Public Employees Retirement System of Ohio

THE COMPREHENSIVE ANNUAL FINANCIAL REPOR

For the Year Ended December 31, 1990

Richard E. Schumacher, Executive Director
Mark Snodgrass, Controller

277 East Town Street, Columbus, Ohio 43215

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Public Employees Retirement System of Ohio

For its Comprehensive Annual Financial Report for the Fiscal Year Ended December 31, 1989

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFR's) achieve the highest standards in government accounting and financial reporting.

Gary R. Nordstrom
President

Jeffrey L. Esser
Executive Director

Table of Contents

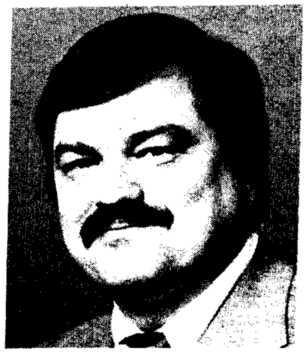
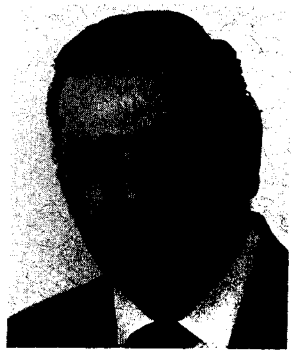
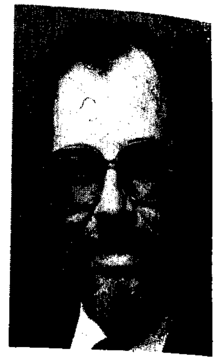
The Retirement Board

ELECTED MEMBERS

Charlie R. Adkins
Representing College and University Employees

John M. Hurley
Representing Municipal Employees

John W. Maurer
Representing State Employees

W. Emerson "Dusty" Rhodes
Representing Miscellaneous Employees

Barbara J. Thomas
Representing County Employees

William G. Wilcox
Representing Retirants



STATUTORY MEMBERS

Thomas E. Ferguson
State Auditor

Lee Fisher
Attorney General

Stephen A. Perry
Director of Administrative Services



EXECUTIVE DIRECTOR

Richard E. Schumacher

The Retirement Board is the governing body of PERS, with responsibility for administration and management. Six of the nine members are elected by the groups they represent: retirants; employees of the state; employees of counties; employees of municipalities; non-teaching employees of state colleges and universities; and miscellaneous employees. The Auditor of State, Attorney General, and the Director of Administrative Services are statutory members.

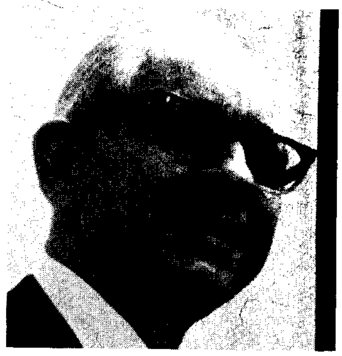
The Retirement Board appoints the Executive Director, an actuary, and other employees necessary for the transaction of business. The Board meets monthly and receives no compensation, but is reimbursed for necessary expenses. By law, the State Treasurer is custodian of the funds of PERS.

Leadership Transition

EXECUTIVE DIRECTORS

Dale W. Stump
1934-1935

Wilson E. Hoge
1935-1943



Fred L. Schneider
1943-1972

J. Douglass Peters
1972-1976

William S. McLaughlin
1976-1990

December 31, 1990 marked the end of a more than 32 year career with the Retirement System for William S. McLaughlin, our fifth Executive Director. Named to the top position in 1976, he previously served as assistant director for administration. During his tenure with PERS, McLaughlin also was supervisor for the benefit estimating department and the interview and reception section, and he oversaw the communications function.

He saw PERS grow from $300 million in assets to our present sum of over $20 billion. When McLaughlin was named Executive Director, the Retirement System's assets were $3 billion.

Before joining PERS, he served active duty with the Air Force and full-time in the Air Force Reserve program, attaining the rank of Major. For approximately 10 years, his responsibilities included personnel and administrative duties. McLaughlin served with the Army of Occupation in Germany in 1946 and during the Berlin Crisis of 1961 he was called to active duty in France.

On January 1, 1991, Richard E. Schumacher began his duties as the sixth Executive Director of PERS. Previously assistant director and controller, he joined the Retirement System in 1960 after a short career with the FBI.

A graduate of Strayer College in Washington, DC, and a certified public accountant, Schumacher has had a variety of duties with PERS. In 1970, he became manager of the fixed income portfolio and, in 1979, he was named controller. Beginning in 1989, he served as deputy director when William S. McLaughlin announced his retirement.

Richard E. Schumacher
1991-

Organizational Structure

ADVISERS:

Actuary —
Gabriel, Roeder, Smith & Company
Detroit, Michigan

Investments —
Comstock Partners Inc.
New York, New York

AUDITORS:

Deloitte & Touche
Columbus, Ohio
(Under contract with the Auditor of the State of Ohio)

RETIREMENT BOARD

EXECUTIVE DIRECTOR
Richard E. Schumacher

Assistant Director Investments
Robert A. McLaughlin

Assistant Director Benefits Administration
Danny L. Drake

Assistant Director Legal and Legislation
Toba Jeanne Feldman

Controller
Mark Snodgrass

Manager Data Information Systems
Blake W. Sherry

Letter of Transmittal

PUBLIC EMPLOYEES RETIREMENT SYSTEM OF OHIO
277 EAST TOWN STREET COLUMBUS, OHIO 43215
TELEPHONE (614) 466-2085

Dear Chairman and Members of the Board:

It is a privilege to submit to you the Comprehensive Annual Financial Report for the Public Employees Retirement System of Ohio for the fiscal year ended December 31, 1990. We believe this report reflects a careful stewardship of the System's assets and dedicated service to members and retirants.

The State Employees Retirement System was established January 1, 1935 to provide a secure means for employees of the state of Ohio to provide for their retirement. In 1938 the System expanded to include employees of counties, municipalities, health departments and park and conservancy districts. At that time the name was changed to the Public Employees Retirement System of Ohio. Membership was made optional for elected officials in 1941. Survivor benefits were made part of PERS' benefits in 1951. From 1935 to the present the System has experienced continuous growth and provided benefit enhancements.

Participating employers are divided, for actuarial purposes, into state, local and law enforcement divisions. A complete description of employees eligible for membership in PERS is contained in the Plan Statement on page 49.

PERS provides retirement, disability and survivor benefit protection for thousands of public employees throughout the state. Employees, along with their employers, pay into the System during their working years. PERS, in turn, pays benefits to these members throughout their retirement, and to qualified beneficiaries upon a member's or retirant's death. For additional information on benefits available, see the Plan Statement on page 49.

The Comprehensive Annual Financial Report consists of six sections: (1) an Introductory Section which contains a Letter of Transmittal, along with the identification of the administrative organization and consulting services utilized by the System; (2) a Financial Section which contains a letter expressing the opinion of the independent certified public accountants and the financial statements of the System; (3) an Actuarial Section which contains a letter stating the independent actuary's opinion and results of their annual actuarial valuation; (4) a Statistical Section which includes significant data pertaining to the Retirement System; (5) an Investment Section which contains the investment report, portfolio summary, and the portfolio listings; and (6) the System's Plan Statement.

Economic Condition and Outlook

The question no longer is whether the economy has entered a recession, but how long and how severe the current recession will be. The consensus opinion among the economists is for a short (six months) and mild (a decline in GNP of 1.0 percent) recession. Specifically, the economists forecast a modest decline in GNP of 0.9 percent in the first half of 1991, followed by an economic recovery in the second half with real GNP growing at a 1.7 percent rate. The good news, according to the consensus forecast, is that both interest rates and the inflation rate should finish lower than year end 1990 results.

Several factors that will influence the duration and severity of the economic recession and the performance of the financial market in 1991 are listed below:

(1) solutions to the growing federal and state budget deficits;

(2) pending financial/banking industry reform legislation; and

(3) the Federal Reserve's ability to stimulate the economy while preventing a return to high inflation.

Major Initiatives

PERS' underlying purpose and reason for existence is to provide quality retirement benefits to Ohio's public employees. These benefits are established by state statute. Prudent management and exceptional investment earnings have allowed the System to absorb two decades of substantial benefit increases while constantly maintaining a sound level of funding. This will continue to be our focus in the future.

One of our concerns over the past few years has been the rapidly escalating cost of providing health care to retirants. Though health care benefits are not statutorily guaranteed, PERS is dedicated to providing benefit recipients with quality health care to the extent our resources will permit.

Changes Enacted: The 1990 Omnibus Budget Reconciliation Act passed by the United States Congress will bring about significant change for many state and local government employers and employees. At the heart of these changes is a requirement that individuals who are covered by a state or local retirement system, but who do not participate in that system, shall be covered by Social Security. We believe that these requirements will have a major impact on the budgeting of many governmental units and that the funding of the retirement system will be affected to some degree.

Investment Strategies: Our goal in 1991 will again be to attain a real rate of return on investments and strengthen our overall portfolio. Our fixed income portfolio management will stress quality and call protection. The main function of our trading will be to align the portfolio to a desired mix. The real estate plan for 1991 involves putting greater emphasis on investments which can deliver stable cash flows. The equity portfolio strategy will concentrate on companies with attractive long-term fundamentals and high dividend yields.

Financial Information: The management of PERS is responsible for the information contained in this report and has implemented and continues to maintain systems of internal accounting controls which are designed to provide responsible assurances for the safeguarding of assets and the reliability of financial records. We believe that the internal accounting controls currently in place are adequate to meet the purpose for which they were intended. We also believe the financial statements, supporting schedules and statistical tables to be fairly presented in all material respects.

Accounting System and Reports

The accrual basis of accounting is used in recording financial transactions. Expenses are recorded when the liability is incurred, and revenues are recorded in the accounting period in which they are earned and become measurable. Interest earned is accrued on a monthly basis. Entries for amortization of premium and accumulation of discount are accrued on a monthly basis. Deferred gains and losses are also accrued monthly. Gains and losses on bond exchanges are accounted for under the deferral and amortization method.

Accounts receivable at year end, in addition to accrued interest receivable, reflect accrued employer charges and investment proceeds due on sales that have not yet settled. On the balance sheet, bonds and mortgages are carried at amortized book value while stocks are carried at cost. Fixed assets are listed at cost less accumulated depreciation. Under our cash management program, receipts are deposited as received and are recorded as undistributed deposits until such time as they are allocated to member contributions, employer receivables, employer contributions, and investment income.

Revenues

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through investment income. The 1990 revenue from employee and employer contributions totaled $1,375.8 million. Contribution rates for both employees and employers in the state and local government divisions have remained constant for the past 13 years. Net investment income for the period was $1,876.3 million.

Expenses

Benefit payments are the primary disbursements of a Retirement System. Recurring benefit payments prescribed by the plan, refunds of the contributions to terminated employees, and the cost of administering the System comprise total expenses. Administrative expenses are funded wholly through investment income. Benefit disbursements for 1990 totaled $1,090.3 million. Of this amount $984.7 million was paid to fulfill the System's obligation to its retirants. Refunds to members or beneficiaries for reasons of separation from service or death totaled $105.6 million.

Health care costs more than doubled during the short period covering 1984 through 1988. In 1990 health care costs amounted to $225.6 million. Health care costs represented over 20 percent of the Retirement System's total costs for the year. It is only because of exceptional investment earnings that PERS has been able to successfully absorb these cost increases. Health care costs are paid by the Public Employees Retirement System on a self-insured, split-funding program initiated in January 1981. Claims processing is administered under this agreement by the Aetna Insurance Company.

Funding and Reserves

Funds, derived from the excess of revenues over expenses, are accumulated by the Retirement System in order to meet current and future benefit obligations to retirants and beneficiaries. The higher the level of funding, the larger the accumulations of assets and the greater the investment income potential. Continuous improvement in the funding of the System is sought through suitable reserves, investment earnings, and effective cost containment programs. As of December 31, 1990, funds established by the System totaled $20,812.7 million. The actuarial valuation dated December 31, 1989 reflects an unfunded actuarial accrued liability of $5,244.5 million. This is the difference between the net assets available for benefits and the actuarially calculated liability for the fund. These "unfunded actuarial accrued liabilities" are being amortized over future years. The state government liability is being funded over 35 years, the local government portion over 37 years, and the law enforcement portion over 33 years. The industry standard for a sound funding policy is a funding period of 40 years or less. By pursuing a conscientious management approach, PERS has been able to meet the goals of level funding, thereby holding constant member and employer contribution rates.

The Pension Benefit Obligation is a standardized disclosure measure of the present value of pension benefits. The measure is the actuarial present value of credited projected benefits, excluding health care benefits and projected service credit, and is intended to help users assess a public employees retirement system's funding status. The total Pension Benefit Obligation at December 31, 1989 was $16,698.7 million. The net assets available for benefits, excluding health care costs, were $14,729.6 million.

Investments

The investment portfolio provided net revenues of $1,876.3 million in 1990. Net revenues are comprised of bond interest, accumulation of discount, amortization of premium, dividend income, recognized gains and losses on the sale of securities, and amortization of deferred gains and losses on bonds sold. Total yield on all investments was 7.61 percent. A detailed listing of the portfolio is presented on pages 41 to 47.

Professional Services

Professional services are provided to the Public Employees Retirement System by consultants appointed by the Board to aid in efficient and effective management of the System. Actuarial services are provided by Gabriel, Roeder, Smith & Company, Detroit, Michigan. The investment adviser is Comstock Partners, Inc., New York, New York. The financial records of the System were audited by Deloitte & Touche, Certified Public Accountants, Columbus, Ohio, under contract with the Auditor of the State of Ohio.

Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Public Employees Retirement System of Ohio for its Comprehensive Annual Financial Report for the fiscal year ended December 31, 1989. In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized Comprehensive Annual Financial Report, whose contents conform to program standards. Such reports must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. We believe our current report continues to conform to Certificate of Achievement program requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Acknowledgements

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

This report is being mailed to all employer units of the System, each state legislator, and other interested parties.

Respectfully submitted,

Richard E. Schumacher

RICHARD E. SCHUMACHER, CPA
Executive Director

Mark Snodgrass

MARK SNODGRASS, CPA
Controller

June 1, 1991, Columbus, Ohio

Public Employees Retirement System of Ohio

The Comprehensive Annual Financial Report

For the Year Ended December 31, 1990

PERS

FINANCIAL SECTION

Independent Auditors' Report

Deloitte & Touche

155 East Broad Street
Columbus, Ohio 43215-3650
Telephone: (614) 221-1000
Facsimile: (614) 229-4647

INDEPENDENT AUDITORS' REPORT

To the Retirement Board of the
Public Employees Retirement System of Ohio:

We have audited the accompanying balance sheets of the Public Employees Retirement System of Ohio as of December 31, 1990 and 1989, and the related statements of revenues, expenses, and changes in fund balances and of changes in financial position for the years then ended. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, such financial statements present fairly, in all material respects, the financial position of the System at December 31, 1990 and 1989, and the results of its operations and the changes in its financial position for the years then ended in conformity with generally accepted accounting principles.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The Additional Information listed in the table of contents is presented for the purpose of additional analysis and is not a required part of the basic financial statements. The Additional Information is the responsibility of the System's management. The Additional Information has been subjected to the auditing procedures applied in our audits of the basic financial statements and, in our opinion, is fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

Deloitte & Touche

May 3, 1991

Balance Sheets

As of December 31, 1990 and 1989

	1990	1989
ASSETS		
Cash and Short-Term Securities (Note 3):		
Cash	$ 25,670,612	$ (4,835,208)
Short-Term Securities	5,487,336,799	3,897,391,669
	5,513,007,411	3,892,556,461
Receivables:		
Employers	115,806,069	108,773,940
Retirement Incentive Plan	56,010,962	72,966,871
Investment Sales Proceeds	5,426,468	
Accrued Interest and Dividends	145,442,333	161,052,930
	322,685,832	342,793,741
Investments (Notes 3 and 4):		
Bonds	7,423,191,791	6,952,218,434
Mortgages	3,288,205,113	3,912,786,505
Stocks	3,376,519,012	2,859,115,836
Real Estate	936,361,192	730,142,364
Venture Capital	16,042,521	16,407,521
	15,040,319,629	14,470,670,660
Fixed Assets:		
Land	1,708,409	1,708,409
Building and Building Improvements	16,305,470	12,497,506
Furniture, Fixtures, and Equipment	7,494,549	5,966,154
	25,508,428	20,172,069
Accumulated Depreciation	(5,552,125)	(4,693,305)
	19,956,303	15,478,764
Other Assets:		
Deferred Losses on Bonds Sold (Note 4)	59,840,131	72,339,136
Prepaid Expenses	1,340,984	1,101,396
	61,181,115	73,440,532
TOTAL ASSETS	$20,957,150,290	$18,794,940,158
LIABILITIES AND FUND BALANCES		
Liabilities:		
Undistributed Deposits	$ 13,453,430	$ 11,381,270
Medical Benefits Payable	37,729,736	38,572,222
Investment Commitments Payable	48,813,095	1,822,843
Accrued Administrative Expenses (Notes 8 and 9)	3,544,504	3,273,901
Deferred Gains on Bonds Sold (Note 4)	40,860,306	75,781,808
Total Liabilities	144,401,071	130,832,044
Fund Balances:		
Employees' Savings Fund	3,386,651,914	3,076,305,964
Employers' Accumulation Fund	9,656,612,233	8,131,786,049
[Unfunded Actuarial Accrued Liability: 1989 — $5,244,514,348 (Note 5)]		
Annuity and Pension Reserve Fund	7,227,535,972	6,919,929,708
Survivors' Benefit Fund	527,160,612	522,659,425
Income Fund	14,755,725	13,281,353
Expense Fund	32,763	145,615
Total Fund Balances	20,812,749,219	18,664,108,114
TOTAL LIABILITIES AND FUND BALANCES	$20,957,150,290	$18,794,940,158

