

*Comprehensive  
Annual Financial  
Report*

*For the Year Ended December 31, 1999*

Public Employees Retirement System of Ohio

Public Employees Retirement System  
of Ohio

*The Comprehensive  
Annual Financial Report*

For the Year Ended December 31, 1999



Laurie Fiori Hacking, Executive Director

Mark Snodgrass, Assistant Director-Controller

277 East Town Street, Columbus, Ohio 43215-4642



# Table of Contents

## Introductory Section

Certificate of Achievement Award in Financial Reporting .....	6
Public Pension Principles Achievement Award .....	7
The Retirement Board .....	8
Organizational Structure .....	9
Letter of Transmittal .....	10

## Financial Section

Independent Auditor's Report .....	17
------------------------------------	----

### Financial Statements

Combining Statements of Plan Net Assets .....	18
Combining Statements of Changes in Plan Net Assets .....	20
Notes to Financial Statements .....	22

### Required Supplementary Information

Schedule of Funding Progress .....	30
Schedule of Employer Contributions .....	30
Notes to Required Supplementary Schedules .....	31

### Additional Information

Administrative Expenses .....	33
Schedule of Investment Expenses .....	34
Schedule of Payments to Consultants .....	34

## Investment Section

Investment Report .....	36
Schedule of Investment Results .....	49
Listings of Largest Assets Held .....	51
Schedule of Fee and Commission Payments to Brokers .....	52
Investment Summary .....	53

## Actuarial Section

Report of the Actuary .....	55
Summary of Assumptions .....	57
Actuarial Valuation Data .....	58
Schedule of Retirants and Beneficiaries Added To and Removed From Rolls .....	58
Short-Term Solvency Test .....	58
Actual vs. Recommended Contribution Rates .....	59
Analysis of Financial Experience .....	59

## Statistical Section

Employer Contribution Rates .....	61
Disbursements by Category .....	62
Revenues by Source .....	62
Expenses by Type .....	63
Schedule of Benefit Recipients by Benefit Type .....	64
Schedule of Average Benefit Payments .....	64
Number of Benefit Recipients by Category .....	65
Number of New Benefit Recipients and Refund Payments .....	65
Member Count .....	65
Member Contribution Rates .....	65
Number of Employer Units .....	65

Plan Statement .....	68
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# Introductory Section

# 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, 1998

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



*Cary Brubaker*  
President

*Jeffrey L. Essler*  
Executive Director



**Public Pension Coordinating Council  
Public Pension Principles  
1998 Achievement Award**

Presented to

**Public Employees Retirement  
System of Ohio**

In recognition of instituting professional standards for public employee retirement systems as established by the Public Pension Principles.

*Presented by the Public Pension Coordinating Council, a confederation of*  
Government Finance Officers Association (GFOA)  
National Association of State Retirement Administrators (NASRA)  
National Conference on Public Employee Retirement Systems (NCPERS)  
National Council on Teacher Retirement (NCTR)

A handwritten signature in black ink, appearing to read 'Scott Engmann', written in a cursive style.

Scott Engmann  
Chairman



# THE RETIREMENT BOARD

## *Elected Members*

**Charlie Adkins**  
Representing College and  
University Employees



**Ronald C. Alexander**  
Representing State Employees



**Larry D. Black**  
Representing Miscellaneous Employees

**Sharon M. Downs**  
Representing Retirants



**Barbara J. Thomas**  
Representing County Employees

**Ken Thomas**  
Representing Municipal Employees

## *Statutory Members*

**C. Scott Johnson**  
Director of Administrative  
Services



**Betty D. Montgomery**  
Attorney General



**Jim Petro**  
Auditor of State



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 Director of Administrative Services, Attorney General, and the Auditor of State 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.

# Organizational Structure

## ADVISORS:

**Actuary —**  
Jabriel, Roeder, Smith & Company  
Detroit, Michigan

**Performance Evaluation —**  
Capital Resources  
Wayne, Pennsylvania

**Asset Allocation and  
Investment Policy Advisors  
to the Retirement Board —**  
Strategic Investment Solutions Inc.  
San Francisco, California

## AUDITORS:

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

### RETIREMENT BOARD



**EXECUTIVE DIRECTOR**  
Laurie Fiori Hacking



*Assistant Director  
Benefits Administration*  
**Danny L. Drake**



*Assistant Director  
Legal and Legislation*  
**Toba Jeanne Feldman**



*Assistant Director  
Information Systems*  
**Blake W. Sherry**



*Assistant Director  
Controller*  
**Mark Snodgrass**



*Assistant Director  
Investment Officer*  
**Neil V. Toth**



*Retired Executive Director*  
**Richard E. Schumacher, with PERS from 1960 through 1999**

# LETTER OF TRANSMITTAL

277 East Town Street



Columbus, Ohio 43215-4642

**Public Employees Retirement System of Ohio**

(614) 466-2085 • 1-800-222-PERS (7377)

[www.opers.org](http://www.opers.org)

April 28, 2000

Dear Chair and Members of the Board:

It is our privilege to submit to you the Comprehensive Annual Financial Report (CAFR) for the Public Employees Retirement System of Ohio for the fiscal year ended December 31, 1999. Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, rests with the management of the System. We believe this report reflects a careful stewardship of the system's assets and dedicated service to our members and our retirees.

The State Employees Retirement System was established January 1, 1935 to make available a secure means to provide retirement for employees of the State of Ohio. 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 (PERS). Membership was made optional for elected officials in 1941. Survivor benefits were made part of the PERS benefit structure in 1951. From 1935 to the present the system has experienced continuous growth and provided significant benefit enhancements.

Participating employers are divided, for actuarial purposes, into state, local government and law enforcement divisions. A complete description of membership in PERS is contained in the Plan Statement on page 68. 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 retiree's death. For additional information on benefits available, see the Plan Statement on page 68.

This CAFR is divided into six sections: (1) an Introductory Section, which contains the administrative organization, the Certificate of Achievement for Excellence in Financial Reporting, the Public Pension Coordinating Council Achievement Award and a letter of transmittal; (2) a Financial Section, which contains the report of the Independent Auditors, the financial statements of the system and certain required supplementary information; (3) an Investment Section, which contains a report on investment activity, investment policies, investment results, and various investment schedules; (4) an Actuarial Section, which contains an Actuary's Certification Letter and the results of the annual actuarial valuation; (5) a Statistical Section, which includes significant data pertaining to the system and (6) the system's plan statement.

#### Major Initiatives

PERS exists for the purpose of providing retirement, disability, and survivor benefits to Ohio's public employees. This basic purpose continues to be our focus.

In the fall of 1999 we received results from our annual actuarial study which revealed that for the first

time in PERS 65-year history the Retirement System reached a fully funded status. Much of our success in reaching this goal can be traced to the board's more aggressive asset allocation which commenced in 1996. Even though the retirement system has reached this significant milestone, we will continue to aggressively pursue the maximization of our investment returns within prudent risk tolerances and with deference to long term funding needs. In order to assist the retirement system in this area, PERS will be commencing a comprehensive external review of our investment program and operations during the summer of 2000.

In addition to our continued vigilance in funding the Retirement System, PERS will be focusing considerable attention and resources on improving customer service. The results of a recent review of PERS and its peers, conducted by an independent third party organization, indicated that PERS provides above average customer service while spending less than the average per capita in administrative costs. Though we were pleased by the overall results, continued improvement in customer service will be a central theme for PERS in the coming years.

Among the first service improvements which we will be pursuing are more flexible and efficient ways to provide account information to benefit recipients members and employers. Other significant service enhancements will follow. PERS will be seeking input to assist in determining what services are most valuable to our membership. This input will be gathered through focus groups, surveys, and direct communications initiated by members. We encourage input from all interested parties.

During the year 2000 PERS will be commencing work on a strategic plan. The core of this plan will be to improve customer service while maximizing operational efficiency. We believe this process will benefit PERS by helping the board and staff to fine tune the future direction for the Retirement System. This in turn will allow us to allocate system resources in a strategically sound manner which will assure that PERS reaches overall system goals in as efficient and timely a manner as possible.

PERS provides health care that is of importance to our benefit recipients, (though not a statutorily mandated benefit). PERS is dedicated to providing quality health care to the extent our resources will permit. The cooperation of all benefit recipients will be a key ingredient for continuing our high standard of health care coverage.

Over the years PERS has implemented a variety of cost containment measures in order to maximize our available health care resources. These measures include: a preferred pharmacy network, two preferred provider networks, individual case management, mail order prescriptions, a patient pre-certification program and the utilization of Medicare Risk health maintenance organizations. Further, in 1999 we introduced several voluntary health management programs to help our benefit recipients deal with a variety of conditions, including asthma, diabetes, hypertension, high cholesterol, and chronic heart disease.

Several positive changes were made this past year in our health care benefits. Dental and vision coverage options were expanded to give the benefit recipient more choices. The Board elected to subsidize the cost of dental and vision coverage by 25 percent (for the benefit recipient only) to encourage participation. Other changes included adding or increasing coverage for flu and pneumonia vaccinations, hemocults, hearing aids, and outpatient alcohol treatment.

In an effort to slow down the rapid rise in Medicare costs resulting from Parts A & B benefits, the Federal government is seeking to bring Medicare in line with other health care plans by initiating the

Medicare Plus Choice Program. Over 80 percent of the participants in traditional non-Medicare plans are covered by some form of managed care. The Federal government will offer financial incentives to Medicare beneficiaries such as lower out-of-pocket payments and lower premiums if they enroll in Medicare Plus Choice managed care plans. Approved Medicare Plus Choice plans must provide benefits that are at least equal to traditional Medicare benefits and must assume full risk, meet various solvency standards and be subject to state licensing. If PERS concludes that Medicare Plus Choice arrangements would be beneficial to our benefit recipients, such plans will be offered during the open enrollment period in the fall of this year.

In the coming years, PERS will continue to aggressively pursue other innovative ways to control health care costs while attempting to maintain quality health care service.

#### Legislative Initiatives

There were exciting new Congressional proposals in 1999 to extend the portability of pension assets. Some proposals would allow the transfer of pension assets between IRC Section 401 (a) qualified plans (such as PERS), IRC Section 403(b) educational annuities, IRC Section 457 (deferred compensation) plans, and 401 (k). If such proposals become law, PERS members will realize far greater flexibility in their individual retirement options.

Several state legislative initiatives are also under consideration. Ohio Senate Bill (SB) 144, as introduced, provides for the accrual of interest on a member's contributions. SB 144 also would provide that if the member has at least five years of qualifying service credit, but less than 10 years, the refund amount, including interest, will be increased by 33 percent. For members with qualifying service credit of 10 years or more, the refund will be increased by 67 percent over and above the amount of contributions and interest. As of the date of this letter, SB 144 has been approved by the Ohio Senate and is pending in the House.

The PERS Board voted in October 1999 to pursue the introduction of the legislative changes for our members and benefit recipients. These legislative proposals would include increasing the benefit calculation formula for both regular members and law enforcement members. For regular members, Plan B will be calculated by multiplying 2.2 percent of final average salary (FAS) by the first 30 years of service; currently 2.1 percent of FAS is used in the calculation. For law enforcement members, 2.5 percent is used for only the first 20 years and 2.1 percent of FAS used for all years thereafter. Benefit amounts for current retirants and their beneficiaries, and disability benefit recipients will be recalculated using the new formulas described above. The legislative initiative also would provide an ad hoc increase to current benefit recipients to restore 85 percent of the purchasing power of their benefit. Another proposal is to change the cost of living adjustment (COLA) to a simple 3 percent increase, regardless of the actual Consumer Price Index (CPI) percentage change.

At a special board meeting held February 29, 2000, the PERS Board voted to approve a temporary roll back of employer contributions rates. The rollback, effective for the year 2000 will reduce state and local division rates by 20 percent and law enforcement division rates by 6 percent.

#### Legislative Changes

Ohio House Bill (HB) 15, effective November 3, 1999 allows an additional option for members wishing to redeposit money withdrawn from PERS, State Teachers Retirement System (STRS) or School Employees Retirement System (SERS). Under the new law, once certain re-employment time frames are met, a member may redeposit monies withdrawn from PERS, STRS or SERS via payroll deductions to the Retirement System they are currently contributing to.

