Hardt & Co	20,794	Thomson Kernaghan & Co	21,039
Montgomery Securities	100,009	Trend Analysis	72
Moran & Assoc Securities Brokerage	6,210	Tucker Anthony	9,132
Morgan Keegan & Company	11,321	21st Securities	4,224
Morgan Stanley & Co	920,845	U S Clearing Corporation	6,654
National Financial Services	3,262	UBS Securities	59,752
Needham & Co	1,308	Value Line	3,780
Neuberger & Berman	53,954	Van Kasper & Co	4,839
New York Foreign Securities	3,180	Volpe & Covington	1,642
Newbridge Securities	105	Volpe, Welty & Co	1,200
Nomura Securities International	60,588	W & D Securities	1,462
O'Neil, William & Co	15,704	Wagner Stott Clearing	2,718
Oppenheimer & Co	638,643	Wainwright, H C & Co	3,460
Paine Webber Mitchell Hutchins	139,507	Wall Street Discount	10,442
Penna Merchant Group	3,430	Warburg, S G & Co	14,262
Pennsylvania Group	2,378	Wechsler & Krumholz	560
Performance Analytics	5,220	Weeden & Co	59,704
Pershing & Co	22,830	Weiss Peck & Greer	6,750
Piper Jaffray & Hopwood	288	Wellesley Research	4,398
Pollit-Bertrand	4,310	Wellesley Resources	7,128
Prescott Ball & Turben	11,285	Wertheim & Co	145,697
Prudential Bache Securities	146,986	Wertheim & Schroder	9,141
Pryor Govan Counts & Co	3,246	Wheat First Securities	84,369
Pryor McClendon	1,980	William McKay Jordan & Mills	1,786
Ragen McKenzie	12,444	Wilshire Associates	49,404
Rauscher Pierce Refsnes	4,502	Wood Gundy	3,987
Raymond James & Associates	3,156	York Securities	9,367
Reinheimer Nordberg	108	Zacks & Co	630
Richard, E R	420		
		TOTAL	11,617,439

Investment Overview (Continued)

The next schedule shows the impact of investment transactions on book value for the major asset classes during the fiscal year.

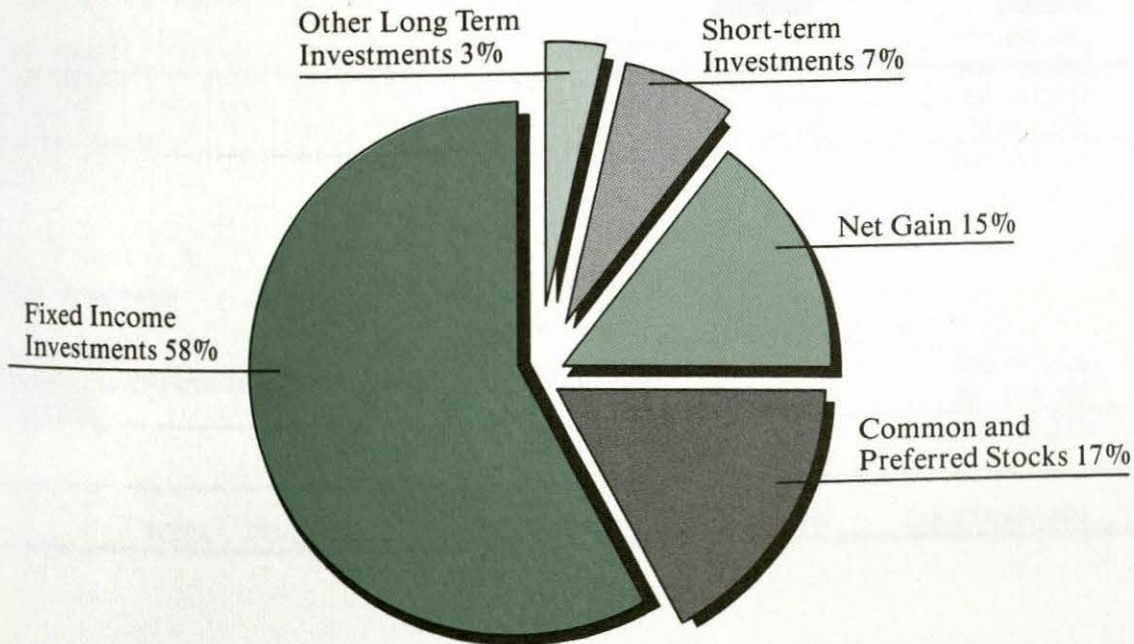
Summary of Investment Transactions
Year ended June 30, 1991
(Amounts in millions)

Type of Investment	Book Value 6/30/90	Purchases	Sales	Gain/ (Loss)	Accretion/ (Amortiza- tion)	Book Value 6/30/91
Fixed Income	\$ 8,525	\$ 8,568	(\$ 8,191)	\$ 95	\$ —	\$ 8,977
Common and Preferred Stock	5,145	4,163	(2,954)	101	—	6,455
Other Long-Term Investments	651	19	(7)	2	—	665
Short-Term Investments	1,205	12,725	(12,969)	1	—	962
Total	\$15,526	\$25,456	(\$24,122)	\$199	\$ —	\$17,059

Net investment revenue for the fiscal year ending June 30, 1991 exceeded \$1.2 billion, a decrease from the prior fiscal year when net revenue was \$1.4 billion. The components of investment revenue are shown in the following graph.