See Notes to Financial Statements

Statements of Changes in Financial Position

For the Years Ended December 31, 1990 and 1989

	1990	1989
Funds Provided By:		
Excess of Revenues Over Expenses	$ 2,148,641,105	$ 2,095,373,539
Items Not Requiring Or (Providing) Funds:		
Depreciation	873,820	705,701
Loss on Disposal of Fixed Assets	1,951	10,371
Increase (Decrease) in Funds Due to Changes in:		
Employers' Receivables	(7,032,129)	(18,808,287)
Retirement Incentive Plan Receivable	16,955,909	(7,252,976)
Investment Sale Proceeds Receivable	(5,426,468)	15,633,524
Accrued Interest and Dividends Receivable	15,610,597	(18,999,448)
Deferred Losses on Bonds Sold	12,499,005	53,731,002
Prepaid Expenses	(239,588)	(235,296)
Undistributed Deposits	2,072,160	1,979,888
Medical Benefits Payable	(842,486)	(502,997)
Investment Commitments Payable	46,990,252	(5,719,688)
Accrued Administrative Expenses	270,603	250,677
Deferred Gains on Bonds Sold	(34,921,502)	75,781,808
Sales and Maturities of Investments— Net Book Value:		
Bonds	15,875,450,244	19,891,282,961
Mortgages	1,794,989,000	2,051,290,352
Stocks	795,251,179	916,602,045
Real Estate	32,142,326	39,691,264
Venture Capital	365,000	21,431,328
Proceeds from Sale of Fixed Assets	11,500	31,188
Total Funds Provided	20,693,662,478	25,112,276,956
Funds Used For:		
Purchases of Investments:		
Bonds	16,346,423,601	21,238,208,445
Mortgages	1,170,407,608	1,141,004,736
Stocks	1,312,654,355	819,318,636
Real Estate	238,361,154	335,907,061
Venture Capital		3,565,288
Additions to Fixed Assets	5,364,810	6,747,552
Total Funds Used	19,073,211,528	23,544,751,718
Net Increase In Funds	1,620,450,950	1,567,525,238
Cash and Short-Term Securities, Beginning of Year	3,892,556,461	2,325,031,223
Cash and Short-Term Securities, End of Year	$ 5,513,007,411	$ 3,892,556,461

See Notes to Financial Statements

Statements of Revenues, Expenses, and Changes in Fund Balances
For the Years Ended December 31, 1990 and 1989

	Employees' Savings	Employers' Accumulation	Annuity And Pension Reserve
Revenues:			
Members' Contributions	$ 517,627,159		
Employers' Contributions		$ 858,207,902	
Investment Income			
Other			$ 140,210
Total Revenues	517,627,159	858,207,902	140,210
Expenses:			
Benefit Payments			917,282,934
Refunds	91,830,079	13,734,836	
Administrative Expenses			
Total Expenses	91,830,079	13,734,836	917,282,934
Excess (Deficit) of Revenues Over Expenses	425,797,080	844,473,066	(917,142,724)
Transfers — Increase (Decrease):			
Retirement Benefits	(143,566,374)	(357,625,998)	501,192,372
Disability Benefits	(18,176,099)	(111,475,974)	129,652,073
Survivor Benefits	(5,283,654)	(25,012,886)	
Retirement To (From) Other Systems	(2,085,891)	(1,055,282)	3,141,173
Statutory Interest	53,766,578	(53,766,578)	
Annual Interest		642,427,035	525,448,915
Other	(105,690)	586,862,801	65,314,455
Total Transfers	(115,451,130)	680,353,118	1,224,748,988
Balance, Beginning of Year	3,076,305,964	8,131,786,049	6,919,929,708
Balance, End of Year	$3,386,651,914	$9,656,612,233	$7,227,535,972

See Notes to Financial Statements

1990				1989
Survivors' Benefit	Income	Expense	Total	Total
		$ 2,640	$ 517,629,799	$ 476,415,655
			858,207,902	804,745,875
	$1,876,319,720		1,876,319,720	1,823,780,073
$ 5,221	13,586		159,017	2,535,968
5,221	1,876,333,306	2,640	3,252,316,438	3,107,477,571
67,428,643			984,711,577	914,787,338
	525	47	105,565,487	85,276,351
		13,398,269	13,398,269	12,040,343
67,428,643	525	13,398,316	1,103,675,333	1,012,104,032
(67,423,422)	1,876,332,781	(13,395,676)	2,148,641,105	2,095,373,539
30,296,540				
38,890,168	(1,206,766,118)			
2,737,901	(668,092,291)	13,282,824		
71,924,609	(1,874,858,409)	13,282,824		
522,659,425	13,281,353	145,615	18,664,108,114	16,568,734,575
$527,160,612	$ 14,755,725	$ 32,763	$20,812,749,219	$18,664,108,114

Notes to Financial Statements

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The following are the significant accounting policies followed by the Public Employees Retirement System of Ohio (PERS):

Basis of Accounting — The financial statements are prepared using the accrual basis of accounting under which expenses are recorded when the liability is incurred and revenues are recorded in the accounting period in which they are earned and become measurable.

Investments — Section 145.11 of the Ohio Revised Code authorizes PERS to invest in various instruments (meeting various rating criteria) which include obligations of the U.S. Treasury and U.S. agencies, state and local governments, various mortgage loans, corporate bonds, common and preferred stock, commercial paper, and real estate. PERS did not engage in any repurchase or reverse repurchase transactions during either 1990 or 1989.

Short-term securities consisting of commercial paper and U.S. Treasury obligations are carried at cost. Equity securities and investments in real estate are carried at cost. Fixed income investments are carried at amortized cost, using the effective interest rate method of amortization. All investments are subject to adjustment for market declines judged to be other than temporary.

The gain or loss on investment transactions is determined using the average cost of securities sold for equity securities and the specific cost of securities sold for all other investments. Dividend income is recognized based on the ex-dividend date. Interest income is recognized as earned.

Deferred Gains and Losses on Bonds Sold — Gains and losses on bond exchanges are accounted for under the deferral and amortization method of accounting whereby gains and losses on bonds exchanged are deferred and amortized over the shorter of the life of the bond sold or purchased (see Note 4). Gains and losses are deferred on bond exchanges only if the exchange involves the sale and simultaneous purchase of another bond of equal or better rating and/or an improvement in net yield to maturity or the quality of the bond held. Gains and losses are deferred only on the first exchange of a security. On the subsequent sale of any bond purchased as part of a bond exchange on which a gain or loss was deferred, any unaccumulated gain or unamortized loss is immediately recognized.

Fixed Assets — Fixed assets are recorded at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets. The range of estimated useful lives is as follows:

	Years
Building and building improvements	50
Furniture, fixtures, and equipment	3-10

Undistributed Deposits — Cash receipts are recorded as undistributed deposits until such time as they are allocated to employers' receivables, members' contributions, or investment income.

Funds — Various funds are established to account for the reserves held for future and current benefit payments as follows:

- The Employees' Savings Fund represents members' contributions held in trust pending their refund or transfer to a benefit disbursement fund. Upon an employee's retirement, such employee account is credited with an amount of interest (statutory interest) on the employee's contributions based on a rate of 3 percent to 4 percent compounded annually as required by Chapter 145 of the Ohio Revised Code. Such statutory interest does not vest with the employee.
- The Employers' Accumulation Fund is used to accumulate employers' contributions to be used in providing the reserves required for transfer to the Annuity and Pension Reserve Fund as members retire or become eligible for disability benefits and to the Survivors' Benefit Fund for benefits due dependents of deceased members.
- The Annuity and Pension Reserve Fund is the fund from which annuity and disability pensions are paid. This reserve was fully funded according to the latest actuarial study dated December 31, 1989, and accordingly, there are sufficient assets available to this fund to pay the vested benefits of all retirants and beneficiaries as of that valuation date.
- The Survivors' Benefit Fund is the fund from which benefits due dependents of deceased members of the retirement system are paid. This fund is also fully funded as of December 31, 1989.
- The Income Fund is the fund which is credited with all investment earnings and miscellaneous income. The balance in this fund is transferred to other funds to aid in the funding of future benefit payments and administrative expenses.
- The Expense Fund provides for the payment of administrative expenses with the necessary monies allocated to it from the Income Fund.

2. DESCRIPTION OF PERS

Organization — PERS is a cost-sharing multiple-employer public employee retirement system for all public employees in Ohio except those covered by one of the other state or local retirement systems in Ohio. PERS is administered in accordance with Chapter 145 of the Ohio Revised Code.

PERS is not part of the State of Ohio financial reporting entity. Responsibility for the organization is vested in the System's Retirement Board; there is no financial interdependency with the State of Ohio, nor does the State of Ohio provide oversight authority for the System. The Retirement Board is the governing body of PERS, with responsibility for administration and management. Six of the nine members are elected by the groups they represent: retirants; employees of the state; employees of counties; employees of municipalities; non-teaching employees of state colleges and universities; and miscellaneous employees. The Auditor of State, Attorney General, and the Director of Administrative Services are statutory members.

The Retirement Board appoints the Executive Director, an actuary, and other employees necessary for the transaction of business. The Board meets monthly and receives no compensation, but is reimbursed for necessary expenses.

Employer, employee and retirant data as of December 31, 1989 and 1988 (per latest available actuarial data) follows:

	1989	1988
Employer Units:		
State group	260	240
Local government group	3,060	3,039
Law enforcement group	197	186
Employee Members and Retirants:		
Retirants and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them	121,983	120,240
Active employees:		
Vested	152,740	152,297
Nonvested	117,943	112,571

All public employees in Ohio, except for certain specific exclusions and exemptions, are required to become contributing members of PERS. Vested employees represent those employees who have earned sufficient service credit (5 years or 60 contributing months) to be entitled to a future benefit from PERS.

Benefits

- Age and Service Benefits — Benefits are calculated on the basis of age, final average salary, and service credit. Members are eligible for retirement benefits at age 60 with 5 years or 60 contributing months of service credit, age 55 with 25 or more years of service credit, or at any age with 30 or more years of service credit. The annual benefit is based on 2.1 percent of final average salary multiplied by the actual years of service for the first 30 years of service credit and 2.5 percent for years of service in excess of 30 years. Persons retiring before age 65 with less than 30 years of service credit receive a percentage reduction in benefit amounts. Retirement benefits vest after 5 years or 60 contributing months of credited service.
- Law Enforcement Officers' Benefits — Law enforcement officers, as defined in Chapter 145 of the Ohio Revised Code, are eligible for special retirement options. These options are available to such members at age 52 or older with 25 or more years of credited service. The annual benefit is calculated by multiplying 2.5 percent of final average salary by the actual years of service for the first 20 years of service credit and 2.1 percent of final average salary for each year of service over 20 years. These options also permit early retirement under qualifying circumstances as early as age 48.
- Early Retirement Incentive — Employers under PERS may establish an early retirement incentive plan utilizing the purchase of service credit. To be eligible, employees must be able to retire under existing plan provisions after the purchase of the additional credit. Electing employers must contribute all such additional costs as are actuarially determined to fund the benefit. Such plan, if adopted by an employer, must be offered to a minimum of 5 percent of covered employees and provide for the purchase of up to five years credit, limited to a maximum of 20 percent of total service credit.
- Disability Benefits — A member who becomes permanently disabled before age 60 and has completed 60 months of contributing service is eligible for a disability benefit. Law enforcement officers are immediately eligible for disability benefits if disabled by an on-duty illness or injury.
- Survivor Benefits — Dependents of deceased members may qualify for survivor benefits if the deceased employee had at least 18 months of service credit with at least three months of credit within the two and one-half years immediately preceding death. Chapter 145 of the Ohio Revised Code specifies the dependents and the conditions under which they qualify for survivor benefits.
- Health Care Benefits — The System provides comprehensive health care benefits to retirants with 10 or more years of service credit and offers coverage to their dependents on a co-pay basis. Coverage includes hospitalization, physicians' fees, prescription drugs and reimbursement of monthly Medicare premiums. The System determines the amount, if any, of the associated health care costs that will be absorbed by the System. The System has adopted cost containment measures that require annual deductible payments on claims by retirants, their covered spouses, and other dependents.
- Other Benefits — Annually, after retirement, retirement benefits are increased 3 percent if the cost of living, as measured by the Consumer Price Index, has increased by at least 3 percent on a cumulative basis. A death benefit of $500-$2,500, determined by number of years of service credit of the retirant, is paid to the beneficiary of a deceased retirant.
- Refunds — Upon termination of employment, a member may withdraw accumulated contributions made to PERS. The law requires a three month waiting period after service termination before the refund may be paid. The acceptance of a refund cancels the individual's rights and benefits in PERS. Employer contributions to PERS are not refundable.

Contributions — PERS' funding policy provides for periodic employer contributions at actuarially determined rates, expressed as a percentage of annual covered payroll, such that they, along with employee contributions and an actuarially determined rate of investment return, are adequate to accumulate adequate assets to pay benefits when due. Level percentage of payroll employer contribution rates are determined using the entry age normal actuarial funding method. This formula determines the amount of contributions necessary to fund: (1) the current service cost, which represents the estimated amount necessary to pay for benefits earned by the employees during the current service year; and (2) the prior service cost for service earned prior to plan inception and subsequent benefit increases, which represents the amount necessary to pay for unfunded accrued liabilities over a period of 35 years for state, 37 years for local government, and 33 years for law enforcement divisions. As of December 31, 1990 the rates based on covered payroll were:

	Employee Rate	Employer Rate
State group	8.5%	13.71%
Local government group	8.5%	13.95%
Law enforcement group	9.5%	18.10%

These rates fall within the range set by the Ohio Revised Code. Effective January 1, 1991 the law enforcement rates were revised to 9% and 16% of covered payroll for employees and employers, respectively.

Litigation — PERS is a party in various litigation relating to plan benefits. While the final outcome cannot be determined at this time, management is of the opinion that the liability, if any, for these legal actions will not have a material adverse effect on PERS' financial position.

3. CASH AND INVESTMENTS

Of PERS' cash deposits at December 31, 1990, $100,000 was insured by Federal Deposit Insurance Corporation (Category 1). The remaining cash deposits are uninsured and uncollateralized and are held in the name of PERS' pledging financial institution, as required by the Ohio Revised Code (Category 3). Uninsured and uncollateralized deposits were generally higher during 1989 than at December 31, 1989, due to higher deposit amounts maintained during the year.

A summary of short-term securities and investments held at December 31, 1990 and 1989 is as follows:

	Book Value	Market Value
	December 31, 1990	
Short-term Securities:		
Commercial Paper	$ 133,606,839	$ 133,606,839
U.S. Treasury Obligations	5,353,729,960	5,353,729,960
Total Short-term Securities	$ 5,487,336,799	$ 5,487,336,799
Investments:		
Bonds — par value	$11,610,779,400	
Net unamortized discount	4,187,587,609	
Bonds — net	7,423,191,791	$ 7,545,349,896
Mortgages — par value	3,515,644,591	
Net unamortized discount	227,439,478	
Mortgages — net	3,288,205,113	3,407,020,294
Stocks — common	3,376,519,012	4,135,617,002
Real estate	936,361,192	1,005,043,530
Venture capital — stocks and partnership interests	16,042,521	17,042,521
Total investments	$15,040,319,629	$16,110,073,243
	December 31, 1989	
Short-term Securities:		
Commercial Paper	$ 287,609,719	$ 287,609,719
U.S. Treasury Obligations	3,609,781,950	3,609,781,950
Total Short-term Securities	$ 3,897,391,669	$ 3,897,391,669
Investments:		
Bonds — par value	$12,359,526,400	
Net unamortized discount	5,407,307,966	
Bonds — net	6,952,218,434	$ 7,201,896,674
Mortgages — par value	4,690,424,355	
Net unamortized discount	777,637,850	
Mortgages — net	3,912,786,505	4,028,940,322
Stocks — common	2,859,115,836	4,105,282,344
Real estate	730,142,364	785,548,004
Venture capital	16,407,521	17,407,521
Total investments	$14,470,670,660	$16,139,074,865

Market Value — If available, quoted market prices have been used to value investments as of December 31, 1990 and 1989. Securities not having a quoted market price have been valued based on yields currently available on comparable securities of issuers with similar credit ratings. Venture capital not having quoted market prices are valued at cost. The market value of real estate commingled funds is based upon appraisals of the properties held.

Weighted average purchase yields are as follows:

	1990	1989
Short-term securities	7.18%	7.67%
Long-term investments	7.71%	8.11%
Total yield	7.59%	8.04%
Total yield adjusted for amortization of deferred gains and losses on bonds sold	7.61%	8.05%

Statement No. 3 of the Government Accounting Standards Board requires governmental entities to categorize investments to give an indication of the level of risk assumed by the entity at year-end. Category 1 includes investments that are insured or registered or for which the securities are held by PERS or by its agent in the name of PERS. Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty's trust department or agent in the name of PERS. Category 3 includes uninsured and unregistered investments for which the securities are held by the counterparty or by its trust department or agent but not in PERS' name.

All investments of PERS meet the criteria of Category 1 except the real estate commingled funds, which by their nature are not required to be so categorized. Investments are held in the name of PERS or its nominee by the Treasurer of the State of Ohio as custodian.

4. DEFERRED GAINS AND LOSSES ON BONDS SOLD

PERS defers gains and losses on the sale of bonds under a program to reinvest the proceeds in similar bonds. These exchanges are made to increase annual income, to shorten or lengthen maturity as market conditions change, or to improve the quality of the bond portfolio. The following presents the activity in these accounts for the years ended December 31, 1990 and 1989.

	1990	1989
Deferred gains:		
Beginning balance	$75,781,808	$ -0-
Gains deferred on bonds exchanged	24,941,842	271,780,378
Gains accumulated	(10,974,189)	(11,137,592)
Gains recognized on sales prior to maturity	(48,889,155)	(184,860,978)
Ending balance	$40,860,306	$ 75,781,808

	1990	1989
Deferred losses:		
Beginning balance	$72,339,136	$126,070,138
Losses deferred on bonds exchanged	35,244,323	78,490,762
Losses amortized	(5,577,368)	(8,282,757)
Losses recognized on sales prior to maturity	(42,165,960)	(123,939,007)
Ending balance	$59,840,131	$ 72,339,136

5. ACTUARIAL ASSUMPTIONS AND METHODS

Significant actuarial assumptions employed by the actuary for funding purposes as of December 31, 1989, the date of the latest actuarial study, and 1988 include:

- Investment Return — 7.75 percent (7.5 percent for retirants and beneficiaries only at December 31, 1988), compounded annually, for all members, retirants, and beneficiaries.
- Salary Scale — The active member payroll is assumed to increase 5.5 percent annually, which is the portion of the individual pay increase assumption attributable to inflation. Also assumed are additional projected salary increases ranging from 0 percent to 4 percent per year, depending on age, attributable to seniority/merit. Benefit payments are assumed to increase 3 percent per year after retirement.
- Multiple Decrement Tables

  Death — For determination of active and inactive members' mortality, the 1960 Basic Group Mortality Table was used. For retirants' mortality, the 1971 Group Annuity Mortality Male and Female Tables, projected to 1984 were used.