### Internal Controls

The management of PERS is responsible for and has implemented 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. Accounts receivable at year end, in addition to accrued interest receivable, reflects accrued employer charges and investment proceeds due on sales that have not yet settled. Investments are recorded at fair value. Fixed assets are listed at cost less accumulated depreciation. Under our cash management program, receipts are immediately deposited and are recorded as undistributed deposits until such time as they are allocated to member contributions, employer receivables, employer contributions, and investment income.

### Additions to Plan Net Assets

The collection of employer and employee contributions, as well as income from investments, provides the reserves needed to finance retirement benefits. Contributions, investment, and other income for fiscal year 1999 totaled \$8,664,659,091.

	1999	1998	Increase (Decrease) Amount	Increase (Decrease) Percentage
Member Contributions	\$ 839,186,449	\$ 799,281,516	\$ 39,904,933	5%
Employer Contributions	1,327,889,681	1,266,445,268	61,444,413	5%
Net Investment Income	6,495,797,615	6,045,862,119	449,935,496	7%
Other	1,785,346	237,360	1,547,986	652%
Total	\$8,664,659,091	\$ 8,111,826,263	\$ 552,832,828	7%

Member and employer contributions increased by \$101,349,346 (5 percent) and \$58,988,733 (3 percent), respectively for the years ended December 31, 1999 and 1998. The increase in contributions was attributable to higher salaries and additional members during the period. Contribution rates remained unchanged. Net investment income increased in 1999 due to favorable investment returns and more dollars with which to invest. The very large increase in other income was due to the favorable settlement of several class action securities litigation claims.

### Deductions to Plan Net Assets

The principal purpose for which the System was created was to provide retirement, disability and survivor benefits to qualified members and their beneficiaries. The cost of such programs includes recurring benefit payments, refunds of contributions to terminated employees, and the cost of administering the System.

	1999	1998	Increase (Decrease) Amount	Increase (Decrease) Percentage
Benefit Payments	\$ 2,029,539,511	\$ 1,842,835,738	\$ 186,703,773	10%
Refunds	120,631,961	125,609,907	( 4,977,946)	( 4%)
Administrative Expenses	24,142,273	21,530,875	2,611,398	12%
Total	\$ 2,174,313,745	\$ 1,989,976,520	\$ 184,337,225	9%

Expenses for fiscal year 1999 totaled \$2,174,313,745, an increase of 9 percent over fiscal year 1998 expenses. The majority of the increase is due to an increase in the number of benefit recipients and associated benefit payouts. We attribute the decrease in refunds to members leaving their funds on deposit to await the outcome of SB 144. The increase in administrative expenses is largely attributable to increased payroll costs. Administrative expenses are detailed in the Financial Section on page 33 of the CAFR.

#### Funding and Reserves

Funds, derived from the excess of revenues over expenses, are accumulated by the System in order to meet current and future benefit obligations to retirees and beneficiaries. The higher the level of funding, the larger the accumulation of assets, hence, the greater the investment income potential. Continuous improvement in the funding of the System is sought through suitable reserves, higher investment earnings and effective cost containment programs. The latest actuarial valuation, dated December 31, 1998, reflects that for the first time in the 65-year history of PERS the Retirement System is fully funded. This means that PERS' accumulated assets and investment earnings thereon should be sufficient to pay benefits to all current members and retirees based upon service credit established as of year end 1998. The funding value of PERS' assets exceeds actuarial accrued liabilities by \$646 million. By pursuing a conscientious management approach, PERS has been able to meet the goals of level funding, thereby holding member and employer contribution rates relatively constant as a percentage of covered payroll.

#### Investments

The investments of the System are governed by Section 145.11 of the Ohio Revised Code (ORC). This section of the ORC requires a prudent person standard be applied to all investment decisions. The prudent person standard establishes a standard for all fiduciaries, which includes anyone that has authority with respect to the fund. Under the prudent person standard, fiduciaries shall discharge their duties solely in the interest of the fund participants and beneficiaries and with the degree of diligence, care and skill which prudent persons would ordinarily exercise under similar circumstances in a like position. By permitting further diversification of investments within the fund, the prudent person standard may enable PERS to reduce overall risk and increase returns. A summary of the asset allocation can be found on page 53 of this report.

For the year ended December 31, 1999, total return on investments was 11.94 percent. The annualized rate of return over the past three years was 13.24 percent and 13.67 percent over the past five years.

#### Certificate of Achievement

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 CAFR for the fiscal year ended December 31, 1998. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized CAFR, whose contents meet or exceed program standards. Such reports must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid only for one year. We believe our current report continues to conform to the Certificate of Achievement Program requirements and we are submitting it to the GFOA.

#### **Public Pension Principles Achievement Award**

The Public Employees Retirement System of Ohio was awarded the Public Pension Coordinating Council's Public Pension Principles 1998 Achievement Award. This award recognizes the achievement of high professional standards in the areas of benefits, actuarial valuations, financial reporting, investments and disclosures to members.

#### **Professional Services**

Professional services are provided to the Public Employees Retirement System of Ohio 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 advisor to the Board is Strategic Investment Solutions Inc., San Francisco California. The financial records of the System were audited by Deloitte & Touche LLP, Certified Public Accountants, Columbus, Ohio, under contract with the Auditor of the state of Ohio.

#### **Staff Changes**

Special thanks go out to Richard E. Schumacher, former executive director, who retired at the end of 1999 with 39 years of public service, nearly all of which was spent at PERS. Our sincere thanks and appreciation are extended to him for a job well done. His leadership helped solidify the strong financial status of the System.

#### **Acknowledgments**

The preparation of this report reflects the combined efforts of the System's staff under the direction of the board. Our sincere appreciation is extended to all who assisted in and contributed towards the completion of this document.

The purpose of this report 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 held in trust for the members of this System.

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

Respectfully submitted,

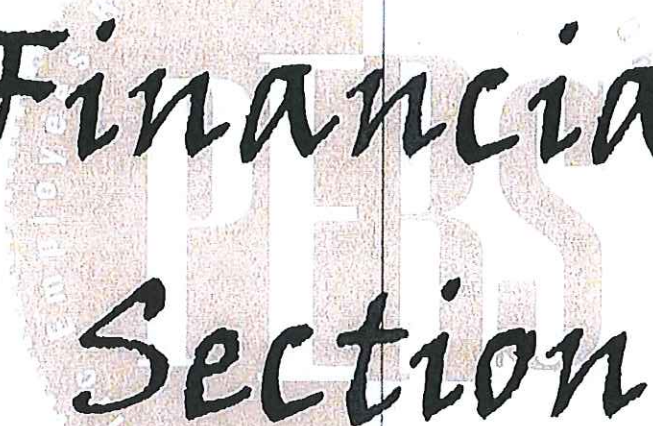


LAURIE FIORI HACKING  
Executive Director



MARK SNODGRASS, CPA  
Assistant Director - Controller





# Financial Section

# Independent Auditor's Report

**Deloitte &  
Touche**



**Deloitte & Touche LLP**  
155 East Broad Street  
Columbus, Ohio 43215-3611

Telephone: (614) 221-1000  
Facsimile: (614) 229-4647

## INDEPENDENT AUDITORS' REPORT

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

We have audited the accompanying combining statement of plan net assets of Public Employees Retirement System of Ohio (the "System") as of December 31, 1999 and 1998, and the related combining statement of changes in plan net assets 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 auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial status of the System as of December 31, 1999 and 1998, and the changes in plan net assets for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Our audits were performed for the purposes of forming an opinion on the basic financial statements of the System taken as a whole. The schedules of administrative expenses and summary of investment expenses for the years ended December 31, 1999 and 1998 are presented for the purposes of additional analysis and are not a required part of the basic financial statements. This additional information is the responsibility of the System's management. Such additional information has been subjected to the auditing procedures applied to our audit of the basic financial statements for the years ended December 31, 1999 and 1998, and, in our opinion, is fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

The statistical data on pages 60 - 66 are presented for the purpose of additional analysis and is not a required part of the basic financial statements of the System. Such additional information has not been subjected to the auditing procedures applied in our audit of the basic financial statements and, accordingly, we express no opinion on it.

In accordance with *Government Auditing Standards*, we have also issued our report dated April 7, 2000, on our consideration of the System's internal control structure and on its compliance with laws and regulations.

*Deloitte & Touche LLP*

April 7, 2000

**Deloitte Touche  
Tomatsu**

# Combining Statements of Plan Net Assets

(as of December 31, 1999 and 1998)

	1999		
	Pensions	Post-employment Healthcare	Total
<b>Assets:</b>			
Cash and Short-Term Investments (Note 3)	\$ 807,108,540	\$ 193,521,934	\$ 1,000,630,474
	<u>807,108,540</u>	<u>193,521,934</u>	<u>1,000,630,474</u>
<b>Receivables:</b>			
Employers	113,213,559	27,145,428	140,358,987
Retirement Incentive Plan	11,582,121	2,777,067	14,359,188
Investment Sales Proceeds	488,638	117,162	605,800
Accrued Interest and Dividends	193,580,178	46,415,084	239,995,262
Total Receivables	<u>318,864,496</u>	<u>76,454,741</u>	<u>395,319,237</u>
<b>Investments, at fair value (Note 3):</b>			
Bonds	9,018,209,290	2,162,313,014	11,180,522,304
Mortgage & Mortgage Backed	5,960,439,775	1,429,145,862	7,389,585,637
Stocks	16,312,155,666	3,911,196,263	20,223,351,929
Real Estate	4,664,271,642	1,118,361,190	5,782,632,832
Venture Capital	75,534,729	18,111,104	93,645,833
International Securities	9,539,132,619	2,287,215,780	11,826,348,399
Total Investments	<u>45,569,743,721</u>	<u>10,926,343,213</u>	<u>56,496,086,934</u>
Collateral on loaned Securities	<u>3,610,133,854</u>	<u>865,608,588</u>	<u>4,475,742,442</u>
<b>Fixed Assets:</b>			
Land	3,021,934	724,575	3,746,509
Building and Building Improvements	16,132,990	3,868,237	20,001,227
Furniture and Equipment	18,468,978	4,428,341	22,897,319
	<u>37,623,902</u>	<u>9,021,153</u>	<u>46,645,055</u>
Accumulated Depreciation	(14,114,066)	(3,384,156)	(17,498,222)
Total Fixed Assets	<u>23,509,836</u>	<u>5,636,997</u>	<u>29,146,833</u>
Prepaid Expenses and Other	66,670,876	15,985,801	82,656,677
<b>TOTAL ASSETS</b>	<u>50,396,031,323</u>	<u>12,083,551,274</u>	<u>62,479,582,597</u>
<b>Liabilities</b>			
Undistributed Deposits	1,049,671	251,682	1,301,353
Medical Benefits Payable		53,846,033	53,846,033
Investment Commitments Payable			
Accrued Administrative Expense (Note 5)	2,634,647	631,714	3,266,361
Obligations Under Securities Lending	3,610,133,854	865,608,588	4,475,742,442
<b>TOTAL LIABILITIES</b>	<u>3,613,818,172</u>	<u>920,338,017</u>	<u>4,534,156,189</u>
<b>Net assets held in trust for pension and post-employment healthcare benefits</b>	<u>\$46,782,213,151</u>	<u>\$11,163,213,257</u>	<u>\$57,945,426,408</u>

(A Schedule of Funding Progress is presented on page 30)