The category net gain includes income from security lending, gains on option overwriting, and amortization of premiums.

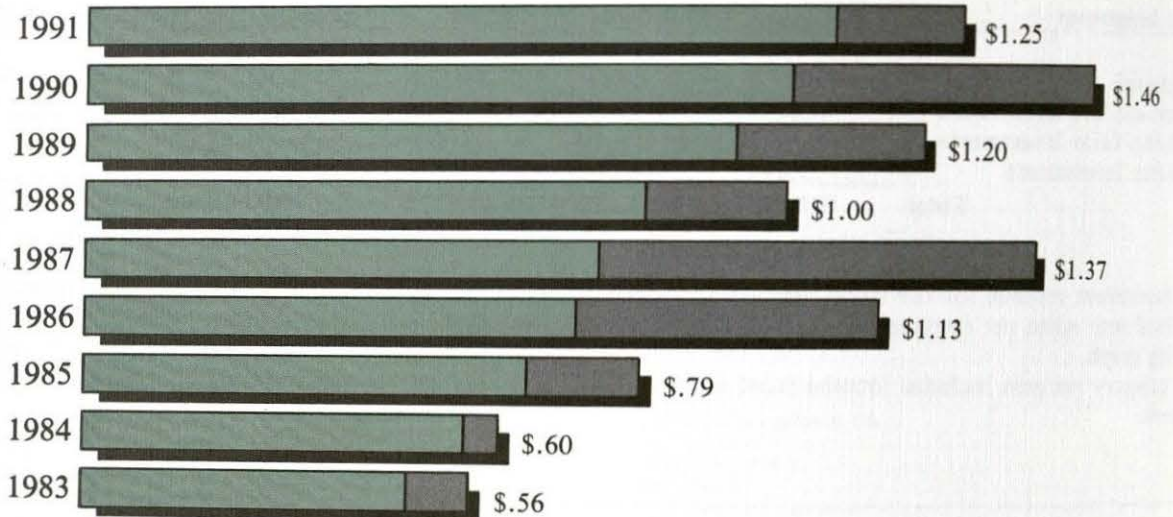
Components of Investment Revenue — 1991



Investment Overview (Continued)

The following graph illustrates the eight year trend of the components of the investment revenue. In addition to realized gains and losses from the sale of investments, the category net gain/loss includes income from security lending, gains on option overwriting and amortization of premiums.

Components of Investment Revenue — 9 Year Trend
(Amounts in Billions)