  Disability — Based upon PERS' experience.

  Withdrawal — Based upon PERS' experience.
- Health Care Benefits — Assumed liabilities are based on PERS' experience adjusted for 5.5 percent increase in costs annually. At December 31, 1989, an additional 10 percent provision was made for near term increases in excess of 5.5 percent. All benefit recipients were assumed to be eligible for Medicare on attainment of age 65, or immediately if retired for disability.

For actuarial purposes, assets are valued based on book value plus or minus 1) cumulative realized investment gains and losses and 2) a cumulative market value adjustment based on 20 percent of unrealized market appreciation/depreciation on investment assets.

PERS' actuarial valuation is calculated separately for retirants and beneficiaries and for active and inactive members.

The actuarial present value of benefits to be paid retirants and beneficiaries currently receiving benefits and deferred survivor beneficiaries, whose benefits have been determined, is calculated using the assumptions noted above. The reserves in the Annuity and Pension Reserve Fund and the Survivors' Benefit Fund together with interest credited thereon from the Income Fund are compared to the actuarial accrued liability for the remaining lifetimes of the retirants and beneficiaries, and any deficiency is then funded by a transfer from the Employers' Accumulation Fund. Consequently, all such determined benefits are fully funded.

The actuarial accrued liability for active and inactive members is calculated on the projected benefit basis using the entry age normal actuarial cost method under which the present value of each member's expected benefit payable at retirement or death is determined. The assets of the Employees' Savings Fund, Employers' Accumulation Fund, and the market value adjustment are subtracted from this present value to arrive at the unfunded actuarial accrued liability.

The unfunded actuarial accrued liability (includes unfunded health care costs for members and retirants) based upon the two most recent annual actuarial valuations is as follows:

	December 31, 1989				December 31, 1988
	State Group	Local Government Group	Law Enforcement Group	Total	Total
Present value of actuarial accrued liability for active and inactive accounts	$6,493,158,859	$9,343,706,818	$448,314,318	$16,285,179,995	$15,493,784,503
Less:					
Employers' Accumulation Fund*	3,175,784,045	4,594,412,814	293,536,833	8,063,733,692	6,828,030,762
Employees' Savings Fund	1,218,232,315	1,765,865,255	92,208,394	3,076,305,964	2,843,386,629
Market value adjustment	(39,087,717)	(57,932,278)	(2,354,014)	(99,374,009)	(41,271,231)
Unfunded actuarial accrued liability	$2,138,230,216	$3,041,361,027	$ 64,923,105	$ 5,244,514,348	$ 5,863,638,343

*Amounts shown reflect transfers out of the Employers' Accumulation Fund to fully fund the Annuity and Pension Reserve Fund and Survivors' Benefit Fund.

6. DISCLOSURES REQUIRED BY GOVERNMENT ACCOUNTING STANDARDS BOARD (GASB) STATEMENT NO. 5

GASB Statement No. 5 established standard disclosure of pension information by public employee retirement systems. The Statement pertains to pension obligations only, and does not address health care benefits.

The amounts shown below as "pension benefit obligation" are a standardized disclosure measure of the present value of pension benefits, adjusted for the effect 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, excluding health care benefits, and is intended to help users assess a public employees retirement system's funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among such systems. The measure is independent of the actuarial funding method used to determine contributions to PERS discussed below.

The pension benefit obligations were determined as part of actuarial valuations at December 31, 1989 and 1988. The significant actuarial assumptions used to compute the pension benefit obligations are the same as those used for funding purposes and to compute contribution requirements, except that an investment rate of return of 7.75 percent was used for all obligations at December 31, 1988. At December 31, 1989 and 1988, the unfunded pension benefit obligation was $1,969 million and $2,368 million determined as follows (in millions):

	1989	1988
Pension benefit obligation:		
Retirants and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	$ 7,753	$ 7,163
Current employees:		
Accumulated employee contributions including allocated investment income	3,006	2,764
Employer-financed vested	5,726	5,523
Employer-financed nonvested	214	208
Total pension benefit obligation	16,699	15,658
Net assets available for benefits (excluding amounts allocated to health care costs), at cost (market value: 1989 — $16,047; 1988 — $13,728)	14,730	13,290
Unfunded pension benefit obligation	$ 1,969	$ 2,368

The Ohio Revised Code provides statutory authority for employee and employer contributions. The employee contribution rates were 8.5 percent for employees other than law enforcement. Law enforcement employees contributed 9.5 percent of covered salary. The total 1990 employer contribution rate for state employers was 13.71 percent of covered payroll; 9.23 percent was the portion that was used to fund pension obligations. For local government employer units the rate was 13.95 percent of which 8.53 percent was used to fund pension obligations. The law enforcement employer rate was 18.10 percent and 12.52 percent was used to fund pension obligations. The difference between the total employer rate and the portion used to fund pension obligations was the amount used to fund the health care program for retirants.

Contributions for 1990 totaling $1,056,699,802 (employers, including early retirement incentive contributions — $551,672,548; employees — $505,027,254) were made in accordance with the actuarially determined contribution requirements determined through an actuarial valuation performed at December 31, 1989. All other actuarially determined contributions to the System were used for the purpose of funding health care.

The contributions used to fund the pension obligations represented 8.9 percent and 8.5 percent of active member payroll for employers and employees, respectively. Employers' contributions consisted of: a) $297,701,515 normal cost, b) $179,441,171 amortization of unfunded actuarial accrued liability, and c) $74,529,862 to fund survivor benefits.

Historical trend information is unavailable for years prior to 1986. The information for 1986 through 1989 is presented below (dollar amounts in millions):

Fiscal Year	(1) Net Assets Available For Benefits	(2) Pension Benefit Obligation (PBO)	(3) Percent Funded (1) ÷ (2)	(4) Unfunded PBO (2) − (1)	(5) Annual Covered Payroll	(6) Unfunded PBO as a Percentage of Covered Payroll (4) ÷ (5)
1986	$10,841	$13,284	81.6%	$2,443	$4,543	53.8%
1987	11,900	14,469	82.2%	2,569	4,864	52.8%
1988	13,290	15,658	84.9%	2,368	5,307	44.6%
1989	14,730	16,699	88.2%	1,969	5,597	35.2%

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of the plan's funded 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 plan. The 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 being made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the plan.

7. LEASES

PERS leases equipment with lease terms of one year or less. Total rent expense was $327,059 and $259,306 for the years ended December 31, 1990 and 1989, respectively.

8. VACATION AND SICK LEAVE

As of December 31, 1990 and 1989, $1,885,027 and $1,932,732, respectively, was accrued for unused vacation and sick leave for PERS' employees. Employees who resign or retire are entitled to full compensation for all earned unused vacation. Unused sick leave pay is lost upon termination. However, employees who retire are entitled to receive payment for a percentage of unused sick leave.

9. DEFERRED COMPENSATION PLAN

PERS offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The plan, available to all PERS employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency.

All amounts of compensation deferred under the plan, all property and rights purchased with those amounts, and all income attributable to those amounts, property, or rights are (until paid or made available to the employee or other beneficiary) solely the property and rights of PERS (without being restricted to the provisions of benefits under the plan), subject only to the claims of PERS' general creditors. Participants' rights under the plan are equal to those of general creditors of PERS in an amount equal to the fair market value of the deferred account for each participant.

PERS has no liability for losses under the plan and believes that it is unlikely that it will use the assets to satisfy the claims of general creditors in the future.

The deferred compensation assets of $1,070,071 and $937,197, at market value, and the related liability to PERS employees are included in the accompanying financial statements as of December 31, 1990 and 1989, respectively.

10. DEFINED BENEFIT PENSION PLAN

All employees of the System are eligible for membership in PERS. The payroll for such employees for the year ended December 31, 1990 was $6,550,993. Covered payroll paid to System employees participating in PERS was $6,334,509 for the year ended December 31, 1990. The System's contributions and its employees' contributions for the year ended December 31, 1990 were $883,664 and $538,433, respectively. These contributions represented 13.95 percent and 8.5 percent of covered payroll, respectively.

Information relating to eligibility, benefits and the System's asset valuations, unfunded actuarial accrued liability, and pension benefit obligation can be found elsewhere in the Notes to the Financial Statements.

liability for the remaining lifetimes of the retirants and beneficiaries, and any deficiency is then funded by a transfer from the Employers' Accumulation Fund. Consequently, all such determined benefits are fully funded.

The actuarial accrued liability for active and inactive members is calculated on the projected benefit basis using the entry age normal actuarial cost method under which the present value of each member's expected benefit payable at retirement or death is determined. The assets of the Employees' Savings Fund, Employers' Accumulation Fund, and the market value adjustment are subtracted from this present value to arrive at the unfunded actuarial accrued liability.

The unfunded actuarial accrued liability (includes unfunded health care costs for members and retirants) based upon the two most recent annual actuarial valuations is as follows:

	December 31, 1989				December 31, 1988
	State Group	Local Government Group	Law Enforcement Group	Total	Total
Present value of actuarial accrued liability for active and inactive accounts	$6,493,158,859	$9,343,706,818	$448,314,318	$16,285,179,995	$15,493,784,503
Less:					
Employers' Accumulation Fund*	3,175,784,045	4,594,412,814	293,536,833	8,063,733,692	6,828,030,762
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The pension benefit obligations were determined as part of actuarial valuations at December 31, 1989 and 1988. The significant actuarial assumptions used to compute the pension benefit obligations are the same as those used for funding purposes and to compute contribution requirements, except that an investment rate of return of 7.75 percent was used for all obligations at December 31, 1988. At December 31, 1989 and 1988, the unfunded pension benefit obligation was $1,969 million and $2,368 million determined as follows (in millions):

	1989	1988
Pension benefit obligation:		
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Contributions for 1990 totaling $1,056,699,802 (employers, including early retirement incentive contributions — $551,672,548; employees — $505,027,254) were made in accordance with the actuarially determined contribution requirements determined through an actuarial valuation performed at December 31, 1989. All other actuarially determined contributions to the System were used for the purpose of funding health care.

The contributions used to fund the pension obligations represented 8.9 percent and 8.5 percent of active member payroll for employers and employees, respectively. Employers' contributions consisted of: a) $297,701,515 normal cost, b) $179,441,171 amortization of unfunded actuarial accrued liability, and c) $74,529,862 to fund survivor benefits.

Historical trend information is unavailable for years prior to 1986. The information for 1986 through 1989 is presented below (dollar amounts in millions):

Fiscal Year	(1) Net Assets Available For Benefits	(2) Pension Benefit Obligation (PBO)	(3) Percent Funded (1) ÷ (2)	(4) Unfunded PBO (2) − (1)	(5) Annual Covered Payroll	(6) Unfunded PBO as a Percentage of Covered Payroll (4) ÷ (5)
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1987	11,900	14,469	82.2%	2,569	4,864	52.8%
1988	13,290	15,658	84.9%	2,368	5,307	44.6%
1989	14,730	16,699	88.2%	1,969	5,597	35.2%

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of the plan's funded 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 plan. The 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 being made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the plan.

7. LEASES

PERS leases equipment with lease terms of one year or less. Total rent expense was $327,059 and $259,306 for the years ended December 31, 1990 and 1989, respectively.

8. VACATION AND SICK LEAVE

As of December 31, 1990 and 1989, $1,885,027 and $1,932,732, respectively, was accrued for unused vacation and sick leave for PERS' employees. Employees who resign or retire are entitled to full compensation for all earned unused vacation. Unused sick leave pay is lost upon termination. However, employees who retire are entitled to receive payment for a percentage of unused sick leave.

9. DEFERRED COMPENSATION PLAN

PERS offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The plan, available to all PERS employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency.

All amounts of compensation deferred under the plan, all property and rights purchased with those amounts, and all income attributable to those amounts, property, or rights are (until paid or made available to the employee or other beneficiary) solely the property and rights of PERS (without being restricted to the provisions of benefits under the plan), subject only to the claims of PERS' general creditors. Participants' rights under the plan are equal to those of general creditors of PERS in an amount equal to the fair market value of the deferred account for each participant.

PERS has no liability for losses under the plan and believes that it is unlikely that it will use the assets to satisfy the claims of general creditors in the future.

The deferred compensation assets of $1,070,071 and $937,197, at market value, and the related liability to PERS employees are included in the accompanying financial statements as of December 31, 1990 and 1989, respectively.

10. DEFINED BENEFIT PENSION PLAN

All employees of the System are eligible for membership in PERS. The payroll for such employees for the year ended December 31, 1990 was $6,550,993. Covered payroll paid to System employees participating in PERS was $6,334,509 for the year ended December 31, 1990. The System's contributions and its employees' contributions for the year ended December 31, 1990 were $883,664 and $538,433, respectively. These contributions represented 13.95 percent and 8.5 percent of covered payroll, respectively.

Information relating to eligibility, benefits and the System's asset valuations, unfunded actuarial accrued liability, and pension benefit obligation can be found elsewhere in the Notes to the Financial Statements.

11. PROFESSIONAL TRENDS

The Financial Accounting Standards Board (FASB) and the Governmental Accounting Standards Board (GASB), previously the National Council on Governmental Accounting (NCGA), have both issued financial reporting standards for state and local government pension plans. The conflicting opinions and views of these various standard setting bodies within the accounting profession have created a dilemma for PERS as to which standards to follow.

In March 1980, the Financial Accounting Standards Board issued Statement No. 35 (FASB No. 35) titled "Accounting and Reporting by Defined Benefit Pension Plans." The principal impact of this Statement on financial statements is to require that all of the investments be stated at fair market value, and the elimination of deferred gains and losses on bond investment exchanges.

In a release dated August 1, 1980, the National Council on Governmental Accounting (NCGA) expressed its concern "that acceptance of FASB No. 35 as generally accepted accounting principles for governmental pension plans could create a situation resulting in the preparation of financial statements for public pension plans that may be subject to misinterpretations, especially in determining the proper level of funding for the plan." Accordingly, the NCGA statement urged government accountants to continue preparing financial statements in accordance with the principles stated in NCGA Statement 1.

In April 1983, the NCGA adopted Statement 6 "Pension Accounting and Financial Reporting: Public Employee Retirement Systems and State and Local Government Employers." In September of 1983, NCGA Statement 6 was deferred indefinitely. In November 1983, the FASB issued Statement No. 75 which deferred indefinitely the application of FASB No. 35 to pension plans of state and local governmental units.

In July 1984, GASB Statement 1 "Authoritative Status of NCGA Pronouncements and AICPA Industry Audit Guide" was issued stating that NCGA Statement 1, NCGA Statement 6, or FASB Statement No. 35 were acceptable accounting and reporting principles pending issuance of a new GASB Statement(s).

Accordingly, PERS has elected not to change its present accounting principles until such time as consensus is reached among the various standard setting authorities.

Cash Receipts and Disbursements

For the Years Ended December 31, 1990 and 1989

	1990	1989
Cash Balance at Beginning of Year	$ (4,835,208)	$ 5,073,263
Receipts:		
Members' Contributions	496,476,134	456,988,592
Employers' Contributions	862,880,293	774,672,008
Purchases of Back Service	12,439,445	11,150,849
State Subsidies	2,828,966	3,166,230
Short-Term Securities Matured and Sold	14,869,533,038	12,046,605,927
Investments Matured and Sold	19,289,426,518	23,564,494,632
Interest and Dividends	1,033,049,014	1,027,597,566
Undistributed Deposits	13,453,430	11,381,270
Miscellaneous	39,720,427	22,663,422
TOTAL CASH RECEIPTS	36,619,807,265	37,918,720,496
Disbursements:		
Refunds:		
Separation	101,484,361	83,150,689
Beneficiaries	4,080,822	2,126,612
Annuity Payments:		
Retirement Annuities	785,200,035	732,167,851
Disability Benefits	129,633,552	115,601,239
Survivor Annuities	67,493,623	63,468,900
Retirement to Other Systems	3,229,381	4,056,940
Short-Term Securities Purchased	16,459,478,167	13,371,714,221
Investment Purchases	19,020,856,467	23,538,307,862
Administrative Expenses	12,494,895	11,113,653
Additions to Fixed Assets	5,350,142	6,921,000
TOTAL CASH DISBURSEMENTS	36,589,301,445	37,928,628,967
CASH BALANCE AT END OF YEAR	$ 25,670,612	$ (4,835,208)

Investment Summary

For the Year Ended December 31, 1990

	January 1, 1990		
	Book Value	Market Value	Purchases
Bonds			
U.S. Gov't. & Agencies	$ 5,457,109,355	$ 5,615,459,925	$15,744,925,545
Corporate	2,989	2,947	
Canadian	1,495,106,090	1,586,433,802	601,498,056
Mortgages	3,912,786,505	4,028,940,322	1,170,407,608
Stocks	2,859,115,836	4,105,282,344	1,312,654,355
Real Estate	730,142,364	785,548,004	238,361,154
Venture Capital	16,407,521	17,407,521	
Total	$14,470,670,660	$16,139,074,865	$19,067,846,718

Revenues by Source

Year	Members' Contributions	Employers' Contributions	Employers' Contributions as a Percentage of Covered Payroll	Investment Income (Net)	Other	Total
1981	$284,930,608	$469,535,130	13.93%	$ 457,387,532	$ 230,852	$1,212,084,122
1982	311,779,921	505,809,912	13.93	686,420,515*	192,959	1,504,203,307
1983	330,125,897	544,109,013	13.94	666,680,588	56,228	1,540,971,726
1984	345,368,439	557,498,416	13.94	713,857,919	187,347	1,616,912,121
1985	370,005,032	597,079,409	13.94	1,601,928,648	251,641	2,569,264,730
1986	391,193,417	627,520,315	13.94	1,830,721,267	209,457	2,849,644,456
1987	420,977,772	741,840,413	13.92	1,325,054,638	362,986	2,488,235,809
1988	446,091,129	769,144,695	13.93	1,441,226,325	10,160,620	2,666,622,769
1989	476,415,655	804,745,875	13.95	1,823,780,073	2,535,968	3,107,477,571
1990	517,629,799	858,207,902	13.96	1,876,319,72[illegible]	159,017	3,252,316,438

*Reflects an increase of $137,685,082 in net investment income resulting from a change to the accrual basis of accounting as of December 31, 1982.