See Notes to Financial Statements

1998

<i>Pensions</i>	<i>Post-employment Healthcare</i>	<i>Total</i>
\$ 1,942,056,001	\$ 471,335,326	\$ 2,413,391,327
<u>1,942,056,001</u>	<u>471,335,326</u>	<u>2,413,391,327</u>
121,591,105	29,510,057	151,101,162
12,216,606	2,964,960	15,181,566
357,618,544	86,793,714	444,412,258
<u>217,254,088</u>	<u>52,727,381</u>	<u>269,981,469</u>
<u>708,680,343</u>	<u>171,996,112</u>	<u>880,676,455</u>
11,520,268,911	2,795,959,387	14,316,228,298
5,825,567,804	1,413,860,311	7,239,428,115
15,680,972,305	3,805,758,533	19,486,730,838
<u>3,832,465,121</u>	<u>930,135,999</u>	<u>4,762,601,120</u>
35,290,853	8,565,060	43,855,913
<u>1,968,586,403</u>	<u>477,774,232</u>	<u>2,446,360,635</u>
<u>38,863,151,397</u>	<u>9,432,053,522</u>	<u>48,295,204,919</u>
<u>4,678,876,208</u>	<u>1,135,559,244</u>	<u>5,814,435,452</u>
2,979,837	723,204	3,703,041
15,071,280	3,657,787	18,729,067
<u>15,595,092</u>	<u>3,784,916</u>	<u>19,380,008</u>
33,646,209	8,165,907	41,812,116
<u>(12,422,048)</u>	<u>(3,014,820)</u>	<u>(15,436,868)</u>
<u>21,224,161</u>	<u>5,151,087</u>	<u>26,375,248</u>
60,075,375	14,580,242	74,655,617
<u>46,274,063,485</u>	<u>11,230,675,533</u>	<u>57,504,739,018</u>
454,745	110,366	565,111
	46,398,790	46,398,790
149,314,841	36,238,584	185,553,425
2,176,857	528,321	2,705,178
<u>4,678,876,208</u>	<u>1,135,559,244</u>	<u>5,814,435,452</u>
<u>4,830,822,651</u>	<u>1,218,835,305</u>	<u>6,049,657,956</u>
<u>\$41,443,240,834</u>	<u>\$10,011,840,228</u>	<u>\$51,455,081,062</u>

# Combining Statements of Changes in Plan Net Assets

(For the Years Ended December 31, 1999 and 1998)

	1999		
	Pensions	Post-employment Healthcare	Total
<b>Additions:</b>			
Contributions:			
Members'	\$ 839,186,449		\$ 839,186,449
Employers'	935,429,954	\$ 392,459,727	1,327,889,681
Total Contributions	1,774,616,403	392,459,727	2,167,076,130
Investment Income			
From Investing Activities:			
Net Appreciation in			
Fair Value of Investments	3,649,521,868	888,386,350	4,537,908,218
Bond Interest	1,004,469,466	254,543,745	1,259,013,211
Dividends	273,833,286	69,366,846	343,200,132
Real Estate Operating Income, net	282,076,647	71,472,483	353,549,130
Total Investment Income	5,209,901,267	1,283,769,424	6,493,670,691
Less: Investment Management Expenses	(5,865,606)	(1,406,407)	(7,272,013)
Net Income from Investing Activities	5,204,035,661	1,282,363,017	6,486,398,678
From Security Lending Activities:			
Security Lending Gross Income	114,175,302	29,062,059	143,237,361
Less: Security Lending Activity Expenses:			
Security Lending-Agent Fees	(1,717,198)	( 437,094)	(2,154,292)
Security Lending-Broker Rebates	(104,966,159)	(26,717,973)	(131,684,132)
Total Security Lending Expenses	(106,683,357)	(27,155,067)	(133,838,424)
Net Income from Security Lending Activity	7,491,945	1,906,992	9,398,937
Total Net Investment Income	5,211,527,606	1,284,270,009	6,495,797,615
Other Income	1,785,346		1,785,346
<b>TOTAL ADDITIONS</b>	<b>6,987,929,355</b>	<b>1,676,729,736</b>	<b>8,664,659,091</b>
<b>Deductions:</b>			
Benefits	1,505,940,162	523,599,349	2,029,539,511
Refunds of Contributions	120,631,961		120,631,961
Administrative Expenses	22,384,915	1,757,358	24,142,273
<b>TOTAL DEDUCTIONS</b>	<b>1,648,957,038</b>	<b>525,356,707</b>	<b>2,174,313,745</b>
Net Increase	5,338,972,317	1,151,373,029	6,490,345,346
Net assets held in trust for pension and post-employment healthcare benefits:			
Balance, Beginning of Year	41,443,240,834	10,011,840,228	51,455,081,062
<b>BALANCE, END OF YEAR</b>	<b>\$46,782,213,151</b>	<b>\$ 11,163,213,257</b>	<b>\$57,945,426,408</b>

See Notes to Financial Statements

1998

Pensions      Post-employment  
Healthcare      Total

\$ 799,281,516		\$ 799,281,516
<u>886,684,170</u>	\$ 379,761,098	<u>1,266,445,268</u>
<u>1,685,965,686</u>	<u>379,761,098</u>	<u>2,065,726,784</u>

2,542,076,801	1,593,731,660	4,135,808,461
1,089,908,097	250,812,003	1,340,720,100
214,251,321	49,322,412	263,573,733
<u>244,805,051</u>	<u>56,358,214</u>	<u>301,163,265</u>

4,091,041,270	1,950,224,289	6,041,265,559
<u>(5,051,932)</u>	<u>(1,226,099)</u>	<u>(6,278,031)</u>

4,085,989,338	1,948,998,190	6,034,987,528
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163,484,222	48,202,207	211,686,429
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(1,867,584)	(550,842)	(2,418,426)
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<u>(152,746,618)</u>	<u>(45,646,794)</u>	<u>(198,393,412)</u>
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<u>(154,614,202)</u>	<u>(46,197,636)</u>	<u>(200,811,838)</u>
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8,870,020	2,004,571	10,874,591
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<u>4,094,859,358</u>	<u>1,951,002,761</u>	<u>6,045,862,119</u>
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<u>237,360</u>		<u>237,360</u>
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<u>5,781,062,404</u>	<u>2,330,763,859</u>	<u>8,111,826,263</u>
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1,402,239,075	440,596,663	1,842,835,738
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125,609,907		125,609,907
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<u>19,811,891</u>	<u>1,718,984</u>	<u>21,530,875</u>
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<u>1,547,660,873</u>	<u>442,315,647</u>	<u>1,989,976,520</u>
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4,233,401,531	1,888,448,212	6,121,849,743
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<u>37,209,839,303</u>	<u>8,123,392,016</u>	<u>45,333,231,319</u>
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<u>\$ 41,443,240,834</u>	<u>\$ 10,011,840,228</u>	<u>\$ 51,455,081,062</u>
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# NOTES TO FINANCIAL STATEMENTS

## 1. DESCRIPTION OF PERS

**a. Organization** — The Public Employees Retirement System of Ohio (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 (ORC). The accompanying financial statements comply with the provisions of the Governmental Accounting Standards Board (GASB) Statement No. 14, *The Financial Reporting Entity*. This statement requires that financial statements of the reporting entity include all of the organizations, activities, functions and component units for which the reporting entity is financially accountable. Financial accountability is defined as the appointment of a voting majority of the component unit's board and either (1) the reporting entity's ability to impose its will over the component unit, or (2) the possibility that the component unit will provide a financial benefit to or impose a financial burden on the reporting entity. PERS does not have financial accountability over any entities.

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 have financial accountability 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 consultants necessary for the transaction of business. The Retirement Board meets monthly and receives no compensation, but is reimbursed for necessary expenses.

Employer, employee and retirant data as of December 31, 1998 and 1997 (our latest available actuarial data) follows:

	1998	1997
<b>Employer Units</b>		
State group	327	292
Local government group	3,225	3,187
Law enforcement group	233	226
<b>Employee Members and Retirants</b>		
Retirants and beneficiaries currently receiving benefits	127,139	124,258
Terminated employees not yet receiving them	40,447	34,859
<b>Active Employees</b>		
State group	112,323	114,036
Local government group	234,601	231,668
Law enforcement group	7,507	7,256

All public employees, except those covered by another state retirement system in Ohio or the Cincinnati Retirement System, are required to become contributing members of PERS when they begin public employment unless they may be exempted or excluded. For actuarial purposes, 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.

**b. Benefits** — All benefits of the System and any benefit increases are established by the legislature pursuant to Ohio Revised Code Chapter 145. Chapter 145 provides the Retirement Board with the authority to provide healthcare 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, at 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. Upon reaching minimum retirement age, benefits are vested at the time of eligibility for monthly benefits.

• **Law Enforcement Officers' Benefits** — Law enforcement officers, as defined in ORC Chapter 145, 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 Plan*— 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 a plan, if adopted by an employer, must be offered to a minimum of 5 percent of covered employees and provide for the purchase not to exceed five years credit, limited to a maximum of 20 percent of total service credit.

• *Disability Benefits*— PERS administers two disability plans. Members on the rolls as of July 29, 1992 could elect, by April 7, 1993, coverage under either the original plan or the revised plan. All members who entered the System after July 29, 1992 are automatically covered under the revised plan.

A member who becomes disabled before age 60 and has completed 60 contributing months is eligible for a disability benefit under the original plan. The revised plan differs in that a member who becomes disabled at any age with 60 contributing months will be eligible for disability benefits until a determined age. After the disability benefit ends, the member has an opportunity to apply for a service retirement benefit, or a refund of contributions which are not reduced by the amount of disability benefits received.

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. ORC Chapter 145 specifies the dependents and the conditions under which they qualify for survivor benefits.

• *Healthcare Benefits*— The ORC permits, but does not require, PERS to offer healthcare benefits. The System currently provides comprehensive healthcare benefits to retirees with 10 or more years of qualifying

service credit and offers coverage to their dependents on a premium deduction basis. Coverage includes hospitalization, medical expenses, prescription drugs, and reimbursement of monthly Medicare premiums. The System determines the amount, if any, of the associated healthcare costs that will be absorbed by the System. The System attempts to control costs by utilizing managed care, HMOs, case management, disease management, and other programs.

• *Other Benefits*— Once a benefit recipient has received benefits for 12 months, an annual cost-of-living adjustment is provided to benefit recipients in each year the Consumer Price Index (CPI) shows an increase. The adjustment is the lesser of 3 percent or the actual CPI increase. 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 or disability benefit recipient.

• *Money Purchase Annuity*— PERS age and service retirants who become re-employed in a PERS-covered position must contribute to the System. All re-employed PERS retirants must elect to either: 1) have their retirement allowance suspended for the re-employment period and contribute toward a formula benefit, or 2) continue to receive their retirement allowance and contribute toward a money purchase annuity (based on the calculation of employee contributions for the period of re-employment plus allowable interest, multiplied by two). An elected official who retires during a term of office and who is re-appointed to the position during the same term or is elected to the position for the next consecutive term can choose only the option to have their retirement allowance suspended and contribute to a formula benefit.

• *Refunds*— Upon their 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.

c. *Contributions* — PERS' funding policy provides for periodic employer contributions at actuarially determined rates, expressed as a percentage of annual covered payroll, which, along with employee contributions and an actuarially determined rate of investment return, are adequate to accumulate sufficient 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. These contributions represent the amount necessary to fund accrued liabilities for retirement allowances and survivor benefits over a period of time.

As of December 31, 1998, the date of the last actuarial study, both state and local government divisions are fully funded. The necessary funding period is 5 years for the law enforcement division.

As of December 31, 1997 the necessary funding period is 3 years for state, 5 years for local government, and 10 years for law enforcement divisions.

	Employee Rate	Employer Rate
State group	8.5%	13.31%
Local government group	8.5%	13.55%
Law enforcement group	9.0%	16.70%

The rates above fall within the ranges set by the Ohio Revised Code.

A portion of each employer's contribution to PERS is set aside for the funding of post-retirement healthcare. The total employer contribution rate for state employers was 13.31 percent of covered payroll; local employers, 13.55 percent of covered payroll; and law enforcement employers, 16.70 percent of covered payroll, for both 1999 and 1998. The percentage of the employer contribution rate used to fund healthcare, for all divisions, was 4.2 percent for both 1999 and 1998.

Health care costs have risen in excess of assumed levels over the past few years. Continued unfavorable experience in the retiree health plan over an extended period of time could produce a need to modify plan design and or increase health care contributions to the fund.