Income from Securities



Net Gain on Sales

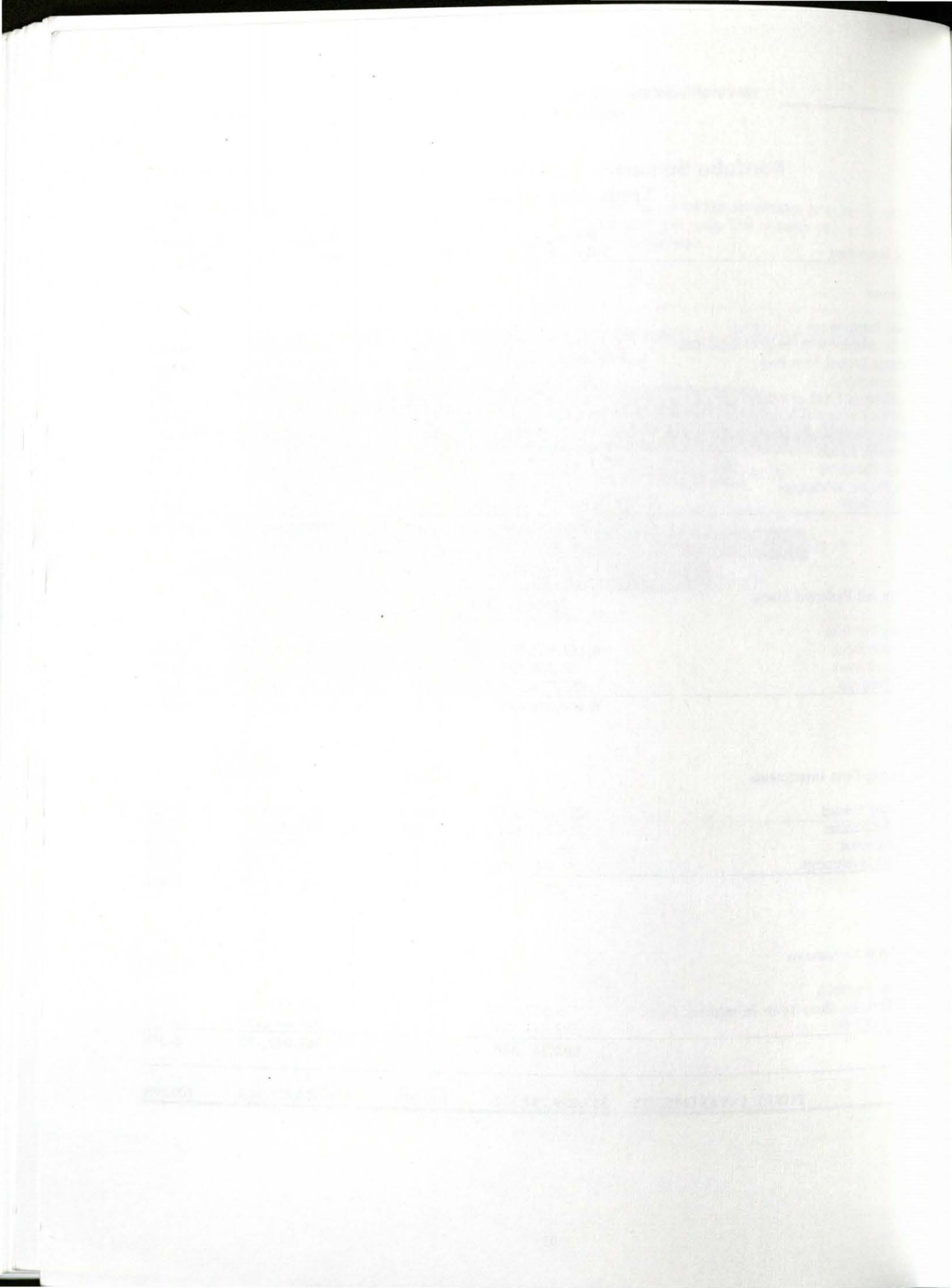


Investment Section

Portfolio Summary Statistics as of 6/30/91

Trade Date Basis

Type of Investment	Book Value (\$)	% Book Value	Market Value (\$)	% Market Value
Fixed Income				
Domestic Portfolio				
U.S. Government & Agency Obligations	\$ 4,241,376,710	24.9%	\$ 4,332,059,510	24.0%
Mortgage Backed Securities	2,625,388,998	15.4%	2,688,449,714	14.9%
Corporate Bonds	1,023,244,789	6.0%	1,030,972,496	5.7%
Miscellaneous Fixed Income	152,067,459	0.9%	153,162,312	0.8%
FHA/VA Residential Mortgages	124,593,969	0.7%	113,318,215	0.6%
Equity Participating Commercial Mtgs	94,034,580	0.5%	104,675,381	0.6%
Convertible Bonds	71,871,034	0.4%	67,719,073	0.4%
Private Placement	50,000,000	0.3%	50,000,000	0.3%
FHA Project Mortgages	31,925,990	0.2%	24,798,532	0.1%
Global Portfolio	562,049,407	3.3%	541,473,845	3.0%
	8,976,552,936	52.6%	9,106,629,078	50.4%
Common and Preferred Stock				
Domestic Portfolio				
Common Stock	6,151,562,581	36.1%	7,108,632,307	39.3%
Preferred Stock	50,348,537	0.3%	51,359,633	0.3%
Global Portfolio	252,718,563	1.5%	239,656,216	1.3%
	6,454,629,681	37.9%	7,399,648,156	40.9%
Other Long-Term Investments				
Real Estate Owned	225,199,656	1.3%	181,458,410	1.0%
Equity Real Estate	319,238,601	1.9%	306,063,669	1.7%
Venture Capital	68,787,888	0.4%	68,787,888	0.4%
Farmland Investments	52,247,590	0.3%	52,247,590	0.3%
	665,473,735	3.9%	608,557,557	3.4%
Short-Term Investments				
Domestic Portfolio				
PA Treasury Short-Term Investment Fund	579,557,016	3.4%	579,557,016	3.2%
Global Portfolio	383,184,564	2.2%	381,445,156	2.1%
	962,741,580	5.6%	961,002,172	5.3%
TOTAL INVESTMENTS	\$17,059,397,932	100.0%	\$18,075,836,963	100.0%



NOTES