Maturities, Sales & Accruals	Book Value	Market Value	% Total Portfolio (Book Value)	Purchase Yield
		December 31, 1990		
$15,271,094,816	$ 5,930,940,084	$ 6,065,990,505	39.43%	8.54%
2,989				
604,352,439	1,492,251,707	1,479,359,391	9.92	9.48%
1,794,989,000	3,288,205,113	3,407,020,294	21.86	9.60%
795,251,179	3,376,519,012	4,135,617,002	22.45	4.61%
32,142,326	936,361,192	1,005,043,530	6.23	
365,000	16,042,521	17,042,521	.11	2.49%
$18,498,197,749	$15,040,319,629	$16,110,073,243	100.00%	7.71%

Expenses by Type

Year	Benefit Payments	Refunds	Administrative Expenses	Total
1981	$345,857,579	$ 76,238,930	$ 6,620,678	$ 428,717,187
1982	406,828,497	66,978,882	7,223,272	481,030,651
1983	466,770,558	63,144,826	8,774,539	538,689,923
1984	522,466,256	85,108,060	9,137,846	616,712,162
1985	581,512,580	76,636,067	9,144,206	667,292,853
1986	653,440,281	80,552,059	9,467,193	743,459,533
1987	723,438,025	81,802,444	10,271,197	815,511,666
1988	841,373,200	81,220,133	11,256,093	933,849,426
1989	914,787,338	85,276,351	12,040,343	1,012,104,032
1990	984,711,577	105,565,487	13,398,269	1,103,675,333

Investment Summary

For the Year Ended December 31, 1990

	January 1, 1990		
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1989	476,415,655	804,745,875	13.95	1,823,780,073	2,535,968	3,107,477,571
1990	517,629,799	858,207,902	13.96	1,876,319,720	159,017	3,252,316,438

*Reflects an increase of $137,685,082 in net investment income resulting from a change to the accrual basis of accounting as of December 31, 1982.

			December 31, 1990	
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1,794,989,000	3,288,205,113	3,407,020,294	21.86	9.60%
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32,142,326	936,361,192	1,005,043,530	6.23	
365,000	16,042,521	17,042,521	.11	2.49%
$18,498,197,749	$15,040,319,629	$16,110,073,243	100.00%	7.71%

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1989	914,787,338	85,276,351	12,040,343	1,012,104,032
1990	984,711,577	105,565,487	13,398,269	1,103,675,333

Administrative Expenses

For the Years Ended December 31, 1990 and 1989

	1990	1989
Personal Services:		
Salaries and Wages	$ 6,550,993	$ 5,991,624
Retirement Contributions	1,069,632	829,908
Insurance	1,215,278	1,064,152
Bureau of Employment Services		3,642
	8,835,903	7,889,326
Supplies:		
Office Supplies	177,047	180,459
Printing and Publications	136,078	121,932
Dues and Subscriptions	18,378	15,209
	331,503	317,600
Other Services and Charges:		
Professional Services:		
Auditing	67,100	54,990
Actuarial and Technical	132,580	180,065
Investment	335,945	300,125
Medical	245,074	228,303
Pension Review		33,046
Employee Training	44,913	11,265
Data Processing Contract	39,877	109,598
Disaster Recovery	14,712	16,600
Communication:		
Telephone and Telegraph	122,122	125,851
Freight, Express, and Drayage	6,905	5,618
Postage	735,186	704,183
Transportation and Travel	184,351	139,871
Utilities	207,632	167,239
Equipment Rental	632,448	541,135
Repair and Maintenance:		
Equipment	3,747	1,307
Building	255,969	297,032
Microfilm	82,947	33,194
Retirement Study Commission	163,998	154,377
Miscellaneous	81,537	23,917
	3,357,043	3,127,716
Depreciation On:		
Building	138,928	138,928
Equipment and Fixtures	734,892	566,773
	873,820	705,701
TOTAL ADMINISTRATIVE EXPENSES	$13,398,269	$12,040,343

PERS

ACTUARIAL SECTION

Report of the Actuary

GABRIEL, ROEDER, SMITH & COMPANY
Actuaries & Consultants

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

June 10, 1991

The Retirement Board
Public Employees Retirement System of Ohio
277 East Town Street
Columbus, Ohio 43215

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

In order to measure progress toward this fundamental objective, PERS has annual actuarial valuations to (i) compute the present financial position, and (ii) test the adequacy of established contribution rates. The latest completed actuarial valuations were based upon data and assumptions as of December 31, 1989. These valuations indicate that the contribution rates, established by the Retirement Board for benefits then in effect, meet the basic financial objective.

Assumptions concerning future Retirement System experience in major risk areas are needed for an actuarial valuation. Each year an actuarial gain/loss analysis is performed which determines the relationship between assumed experience and actual experience in each such risk area. Cumulative experience over the last five years has been more favorable than assumed. The primary source of favorable experience has been gains from investment income. These gains were partially offset by larger than assumed health care cost increases and by turnover at lower rates than assumed. The high rate of health care inflation in recent years continues to be a cause for concern. Overall, however, we continue to believe the assumptions used in the regular valuations produce results which are reasonable.

Based upon the valuation results it is our opinion that the Public Employees Retirement System of Ohio continues in sound condition in accordance with actuarial principles of level percent of payroll financing.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

Norman Jones   Brian B. Murphy

Norman L. Jones, F.S.A.   Brian B. Murphy, F.S.A.

NLJ:ct

Summary of Assumptions

Adopted by Retirement Board After Consulting with Actuary

Funding Method. An entry age normal actuarial cost method of valuation is used in determining benefit liabilities and normal cost. Differences between assumed and actual experience (actuarial gains and losses) become part of unfunded actuarial accrued liabilities. Unfunded actuarial accrued liabilities are amortized to produce payments which are level percents of payroll contributions. Adopted 1975.

Assets Valuation Method. Assets are valued based on book value plus or minus 1) cumulative realized investment gains and losses and 2) a cumulative market value adjustment based on 20 percent of unrealized market appreciation/depreciation on investment assets. Adopted 1988.

Valuation Data. The data about persons now covered and about present assets was furnished by the System's administrative staff. Data is examined for general reasonableness and year-to-year consistency, but is not audited by the Actuary.

Economic Assumptions. The following economic assumptions are used by the Actuary.

Investment Return. 1989 — 7.75 percent, compounded annually, for all members and beneficiaries. Adopted 1989.

Active Employee Total Payroll. Increasing 5.5 percent annually, compounded annually, which is the base portion of the individual pay increase assumption. In effect, this assumes no change in the number of active employees.

Individual Employee Pay Increases. An employee's pay is assumed to increase each year, in accordance with a table consisting of a percent increase for each age. For sample ages, the following table describes annual increase percents.

Age	Merit & Seniority		Base (Economy)	Increase Next Year	
	State	Local		State	Local
30	3.3%	2.8%	5.5%	8.8%	8.3%
40	2.3	1.9	5.5	7.8	7.4
50	1.5	1.1	5.5	7.0	6.6
60	0.7	0.6	5.5	6.2	6.1

Decrement Assumptions. The following tables of probabilities, adopted in 1981, for the indicated risk areas are used by the Actuary.

Mortality. The tables used in evaluating allowances to be paid were the 1971 Group Annuity Mortality Male and Female tables, projected to 1984.

Retirement. Probabilities of age and service retirement applicable to members eligible to retire are:

Retirement Ages	% Retiring Next Year		
	State & Local		Law Enforcement
	Men	Women	
50-61	15%	20%	20%
62	15	20	20
63	15	20	20
64	20	25	25
65	30	30	30
66	25	25	25
67	25	25	25
68	25	25	25
69	40	40	40
70	100	100	100

Turnover. Probabilities of separation from employment before age and service retirement because of death, withdrawal or disability are:

Sample Ages	Years of Service	% Separating Within Next Year									
		Death		Withdrawal					Disability	
				State		Law Enforcement	Local			
		Men	Women	Men	Women		Men	Women	Men	Women
	0			30.00%	30.00%	20.00%	30.00%	25.00%		
	1			22.00	22.00	15.00	22.00	20.00		
	2			18.00	18.00	12.00	18.00	18.00		
	3			12.00	15.00	10.00	12.00	15.00		
	4			10.00	12.00	7.00	10.00	12.00		
30	5 & Over	.12%	.10%	8.30	10.70	5.40	8.10	10.70	.07%	0.06%
40		.25	.15	5.40	6.60	4.00	5.70	6.60	.37	.21
50		.71	.43	2.60	3.80	2.40	3.20	3.80	1.05	.69
60		1.80	1.16	0.50	0.80	0.40	0.60	0.80		

Actuarial Valuation Data

Valuation Year	Active Members: Number	Active Members: Annual Payroll ($ Millions)	Active Members: Average Pay	Retired Lives: Number	Retired Lives: Annual Allowance ($ Millions)	Retired Lives: Average Allowance
1980	256,688	$3,441	$13,405	73,620	$257	$3,497
1981	252,623	3,308	13,092	77,718	302	3,880
1982	248,855	3,654	14,683	81,166	331	4,076
1983	248,307	3,814	15,361	85,594	369	4,285
1984	248,483	4,044	16,278	90,302	424	4,691
1985	251,748	4,282	17,007	93,867	471	5,021
1986	254,619	4,543	17,842	97,906	519	5,298
1987	258,981	4,864	18,782	100,010	565	5,652
1988	264,868	5,307	20,036	103,150	630	6,108
1989	270,683	5,597	20,677	105,643	715	6,768

Summary of Unfunded Accrued Liabilities

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

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

Summary of Assets and Actuarial Accrued Liabilities ($ Amounts in Millions)

Valuation Year	Actuarial Accrued Liabilities (AAL)	Valuation Assets	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as a % of Active Member Payroll
1980	$10,388	$ 5,235	$5,153	50%	$3,441	150%
1981	11,055	6,106	4,949	55	3,308	150
1982	12,399	7,145	5,254	58	3,654	144
1983	13,976	8,156	5,820	58	3,814	153
1984	15,473	9,156	6,317	59	4,044	156
1985	17,138	11,049	6,089	64	4,282	142
1986	18,558	13,403*	5,155	72	4,543	113
1987	20,282	14,899*	5,383	73	4,864	111
1988	22,378	16,515*	5,863	74	5,307	110
1989	23,794	18,550*	5,244	78	5,597	94

*Includes market adjustment.

Short-Term Solvency Test

The PERS financing objective is to pay for the benefits hrough contributions that remain approximately level om year to year as a percent of member payroll. If contributions to the system are level in concept soundly executed, the system will *pay all promised fits when due — the ultimate test of financial dness.*

A short-term solvency test is one means of checking a system's progress under its funding program. In a short-term solvency test, the plan's present assets (cash and investments) are compared with: 1) Active member contributions on deposit; 2) The liabilities for future benefits to present retired lives; 3) The liabilities for service already rendered by active members. In a system that has been following the discipline of level percent of payroll financing, the liabilities for active member contributions on deposit (1) and the liabilities for future benefits to present retired lives (2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (3) will be partially covered by the remainder of present assets. Generally, if the system has been using level cost financing, the funded portion of column 3 will increase over time. Column 3 being fully funded is very rare.

It is wise to pay attention to both fundamental and short-term solvency tests.

Accrued Liabilities ($ Amounts in Millions)

Valuation Year	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered By Reported Assets (1)	(2)	(3)
1980	$1,363	$2,710	$ 6,316	$ 5,235	100	100	18
1981	1,491	3,296	6,268	6,106	100	100	21
1982	1,664	3,588	7,146	7,145	100	100	26
1983	1,843	4,011	8,123	8,156	100	100	28
1984	2,011	4,486	8,976	9,156	100	100	30
1985	2,190	5,031	9,917	11,049	100	100	40
1986	2,358	5,540	10,660	13,403*	100	100	52
1987	2,615	6,111	11,556	14,899*	100	100	53
1988	2,843	6,884	12,651	16,515*	100	100	54
1989	3,076	7,510	13,208	18,550*	100	100	60

*Includes market adjustment.

Actual vs. Recommended Contribution Rates

The Board adopted all contribution rates as recommended by the Actuary

Analysis of Financial Experience

Gains & Losses in Accrued Liabilities
Resulting From Differences Between Assumed Experience & Actual Experience

Type of Activity	Gain (or Loss) For Year $ in Millions 1989	1988	1987	1986
Age & Service Retirements. If members retire at older ages than assumed, there is a gain. If younger ages, a loss.	**$ 16.7**	$ 22.0	$ 4.2	$ (1.5)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	**35.6**	14.5	5.6	15.9
Death-In-Service Annuities. If survivor claims are less than assumed, there is a gain. If more claims, a loss.	**21.4**	19.9	27.9	9.2
Other Separations. If more liabilities are released by other separations than assumed, there is a gain. If smaller releases, a loss.	**(117.7)**	(243.3)	(150.9)	(136.1)
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	**352.7**	(244.9)	66.9	109.0
Investment Return. If there is greater investment return than assumed, there is a gain. If less return, a loss.	**492.9**	233.1	133.6	980.8
Health Insurance & Medicare Premiums. If there are smaller increases than assumed, there is a gain. If greater increases, a loss.	**40.5**	(390.8)	(244.8)	(199.4)
Gain (or Loss) During Year from Financial Experience	**$842.1**	$(589.5)	$(157.5)	$777.9

Public Employees Retirement System of Ohio

The Comprehensive Annual Financial Report

For the Year Ended December 31, 1990

PERS STATISTICAL SECTION

Employer Contribution Rates

		Current			Unfunded Liability		
	Year	Normal	Health	Survivor Benefits	Past Service	Health	Total
State	1981	6.40%	1.27%	1.04%	4.09%	0.91%	13.71%
	1982	5.77	1.10	0.99	4.93	0.92	13.71
	1983	4.55	1.65	0.86	5.25	1.40	13.71
	1984	4.61	1.70	0.80	5.13	1.47	13.71
	1985	4.73	2.17	0.84	4.47	1.50	13.71
	1986	4.84	2.23	0.75	4.35	1.54	13.71
	1987	4.98	2.19	0.84	4.22	1.48	13.71
	1988	5.43	2.78	1.06	3.36	1.08	13.71
	1989	5.63	2.91	1.07	3.21	0.89	13.71
	1990	5.15	3.16	1.01	3.07	1.32	13.71
Local	1981	6.67	1.65	1.06	3.65	0.92	13.95
	1982	6.03	1.27	1.07	4.66	0.92	13.95
	1983	4.86	1.97	0.92	4.83	1.37	13.95
	1984	4.83	2.20	0.88	4.56	1.48	13.95
	1985	4.99	2.53	0.91	4.02	1.50	13.95
	1986	4.95	2.76	0.80	3.87	1.57	13.95
	1987	5.11	2.69	0.90	3.75	1.50	13.95
	1988	5.00	3.18	1.05	3.49	1.23	13.95
	1989	5.08	3.49	1.06	3.26	1.06	13.95
	1990	4.65	3.92	0.99	2.89	1.50	13.95
Law Enforcement	1981	11.35	1.65	1.28	3.46	0.36	18.10
	1982	10.38	1.27	1.58	4.47	0.40	18.10
	1983	8.66	2.00	1.42	5.27	0.75	18.10
	1984	8.15	2.32	1.57	5.14	0.92	18.10
	1985	8.19	2.90	1.56	4.35	1.10	18.10
	1986	8.07	3.12	1.53	4.30	1.08	18.10
	1987	7.99	3.05	1.52	4.45	1.09	18.10
	1988	8.58	3.45	1.55	3.52	1.00	18.10
	1989	8.64	3.90	1.55	2.89	1.12	18.10
	1990	7.73	4.33	1.45	3.34	1.25	18.10

Disbursements by Category

Year	Annuities	Disabilities	Other Systems	Survivors	CPI	Post Retirement Legislative Incr.
	Benefits					
1981	$192,045,068	$24,970,899	$1,967,683	$22,974,505	$24,942,579	$23,399,149
1982	214,286,038	27,372,888	2,023,006	24,535,836	31,468,090	27,594,317
1983	239,346,014	29,678,413	2,615,346	25,977,513	38,569,453	25,841,902
1984	266,061,642	32,411,456	3,227,849	27,608,949	46,263,861	40,967,243
1985	297,771,528	36,811,337	3,818,776	29,136,086	54,905,210	40,238,117
1986	330,641,045	41,693,306	2,902,443	31,076,948	64,319,209	38,034,762
1987	363,424,328	46,658,177	3,231,189	33,044,661	73,612,942	35,800,025
1988	416,758,803	51,625,775	3,223,604	34,735,329	80,357,076	33,742,346
1989	463,455,461	57,151,688	4,061,810	36,392,135	92,146,600	53,475,739
1990	493,081,656	63,546,647	3,229,381	37,764,185	106,013,735	50,389,589

MEMBER COUNT

Year-End	Active Contributing	Inactive	Total
1981	255,097	53,005	**308,102**
1982	251,169	52,454	**303,623**
1983	250,566	53,560	**304,126**
1984	250,796	53,931	**304,727**
1985	254,797	54,746	**309,543**
1986	258,608	56,710	**315,318**
1987	262,208	60,291	**322,499**
1988	268,460	63,642	**332,102**
1989	266,866	80,630	**347,496**
1990	278,969	73,882	**352,851**

MEMBER CONTRIBUTION RATES

Year	Contribution Rate
1981	8.5%
1982	8.5*
1983	8.5*
1984	8.5*
1985	8.5*
1986	8.5*
1987	8.5*
1988	8.5*
1989	8.5*
1990	8.5*

*Effective November 1982. Law Enforcement Contribution Rate is 9.5%.