ORC Chapter 145 assigns authority to the Retirement Board to amend the funding policy. As of December 31, 1998 the Retirement Board adopted all contribution rates as recommended by the Actuary.

**d. 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.

## K. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The following are the significant accounting policies followed by PERS:

**a. Basis of Accounting** — The financial statements are prepared using the accrual basis of accounting under which expenses are recorded when the liability is incurred, revenues are recorded in the accounting period in which they are earned and become measurable, and investment purchases and sales are recorded as of their trade date. Administrative expenses are financed exclusively with investment income.

Pursuant to the GASB Statement No. 20: *Accounting and Financial Reporting for Proprietary Funds and Other Governmental Entities that use Proprietary Fund Accounting*, the System follows GASB guidance as applicable to proprietary funds and Financial Accounting Standards Board Statements and Interpretations, Accounting Principles Board Opinions and Accounting Research Bulletins issued on or before November 30, 1989 that do not conflict with or contradict GASB pronouncements.

The accounting and reporting policies of PERS conform to generally accepted accounting principles (GAAP). The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

GASB Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans* and Statement No. 26, *Financial Reporting for Post-employment Healthcare Plans Administered by Defined Benefit Pension Plans* require that plan assets be split between pension and healthcare. To meet this requirement, plan assets and liabilities not specifically identifiable to a plan were proportionately allocated to the pension and post-employment healthcare plans.

**b. Investments** — PERS is authorized by ORC Section 145.11 to invest under an investment policy established by the Retirement Board under a prudent person standard. The prudent person standard requires the Retirement Board "to discharge their duties with respect to the funds solely in the interest of the participants and beneficiaries and defraying reasonable expenses of administering the System; with care, skill, prudence,

and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims; and by diversifying the investments of the system so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.”

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller, that is, other than in a forced or liquidation sale. At December 31, 1999 the fair value of short-term investments is presented using broker pricing. At December 31, 1998 short-term investments were reported at amortized cost which approximates fair value. The change in pricing method is immaterial, therefore 1998 values have not been restated. All other investments, with the exception of real estate, are valued based on closing market prices or broker quotes. The fair value of real estate investments is based on estimated current values and independent appraisals.

Net appreciation (depreciation) is determined by calculating the change in the fair value of investments between the end of the year and the beginning of the year, less purchases of investments at cost plus sales of investments at fair value. Investment expense consists of those administrative expenses directly related to PERS' investment operations and a proportional amount of all other administrative expenses allocated based on a ratio of PERS' investment staff to a total PERS staff.

**c. Securities Lending** — PERS maintains a securities lending program. The Retirement Board uses its own discretion to determine the type and amount of securities lent under the program. Under this program securities are loaned to brokers. In return, PERS receives cash collateral and agrees to return the collateral for the same securities in the future. Cash collateral from securities loaned is, simultaneous to the loan, reinvested in repurchase agreements (repos) and short-term securities with a final maturity of one year or less. Securities loaned and repos are collateralized at a minimum of 102 percent of the market value of loaned securities. Collateral is marked-to-market daily. If the market value of the collateral held falls below 102 percent of the market value of securities loaned, additional collateral is provided. The maturity of the repo is always identical to the maturity of the securities loaned. Further, there is always a positive spread between the cost of funds raised from a securities loan and the income earned from the associated repo. At year end PERS had no credit risk exposure to borrowers because the fair value of collateral PERS held exceeded the fair value of securities loaned.

As of December 31, 1999, the fair values of loaned securities and associated collateral (repo agreements and short-term investments) were \$4,310,729,291 and \$4,475,742,442, respectively.

As of December 31, 1998, the fair value of loaned securities and associated collateral (repo agreements and short-term investments) were \$5,644,114,208 and \$5,814,435,452, respectively.

Net security lending income is composed of three components: gross income, broker rebates, and agent fees. Gross income is equal to earnings on cash collateral received in a security lending transaction. A broker rebate is the cost of using that cash collateral. Agent fees represent the fees paid to the agent for administering the lending program. Net security lending income is equal to gross income less broker rebates and agent fees.

Net income from securities lending was \$9,398,937 and \$10,874,591 in 1999 and 1998, respectively.

**d. Derivatives** — Derivatives are generally defined as contracts whose value depends on, or derives from, the value of an underlying asset, reference rate or index. PERS has classified the following as derivatives:

- *Mortgage and Asset-Backed Securities* — As of December 31, 1999 and 1998, the System held the following mortgage and asset-backed securities which may be categorized as derivative securities:
  - GNMA, FNMA, and FHLMC pass-throughs with amortization terms of 15 years, 30 years, and 30-year amortization/7-year balloons.
  - Collateralized mortgage obligation securities (CMOs) backed by FNMA and FHLMC 15 and 30-year pass throughs.
  - Commercial mortgage backed securities (CMBS) backed by commercial mortgages and leases on a variety of property types such as office, retail, hotel, self-storage, warehouse, and industrial.
  - Asset-backed securities (ABS) backed by auto loans, credit card receivables, home equity loans, home improvement loans, and electric-utility receivables.

The overall return or yield on mortgage-backed securities depends on the amount of interest collected over the life of the security and the change in the market value. Although the System will receive the full amount of principal, if prepaid, the interest income that would have been collected during the remaining period to maturity, net of any market adjustments, is lost. Accordingly, the yields and

maturities of mortgage-backed securities generally depend on when the underlying mortgage loan principal and interest are repaid. If market rates fall below a mortgage loan's contractual rate, it is generally to the borrower's advantage to repay the existing loan and obtain new lower financing. The fair value of mortgage and asset-backed securities was \$7,389,585,637 and \$7,239,428,115 as of December 31, 1999 and December 31, 1998, respectively.

- **Forward Currency Contracts**— The System enters into various forward currency contracts to manage exposure to changes in foreign currency exchange rates on its foreign portfolio holdings. The System may also enter into forward currency exchange contracts to provide a quantity of foreign currency needed at a future time at the current exchange rates, if rates are expected to change dramatically. A forward exchange contract is a commitment to purchase or sell a foreign currency at a future date at a negotiated forward rate. Risk associated with such contracts includes movement in the value of foreign currency relative to the U.S. dollar and the ability of the counterparty to perform. The contracts are valued at forward exchange rates, and the changes in value of open contracts are recognized as net appreciation/depreciation in the statement of changes in plan net assets. The realized gain or loss on forward currency contracts represents the difference between the value of the original contracts and the closing value of such contracts and is included as net appreciation/depreciation in the statement of changes in plan net assets. As of December 31, 1999 and December 31, 1998, the fair values of forward currency contracts held by the System were \$604,984,570 and (\$2,433,228), respectively.

- **Foreign Stock Index Futures Contracts**— The System enters into various foreign stock index futures contracts to manage exposure to changes in foreign equity markets and to take advantage of foreign equity index movements on an opportunistic basis. A foreign stock index future is a futures contract that uses a stock index as its base, and which is settled by cash or delivery of the underlying stocks in the index. Futures contracts differ from forward contracts by their standardization, exchange trading, margin requirements, and daily settlement (marking to market). Risk associated with foreign stock index futures contracts includes adverse movements in the underlying stock index. As of December 31, 1999, the fair value of foreign stock index futures contracts was (\$5,130). As of December 31, 1998, the System did not hold any foreign stock index contracts.

- **Stock Rights and Warrants**— The System held various stock rights and warrants related to its international

investment fund. A stock right gives the holder a preemptive right to purchase additional shares from a pending new issue of stock in proportion to their present holdings. A stock right indicates the price at which stock can be acquired (the exercise price), the number of shares that may be acquired for each right and the expiration date of the right. The value of the stock right is directly affected by the market value of the related stock. A warrant is a certificate attached to a stock that gives its holder the right to purchase stock at a specified price within a specified time period. The value of the warrant is directly affected by the market value of the related stock. As of December 31, 1999, the System did not hold any rights or warrants. As of December 31, 1998, the fair values of stock rights and warrants held were \$522,965.

**e. International Investments** – The Retirement Board has authorized investment in various instruments including international securities. In November 1994, PERS executed an investment management agreement to take advantage of expected favorable long-term trends in the global forest products industry by making specialized investment in offshore forest products companies. In fiscal 1996, PERS began investing in international equity investments through the use of outside money managers. It is the intent of PERS and the money managers to be fully invested in non-cash equivalent international securities, however, cash and short-term fixed income investments are often held temporarily. PERS also invests in forward currency contracts (see Note 2d).

The allocation and fair value of international investments held at December 31, 1999 and 1998 are:

	1999	1998
Cash	\$ 37,050,320	\$ 17,220,492
REIT	21,375,806	1,187,514
ADR	413,140,127	3,677,950
GDR	37,143,598	
Cash Equivalents	133,120,209	35,825,766
Netted Receivable/ (Payable) Interest	(590,441,072)	(2,977,749)
Netted Receivable/ (Payable) Currency Contracts	604,984,570	(2,433,228)
International Stock	6,464,882,580	2,219,990,443
Convertible Bonds	7,760,343	5,628,041
Stock Index Futures Contracts	(5,130)	
Stock Index Funds	4,455,811,237	
Rights & Warrants		522,965
Private Equity	<u>241,525,811</u>	<u>167,718,441</u>
Total International Investment	<u>\$ 11,826,348,399</u>	<u>\$ 2,446,360,635</u>

- **f. 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
Buildings and building improvements	50
Furniture and equipment	3-10

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

**h. Federal Income Tax Status** — PERS is a qualified plan under Section 401(a) of the Internal Revenue Code and is exempt from federal income taxes under Section 501(a).

**i. Funds** — In accordance with state statute, various funds have been established to account for the reserves held for future and current benefit payments. Statutory funds are 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's account is credited with an amount of interest (statutory interest) on the employee's contributions based on a rate of 3 to 4 percent compounded annually as required by ORC Chapter 145. 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 and healthcare 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, disability, and healthcare benefits are paid. This reserve was fully funded according to the latest actuarial study dated December 31, 1998, and accordingly, there are sufficient assets available in this fund to pay the vested benefits of all retirants and beneficiaries as of the valuation date.
- *The Survivors' Benefit Fund* is the fund from which benefits due dependents of deceased members of the System are paid. This fund also was fully funded as of December 31, 1998.

- *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.

Fund balances at December 31, 1999 and 1998 are as follows:

	1999	1998
Employees' Savings Fund	\$ 6,955,342,095	\$ 6,508,357,667
Employers' Accumulation Fund	35,523,440,762	30,601,546,907
Annuity & Pension Reserve Fund	14,638,972,514	13,549,953,830
Survivors' Benefit Fund	786,627,354	760,099,855
Income Fund	38,128,387	33,840,220
Expense Fund	2,915,296	1,282,583
Total Fund Balance	<u>\$ 57,945,426,408</u>	<u>\$ 51,455,081,062</u>

**j. Risk Management** — PERS is exposed to various risks of loss related to theft of, damage to, and destruction of assets; injuries to employees; and court challenges to fiduciary decisions. To cover these risks PERS maintains commercial insurance and holds fidelity bonds on employees. There were no reductions in coverage in either 1999 or 1998. As required by state law, PERS is registered and insured through the state of Ohio Bureau of Workers' Compensation for injuries to employees. PERS is self-insured with relation to employee healthcare coverage. The only outstanding liabilities at the end of 1999 and 1998 were related to the employee healthcare coverage (see Note 8).

### 3. CASH AND INVESTMENTS

At December 31, 1999, the carrying amount of PERS' cash deposits was \$9,614,664 and the bank balance was \$16,282,831. Of the bank balance, \$100,000 was insured by the Federal Deposit Insurance Corporation (Category 1 as defined by the Government Accounting Standards Board). The remaining bank balance cash deposits were uninsured and uncollateralized and were held in the name of PERS' pledging financial institution, as required by the ORC (Category 3).

At December 31, 1998, the carrying amount of PERS' cash deposits was \$20,953,586 and the bank balance was \$27,039,457. Of the bank balance, \$100,000 was insured by the Federal Deposit Insurance Corpora-

tion (Category 1). The remaining bank balance cash deposits were uninsured and uncollateralized and were held in the name of PERS' pledging financial institution, as required by the ORC (Category 3).