Health Care	Death Benefits	Refunds: Separation	Refunds: Beneficiaries	Refunds: Other	Total All Payments
$ 54,033,205	$1,524,491	$73,182,786	$2,617,655	$ 438,489	**$ 422,096,509**
78,112,241	1,436,081	63,954,454	2,722,037	302,391	**473,807,379**
103,156,330	1,585,587	59,871,357	2,673,207	600,262	**529,915,384**
104,257,965	1,667,291	80,620,354	3,154,663	1,333,043	**607,574,316**
117,178,501	1,653,025	72,916,583	3,135,948	583,536	**658,148,647**
143,141,885	1,630,683	76,349,378	3,243,057	959,624	**733,992,340**
166,021,858	1,644,845	78,282,220	3,302,041	218,183	**805,240,469**
219,010,835	1,919,432	76,778,952	4,099,350	341,831	**922,593,333**
203,624,997	4,478,907	80,927,621	3,751,617	597,112	**1,000,063,689**
225,610,040	5,076,344	78,847,373	4,080,822	22,637,292	**1,090,277,064**

NUMBER OF EMPLOYER UNITS

Year	State	County	Law Enforcement	Municipalities	Villages	Miscellaneous	Libraries	Townships	Totals
1981	252	200	146	291	569	328	249	1,286	**3,321**
1982	248	207	151	294	576	348	249	1,267	**3,340**
1983	259	170	162	300	584	353	249	1,342	**3,419**
1984	270	184	148	330	561	371	254	1,296	**3,414**
1985	239	197	174	296	599	355	249	1,302	**3,411**
1986	239	235	175	338	603	288	251	1,306	**3,435**
1987	240	236	177	342	607	299	252	1,306	**3,459**
1988	240	239	186	341	601	298	251	1,309	**3,465**
1989	260	241	197	341	605	309	254	1,310	**3,517**
1990	263	239	206	341	613	327	255	1,310	**3,554**

Schedule of Average Benefit Payments*

	Years Credited Service					
	5-9	10-14	15-19	20-24	25-30	30+
Period 1/1/86-12/31/86						
Average Monthly Benefit*	$168.50	$341.72	$531.17	$733.55	$979.39	$1,413.51
Average Final Average Salary	$12,027.41	$15,693.89	$18,206.66	$19,916.06	$22,059.42	$24,509.95
Number of Active Recipients	1,386	1,236	1,131	869	675	1,167
Period 1/1/87-12/31/87						
Average Monthly Benefit*	$207.40	$362.32	$546.84	$753.07	$997.63	$1,539.31
Average Final Average Salary	$12,479.55	$16,639.25	$19,223.42	$20,816.56	$22,850.58	$26,457.31
Number of Active Recipients	388	987	985	915	791	1,717
Period 1/1/88-12/31/88						
Average Monthly Benefit*	$227.34	$346.68	$569.17	$765.63	$1,041.53	$1,670.75
Average Final Average Salary	$13,447.99	$16,226.87	$20,245.69	$21,308.84	$24,295.59	$28,990.84
Number of Active Recipients	455	1,041	1,052	1,024	822	2,027
Period 1/1/89-12/31/89						
Average Monthly Benefit*	$243.81	$382.98	$579.51	$809.36	$1,044.45	$1,678.48
Average Final Average Salary	$15,471.60	$17,947.33	$21,163.82	$23,513.76	$24,752.62	$29,069.93
Number of Active Recipients	429	1,028	976	870	801	1,575
Period 1/1/90-12/31/90						
Average Monthly Benefit*	$243.08	$354.19	$568.91	$788.67	$1,035.41	$1,566.47
Average Final Average Salary	$15,395.10	$17,403.25	$20,944.24	$23,036.39	$25,592.09	$28,968.44
Number of Active Recipients	322	964	852	804	613	1,022
Period 1/1/86-12/31/90						
Average Monthly Benefit*	$218.03	$357.58	$559.12	$770.06	$1,019.68	$1,573.70
Average Final Average Salary	$13,764.33	$16,782.12	$19,956.77	$21,718.32	$23,910.06	$27,599.29
Number of Active Recipients	2,980	5,256	4,996	4,482	3,702	7,508

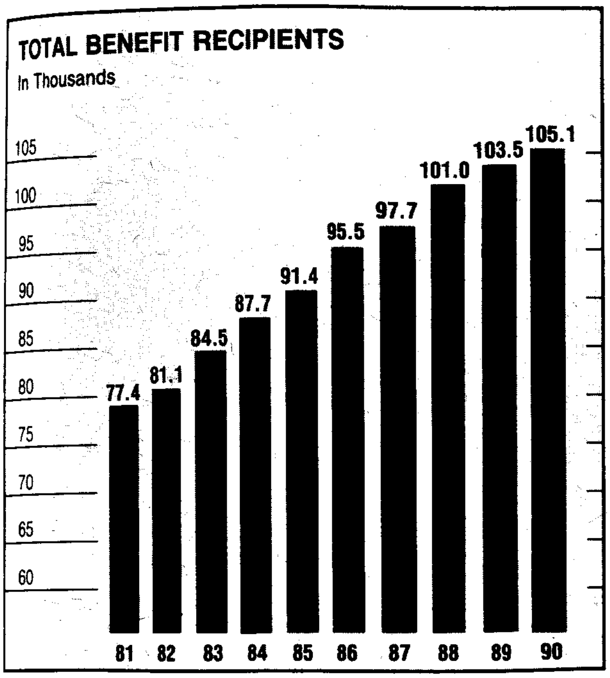
*"Average Monthly Benefit" includes post retirement and yearly 3% cost-of-living increases.

Number of Benefit Recipients by Category

Year-End	Annuities	Disabilities	Survivors	Total
1981	62,212	5,565	9,614	**77,391**
1982	65,363	5,807	9,901	**81,071**
1983	68,345	6,017	10,132	**84,494**
1984	71,228	6,189	10,315	**87,732**
1985	74,407	6,517	10,467	**91,391**
1986	77,960	6,864	10,681	**95,505**
1987	79,648	7,272	10,828	**97,748**
1988	82,462	7,560	10,940	**100,962**
1989	84,676	7,916	10,957	**103,549**
1990	85,916	8,294	10,981	**105,191**

Number of New Benefit Recipients and Refund Payments

Year	Annuities	Disabilities	Survivors	Refund
1981	5,772	693	667	35,108
1982	5,445	563	631	28,283
1983	5,143	509	596	23,665
1984	5,475	562	568	28,988
1985	5,516	683	535	21,766
1986	6,196	730	620	22,976
1987	4,567	775	560	22,246
1988	5,731	703	513	23,547
1989	5,026	728	500	23,008
1990	4,140	745	451	24,878


TOTAL BENEFIT RECIPIENTS
In Thousands
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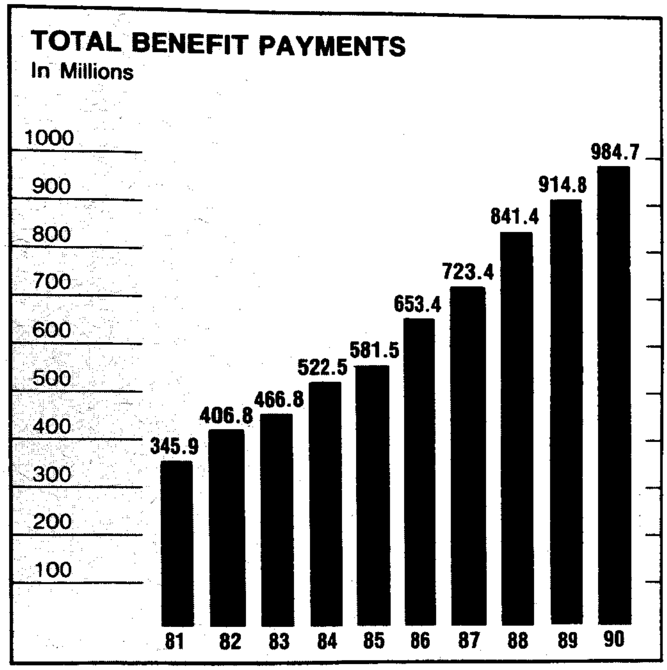
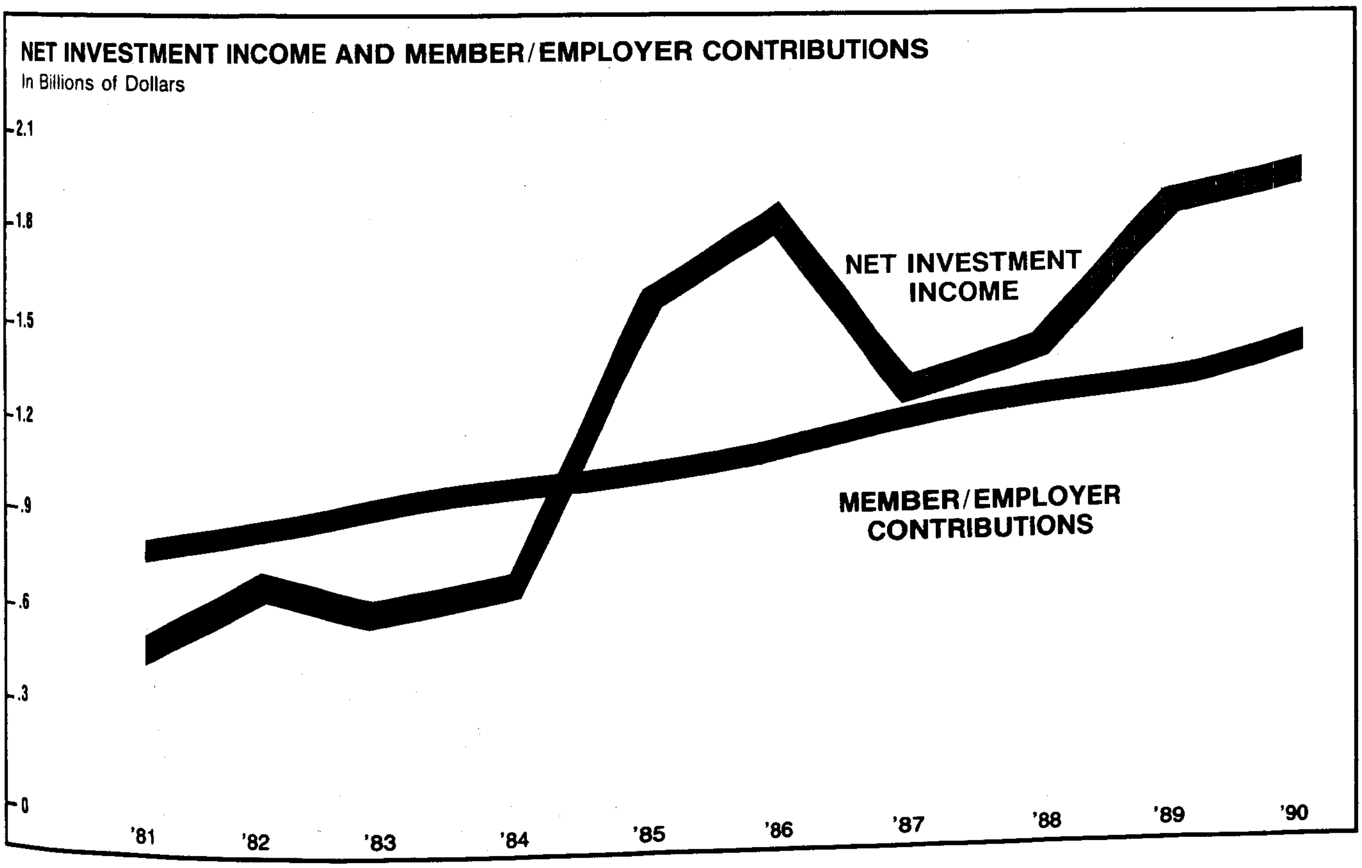
100
95
90
85
80
75
70
65
60
77.4
81.1
84.5
87.7
91.4
95.5
97.7
101.0
103.5
105.1
81
82
83
84
85
86
87
88
89
90


TOTAL BENEFIT PAYMENTS
In Millions
1000
900
800
700
600
500
400
300
200
100
345.9
406.8
466.8
522.5
581.5
653.4
723.4
841.4
914.8
984.7
81
82
83
84
85
86
87
88
89
90


NET INVESTMENT INCOME AND MEMBER/EMPLOYER CONTRIBUTIONS
In Billions of Dollars
2.1
1.8
1.5
1.2
.9
.6
.3
0
NET INVESTMENT INCOME
MEMBER/EMPLOYER CONTRIBUTIONS
'81
'82
'83
'84
'85
'86
'87
'88
'89
'90

Public Employees Retirement System of Ohio

The Comprehensive Annual Financial Report

For the Year Ended December 31, 1990

PERS

INVESTMENT SECTION

Economic Activity in 1990

Most economists agreed that the economy went into recession sometime during the third or fourth quarter of 1990. The two overriding factors contributing to this downturn were a contraction in credit and the Persian Gulf Crisis. "Credit crunch" became one of the buzz phrases of 1990 as declining bank profits and increased federal regulation, due in large part to junk bond and real estate loan losses, caused the banking industry to severely tighten its lending practices. Borrowers of all kinds found financing more difficult to secure; however, real estate borrowers bore the brunt of last year's credit squeeze. The economy already was beginning to show signs of weakness when Iraq invaded Kuwait in early August. Oil prices skyrocketed upon news of the invasion, making the prospect of a recession unavoidable. The stock and bond markets reached their lows in the autumn but managed to recoup most of their losses by year-end in response to a decline in interest rates.

Despite a slowdown in business activity during the latter half of the year, the economy did manage to eke out a slight gain in 1990. Real Gross National Product (GNP) grew 1 percent in 1990 versus 2.5 percent in 1989. Inflation, as measured by the annual change in the Consumer Price Index, climbed 5.5 percent in 1990 as compared to 4.8 percent in 1989. The year-end unemployment rate also rose from 5.3 percent in 1989 to 6.1 percent in 1990.

1990 Performance of Bond, Stock, and Real Estate Sectors

The Salomon Brothers Broad Index, a proxy for the bond market, returned 9.09 percent in 1990 versus 14.44 percent in 1989. The bond market experienced a sharp divergence in short-term and long-term yields during 1990. The bellwether 30-year Treasury bond had its low yield of 7.97 percent at the beginning of the year. Long-term interest rates reached a high of 9.17 percent before falling back to 8.26 percent at year-end. In contrast, yields on short-term Treasury bonds fell considerably during the year as the Federal Reserve sought to combat a deteriorating economy by easing its monetary policy. As a result, short-term bonds generated greater total performance than longer term issues in 1990. Mortgage-backed bonds produced the highest total returns among all sectors on the bond market; however, corporate issues had another bad year. A total of 768 companies had their corporate debt downgraded during the year by various rating agencies. Moreover, $21 billion of junk bonds went into default in 1990.

The stock market as measured by the Dow Jones Industrial Average (DJIA) exhibited strong performance during the first half of 1990, reaching a record level of 2999.75 in July. Higher interest rates and war-related concerns sent the market reeling in autumn. By October the DJIA had plunged over 20 percent to its yearly low of 2365.10. From this point the DJIA rallied to close at 2633 by year-end as investors, buoyed by lower interest rates, renewed their appetite for stocks. Of the 11 worst performing industry groups in 1990, eight were banking or real estate related. The best performing stocks were concentrated in the health care segment as these types of companies continued to enjoy solid earnings growth.

Real estate continued its lackluster performance of recent years rising only 0.31 percent (net of fees) as measured by the Frank Russell Index. Commercial office buildings were the worst performing among property categories, and property owners in New England markets experienced another dismal year. Credit contraction frustrated the attempts of many developers to refinance their properties in 1990 causing a downward pressure on property values. The decline in mortgage lending has been particularly noticeable since 1990. Real estate transaction volume was almost non-existent by year-end as most market participants chose to wait for some restoration in the capital markets before making new deals.

PERS Performance

In 1990, PERS' total fund performance was 6.3 percent versus a median return of 3.8 percent for other investment plans with similar allocation and investment constraints. A relatively high weighting in short-term cash equivalents, i.e., Treasury bills, commercial paper, coupled with a strong emphasis on current income, strong balance sheets, and low credit risk in the remaining investments enabled PERS to enjoy strong relative performance in what otherwise was a very volatile year for most investors. PERS' total investment return fell short of our actuarial rate of 7.75 percent; however, over the past 10 years (1981-1990) PERS has greatly exceeded its actuarial target with an average annualized return of 12.4 percent.

PERS' bond portfolio generated a total return of 8.28 percent which was 0.81 percent less than the Salomon Brothers Broad Index. In recent years PERS' bond portfolio has been structured to have an average maturity longer than the Index in anticipation of persistent economic weakness and a general decline in long-term interest rates. Consequently, PERS' bond performance lagged behind the Index through September of last year as long-term interest rates rose. However, considerable ground was regained during the fourth quarter when it became evident that the economy was clearly in recession.

PERS' equity portfolio was slightly negative for the year with a minus 0.28 percent return. PERS' performance surpassed the DJIA, the Standard & Poor 500 Index, and the returns of most professional money managers. PERS' superior relative performance to the major indices can be traced to relatively large stock holdings in pharmaceuticals, electric utilities, energy, paper and forest, and machinery related companies and our low weighting in the poor performing finance sector (banks and insurance companies).

The real estate portfolio produced a total return of 5.94 percent versus .31 percent (net of fees) for Frank Russell Index. Total performance was anchored by stable cash flows from multifamily and retail properties and a low weighting in the troublesome office sector.

Economic Outlook for 1991

The question lingering in most investors' minds is the length and severity of the recession. Many economists are looking for a short, mild recession pinning their hopes to a rebound in consumer spending and lower interest rates. There is also a feeling that the quick end to the Gulf War and the ensuing buildup in investor optimism can ignite a recovery as well. However, consumers will have to improve their financial condition if these expectations will be met. The liberal use of credit and tremendous accumulation of debt during the 1980s fueled the greatest economic expansion this country has seen since World War II. Unfortunately, this kind of debt expansion has not occurred without exacting its price on the economy. One by one, every economic sector that has become dependent on the use of credit has rolled over into its respective recession, with real estate being the latest victim. It now appears that the average consumer is beginning to show signs of financial strain. Personal income is down, personal savings are low, and installment debt is much higher than in the last recession. Recent sales figures on cars and homes, traditional barometers for any recovery, are not promising. Even if the recession does end quickly, layoffs in finance, retailing, and other service sector businesses with overcapacity will initially put a drag on economic growth. Consequently, stock and bond investors are likely to see a repeat of last year's marginal performances. Real estate remains the one sector that will show further deterioration under any economic scenario during 1991 as oversupply remains a fundamental problem in most markets. Moreover, there appears to be a continuing shortage of lendable funds for real estate.

Investment Objectives for 1991

The early 1990s will likely be a time when many companies will redirect their efforts toward lowering their debt levels, rebuilding liquidity, and generating real earnings. This kind of restructuring does not come easily. Many companies will not survive this period, causing a rude awakening for their investors. Our objectives will be to generate positive returns which will, at a minimum, meet our actuarial targets, and to minimize any volatile market environment. High quality Treasury bonds and other government-guaranteed issues will be the sole focus of our bond program in the coming months. Equity investments will emphasize companies with pristine balance sheets and strong cash flows. Consumer and finance stocks will be de-emphasized in favor of utilities, energy, and capital goods sectors where cost cutting and productivity improvements have already occurred. Our weighting in real estate will likely remain low for the balance of 1991, although persistent weakness will lead to some tremendous buying opportunities in the years to come.

Investment Portfolio Summary

As of December 31, 1990

	Par Value	Book Value	Market Value	% of Portfolio (Book Value)	Yield
Bonds					
U.S. Gov't. & Agencies	$10,099,289,400	$ 5,930,940,084	$ 6,065,990,505	39.43%	8.54%
Canadian	1,511,490,000	1,492,251,707	1,479,359,391	9.92	9.48%
Mortgages	3,515,644,591	3,288,205,113	3,407,020,294	21.86	9.60%
Stocks		3,376,519,012	4,135,617,002	22.45	4.61%
Real Estate		936,361,192	1,005,043,530	6.23	
Venture Capital		16,042,521	17,042,521	.11	2.49%
TOTAL PORTFOLIO		$15,040,319,629	$16,110,073,243	100.00%	7.71%

Detailed Listing of Investment Portfolio
As of December 31, 1990

U.S. GOVERNMENT & AGENCIES BONDS

Name	Coupon	Maturity	Par Value	Book Value	Market Value
FHA — Series MM	4.625%	12/01/1992	$ 3,400	$ 2,700	$ 3,400
Government Trust Certificates Class 1-D	0.000%	11/15/2001	38,350,000	14,005,613	15,139,813
Government Trust Certificates Class 1-D	0.000%	11/15/2002	35,550,000	11,803,396	12,780,580
Government Trust Certificates Class 1-D	0.000%	05/15/2004	43,700,000	12,632,526	13,697,328
Government Trust Certificates Class 1-D	0.000%	11/15/2004	17,900,000	4,938,998	5,379,129
Government Trust Certificates Class 1-D	0.000%	05/15/2005	18,035,000	4,749,994	5,175,323
Government Trust Certificates Class 1-D	0.000%	05/15/2008	62,780,000	12,523,042	13,877,519
Government Trust Certificates Class 1-D	0.000%	11/15/2008	30,000,000	5,751,241	6,349,200
Government Trust Certificates Class 1-D	0.000%	11/15/2009	9,395,000	1,698,551	1,819,435
Government Trust Certificates Class 1-D	0.000%	11/15/2010	5,000,000	790,621	885,900
Government Trust Certificates Class 1-D	0.000%	05/15/2011	36,000,000	5,444,320	6,106,320
Government Trust Certificates Class 1-D	0.000%	11/15/2011	28,000,000	4,042,452	4,546,640
Government Trust Certificates Class 1-D	0.000%	05/15/2012	24,000,000	3,314,484	3,731,040
Government Trust Certificates Class 1-D	0.000%	11/15/2012	12,000,000	1,582,095	1,789,680
Government Trust Certificates Class 1-D	0.000%	05/15/2013	14,000,000	1,769,443	2,007,600
Government Trust Certificates Class 2-F	0.000%	11/15/1995	24,860,000	15,981,807	16,918,473
Government Trust Certificates Class 2-F	0.000%	05/15/1996	29,000,000	17,774,712	18,736,030
Government Trust Certificates Class 2-E	9.400%	05/15/2002	7,100,000	7,080,740	7,428,730
Government Trust Certificates Class 2-F	0.000%	05/15/2004	63,000,000	18,206,105	19,746,720
Government Trust Certificates Class 2-F	0.000%	05/15/2005	39,000,000	10,324,395	11,191,440
Government Trust Certificates Class 2-F	0.000%	11/15/2005	76,000,000	19,205,902	21,090,000
Government Trust Certificates Class 2-F	0.000%	11/15/2006	29,900,000	6,887,664	7,519,252
Resolution Funding Corporation	0.000%	01/15/2001	27,060,000	11,235,379	11,568,150
Resolution Funding Corporation	0.000%	07/15/2001	22,260,000	8,845,823	9,077,850
Resolution Funding Corporation	0.000%	01/15/2002	12,075,000	4,595,268	4,709,250
Resolution Funding Corporation	0.000%	07/15/2002	12,075,000	4,398,175	4,501,680
U.S. Treasury Receipts	0.000%	02/15/1994	34,575,000	27,192,321	27,396,884
U.S. Treasury Receipts	0.000%	05/15/1994	88,440,000	66,509,761	68,706,382
U.S. Treasury Receipts	0.000%	08/15/1994	39,500,000	29,113,736	30,069,770
U.S. Treasury Receipts	0.000%	02/15/1996	71,165,000	47,185,891	47,791,567
U.S. Treasury Receipts	0.000%	08/15/1996	102,325,000	66,177,352	65,776,556
U.S. Treasury Receipts	0.000%	02/15/2002	35,000,000	13,390,353	13,988,450
U.S. Treasury Receipts	0.000%	08/15/2002	75,000,000	27,087,961	28,700,250
U.S. Treasury Receipts	0.000%	02/15/2003	100,000,000	34,666,615	36,632,000
U.S. Treasury Receipts	0.000%	08/15/2003	50,000,000	16,763,103	17,530,500
U.S. Treasury Receipts	0.000%	02/15/2004	200,000,000	62,446,177	67,016,000
U.S. Treasury Receipts	0.000%	05/15/2004	56,645,000	17,584,500	18,592,588
U.S. Treasury Receipts	0.000%	08/15/2004	234,675,000	69,926,394	75,424,545
U.S. Treasury Receipts	0.000%	11/15/2004	37,100,000	10,969,543	11,695,775
U.S. Treasury Receipts	0.000%	02/15/2005	353,675,000	103,143,332	108,885,922
U.S. Treasury Receipts	0.000%	02/15/2006	25,000,000	6,895,745	7,070,250
U.S. Treasury Receipts	0.000%	02/15/2015	1,413,350,000	180,978,369	192,441,736
U.S. Treasury Receipts	0.000%	08/15/2015	350,324,000	42,865,408	45,983,528
U.S. Treasury Receipts	0.000%	05/15/2005	259,065,000	77,829,329	77,911,208
U.S. Treasury Receipts	0.000%	11/15/2015	1,055,830,000	124,971,826	136,107,045
U.S. Treasury Receipts	0.000%	05/15/2016	121,365,000	13,216,980	14,977,654
United States Treasury	9.250%	08/15/1998	41,960,000	44,728,719	44,713,415
United States Treasury	8.875%	11/15/1998	265,000,000	278,919,548	276,842,850
United States Treasury	7.875%	07/15/1996	236,640,000	230,128,201	237,082,516
United States Treasury	8.000%	10/15/1996	168,570,000	165,849,473	169,517,363
United States Treasury	7.875%	11/15/1999	649,590,000	628,642,569	639,235,535
United States Treasury	8.500%	03/31/1992	163,750,000	162,867,011	166,360,175
United States Treasury	8.875%	04/30/1992	686,915,000	690,915,710	701,937,831
United States Treasury	8.500%	05/31/1992	908,485,000	915,276,030	924,101,857
United States Treasury	8.375%	06/30/1992	494,030,000	497,377,543	502,211,136

NOTE: *Cents omitted. Columns will not add.*

Name	Coupon	Maturity	Par Value	Book Value	Market Value
United States Treasury	8.125%	08/31/1992	$ 721,715,000	$ 722,581,947	$ 731,414,849
United States Treasury	7.750%	10/31/1992	53,745,000	54,179,047	54,198,607
United States Treasury	7.500%	11/15/2016	35,567,000	30,189,350	32,443,861
United States Treasury	8.750%	05/15/2017	63,090,000	61,988,854	65,889,303
United States Treasury	8.875%	08/15/2017	43,475,000	44,081,926	45,947,423
United States Treasury	8.875%	02/15/2019	146,680,000	154,713,982	155,618,679
Total			**$10,099,289,400**	**$ 5,930,940,084**	**$ 6,065,990,505**

CANADIAN BONDS

Name	Coupon	Maturity	Par Value	Book Value	Market Value
British Columbia Hydro & Power	15.000%	04/15/2011	$ 34,470,000	$ 44,982,216	$ 44,915,099
British Columbia Hydro & Power	15.500%	11/15/2011	43,750,000	58,878,678	59,333,750
Hydro Quebec	13.250%	10/15/2010	7,000,000	8,447,682	8,358,210
Hydro Quebec	13.375%	02/15/2013	13,500,000	16,742,661	16,573,005
Hydro Quebec	13.250%	12/15/2013	9,770,000	11,932,784	12,068,587
Hydro Quebec	8.875%	03/01/2026	112,900,000	103,934,383	106,470,345
Hydro Quebec	8.250%	04/15/2026	133,540,000	117,793,585	117,664,764
Hydro Quebec	8.250%	01/15/2027	114,650,000	101,197,978	101,006,650
Hydro Quebec	8.625%	06/15/2029	81,675,000	81,323,720	74,824,917
Hydro Quebec	8.500%	12/01/2029	154,280,000	149,181,213	139,723,682
Hydro Quebec	9.375%	04/15/2030	80,225,000	77,349,673	79,731,616
Hydro Quebec	9.500%	11/15/2030	20,000,000	20,056,492	20,136,000
Petro-Canada	9.700%	06/30/2018	28,600,000	29,146,634	30,773,028
Province of Manitoba	7.750%	07/17/2016	24,935,000	22,977,009	24,194,181
Province of Manitoba	9.125%	01/15/2018	18,200,000	19,119,703	18,722,340
Province of Manitoba	9.625%	12/01/2018	29,285,000	29,307,921	29,630,270
Province of New Brunswick	9.750%	05/15/2020	24,755,000	24,278,297	25,106,521
Province of Nova Scotia	8.875%	03/15/2016	6,750,000	6,341,242	6,243,682
Province of Nova Scotia	9.500%	02/01/2019	90,550,000	91,071,398	88,956,320
Province of Nova Scotia	8.875%	07/01/2019	82,660,000	82,700,864	76,307,579
Province of Nova Scotia	9.250%	03/01/2020	158,200,000	150,866,286	151,701,144
Province of Ontario	17.000%	11/05/2011	7,000,000	10,029,872	9,958,340
Province of Ontario	15.750%	03/15/2012	13,330,000	18,184,390	18,250,636
Province of Ontario	15.250%	08/31/2012	16,700,000	22,548,297	22,659,729
Province of Quebec	13.000%	10/01/2013	3,000,000	3,677,524	3,654,630
Province of Quebec	13.250%	09/15/2014	19,815,000	24,195,686	24,573,175
Province of Quebec	8.625%	12/01/2026	166,550,000	150,688,591	152,794,635
Province of Saskatchewan	9.375%	12/15/2020	15,400,000	15,296,915	15,026,550
Total			**$1,511,490,000**	**$1,492,251,707**	**$1,479,359,391**

MORTGAGES

Name	Coupon	Maturity	Par Value	Book Value	Market Value
FNMA Remic Class Y-4	7.000%	03/25/2019	$ 5,635,000	$ 4,665,603	$ 4,864,582
FNMA Remic Class Y-8	7.500%	10/25/2019	27,735,000	24,144,628	24,623,410
FNMA — FHA Project — Pool 2494	8.000%	04/01/2008	99,792,323	94,045,056	95,613,021
FNMA — FHA Project — Pool 7238	8.000%	06/01/2008	23,484,310	21,210,410	22,500,787
FNMA — FHA Project — Pool 7239	8.000%	08/01/2008	8,706,870	8,191,260	8,342,226
FNMA — FHA Project — Pool 8213	8.000%	01/01/2008	14,311,947	12,870,748	13,712,563
FNMA — FHA Project — Pool 8300	7.500%	07/01/2007	62,743,003	56,000,639	58,605,730
FNMA — FHA Project — Pool 36204	8.000%	03/01/2008	14,453,742	13,180,006	13,414,807
FNMA — FHA Project — Pool 44045	8.000%	06/01/2008	335,169,350	305,901,996	321,132,458
FNMA — FHA Project — Pool 44046	7.500%	02/01/2014	141,782,313	126,349,391	132,433,188
FNMA — FHA Project — Pool 44049	8.000%	04/01/2008	22,790,849	21,638,462	21,836,368
FNMA — FHA Project — Pool 44064	8.000%	07/01/2008	104,359,012	95,307,751	99,988,457
FNMA — Stripped Mtg. Backed Sec. Class 2 — TR1	9.000%	02/01/2017	20,365,647	20,365,647	21,627,416
FNMA — Stripped Mtg. Backed Sec. Class 2 — TR2	10.000%	02/01/2017	75,671,542	75,671,542	78,911,430
FNMA — Stripped Mtg. Backed Sec. Class 2 — TR6	9.000%	01/01/2017	71,886,775	71,886,775	76,571,872

NOTE: Cents omitted. Columns will not add.

Name	Coupon	Maturity	Par Value	Book Value	Market Value
FNMA – Stripped Mtg. Backed Sec. Class 2 — TR22	10.000%	11/01/2016	$ 14,596,317	$ 14,596,317	$ 15,442,763
FNMA – Stripped Mtg. Backed Sec. Class 2 — TR25	4.000%	02/01/2013	13,864,325	13,864,325	14,315,061
FNMA – Stripped Mtg. Backed Sec. Class 2 — TR63	9.500%	06/01/2018	42,569,445	42,569,445	44,483,615
Federal Home Loan Mortgage Corporation	7.500%	11/01/2008	4,174,583	3,042,227	3,912,335
Federal Home Loan Mortgage Corporation	7.500%	05/01/2016	1,018,428	872,665	931,536
Federal Home Loan Mortgage Corporation	7.500%	06/01/2016	7,221,597	5,780,662	6,605,450
Federal Home Loan Mortgage Corporation	7.500%	08/01/2016	5,006,410	4,471,350	4,579,263
Federal Home Loan Mortgage Corporation	8.000%	08/01/2016	2,103,403	1,903,580	1,972,593
Federal Home Loan Mortgage Corporation	8.000%	08/01/2016	6,398,862	5,726,982	6,000,917
Federal Home Loan Mortgage Corporation	8.500%	08/01/2016	3,587,968	3,557,695	3,443,301
Federal Home Loan Mortgage Corporation	8.000%	09/01/2016	6,327,170	5,722,134	5,933,683
Federal Home Loan Mortgage Corporation	7.500%	09/01/2016	4,511,237	4,029,098	4,126,338
Federal Home Loan Mortgage Corporation	8.000%	09/01/2016	15,615,487	14,029,539	14,644,360
Federal Home Loan Mortgage Corporation	8.000%	09/01/2016	8,631,100	7,841,645	8,094,332
Federal Home Loan Mortgage Corporation	8.000%	09/01/2016	24,733,075	21,757,377	23,194,925
Federal Home Loan Mortgage Corporation	8.000%	09/01/2016	16,874,962	15,250,747	15,825,508
Federal Home Loan Mortgage Corporation	8.000%	09/01/2016	12,336,602	11,210,887	11,569,389
Federal Home Loan Mortgage Corporation	7.500%	10/01/2016	4,135,666	3,670,403	3,782,811
Federal Home Loan Mortgage Corporation	7.500%	11/01/2016	4,614,142	4,043,142	4,220,463
Federal Home Loan Mortgage Corporation	7.500%	11/01/2016	6,551,407	5,742,920	5,992,441
Federal Home Loan Mortgage Corporation	8.000%	11/01/2016	2,418,839	2,093,808	2,268,412
Federal Home Loan Mortgage Corporation	7.500%	12/01/2016	13,668,974	12,583,999	12,502,737
Federal Home Loan Mortgage Corporation	7.500%	12/01/2016	7,864,706	6,865,135	7,193,689
Federal Home Loan Mortgage Corporation	8.000%	12/01/2016	2,797,936	2,557,488	2,623,932
Federal Home Loan Mortgage Corporation	8.000%	12/01/2016	4,702,716	4,253,019	4,410,254
Federal Home Loan Mortgage Corporation	7.500%	01/01/2017	15,611,324	13,220,840	14,279,366
Federal Home Loan Mortgage Corporation	7.500%	01/01/2017	18,253,567	16,804,690	16,696,173
Federal Home Loan Mortgage Corporation	8.000%	01/01/2017	7,122,666	6,414,851	6,679,708
Federal Home Loan Mortgage Corporation	7.500%	02/01/2017	10,529,928	9,152,702	9,631,515
Federal Home Loan Mortgage Corporation	7.500%	02/01/2017	36,474,678	29,253,832	33,362,658
Federal Home Loan Mortgage Corporation	7.500%	02/01/2017	3,250,532	2,732,478	2,973,197
Federal Home Loan Mortgage Corporation	7.500%	02/01/2017	36,967,586	35,292,492	33,813,512
Federal Home Loan Mortgage Corporation	7.000%	03/01/2017	15,413,836	13,332,968	14,806,839
Federal Home Loan Mortgage Corporation	7.500%	03/01/2017	25,395,409	22,396,483	23,228,673
Federal Home Loan Mortgage Corporation	7.500%	03/01/2017	3,877,543	3,259,560	3,546,711
Federal Home Loan Mortgage Corporation	7.500%	03/01/2017	3,520,803	3,079,053	3,220,408
Federal Home Loan Mortgage Corporation	7.500%	03/01/2017	6,521,006	5,702,823	5,964,634
Federal Home Loan Mortgage Corporation	7.500%	03/01/2017	2,277,956	1,914,907	2,083,601
Federal Home Loan Mortgage Corporation	7.500%	04/01/2017	2,785,314	2,341,404	2,547,671
Federal Home Loan Mortgage Corporation	7.500%	04/01/2017	9,124,798	7,952,847	8,346,270
Federal Home Loan Mortgage Corporation	7.500%	04/01/2017	15,060,176	14,278,294	13,775,242
Federal Home Loan Mortgage Corporation	7.500%	04/01/2017	10,472,850	9,102,152	9,579,307
Federal Home Loan Mortgage Corporation	7.500%	05/01/2017	7,788,957	6,803,167	7,124,403
Federal Home Loan Mortgage Corporation	7.500%	05/01/2017	16,618,325	14,515,068	15,200,449
Federal Home Loan Mortgage Corporation	7.500%	05/01/2017	10,088,069	8,839,720	9,227,355
Federal Home Loan Mortgage Corporation	8.000%	05/01/2017	20,470,023	18,867,890	19,196,993
Federal Home Loan Mortgage Corporation	8.500%	05/01/2017	3,469,625	3,248,437	3,329,730
Federal Home Loan Mortgage Corporation	7.500%	06/01/2017	7,685,725	6,845,098	7,029,978
Federal Home Loan Mortgage Corporation	7.500%	06/01/2017	7,889,904	6,891,338	7,216,737
Federal Home Loan Mortgage Corporation	7.500%	06/01/2017	8,716,353	7,761,640	7,972,674
Federal Home Loan Mortgage Corporation	7.500%	06/01/2017	8,083,695	6,795,356	7,393,994
Federal Home Loan Mortgage Corporation	7.500%	07/01/2017	4,449,658	3,964,367	4,070,013
Federal Home Loan Mortgage Corporation	7.500%	07/01/2017	35,888,257	31,940,549	32,826,271
Federal Home Loan Mortgage Corporation	7.500%	08/15/2018	14,415,788	13,109,357	13,185,833
Federal Home Loan Mortgage Corporation	6.000%	02/15/2019	11,600,000	8,921,125	9,396,000
GNMA – GNMA II/Various — Pool 587	8.000%	07/20/2016	4,139,063	3,916,588	3,863,525
GNMA – GNMA II/Various — Pool 606	8.000%	08/20/2016	4,090,143	3,870,297	3,817,862

NOTE: Cents omitted. Columns will not add.