A summary of short-term securities and investments held at December 31, 1999 and 1998 is as follows:

	1999 Fair Value	1998 Fair Value
<b>Short-Term Securities</b>		
Commercial Paper	\$ 614,042,993	\$ 871,332,779
U.S. Treasury Obligations	376,972,817	1,521,104,962
Total Short-term Securities	<u>\$ 991,015,810</u>	<u>\$ 2,392,437,741</u>
<b>Other Investments</b>		
Corporate Bonds:		
Not on securities loan	\$ 6,987,440,866	\$ 6,537,905,089
On securities loan	21,743,122	16,335,905
U.S. Government and Agencies:		
Not on securities loan	1,035,164,092	3,220,724,019
On securities loan	3,136,174,224	4,541,263,285
Mortgage and Mortgage backed Stocks:	7,389,585,637	7,239,428,115
Not on securities loan	19,070,539,984	18,400,215,820
On securities loan	1,152,811,945	1,086,515,018
Real Estate	5,782,632,832	4,762,601,120
Venture Capital	93,645,833	43,855,913
International Securities	11,826,348,399	2,446,360,635
Collateral on loaned securities	4,475,742,442	5,814,435,452
Total Other Investments	<u>\$60,971,829,376</u>	<u>\$54,109,640,371</u>

a. **Fair Value** — If available, quoted market prices have been used to value investments as of December 31, 1999 and 1998. Securities not having a quoted market price have been valued based on yields currently available on comparable securities of issuers with similar credit ratings. The fair value of real estate is based upon estimated current values and independent appraisals.

GASB Statement No. 3, *Deposits with Financial Institutions, Investments, and Reverse Repurchase Agreements*, 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 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 real estate, venture capital and securities on loan, 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. LEASES

PERS leases equipment with lease terms of one year or less. Total lease expense was \$326,715 and \$366,976 for the years ended December 31, 1999 and 1998, respectively.

#### 5. VACATION AND SICK LEAVE

As of December 31, 1999 and 1998, \$2,154,446 and \$1,901,399, respectively, were 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.

#### 6. DEFERRED COMPENSATION PLAN

PERS does not sponsor a deferred compensation program. PERS employees are eligible to participate in the deferred compensation plan sponsored by the state of Ohio. The state sponsored plan was created in accordance with Internal Revenue Code (IRC) Section 457. The plan, available to all PERS employees, permits them to defer a portion of their salary until future years. Deferred compensation assets are not available to employees until termination, retirement, death or unforeseeable emergency.

IRC Section 457 requires that the amount of compensation assets deferred under a plan, all property and rights, and all income attributable to those amounts, property, or rights be held in trust for the benefit of the participants. This insulates 457 benefits from the claims of an employer's general creditors. Accordingly, the employer does not include the deferred compensation assets or liabilities in its financial statements.

#### 7. PERS' SCHEDULE OF REQUIRED CONTRIBUTIONS

All employees of the System are eligible for membership in PERS. The System's annual required contributions for the year ended December 31, 1999 and for each of the two preceding years is as follows:

Year Ended December 31	Annual Required Contribution	Percentage Contributed
1997	\$ 1,537,037	100 %
1998	1,700,572	100
1999	1,783,233	100

8. SELF-INSURED EMPLOYEE  
HEALTHCARE

PERS is self-insured under a professionally administered plan for general health and hospitalization employee benefits. PERS maintained specific stop loss coverage per employee for medical benefits in the amount of \$250,000 for both 1999 and 1998. PERS also maintained a lifetime maximum stop loss coverage per employee for medical benefits in the amount of \$1,000,000 for both 1999 and 1998.

The summary of changes in incurred but unreported claims for the years ended December 31, 1999 and 1998 follows:

	General Health Insurance
Claims Liability as of December 31, 1997	\$ 130,174
Claims Incurred	1,472,216
Claims Paid	(1,429,236)
Claims Liability as of December 31, 1998	173,154
Claims Incurred	1,665,513
Claims Paid	(1,818,999)
Claims Liability as of December 31, 1999	\$ 19,668

# Required Supplementary Information

## Schedule of Funding Progress\*\* (\$ 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 of % of Active Member Payroll
1989	\$ 18,310	\$ 14,629	\$ 3,681	80 %	\$ 5,597	66 %
1990	20,125	16,245	3,880	81	6,036	64
1991	22,027	18,108	3,919	82	6,651	59
1992	23,961	20,364	3,597	85	6,889	52
1993	26,056	23,063	2,993	89	7,236	41
1994	28,260	25,066	3,194	89	7,625	42
1995	30,556	27,651	2,905	90	7,973	36
1996	32,631	30,534	2,097	94	8,340	25
1997	34,971	33,846	1,125	97	8,640	13
1998	37,714	38,360	(646)*	102	9,017	(7)*

\*\*The amounts reported in this schedule do not include assets or liabilities for post-employment healthcare benefits.

\*At December 31, 1998 valuation assets were in excess of AAL.

## Schedule of Employer Contributions\*

Year Ended December 31	Annual Required Contributions	Percentage Contributed
1989	\$ 571,866,966	100 %
1990	558,119,779	100
1991	607,811,880	100
1992	646,170,989	100
1993	663,680,518	100
1994	693,802,578	100
1995	725,893,573	100
1996	777,781,045	100
1997	811,485,028	100
1998	886,684,170	100
1999	935,429,954	100

The Board adopts all contribution rates as recommended by the Actuary.

\*The amounts reported in this schedule do not include contributions for post-employment healthcare benefits.

See Notes to Supplementary Schedules

# Notes to Required Supplementary Information

## 1. DESCRIPTION OF SCHEDULE OF FUNDING PROGRESS

Each time a new benefit is added which applies to service already rendered, an "unfunded actuarial 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 actuarial accrued liability.

In an inflationary economy, the value of the dollar is decreasing. This environment results in employee pay increasing in dollar amounts resulting in unfunded actuarial accrued liabilities increasing in dollar amounts, all at a time when the actual value of these items, in real terms, may be decreasing. Looking at just the dollar amounts of unfunded actuarial accrued liabilities can be misleading. Unfunded actuarial accrued liabilities divided by active employee payroll provides an index which adjusts for the effects of inflation. The smaller the ratio of unfunded actuarial accrued 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.

## 2. ACTUARIAL ASSUMPTIONS AND METHODS

**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 for pension benefits are amortized over a period of time to produce payments which are level percents of payroll contributions based on an open amortization period.

As of December 31, 1998, the date of the latest actuarial study, both state and local government are fully funded. The necessary funding period is 5 years for law enforcement division.

As of December 31, 1997, the necessary funding period is 3 years for state, 5 years for local government, and 10 years for law enforcement divisions.

**Asset Valuation Method** — For actuarial purposes, assets are valued utilizing a method which recognizes book value plus or minus realized and unrealized invest-

ment gains and losses amortized at a 25 percent per annum over a four-year period.

Significant actuarial assumptions employed by the actuary for funding purposes as of December 31, 1998, the date of the latest actuarial study, and 1997 include:

**Investment Return** — 7.75 percent, compounded annually, for all members, retirants, and beneficiaries.

**Salary Scale** — As of December 31, 1998 and 1997 the active member payroll is assumed to increase 4.75 percent annually, which is the portion of the individual pay increase assumption attributable to inflation. Also assumed are additional projected salary increases ranging from .54 percent to 5.1 percent per year at December 31, 1998 and 1997, depending on age, attributable to seniority and merit.

**Benefit Payments** — 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 on PERS' experience.

**Withdrawal** — Based on PERS' experience.

**Healthcare Benefits** — Healthcare benefits are financed through employer contributions and investment earnings thereon. The contributions allocated to retirant healthcare, along with investment income on allocated assets and periodic adjustments in healthcare provisions are expected to be sufficient to sustain the program indefinitely.

During 1997, the Retirement Board adopted a new calculation method for determining employer contributions applied to healthcare expenses. Under the new method, effective January 1, 1998, employer contributions, equal to 4.2 percent of member covered payroll, are used to fund healthcare expenses. Under the prior method, accrued liabilities and normal costs rates were determined for retirant healthcare coverage.

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 to retirees 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 retirees 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 using the entry age normal actuarial cost method. The assets of the Employees' Saving 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 based upon the two most recent annual actuarial valuations is as follows:

### *unfunded Actuarial Accrued Liability*

	December 31, 1998			December 31, 1997	
	State Group	Local Government Group	Law Enforcement Group	Total	Total
Present value of actuarial accrued liability for active and inactive accounts	\$ 9,223,497,123	\$ 12,911,546,022	\$ 914,140,646	\$ 23,049,183,791	\$ 21,384,904,920
Less:					
Employers' Accumulation Fund*	5,844,868,239	7,763,404,789	574,664,127	14,182,937,155	12,924,155,175
Employees' Savings Fund	2,588,159,309	3,701,347,078	218,851,280	6,508,357,667	6,074,352,145
Market Value Adjustment	<u>1,232,772,609</u>	<u>1,670,006,150</u>	<u>101,134,242</u>	<u>3,003,913,001</u>	<u>1,260,626,747</u>
Unfunded/ (Assets in excess of) actuarial accrued liability**	<u>(\$ 442,303,034)</u>	<u>(\$ 223,211,995)</u>	<u>\$ 19,490,997</u>	<u>(\$ 646,024,032)</u>	<u>\$ 1,125,770,845</u>

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

\*\*At December 31, 1998, valuation assets were in excess of unfunded actuarial accrued liabilities.

# Administrative Expenses\*

For the Years Ended December 31, 1999 and 1998

	1999	1998
Personal Services:		
Salaries and Wages	\$13,429,129	\$12,582,693
Retirement Contributions	1,816,925	1,709,988
Insurance	2,346,834	1,542,971
Bureau of Employment Services	<u>128</u>	<u>803</u>
	<u>17,593,016</u>	<u>15,836,455</u>
Supplies:		
Office Supplies	368,381	325,314
Printing and Publications	331,924	324,556
Dues and Subscriptions	<u>139,105</u>	<u>100,500</u>
	<u>839,410</u>	<u>750,370</u>
Other Services and Charges:		
Professional Services:		
Auditing	73,662	78,463
Actuarial and Technical	1,187,754	880,418
Investment	1,341,164	930,103
Treasurer of State Charges	1,060,465	924,621
Medical	1,333,539	1,211,866
Pension Review	<u>14,027</u>	<u>28,395</u>
Employee Training	177,908	119,582
Data Processing Contract	173,557	57,449
Retirement Awareness Seminar	281,206	288,849
Communications:		
Telephone	286,891	265,772
Contract Mailings & Shipping	14,984	15,588
Postage	1,696,993	1,517,454
Transportation and Travel	413,865	417,261
Utilities	300,610	290,036
Rental and Maintenance:		
Equipment & Facilities	1,326,848	1,249,626
Building	458,784	384,693
Microfilm	34,538	37,323
Retirement Study Council	251,273	190,480
Miscellaneous	<u>239,458</u>	<u>119,037</u>
	<u>10,667,526</u>	<u>9,007,016</u>
Depreciation On:		
Building	432,117	409,982
Equipment and Fixtures	<u>1,882,217</u>	<u>1,805,083</u>
	<u>2,314,334</u>	<u>2,215,065</u>
<b>TOTAL ADMINISTRATIVE EXPENSES</b>	<u><u>\$31,414,286</u></u>	<u><u>\$27,808,906</u></u>

\*Includes investment-related administrative expenses

## SCHEDULE OF INVESTMENT EXPENSES

(For the Years Ended December 31, 1999 and 1998)

	1999	1998
Investment Services	\$ 1,341,164	\$ 930,103
Investment Staff Expense	3,150,612	2,709,497
Legal Services for International Investments	5,756	4,352
Legal Services for Venture Capital Investments	4,146	
Legal Services for Securities Lending	5,891	952
Allocation of Administrative Expense (See Note 2b)	<u>2,764,444</u>	<u>2,633,127</u>
<b>TOTAL INVESTMENT EXPENSES</b>	<u><b>\$ 7,272,013</b></u>	<u><b>\$ 6,278,031</b></u>

## Schedule of Payments to Consultants

PERS paid the following investment consultants in 1999:

William M. Mercer	\$13,315
SEI Investments	53,000
Gabriel, Roeder, Smith & Co.	28,410
Global Trend Alert	10,000
Strategic Investments Solutions, Inc.	<u>42,750</u>
<b>TOTAL</b>	<u><b>\$147,475</b></u>

A schedule of Fees and Commission Payments to Brokers is presented on page 52.