Name	Coupon	Maturity	Par Value	Book Value	Market Value
GNMA — Jumbo Mortgage — Pool 763	8.000%	09/20/2001	$ 2,766,221	$ 2,472,310	$ 2,828,461
GNMA — Jumbo Mortgage — Pool 729	8.000%	03/20/2017	4,442,761	3,976,271	4,147,006
GNMA — GNMA II/Various — Pool 730	8.500%	03/20/2017	3,613,524	3,433,977	3,461,069
GNMA — Jumbo Mortgage — Pool 746	8.000%	04/20/2017	5,670,692	5,068,181	5,293,194
GNMA — Sovran Mortgage Corp. — Pool 150462	9.000%	06/15/2016	15,152,991	14,859,544	15,058,296
GNMA — Shearson Lehman Hutton Mortgage — Pool 152586	9.000%	06/15/2016	42,126,706	40,968,221	41,863,414
GNMA — Lomas & Nettleton — Pool 153574	9.000%	06/15/2016	33,530,374	32,719,947	33,320,809
GNMA — Carteret Savings Bank — Pool 156621	9.000%	05/15/2016	15,705,204	14,144,499	15,607,046
GNMA — ARCS Mortgage — Pool 158693	9.000%	08/15/2016	7,718,812	7,588,557	7,670,569
GNMA — Union Federal Savings & Loan — Pool 159858	9.000%	08/15/2016	10,056,252	10,093,963	9,993,401
GNMA — City Federal Savings & Loan — Pool 161368	9.000%	06/15/2016	8,179,778	8,210,452	8,128,654
GNMA — Shawmut — Pool 161785	9.000%	07/15/2016	7,723,749	7,438,935	7,675,475
GNMA — Cowger & Miller Mtg. — Pool 163070	8.500%	02/15/2017	1,470,540	1,488,462	1,423,203
GNMA — Alliance Mortgage Co. — Pool 164677	9.000%	06/15/2016	10,306,231	9,997,044	10,241,817
GNMA — Alliance Mortgage Co. — Pool 164678	9.000%	06/15/2016	20,335,863	18,314,986	20,208,764
GNMA — Alliance Mortgage Co. — Pool 164680	9.000%	08/15/2016	21,218,207	21,244,729	21,085,593
GNMA — Union Federal Savings & Loan — Pool 165610	9.000%	08/15/2016	16,697,905	16,337,857	16,593,544
GNMA — Fleet Mortgage Corp. — Pool 166132	9.000%	07/15/2016	8,850,398	8,689,985	8,795,083
GNMA — Collateral Investment Company — Pool 166212	9.000%	06/15/2016	8,603,073	8,339,604	8,549,304
GNMA — City Federal Savings — Pool 167142	9.000%	07/15/2016	9,264,578	8,752,131	9,206,675
GNMA — Fleet Mortgage Corp. — Pool 169643	9.000%	10/15/2016	25,865,733	25,679,823	25,704,072
GNMA — Standard Federal Savings Bank — Pool 171776	9.000%	11/15/2016	20,403,424	19,584,099	20,275,902
GNMA — Cowell Company — Pool 175983	9.000%	09/15/2016	11,910,910	11,739,690	11,836,467
GNMA — Imperial Mortgage — Pool 178504	9.000%	01/15/2017	21,004,386	21,673,901	20,873,109
GNMA — SEN Mortgage — Pool 181407	8.500%	02/15/2017	2,624,613	2,656,600	2,540,126
GNMA — Mortgage Entrust Inc. — Pool 182205	8.000%	02/20/2017	1,326,252	1,186,995	1,237,963
GNMA — Fireman's Fund Mortgage — Pool 182615	8.000%	06/15/2017	46,127,512	39,496,682	43,518,079
GNMA — Fireman's Fund Mortgage — Pool 182620	8.000%	04/15/2017	4,339,867	4,008,952	4,094,361
GNMA — Fireman's Fund Mortgage — Pool 182621	8.500%	06/15/2017	26,793,142	24,804,589	25,930,671
GNMA — Goldome Realty Credit Corp. — Pool 183022	9.000%	10/15/2016	7,861,597	8,113,413	7,812,462
GNMA — Mason McDuffie — Pool 183738	8.500%	01/15/2017	16,228,016	16,425,795	15,705,636
GNMA — S & L Mortgage Services — Pool 184585	8.500%	02/15/2017	4,537,480	4,015,670	4,391,419
GNMA — Delson Financial — Pool 184660	8.000%	04/15/2017	3,863,270	3,273,819	3,644,724
GNMA — Delson Financial — Pool 184661	8.000%	04/15/2017	4,480,574	4,154,332	4,227,108
GNMA — Sovran Mortgage Corp. — Pool 185832	9.000%	01/15/2017	36,629,484	35,942,681	36,400,549
GNMA — Seafirst Mortgage Corp. — Pool 187852	9.000%	11/15/2016	4,092,879	3,924,047	4,067,298
GNMA — Stockton Whatley Davin & Co. — Pool 190332	8.500%	05/15/2017	7,513,736	7,093,436	7,271,868
GNMA — ICM Mortgage Corp. — Pool 191673	8.000%	04/15/2017	5,649,231	4,969,558	5,329,654
GNMA — Fleet Mortgage Corp. — Pool 192771	9.000%	12/15/2016	14,208,961	14,619,685	14,120,155
GNMA — Fleet Mortgage Corp. — Pool 193319	8.500%	06/15/2017	4,530,291	4,257,058	4,384,461
GNMA — Directors Mortgage Loan Corp. — Pool 195606	8.500%	01/15/2017	4,294,203	4,350,564	4,155,972
GNMA — City Federal Savings Bank — Pool 197506	8.000%	04/15/2017	7,116,093	6,575,714	6,713,535
GNMA — Weyerhaeuser Mortgage — Pool 197508	8.000%	05/15/2017	16,282,199	13,738,106	15,361,115
GNMA — Comfed Savings Bank — Pool 198672	8.000%	03/20/2017	3,644,560	3,261,881	3,401,941
GNMA — Metmor Financial Corp. — Pool 199425	8.500%	02/15/2017	10,225,431	10,359,640	9,896,274
GNMA — First Union Mortgage — Pool 200071	8.500%	04/15/2017	19,776,602	19,999,089	19,139,993
GNMA — City Federal Savings Bank — Pool 200720	8.000%	05/15/2017	11,251,044	10,267,357	10,614,572
GNMA — Fleet Mortgage Corp. — Pool 201209	8.500%	04/15/2017	18,312,088	16,952,988	17,722,622
GNMA — Fleet Mortgage Corp. — Pool 201211	8.000%	03/15/2017	13,358,499	12,344,088	12,602,809
GNMA — Fleet Mortgage Corp. — Pool 201215	8.000%	06/15/2017	24,836,674	21,047,141	23,431,664
GNMA — Weaver Brothers, Inc. — Pool 201719	8.000%	02/15/2017	4,162,552	3,661,745	3,927,07[illegible]
GNMA — Empire of America Realty — Pool 203005	8.500%	04/15/2017	5,880,260	5,443,834	5,690,974
GNMA — Empire Funding — Pool 203016	8.000%	05/15/2017	13,439,226	12,154,100	12,678,969
GNMA — Empire of America Realty — Pool 203058	8.500%	07/15/2017	4,356,769	4,027,289	4,216,525
GNMA — Meritor Mortgage Corporation — Pool 203184	9.000%	01/15/2017	3,017,616	2,822,414	2,998,756
GNMA — Shawmut — Pool 203900	8.500%	06/15/2017	4,042,368	3,798,563	3,912,244

NOTE: Cents omitted. Columns will not add.

Name	Coupon	Maturity	Par Value	Book Value	Market Value
GNMA – Fleet Real Estate Funding — Pool 204307	8.500%	04/15/2017	$ 5,076,908	$ 4,700,106	$ 4,913,482
GNMA – Fleet Real Estate Funding — Pool 204313	8.000%	04/15/2017	4,456,544	3,994,177	4,204,437
GNMA – Ryan Financial Service Inc. — Pool 204969	8.000%	04/20/2017	2,296,135	2,055,041	2,143,281
GNMA – Ryan Financial Service Inc. — Pool 205235	8.000%	03/20/2017	3,699,147	3,310,737	3,452,895
GNMA – Lomas & Nettleton — Pool 206100	8.500%	04/15/2017	7,041,642	6,519,020	6,814,972
GNMA – Fleet Mortgage Corp. — Pool 206246	8.500%	02/15/2017	6,435,828	6,540,410	6,228,658
GNMA – City Federal Savings Bank — Pool 208528	8.500%	04/15/2017	4,490,256	4,540,771	4,345,715
GNMA – City Federal Savings Bank — Pool 208531	8.500%	06/15/2017	7,238,904	6,750,278	7,005,884
GNMA – City Federal Savings Bank — Pool 208540	8.000%	04/15/2017	5,405,066	5,080,762	5,099,301
GNMA – City Federal Savings Bank — Pool 208546	8.500%	05/15/2017	4,349,778	4,026,943	4,209,758
GNMA – Ryan Financial Services — Pool 208592	8.000%	03/15/2017	9,248,275	8,135,592	8,725,100
GNMA – Lincoln Service Corp. — Pool 208722	8.500%	05/15/2017	3,263,507	3,080,955	3,158,455
GNMA – Lincoln Service Corp. — Pool 208728	8.000%	05/15/2017	57,596,344	53,186,624	54,338,119
GNMA – Citicorp Homeowners Services — Pool 211037	8.000%	07/15/2017	4,222,684	3,714,642	3,983,807
GNMA – Fleet Mortgage Corp. — Pool 212179	8.000%	04/15/2017	8,836,456	7,991,470	8,336,578
GNMA – Fleet Mortgage Corp. — Pool 212181	8.000%	05/15/2017	43,040,390	39,772,011	40,605,596
GNMA – Colwell Financial Corp. — Pool 212659	8.500%	04/15/2017	4,206,464	3,894,266	4,071,058
GNMA – REFCO Mortgage Securities — Pool 213313	8.500%	02/15/2017	4,750,299	4,391,058	4,597,387
GNMA – GMAC Mortgage Corp. — Pool 213771	9.000%	01/15/2017	12,062,024	11,594,620	11,986,636
GNMA – Fireman's Fund Mortgage — Pool 213864	8.000%	05/15/2017	32,377,059	30,677,263	30,545,489
GNMA – Metmor Financial Inc. — Pool 216756	8.000%	04/15/2017	8,271,689	7,009,610	7,803,759
GNMA – Metmor Financial Inc. — Pool 216758	8.000%	04/15/2017	4,621,500	4,181,014	4,360,062
GNMA – Goldome Realty Credit Corp. — Pool 218131	8.500%	05/15/2017	4,112,382	3,801,383	3,980,004
GNMA – New York Guardian Mtg. — Pool 219151	8.000%	05/15/2017	14,230,038	13,147,485	13,425,044
GNMA – Standard Federal Savings Bank — Pool 222008	8.000%	04/15/2017	8,832,485	7,880,233	8,332,832
GNMA – Metmor Financial Inc. — Pool 225610	8.500%	06/15/2017	5,650,605	5,244,468	5,468,712
GNMA – Sears Mortgage Corp. — Pool 225885	8.000%	06/15/2017	7,210,692	6,478,356	6,802,783
GNMA – Union Federal Savings — Pool 225966	8.000%	07/15/2017	6,226,655	5,751,872	5,874,413
GNMA – National Mortgage Co. — Pool 228869	8.500%	04/15/2017	70,275,651	64,961,055	68,013,478
GNMA – Duval Federal Savings & Loan — Pool 231922	8.000%	07/15/2017	7,147,286	6,068,493	6,742,964
GNMA – Fleet Funding — Pool 236938	9.000%	05/15/2018	5,055,739	4,776,093	5,024,141
GNMA – First Union Mortgage — Pool 267898	9.500%	09/15/2019	9,969,236	9,889,014	10,118,774
GNMA – Fleet Mortgage Corp. — Pool 279471	9.000%	11/15/2019	24,576,702	23,632,035	24,423,097
GNMA – Banc Boston Mortgage — Pool 284627	9.000%	02/15/2020	20,061,684	19,318,774	19,936,298
GNMA – Banc Boston Mortgage — Pool 284628	9.000%	03/15/2020	20,241,221	19,507,476	20,114,713
GNMA – Barclays American — Pool 284895	9.000%	02/15/2020	56,831,323	54,682,388	56,476,127
GNMA – Barclays American — Pool 284896	9.000%	03/15/2020	130,401,333	125,470,533	129,586,325
GNMA – Fleet Mortgage Corp. — Pool 286287	9.000%	02/15/2020	20,054,160	19,327,197	19,928,822
GNMA – Fleet Mortgage Corp. — Pool 286352	9.000%	03/15/2020	25,283,763	24,319,819	25,125,739
GNMA – Fleet Mortgage Corp. — Pool 286409	9.000%	10/15/2020	17,519,256	16,884,183	17,782,045
GNMA – Fleet Mortgage Corp. — Pool 286439	9.000%	04/15/2020	25,314,355	24,349,246	25,156,141
GNMA – Citicorp Mortgage Inc. — Pool 289079	9.000%	03/15/2020	24,022,315	23,106,464	23,872,176
GNMA – Banc Boston Mortgage — Pool 290269	9.500%	10/15/2020	12,929,096	12,825,057	13,123,033
GNMA – Barclays American — Pool 290348	9.000%	08/15/2020	53,857,209	51,921,716	53,520,602
GNMA – Barclays American — Pool 290372	9.000%	09/15/2020	57,747,223	55,671,933	57,386,303
GNMA – Barclays American — Pool 290384	9.000%	10/15/2020	50,544,063	48,632,865	50,228,162
GNMA – Barclays American — Pool 290385	9.500%	10/15/2020	30,757,793	30,382,932	31,219,160
GNMA – Government National — Pool 291026	9.000%	11/15/2020	1,998,844	1,923,262	1,986,351
GNMA – Republic National Bank — Pool 292422	9.500%	09/15/2020	44,685,265	44,168,592	45,355,544
GNMA – Fireman's Fund Mortgage — Pool 292597	9.500%	11/15/2020	8,495,391	8,427,030	8,622,822
GNMA – Fireman's Fund Mortgage — Pool 292625	9.500%	11/15/2020	22,095,701	21,917,900	22,427,137
GNMA – America's Mortgage Co. — Pool 293399	9.500%	11/15/2020	40,158,084	39,834,936	40,760,455
GNMA – America's Mortgage Co. — Pool 293402	9.500%	11/15/2020	19,590,110	19,432,471	19,883,962
GNMA – America's Mortgage Co. — Pool 293403	9.000%	11/15/2020	27,769,765	26,914,977	27,596,204
GNMA – First Union Mortgage — Pool 295052	9.500%	11/15/2020	27,485,172	27,264,002	27,897,449
GNMA – Chemical Mortgage Co. — Pool 295420	9.500%	09/15/2020	9,794,168	9,715,355	9,941,080

NOTE: Cents omitted. Columns will not add.

Name	Coupon	Maturity	Par Value	Book Value	Market Value
GNMA — Norwest Mortgage — Pool 298523	9.500%	11/15/2020	$ 19,587,755	$ 19,430,134	$ 19,881,[illegible]
GMAC 1985-A Grantor Trust	8.450%	12/15/1990	1,391,790	1,383,961	1,391,[illegible]
Northeast Mortgage FHA Project — Pool 1985-1	8.545%	08/01/2016	23,265	18,581	23,[illegible]
Sears Mortgage Securities Corp. — Series 1985-A	11.875%	04/25/2015	42,029	41,504	42,[illegible]
Total			**$3,515,644,591**	**$3,288,205,113**	**$3,407,020,[illegible]**

COMMON STOCK

Name	Shares	Cost	Market Value
Allegheny Power System Inc.	1,184,000	$ 44,343,425	$ 43,660,0[illegible]
Alliant Techsystems Inc.	20,950	255,328	277,5[illegible]
Aluminum Co. of America	426,600	24,657,092	24,582,8[illegible]
AMAX Inc.	1,113,900	22,812,281	23,531,1[illegible]
Amdahl Corporation	3,000,000	46,138,674	42,375,0[illegible]
American Cyanamid Co.	2,000,000	91,050,471	105,250,0[illegible]
American International Group	2,750,000	132,968,617	211,406,2[illegible]
Ametek Incorporated	750,000	9,132,794	7,125,0[illegible]
AMOCO Corporation	486,500	26,087,396	25,480,4[illegible]
Archer Daniels Midland Company	1,635,700	38,208,562	37,212,1[illegible]
ARKLA Inc.	2,000,000	40,028,350	40,000,0[illegible]
Atlantic Energy Inc.	456,000	15,156,957	15,447,0[illegible]
Atlantic Richfield Company	585,500	13,369,634	72,382,4[illegible]
Avnet Inc.	1,000,000	24,253,743	25,875,0[illegible]
Baker Hughes, Inc.	936,300	25,534,928	23,992,6[illegible]
Baxter International Inc.	3,125,000	73,502,656	87,109,3[illegible]
Becton, Dickinson & Co.	323,100	22,686,514	24,070,9[illegible]
Briggs & Stratton Corporation	110,500	3,036,129	2,900,6[illegible]
Bristol-Myers Squibb Company	1,260,000	34,646,668	84,420,0[illegible]
Bruno's, Inc.	1,910,000	20,492,017	29,366,2[illegible]
Cardinal Distribution, Inc.	85,937	1,499,062	2,298,81[illegible]
Chevron Corporation	2,988,500	156,831,664	217,039,8[illegible]
Cincinnati Milacron Inc.	1,100,000	19,931,976	12,100,0[illegible]
CIPSCO Inc.	877,000	19,074,530	19,074,[illegible]
Consolidated Edison Co. of NY	1,223,000	27,553,999	28,893,3[illegible]
Cooper Industries	1,559,700	45,140,492	64,142,6[illegible]
Corning Incorporated	227,800	9,340,336	10,222,5[illegible]
Crane Co.	31,050	575,308	621,0[illegible]
Deere & Company	571,700	25,586,410	26,798,4[illegible]
Delmarva Power & Light Company	1,087,000	18,955,144	19,701,8[illegible]
Digital Equipment Corporation	85,900	4,923,238	4,713,[illegible]
Dominion Resources Inc.	1,228,000	52,158,529	57,562,5[illegible]
Dow Chemical Company	2,087,650	100,449,954	99,163,3[illegible]
Eastman Kodak Co.	3,350,000	131,415,008	139,443,[illegible]
Florida Progress Corporation	1,150,000	39,663,106	43,987,5[illegible]
Foster Wheeler Corporation	1,300,000	31,511,665	29,087,5[illegible]
FPL Group Incorporated	1,500,000	45,588,518	43,500,0[illegible]
Freeport-McMoran, Inc.	678,700	24,162,738	23,584,8[illegible]
General Re Corp.	1,200,000	100,784,585	111,600,0[illegible]
Gillette Co.	982,800	56,111,492	61,670,[illegible]
Gould's Pumps Incorporated	750,000	13,051,396	14,343,[illegible]
Halliburton Company	546,500	26,383,778	24,934,[illegible]
Harris Corporation	1,000,000	35,903,919	19,875,[illegible]
Honeywell Incorporated	558,000	24,163,628	24,831,[illegible]
Humana Incorporated	684,200	27,165,722	28,821,[illegible]
Idaho Power Company	882,000	19,896,403	22,711,[illegible]
Ingersoll Rand Company	701,800	24,634,285	26,142,[illegible]
International Business Machines	781,800	88,057,068	88,343,[illegible]
International Flavors & Fragrances	275,000	12,694,714	20,48[illegible]

NOTE: Cents omitted. Columns will not a[illegible]

Name	Shares	Cost	Market Value
...national Paper Company	2,700,000	$ 109,547,404	$ 144,450,000
... Enterprises Inc.	843,000	19,062,260	22,550,250
... Power & Light Company	963,000	21,923,833	20,343,375
... Utilities Company	900,000	16,606,401	18,675,000
... International, Inc.	1,125,000	22,851,333	28,406,250
... Clark Corp.	1,084,300	49,521,304	91,081,200
... & E Energy Corporation	542,000	18,810,665	21,680,000
... & Company, Inc.	1,131,000	79,074,433	101,648,625
...pore Corporation	560,000	17,244,835	20,230,000
...nesota Mining & Manufacturing	922,400	68,185,428	79,095,800
...col Corporation	2,776,400	111,375,052	161,031,200
...ex Incorporated	500,000	9,067,020	11,625,000
...ex Incorporated Class A	500,000	11,125,000	10,687,500
...ton International Inc.	70,000	3,097,560	3,193,750
...torola, Inc.	1,945,000	100,074,863	101,869,375
...lco Chemical Company	466,500	23,604,048	26,357,250
...rdstrom, Inc.	1,507,800	35,629,325	33,548,550
...corp	3,484,600	60,273,420	77,967,925
...L Corporation	1,500,000	45,812,633	52,500,000
...kin-Elmer Corp.	704,700	15,673,138	15,062,962
...p Morris Companies Inc.	790,800	37,747,529	40,923,900
...blic Service Enterprise Group	2,581,000	63,067,188	68,073,875
...uaker Oats Company	1,953,300	94,112,085	103,280,737
...ynolds Metals Company	454,800	25,121,889	25,923,600
...na Corporation	992,000	30,261,563	34,348,000
...CE Corporation	1,932,000	62,709,810	73,174,500
...hering-Plough Corporation	2,366,000	79,045,242	104,991,250
...uthwestern Public Service	513,000	13,682,257	14,620,500
...ndstrand Corporation	641,600	16,935,193	18,606,400
...chmark Corporation	1,480,000	10,759,474	72,335,000
...ted Dominion Realty Trust	401,900	5,557,444	5,978,262
...an Associates, Inc.	381,700	10,072,394	11,641,850
...green Company	758,200	11,604,170	38,952,525
...ner-Lambert Company	1,660,000	30,038,423	112,050,000
...nghouse Electric	5,493,000	155,673,454	156,550,500
Total		**$3,376,519,012**	**$4,135,617,002**

REAL ESTATE

Name	Book Value	Market Value
...-CIO Housing Investment Trust	$ 15,118,442	$ 15,706,455
... Group	90,162,421	90,767,818
... Enterprises	16,878,642	17,059,724
...NB	96,001,492	124,703,392
...d Property	27,550,000	24,877,215
...d Realty	99,350,221	102,187,786
... Trust	314,758,890	321,491,038
... Trust	12,700,000	13,008,338
... Fargo	263,841,081	295,241,762
Total	**$936,361,192**	**$1,005,043,530**

VENTURE CAPITAL

Name	Cost	Market Value
... Development Fund, Inc.	$ 2,910,222	$ 2,910,222
... Industries Corporation	3,000,000	4,000,000
... Capital Fund	3,306,082	3,306,082
... Capital Fund II	6,826,217	6,826,217
Total	**$16,042,521**	**$17,042,521**

NOTE: Cents omitted. Columns will not add.

Public Employees Retirement System of Ohio

The Comprehensive Annual Financial Report

For the Year Ended December 31, 1990

PERS

PLAN STATEMENT

Plan Statement

Employees Retirement System of Ohio created by the Ohio General Assembly to retirement, disability retirement, and survivor programs for the public employees of Ohio not covered by another state or local system. This summary outlines the Ohio regulates PERS; however, it cannot and does any of the provisions of the Ohio Revised

public employees in Ohio, except those covered state retirement system in Ohio or the Retirement System, are required to become members of PERS when they begin public ment.

provides for optional membership for public officials. Any new employee who is not at the time of employment and is a or emergency employee whose ment will not exceed three calendar months, a whose employment will not exceed 1,500 any calendar year, or one whose employment exceed 20 hours per week may apply for on from PERS in writing.

llowing individuals are excluded from ship:

- persons receiving a disability benefit or a service retirement allowance from any other Ohio public retirement system, unless membership in PERS and the other system was established prior Aug. 20, 1976;
- persons actively contributing to the Police and emen's Disability and Pension Fund, the State ghway Patrol Retirement System, or the ncinnati Retirement System;
- mates of state correctional and penal stitutions;
- patients in hospitals operated by the partments of Mental Health or Mental tardation;
- patients in the Ohio Veterans' Home and dents of county homes;
- cted officials of public employers who are not ered by PERS;
- ployees of temporary help services who orm services for public employers;
- ployees of private contractors except public ployees transferred with previously publicly-ated functions and performing the same es as before;
- duals performing services under a personal ce contract as an independent contractor;
- summer only, employees, not members of who are contributing to the State Teachers ement System or School Employees ement System on a full-time basis for the ent school year.

PERS provides special retirement coverage for certain law enforcement officers. Full-time sheriffs and deputy sheriffs employed after Jan. 1, 1975 and full-time township constables or police officers employed after Jan. 1, 1981 are included if their primary duties are to preserve the peace, to protect life and property, and to enforce the laws of Ohio. Full-time county narcotics agents employed after Sept. 26, 1984 also are included. The following groups are eligible for the law enforcement provisions if the individuals were employed on or after Dec. 15, 1988: 1) full-time undercover drug agents as defined in Section 109.79; 2) full-time liquor control investigators with the Ohio Department of Liquor Control engaged in the enforcement of Chapter 4301; 3) full-time park officers, forest officers, game protectors, or state watercraft officers with the Ohio Department of Natural Resources; 4) full-time park district police officers under Section 511.232 or 1545.13; 5) full-time conservancy district officers under Section 6101.75; 6) full-time municipal corporation police officers not covered by the Police and Firemen's Disability and Pension Fund; 7) police employed by the Ohio Veterans' Home under Section 6907.02; 8) special police employed by a state mental health institution under Section 5119.14; and 9) special police employed by a state institution for the mentally retarded and developmentally disabled under Section 5123.13. In order to enroll in the law enforcement division, the member must have a Peace Officer's Training School Certificate.

Law enforcement officers employed before the dates indicated above are under this special retirement option only if they elected this coverage as provided by the enabling legislation; otherwise, they remain under the regular PERS schedule of benefits.

Contributions

Employers are required to make contributions to the System on the basis of a percentage of reportable payroll and at a rate based upon the recommendation of PERS' actuary. Penalties and interest are added for late payments. The contribution rate for state employers is 13.71 percent; for local employers, 13.95 percent; and for employers in the law enforcement division, 18.10 percent. Beginning Jan. 1, 1991, employers in the law enforcement division contribute 16 percent of member payroll.

The current contribution rate for members is 8.5 percent of earnable salary. Members in the law enforcement division pay 9.5 percent; beginning Jan. 1, 1991 the rate is 9.0 percent of earnable salary. Individual accounts for each member of PERS are maintained and funds contributed by the member are fully refundable at service termination or death. In the first quarter of the year, members are sent a statement of the balance in their individual accounts as of the previous December 31. A report disclosing the financial status of the System and describing major developments during the year at PERS is sent along with the statement of savings.

BENEFITS

Age and Service Retirement

Members are eligible to retire at age 60 with at least five years or 60 contributing months of total service credit. They may retire with a reduced benefit as early as age 55 with 25 years of service. With 30 years of credit, there is no age requirement nor benefit reduction because of age.

Service credit allowed under Chapter 145 of the Ohio Revised Code includes:

1. service for the state of Ohio or an Ohio political subdivision on which contributions have been paid;
2. certain military service which interrupted contributing public service;
3. prior service before 1935;
4. any out-of-public service period of three years or less during which the member was receiving an award under Ohio's Workers' Compensation;
5. previously unreported service in Ohio after 1935;
6. service purchased by the member for:
   a. other military service that is not being used for other retirement programs, except Social Security;
   b. prisoner-of-war service;
   c. an authorized leave of absence, which did not exceed one year;
   d. comparable public service that is not being used for other retirement programs, except Social Security, performed outside Ohio or with the federal government or for which contributions were made to an Ohio municipal retirement system;
   e. service restored by redeposit which had been cancelled by an earlier refund of PERS contributions;
   f. service in an Ohio police or fire department and covered by the Police and Firemen's Disability and Pension Fund or the State Highway Patrol and covered by the Highway Patrol Retirement System that is not being used for other retirement benefits;
   g. up to 35 percent additional credit on completed terms of full-time contributing elective service or board, commission, or other public body service by members who are appointed by the governor with the advice and consent of the Senate;
7. service purchased by an employer under a retirement incentive plan.

When a member files an application for age and service retirement a choice of several plans of payment is available. The choices include benefits payable throughout the member's lifetime (Plan B-single life annuity) or in a lesser amount during the individual's life but continuing after his/her death to a spouse or other designated beneficiary (Plans A, C, or D-joint and survivor annuities). A benefit payable under Plan A, C, or D is the actuarial equivalent of Plan B, but the payment to the member is reduced because it is based on the combined life expectancies of the member and the beneficiary. A fifth payment plan (Plan E-guaranteed period) is also the actuarial equivalent of Plan B, but the payment is reduced to guarantee the period.

Benefit payments vary in amount depending on length of public service, final average salary, age, and plan of payment selection. Final average salary is determined by taking the average of the three highest years of earnable salary. In no case can the age and service benefit exceed 100 percent of final average salary or the limits under Internal Revenue Code Section 415.

Law enforcement personnel covered under the law enforcement division may retire with 25 years of law enforcement service credit at age 52, or at a reduced benefit as early as age 48. State law also permits retirement at age 62 for any officer with at least 15 years of service credit. The maximum benefit limit is 90 percent of final average salary or the limits under Internal Revenue Code Section 415.

Disability Retirement

Before reaching age 60, a member who has at least five years of service credit and becomes permanently disabled for the performance of duty may apply to the Retirement Board for monthly disability benefits. A member covered under the law enforcement division does not need five years of contributing credit to apply for disability if the disabling condition is the result of an on-duty illness or injury that occurred during or resulted from performance of duty.

The member may be required to have a yearly medical examination. The Board will select the physician and pay for the examination which will determine medical eligibility. The benefit is calculated similar to the age and service formula. There is no reduction for age and the amount of the allowance is based on final average salary and years of PERS service, plus the length of time between the effective date of disability retirement and age 60. Payments cannot be less than 30 percent nor more than 75 percent of final average salary or the limits under Internal Revenue Code Section 415.

Survivor Benefits

A refund of a member's accumulated contributions is available to a qualified beneficiary who is designated by the member or by law.

A member's beneficiary is determined by statutory automatic succession unless a specific designation of beneficiary is made in writing on a form provided by PERS. Under Ohio law, the order of automatic succession is:

1. Spouse.
2. If no spouse, the youngest dependent child under age 18 (or under age 22 if a qualified student). If monthly benefits are selected,

payments will be determined on the basis of all the minor children and divided equally among them. Incompetent, dependent children, regardless of age, are included.

3. If monthly survivor benefits are not payable or there are no dependent children, all living children will share equally in a refund of the account.
4. If no spouse or child(ren), a dependent parent may select a monthly survivor benefit.
5. If none of the above, parents share equally in a refund of the account.
6. If none of the foregoing, a refund of the account will be paid to the member's estate.

Qualified dependent(s) may be eligible for monthly survivor benefits if the deceased member: 1) had at least 18 full months of Ohio credit with three of those months within the two and one-half years immediately before death, or 2) was eligible for age and service retirement but did not retire and continued to work, or 3) was receiving a disability benefit at the time of death.

The dependents qualify for available monthly benefits as follows:

1. A surviving spouse age 62 or older (age 50 if the deceased member had 10 or more years of service credit).
2. A spouse with dependent child(ren) under age 18 [or 22 if qualified student(s)].
3. Dependent child(ren) under age 18 [or 22 if qualified student(s)].
4. Dependent parent(s) age 65 or older.
5. An incompetent spouse, incompetent child(ren), or incompetent dependent parent(s), at any age.

Monthly benefits are calculated as a percentage which cannot exceed 60 percent of the member's final average salary. If the member dies after reaching retirement age but before applying for benefits, the surviving spouse, or other sole dependent beneficiary, regardless of age, may elect to take a monthly joint survivorship allowance for life, known as Plan D.

If a surviving spouse remarries before reaching age 62, rights to benefits, other than the joint survivorship allowance, cease. The benefit will be resumed if the remarriage ends in divorce, annulment, dissolution, or death within two years after the survivor benefit ceased.

Benefits for dependent children terminate upon marriage, adoption, or active military service. Also, survivor benefits will be stopped after a dependent child reaches age 18 unless proof is submitted that the child is attending an institution of learning or training and pursuing a program of study equivalent to at least two-thirds of the full-time curriculum requirements of the institution. Payments to a dependent parent stop in the event of remarriage.

Additional Benefits

1. *Health Care Coverage* — When applying for age and service retirement a member must have 10 years of Ohio service credit to qualify for the PERS health care plan. These 10 years may not include out-of-state service (under Section 145.293, Ohio Revised Code) and/or military service (under Section 145.301, Ohio Revised Code) purchased after Jan. 1, 1981 or service granted under a retirement incentive plan. Health care coverage for disability recipients and primary survivor recipients is available. Dependents of eligible recipients may be covered through premium deductions.
2. *Medicare Part B Premium Reimbursement* — Recipients who are eligible for health care must enroll in Medicare Part B (medical) when they become eligible for Medicare Part B even if they are covered by health care through their current employer. Proof of enrollment must be submitted and PERS will then reimburse the member for the basic cost of the Medicare B premium as long as the recipient is enrolled in Medicare B. The amount is added to the monthly benefit.
3. *Cost-of-Living Adjustment* — Once a benefit recipient has received benefits for 12 months, an annual 3 percent cost-of-living adjustment may be provided in each year the Consumer Price Index shows an increase of 3 percent or more.
4. *Death Benefit* — Upon the death of a former member receiving an age and service retirement benefit or a disability benefit, a one-time lump sum payment is payable to the qualified beneficiary, the person responsible for burial, or the estate of the recipient. The amount payable is based on the amount of service credit at retirement.

Refunds

Full recovery of contributions to PERS is guaranteed. Upon leaving all public employment in Ohio a member may apply for and receive his/her accumulated savings. Employer contributions are not refundable.

Before a refund may be issued, the law requires that three months must elapse from the date certified by the employer that the member has terminated public employment. If a member is also a member of State Teachers Retirement System or School Employees Retirement System, an application for refund from the other system(s) must have been filed in order to receive the money from PERS.

If a refund is taken and the individual later returns to covered public employment for at least 18 months, the amount refunded, plus interest, may be redeposited and service credit restored.

PUBLIC EMPLOYEES RETIREMENT
SYSTEM OF OHIO
277 East Town Street
Columbus, Ohio 43215