# Investment Section

**Introduction**

The investment authority of the Retirement System and its trustees, the Retirement Board, is specified in section 145.11 of the Revised Code of Ohio. Importantly, the Code requires that Board and other fiduciaries discharge their duties with respect to the System's funds solely in the interest of the participants and beneficiaries, for the exclusive purpose of providing benefits to participants and their beneficiaries and defraying reasonable expenses of administering the Public Employees Retirement System. Within the guidelines of the Code, the Board has developed an internal Investment Policy that provides for appropriate diversification of investment assets (assets), and an acceptable expected return on investments after consideration of investment risks. Performance returns are prepared by Capital Resource Advisors in accordance with the Association for Investment Management and Research (AIMR) standards. This investment report was prepared by the PERS of Ohio investment staff.

**Accomplishments in 1999**

- The System's assets earned a return of 11.94 percent in 1999, the fourth year in the last five of double digit gains.
- The PERS Investment Portfolio's return in 1999 exceeded the 11.66 percent return on the policy benchmark by 28 basis points (0.28 percent).

- The asset allocation adopted by the Retirement Board at the end of the third quarter of 1998 was successfully implemented during 1999:

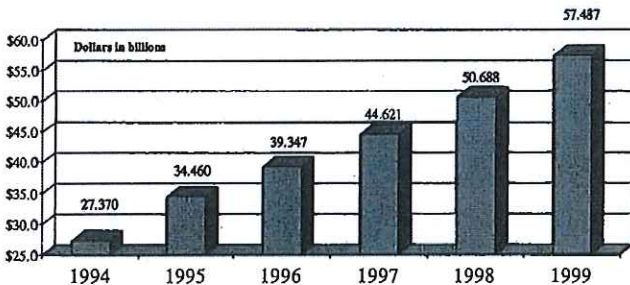
- We increased our international equity allocation from 4.80 percentage points at the end of 1998 to 20.57 percentage points by the end of 1999. The Investment Portfolio benefited greatly from our timely action to increase our international equity exposure. The reference index for international stocks, the Morgan Stanley All Country World Index Free ex U.S. (MSCI ACWIFxUS), gained 30.91 percent during the year.
- The 15.74 percentage point increase in the international equity allocation was funded primarily from a reduction in our domestic bond allocation. We reduced domestic bonds from 42.52 percentage points of the portfolio at the start of the year, to 32.30 percentage points by the end of 1999. The reference index for domestic bonds, the Salomon Smith Barney Broad Investment Grade Index (BIG), posted a return of a negative 83 basis points (-0.83 percent) for the year.
- We increased our exposure to domestic real estate by over one billion dollars during the year.

- The System ended the year with assets of \$57.487 billion, an increase of \$6.799 billion for the year. The System's assets have grown by \$30.117 billion in five years, more than doubling the asset base since 1994.

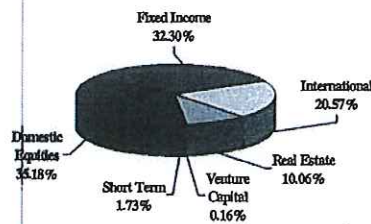
**Asset Allocation**

At the end of 1999 and 1998, the System's assets were diversified across asset classes as follows:

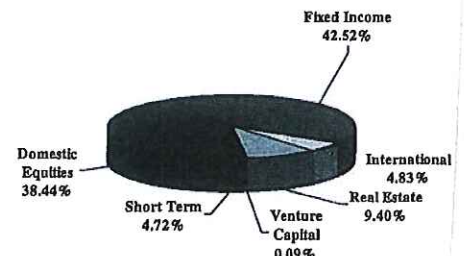
**PERS End of Year Market Values**



**Asset Allocation at December 31, 1999**



**Asset Allocation at December 31, 1998**



## Policy Allocation

The policy allocation, as prescribed by our investment policy, is displayed in the following chart.

**Policy Allocation  
at December 31, 1999**



## Summary of Asset Class Allocation

- The domestic equity allocation of 35.18 percent (\$20.223 billion) was essentially identical to the target allocation of 35 percent as specified in our Investment Policy. The policy allows for tactical allocation of  $\pm 2$  percentage points around the target.
- Our fixed income exposure ended the year at 32.30 percent, or \$18.570 billion. Our Investment Policy calls for a 35 percent allocation to domestic bonds,  $\pm 4$  percentage points.
- Our international equity exposure ended the year at 20.57 percent of total assets or \$11.826 billion, an increase of \$9.380 billion. The Investment Policy specifies a target allocation of 18 percent to international equity,  $\pm 2$  percentage points. We ended the year 57/100<sup>ths</sup> of one percentage point above the top end of the allocation range due to the strong performance of international stocks in December.
- Real estate holdings were 10.06 percent of the total fund at the end of the year (\$5.783 billion). Our Investment Policy specifies a target allocation to real estate of 11 percent,  $\pm 2$  percentage points. While we increased our real estate holdings by over one billion dollars during the year, our ending allocation fell short of the target due to the strong appreciation of domestic and international stocks.
- We ended the year with 1.73 percent of total assets, or \$991 million, in short-term investments. Our Investment Policy specifies a target allocation to short-term

investments of one percentage point. Some of our cash holdings in excess of the one percent target are slated for investment in domestic fixed income early in the new year.

- Our venture capital investments totaled \$94 million a year-end, representing about 16/100<sup>ths</sup> of 1 percent of total assets.

The target asset allocation and allowable variances from the target allocation are specified in the following table:

Asset Allocation Targets and Ranges				
Asset Class	Asset Class	Target Allocation	Range	
			Low	High
Domestic Equities	S&P Supercomposite Index	35%	33%	37%
Fixed Income	SSB BIG Index	35%	31%	39%
International				
Equity	MSCI ACWI Free x US Index	18%	16%	20%
Real Estate	Custom Composite Index	11%	9%	13%
Short Term				
Investments	91-day U.S. T-Bill	1%	0%	4%
<b>TOTAL</b>		<b>100%</b>		

## Asset Class Performance

- **Domestic Equities**  
Domestic stock markets turned in yet another strong performance in 1999, with the technology area, as represented by the NASDAQ market, leading the way. The NASDAQ Composite Index, an index dominated by technology companies, gained 85.60 percent for the year, the largest gain ever recorded in the U.S. for a broad market index. While well behind the NASDAQ, the Dow Jones Industrial Index turned in a respectable gain of 27.28 percent, the broader S&P 500 Index sported a gain of 21.03 percent, and the S&I Supercomposite (SPR), an index of the 1,500 largest domestic stocks by market capitalization, posted a gain of 20.26 percent for the year. In short, it was another year of good news for stock market investors.

PERS of Ohio's domestic equity returns were favorable on an absolute basis, but very disappointing relative to the gains shown in the broad market averages. Our domestic equity holdings had a total return of 14.59 percent in 1999. We benchmark our domestic equity performance against the SPR, which as noted had a total return of 20.26 percent in 1999. Our under-performance of 567 basis points was due to our

decisions at the start of the year to have a value bias in the active part of our portfolio, and to favor small and mid capitalization stocks over large stocks. Both decisions proved detrimental to performance as growth stocks, particularly large ones, were almost the only game in town, especially in the latter half of the year.

Due to our very disappointing equity returns relative to the SPR, we have modified our management approach in the active part of our equity portfolio. By the end of 1999, we fully implemented a "core" management style in all of our active equity portfolios. This management approach seeks to add return through fundamental and quantitative research by identifying attractive holdings, yet mitigate the risk of pure active management by causing a manager to hold an index representation, or near index representation, of a security for which he has no outright opinion. In our review of performance, we found that while our stock research has tended to add value, this incremental return was at times more than offset by not holding in our portfolio an index weight of securities that were included in the reference index, and for which we had no outright investment opinion.

- **Fixed Income**

The domestic investment grade bond market was ugly in 1999, only the second year in recent history when the investment grade market failed to provide a positive return. The worst year for domestic bonds was 1994, a year in which the benchmark index, the Salomon Brothers Broad Investments Grade Index (BIG), posted a return of a negative 2.85 percent. It was not quite that bad in 1999, as the BIG ended the year with a return of a negative 0.83 percent. The bond market had the misfortune of ending last year at some very low absolute yield levels brought about by a capital flight to the safety of the U.S. bond market, stemming from a combination of the Asian flu and hedge fund crises. As the domestic economy powered ahead in 1999, Federal Reserve Chairman Greenspan and the FOMC gradually reversed the three rate cuts implemented in 1998. A strong economy, some whiffs of budding inflation, very tight labor markets, and the Fed proved to be too much for a bond market that was priced for a financial meltdown. Instead, we began to get an economic melt-up. The benchmark U.S. Treasury ten-year note rose in yield from 4.65 percent at the start of the year to 6.44 percent by the year's close. The total return of U.S. Treasury ten-year securities for the year was a negative 8.41 percent.

PERS of Ohio's bond holdings had a return of a negative 49 basis points (-0.49 percent) for 1999. The reference index, the BIG, had a return of a negative 83 basis points (-0.83 percent) for the year. Our out-performance of 34 basis points relative to the reference index resulted from our decisions to overweight corporate and mortgage debt during the year, and underweight U.S. Treasury debt. Duration management (attempting to anticipate changes in interest rates) played almost no role in our out-performance, as we focused on maintaining a portfolio duration very similar to the reference index. Fixed income securities lending activities contributed about 3 basis points of the 34 basis points of out-performance. Securities lending is a relatively low-risk practice of loaning securities on a fully-collateralized basis to the Wall Street broker-dealer community.

- **International Equities**

The International equity markets stole the show in 1999, with the broad reference index, the MSCI ACWIFxUS index, posting a gain of 30.91 percent in U.S. dollar terms. The international indices outscored the U.S. markets for the first time in five years. The gains came about as fears over the impact of the Asian crisis diminished, Japanese and European economic activity improved, international business restructuring accelerated, and worldwide inflation remained non-existent. The developed markets, as measured by the MSCI EAFE index (Europe, "Australasia," and Far East), returned 26.97 percent in dollar terms, while the emerging markets, as measured by the MSCI EMF Index (Emerging Markets Free), posted an eye-popping gain of 66.95 percent in dollar terms. Emerging markets rebounded strongly from the late 1998 Asian crisis sell-off.

PERS of Ohio's international equity holdings returned 44.87 percent in 1999, outdistancing the MSCI ACWIFxUS reference index by 1396 basis points (13.96 percentage points). Our exceptional performance relative to the index was boosted by our year-long overweight in Japan and the entire Asia/Pacific region. In addition, our underweight in Europe relative to the index contributed to out-performance. Finally, though we were underweight in emerging markets for much of the year, we captured some of the strong gains in this area, and raised our emerging markets exposure to be in-line with the index by the end of the year.

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- **Real Estate**

Real estate markets were again mixed in 1999. Non-securitized "brick and mortar" properties generally turned-in respectable gains ranging from the high single digits to low double digits. The reference index we use to gauge the performance of directly-held, non-securitized real estate, the National Council of Real Estate Investment Fiduciaries Property Index (NPI), had a return of 10.24 percent for the year. The securitized real estate markets, the publicly-traded Real Estate Investment Trusts (REITs), however, posted disappointing returns for the second year in a row. The reference index that we use to gauge performance of the REIT market, the S&P REIT Index (SPREIT), had a return of a negative 5.59 percent.

The recent performance dichotomy between non-securitized and securitized real estate is a temporary phenomenon, driven in part by liquidity and the attraction of other investment areas. In short, investors dumped REITs (they are very liquid as compared to directly-held property investments) to raise capital for investment in the high flying technology and internet sectors. With the REIT market ending the year at a discount of about 20 percent to the value of the underlying properties held within the trusts, the performance gap between NPI and REITs should narrow in 2000.

Mirroring the real estate markets, our real estate performance was also mixed. Overall, our real estate holdings returned 7.13 percent for the year. We compare our real estate portfolio to a custom composite benchmark that is weighted 60 percent NPI, 20 percent SPREIT, and 20 percent Giliberto-Levy Commercial Mortgage Index. The latter is a gauge of the performance of whole loan mortgages issued on commercial properties. The custom composite benchmark returned 5.19 percent for the year. Thus, we out-performed our benchmark by 194 basis points (1.94 percent). Our directly-held properties provided a return of 10.99 percent, and our REIT holdings returned a negative 3.67 percent.

- **Short Term Investments**

Internally, we use the return of the U.S. Treasury 90-day T-bill, as measured by the Merrill Lynch Global Index group, as a benchmark reference for the performance of short term investments. The 90-day T-bill earned a return of 4.85 percent in 1999.

PERS of Ohio invests principally in three types of short term securities: U.S. Treasury Bills with a remaining maturity of 185 days; commercial paper with

a maximum remaining maturity of 35 days, issued by domestic corporations rated "A1/P1" for short term debt; and discount notes with a remaining maturity of 185 days or less issued by U.S. Government Sponsored Enterprises. In 1999, we again favored investments in better yielding commercial paper and discount notes, and held few treasury bills. Our short-term investments earned a return of 5.24 percent for the year, exceeding the return on the benchmark 90-day T-bill by 39 basis points.

## Investment Department Strategy and Initiatives for 2000

- **Strategy**

The mission of the investment department is to provide superior long-term performance relative to the return on a policy benchmark, within levels of risk (volatility of performance) that are consistent with the out-performance goals set by the Board. Further, the staff is charged with fulfilling this mission in a cost effective manner.

Given our mission, our strategy for out-performance in 2000 and beyond is straightforward; control investment risk to levels consistent with the relative performance goals articulated by the Board, and add incremental return through well-researched and measured investment actions around the reference benchmarks. In 1999, we began to monitor investment risk in a disciplined, quantitative way. We intend to continue to refine and add to our measurement, understanding, and control of investment risk across asset classes and at the fund level during the coming year. With an increased focus on risk, investment actions are viewed in terms of how they cause the risk and return profile of our portfolio to vary from the risk and return profile of the reference benchmark. By measuring, monitoring, and comparing risk and return attributes, we are attempting to minimize the probability of under-performance and maximize the probability of out-performance relative to a benchmark over time.

- **Initiatives**

With the asset allocation study of 1998 now fully implemented, we plan to undertake a number of actions in 2000 to review and enhance our investment strategy and operations, asset allocation and risk, and fiduciary oversight:

- **Independent Investment Review**—A qualified, independent consulting firm will be hired in the first half of the year to review and assess the opera-



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tions of the investment department. The consultant will review our strategy at the fund and asset class levels, our processes, structure, controls, and operations, and provide us with an assessment of the suitability and appropriateness of our investment approach, in light of our mission, as well as any recommendations for improvement.

- **Asset/Liability Allocation Review**—A qualified, independent consulting firm will be hired in the first half of the year to perform an update to the asset/liability study completed in the fall of 1998. The study will review our asset allocation, expected long-term investment returns, and projected liabilities with a goal of assuring that our long-term investment returns, along with employer and employee contributions, will be sufficient to fully fund member benefits for the foreseeable future.
  
- **Selection of Investment Advisor**—In the second half of the year, a search will be undertaken to select a qualified, independent investment advisor. The selected firm will provide the Board an ongoing assessment of the suitability and appropriateness of our investment approach and strategy, and will be a resource for both staff and board in investment education, special studies, and the identification and research of investment opportunities.

Neil V.Toth  
Assistant Director  
Investment Officer

## DOMESTIC EQUITY

### Domestic Equity Market Value

As of December 31, 1999, the domestic equity portfolio had a market value of \$20.223 billion. This represented 35.18 percent of the total PERS fund.

### Domestic Equity Structure

The Investment Policy objective is to out-perform the S&P Super Composite 1500 stock index by 50 basis points (annualized) over a market cycle. In order to achieve this objective, we have incorporated a "core" investment style for the domestic equity portfolio. This approach aligns the volatility of our holdings (risk) with the relative return expectations outlined by the board. As of December 31, 1999, 30 percent of the domestic equity portfolio was passively managed while 70 percent was managed actively. Large cap stocks represented 90 percent while mid cap stocks and small cap stocks represented 7 percent and 3 percent, respectively, of the domestic equity portfolio.

The PERS Domestic Equity portfolio was divided into eight separately managed portfolios, all internally managed. The following table provides year-end market values, the managers' investment styles, and individual portfolio weightings:

Domestic Equity Portfolio	Portfolio Market Value as of December 31, 1999	Investment Style	% of Equity Portfolio
<b>ACTIVE</b>			
Large Cap Alpha	\$ 4,901,482,202	Large Cap Value	24.24%
Large Cap Omega	4,839,119,732	Large Cap Core	23.93
Large Cap Gamma	3,031,470,829	Large Cap Enhanced	14.99
Mid Cap Active	913,416,723	Mid Cap Core	4.52
Small Cap Active	435,956,385	Small Cap Core	2.16
<b>Subtotal</b>	<b>\$14,121,445,871</b>		<b>69.84%</b>
<b>PASSIVE</b>			
S&P 500 Portfolio	\$ 5,494,839,086	Indexed	27.16%
S&P Midcap 400 Portfolio	419,407,675	Indexed	2.07
S&P Smallcap 600 Portfolio	187,659,297	Indexed	0.93
<b>Subtotal</b>	<b>\$ 6,101,906,058</b>		<b>30.16%</b>
<b>Total</b>	<b>\$20,223,351,929</b>		<b>100.00%</b>

### Domestic Equity Portfolio Statistics

The following table details the fundamental characteristics of the PERS U.S. equity portfolio as of December 31, 1999 with comparisons to the portfolio's benchmark, the SPR index, and our portfolio as of the previous year-end.

Domestic Equity Portfolio and Index Characteristics			
Characteristic	December 31, 1999 PERS' U.S. Stocks	December 31, 1999 SPR Index	December 31, 1998 PERS' U.S. Stocks
Number of Securities	1529	1500	1543
Avg. Market Capitalization	\$22.3 billion	\$22.5 billion	\$19.6 billion
Portfolio Yield	1.3%	1.2%	1.1%
Portfolio P/E	33.2x	30.6x	24.6x
Portfolio Beta vs. S&P 500	1.01	0.99	1.08
Price/Book Ratio	6.1x	5.2x	5.5x
Five Year Earnings Growth	15.0%	13.8%	12.3%

The table below provides a listing of the top 10 largest holdings in the Domestic Equity portfolio as of December 31 1999 and for the previous year-end.

### Domestic Equity Top Ten Portfolio Holdings Comparison

Ten Largest Holdings December 31, 1999	Market Value	% of Total U.S. Stocks	Ten Largest Holdings December 31, 1998	Market Value	% of Total U.S. Stocks
Microsoft Corp	\$ 876,887,535	4.33%	MCI Worldcom Inc	\$ 630,942,953	3.21%
General Electric	749,317,606	3.70	General Electric	482,235,600	2.45
Cisco systems Inc	514,101,659	2.54	Microsoft Corp	450,512,475	2.29
Wal-Mart Stores	454,089,591	2.24	America Online Inc	342,888,300	1.74
Exxon Mobil Corp	414,795,205	2.05	Intel Corp	311,392,550	1.58
Intel Corp	401,935,477	1.98	Cardinal Health	310,506,677	1.58
Lucent Technologies	339,206,325	1.67	Intl. Business Mach	296,493,438	1.51
Intl. Business Mach	287,939,303	1.42	Merck & Co	257,549,750	1.31
Citigroup Inc	270,359,026	1.33	Exxon Corp	246,614,063	1.25
SBC Communications	265,097,625	1.31	Wal-Mart Stores	244,996,575	1.24
<b>Total</b>	<b>\$4,573,729,352</b>	<b>22.62%</b>		<b>\$3,574,132,381</b>	<b>18.22%</b>

### Domestic Equity Investment Returns

The PERS domestic equity return for calendar year 1999 was 14.59 percent. This was below the return of the Investment Policy benchmark, the SPR index, which finished at 20.26 percent. Within the Capital Resource Advisors universe of domestic equity returns for public pension returns, the PERS return fell short of the median return of 19.52 percent. The shortfall in performance was due to our overweighting in small capitalization stocks during a period of time when the largest companies significantly out-performed the smaller cap indexes. In addition, a bias toward value stocks did not work in 1999 as various growth indexes beat their value counterparts by a wide margin.

## FIXED INCOME

### Fixed Income Market Value

As of December 31, 1999, the fixed income portfolio had a market value of \$18.570 billion, representing 32.30 percent of the total fund.

### Fixed Income Portfolio Structure

The fixed income portfolio is charged with the goal of out-performing the BIG by 50 basis points per year over the course of a market cycle. With that goal in mind, we have chosen to overweight the higher yielding sectors of the market, corporates and mortgages, which have proven to out-perform over time.

The fixed income market is broken into three main sectors: 1) Governments, comprised of treasury and agency securities, are the highest quality and most liquid of the sectors and represents 43.30 percent of BIG (PERS holds 22.50 percent); 2) Corporates represent 24 percent of the Index (PERS holds 36.50 percent); and 3) Mortgages represent 32.70 percent of the Index (PERS holds 41 percent).

We have intentionally kept the duration of the fixed income portfolio close to that of the Index over the past year for two main reasons. First, we believe the additional yield offered by the spread sectors is a less risky way to achieve our goal of out-performing the Index by 50 basis points. Second, we believe we have greater expertise in corporate and mortgage security selection than we have in active duration management.

### Fixed Income Statistics

The following table displays the statistical characteristics of the fixed income portfolio as of December 31, 1999 with comparisons shown to the portfolio's policy benchmark (BIG) and the prior year-end.

Fixed Income Portfolio and Index Characteristics				
	December 31, 1999		December 31, 1998	
	PERS	Index	PERS	Index
Total Number of Securities	256	7,193	200	6,900
Yield to Maturity	7.46%	7.19%	5.84%	5.71%
Effective Duration	5.01	5.00	4.55	4.56
Average Credit Quality	A A A	Agency	AAA	Agency

### Fixed Income Top Ten Portfolio Holdings Comparison

Ten Largest Holdings December 31, 1999	Market Value	% of Total U.S. Bonds	Ten Largest Holdings December 31, 1998	Market Value	% of Total U.S. Bonds
GNMA 6.5% (30 yrs)	\$1,669,089,275	8.99%	GNMA 6.5% (30 yrs)	\$ 2,232,370,107	10.29%
FNMA 7.5% (30 yrs)	955,759,404	5.15	GNMA 7.5% (30 yrs)	1,335,915,751	6.16
FNMA 8.0% (30 yrs)	821,186,878	4.42	TIPS 3.625% 7/15/02	1,220,844,540	5.63
GNMA 7.0% (30 yrs)	813,774,628	4.38	GNMA 7.0% (30 yrs)	1,142,043,021	5.26
FNMA 7.0% (30 yrs)	562,436,866	3.03	GNMA 8.0% (30 yrs)	1,034,743,738	4.77
GNMA 7.5% (30 yrs)	547,437,160	2.95	Tsy 5.5% 5/31/03	886,997,512	4.09
GNMA 6.0% (30 yrs)	519,299,253	2.80	Tsy 5.375% 2/15/01	616,054,407	2.84
Tsy 6.0% 8/15/09	409,009,894	2.20	Tsy 5.750% 4/30/03	604,481,711	2.79
TIPS 3.625% 7/15/02	405,470,637	2.18	FNCI 8.0% (15 yrs)	509,162,073	2.35
Tsy 5.875% 11/30/01	375,558,285	2.02	TSY-Strip 0.0% 11/15/09	505,596,662	2.33
<b>Total</b>	<b>\$7,079,022,280</b>	<b>38.12%</b>		<b>\$10,088,209,522</b>	<b>46.51%</b>

### Fixed Income Investment Returns

The PERS fixed income portfolio earned a total return of negative 0.49 percent in 1999, while the total return on the benchmark BIG was a negative 0.83 percent.

### INTERNATIONAL

#### International Equity Market Value

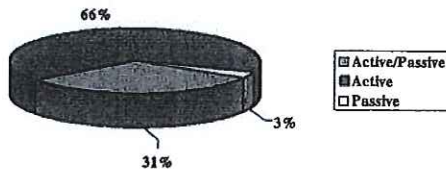
Non-U.S. stocks are employed by the fund primarily because their historical return premiums versus inflation, if realized in the future, will help preserve and enhance the fund's ability to achieve the long-term rate of return objectives as set by the board. Non-U.S. stocks also are employed for the diversification benefits they provide to the portfolio. By incorporating non-U.S. stocks into the asset mix, Ohio PERS expects to achieve overall equity returns which are comparable to that of a U.S. stock portfolio, while reducing overall portfolio risk.

As of December 31, 1999, the Ohio PERS' non-U.S. stock portfolio had a market value of \$11.826 billion, representing approximately 20.57 percent of the total fund.

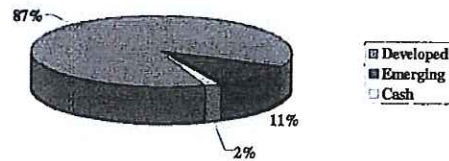
### International Equity Portfolio Structure

As of December 31, 1999, 66 percent of the portfolio was managed on an active basis, 31 percent on an active/passive basis, and 3 percent on a passive basis. Moreover, approximately 87 percent of the portfolio was allocated among the developed non-U.S. markets (i.e. the EAFE countries), 11 percent to the emerging markets, and 2 percent to cash.

**International Equity  
Active and Passive Management  
as of Year-end 1999**



**Developed and Emerging  
Market Exposure  
as of Year-end 1999**



### International Equity Portfolio Statistics

The following tables display country allocations and the top-ten holdings of the Ohio PERS international portfolio as of December 31, 1999:

PERS/MSCI ACWIF x US Country % Allocations						
COUNTRY	PERS	ACWIFxUS	Difference	PERS	ACWIFxUS	Difference
	December 31, 1999	December 31, 1999		December 31, 1998	December 31, 1998	
Austria	0.0	0.2	-0.2	0.1	0.3	-0.2
Belgium	0.2	0.8	-0.6	0.8	1.7	-0.9
Denmark	0.3	0.7	-0.4	0.3	0.8	-0.5
Finland	2.4	2.6	-0.2	2.4	1.4	1.0
France	9.0	8.9	0.1	10.2	8.4	1.8
Germany	8.7	9.1	-0.4	9.5	9.5	0.0
Ireland	0.4	0.4	0.0	0.9	0.4	0.5
Italy	3.3	3.7	-0.4	6.5	4.7	1.8
Netherlands	6.1	4.6	1.5	6.0	5.8	0.2
Norway	0.2	0.3	-0.1	0.5	0.3	0.2
Portugal	0.2	0.4	-0.2	0.8	0.6	0.2
Spain	2.0	2.3	-0.3	3.1	3.0	0.1
Sweden	2.7	2.3	0.4	3.1	2.4	0.7
Switzerland	3.6	4.9	-1.3	7.5	7.2	0.3
U.K.	14.3	16.6	-2.3	22.8	19.0	3.8
<b>EUROPE</b>	<b>55.1</b>	<b>57.7</b>	<b>-2.6</b>	<b>74.5</b>	<b>65.5</b>	<b>9.0</b>
Australia	1.7	2.1	-0.4	4.8	2.3	2.5
Hong Kong	2.9	2.0	0.9	1.6	1.8	-0.2
Japan	25.1	23.8	1.3	16.4	18.7	-2.3
New Zealand	0.7	0.1	0.6	0.2	0.2	0.0
Singapore	2.1	0.9	1.2	0.6	0.7	-0.1
<b>ASIA</b>	<b>32.5</b>	<b>29.0</b>	<b>3.5</b>	<b>23.6</b>	<b>23.7</b>	<b>-0.1</b>
Canada	1.6	3.8	-2.2	0.0	3.4	-3.4
Emerging Mkts.	10.8	9.5	1.3	0.0	7.5	-7.5
<b>OTHER</b>	<b>12.4</b>	<b>13.3</b>	<b>-0.9</b>	<b>0.0</b>	<b>10.9</b>	<b>-10.9</b>
Cash	2.0	0.0	2.0	1.9	0.0	1.9

### 1999 PERS International Portfolio Top Ten Holdings Comparison

Ten Largest Holdings (December 31, 1999)	Market Value	% of Total Portfolio	Ten Largest Holdings (December 31, 1998)	Market Value	% of Total Portfolio
Mannesmann AG	\$ 215,022,704	1.86%	Mannesmann AG	\$ 41,651,221	1.82%
Murata Manufacturing Co.	182,658,343	1.58	Nokia (AB) OY	30,587,274	1.34
Nokia Corp.	159,692,009	1.38	Takeda Chemical Industries	23,987,423	1.05
NTT Mobile Communication Network	158,574,524	1.37	Telefonica SA	23,840,370	1.04
Sony Corp.	102,520,473	0.88	Glaxo Wellcome	23,198,310	1.01
ST Microelectronics	97,230,386	0.84	Astrazeneca	21,777,782	0.95
Softbank Corp.	79,975,162	0.69	Novartis AG	21,391,908	0.93
Koninklijke	76,558,115	0.66	Vodafone Airtouch	20,635,305	0.90
Ericsson	67,722,383	0.58	Roche Holding AG	19,890,177	0.87
Rohm Co.	49,732,778	0.43	Nestle SA	19,849,419	0.87
<b>Total</b>	<b>\$1,189,686,877</b>	<b>10.27%</b>		<b>\$246,809,189</b>	<b>10.78%</b>

### International Equity Portfolio Investment Advisors

The following firms were under contract with Ohio PERS at the end of 1999 for management of non-U.S. stocks. Also, displayed are the managers' investment styles, 1999 year-end market values, and the management fees paid during the year:

### 1999 PERS International Advisor Data

Investment Advisor	Investment Style	Market Value (December 31, 1999)	FY99 Management Fee
AIG Gem Fund	Special Program	\$ 12,799,811	N/A
Bank of Ireland Asset Management	Active-ACWI	681,435,759	\$ 1,417,494
Barclays Global Investors	Active/Passive ACWI	1,811,162,715	N/A
Barclays Global Investors	Passive-ACWI	328,315,089	N/A
Baring Asset Management	Active/Passive-EAFE	1,887,294,196	1,677,652
Brandes Investment Partners	Active-ACWI	787,597,219	842,623
Capital Guardian Trust Company	Active-EAFE	1,496,456,580	3,212,144
Driehaus Capital Management	Active-ACWI	678,940,021	N/A
Lazard Asset Management	Active-Emerging Mkts.	313,960,419	597,734
Marvin & Palmer Associates	Active-ACWI	979,788,481	2,370,231
J.P. Morgan Investment Management	Active-EAFE	481,712,546	1,555,123
Nicholas-Applegate Capital Management	Active-ACWI	760,477,187	N/A
Oechsle International Advisors	Active-ACWI	645,129,163	N/A
Scudder Kemper Investments	Active-Emerging Mkts.	239,274,126	N/A
TT International	Active-ACWI	493,279,087	188,111
Xylem Fund	Special Fund	228,726,000	N/A
<b>Total</b>		<b>\$11,826,348,399</b>	<b>\$11,861,112</b>

# REAL ESTATE

## Real Estate Market Value

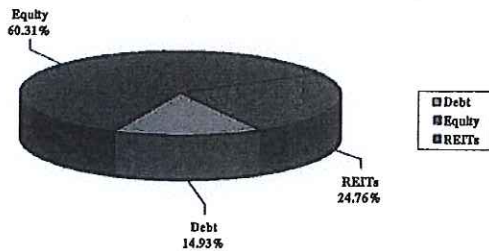
The market value for the portfolio at year-end was \$5.783 billion, bringing the fund's exposure in real estate to 10.00 percent of the fund. This compared to year-end 1998, when the market value was \$4.763 billion, at 9.40 percent of the fund.

## Real Estate Portfolio Structure

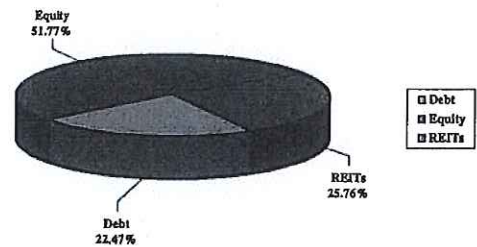
In 1999, the real estate staff focused on out-performing its benchmark while maintaining the fund's exposure to real estate. We focused on filling the allocations to existing advisors, taking profits through sales where appropriate, and increasing our exposure in REITs. Last year, PERS allocated an additional \$875.8 million to five separate advisors, and invested a gross amount of \$1.569 billion in real estate.

The following charts display the Fair Value by Investment Structure at the end of 1999 and 1998.

**Fair Value by Investment Structure  
as of 12/31/99**



**Fair Value by Investment Structure  
as of 12/31/98**



## 1999 PERS Real Estate Advisor Data

Investment Advisor	Investment Style	Market Value December 31, 1999	Market Value December 31, 1998
Rothschild Realty, Inc	Equity	\$ 893,989,304	\$ 494,697,829
Lowe Enterprises, Inc	Equity, Debt	734,200,360	690,485,199
Sentinel Corporation	Equity	628,127,278	538,620,186
Liberty Lending Services, Inc	Debt	536,700,054	676,834,461
Bristol Group, Inc.	Equity, Debt	517,196,733	332,406,861
TGM Associates, L.P	Equity	442,314,991	424,368,178
Faison & Associates, Inc.	Equity	285,108,051	275,240,279
Huntoon Hastings, Inc	Debt	207,115,635	257,320,751
AFL-CIO Housing Investment Trust	Debt	69,564,852	74,827,666
Great Point Investors, L.L.C.	Equity, Debt	26,367,088	7,168,908
Legg Mason Real Estate Services	Equity, Debt	9,934,582	11,042,047
<b>Total</b>		<b>\$4,350,618,928</b>	<b>\$3,783,012,365</b>

## REIT Top Ten Portfolio Holdings Comparison

Ten Largest Holdings December 31, 1999	Market Value	% of Total U.S. REITs	Ten Largest Holdings December 31, 1998	Market Value	% of Total U.S. REITs
AIMCO	\$88,873,324	8.27%	AIMCO	\$ 76,456,172	7.63%
Simon Property Group	77,414,063	7.20	Duke-Weeks Realty Trust	72,800,000	7.26
AMB Property Corp.	63,800,000	5.94	Liberty Property Trust	49,250,000	4.91
Duke-Weeks Realty Trust	62,400,000	5.81	AMB Property Corp.	48,950,000	4.88
Post Properties	55,462,500	5.16	Arden Realty	46,000,000	4.59
Liberty Property Trust	49,500,000	4.60	Simon Property Group	44,437,500	4.43
Camden Properties Trust	47,990,850	4.46	Koger Equity	40,577,210	4.05
Koger Equity	40,577,210	3.77	Colonial Properties	38,834,688	3.87
Arden Realty	40,125,000	3.73	Post Properties	38,250,000	3.81
Home Properties	39,235,625	3.65	Starwood Hotel and Resorts	37,968,750	3.79
<b>Total</b>	<b>\$565,378,572</b>	<b>52.64%</b>	<b>Total</b>	<b>\$493,524,320</b>	<b>49.27%</b>

### Real Estate Investment Returns

In 1999, the real estate portfolio returned 7.13 percent to PERS. This compares to the benchmark returns of 5.11 percent, producing an out-performance for the entire portfolio of 194 basis points.

This return figure was comprised of performance from direct equity investments, mortgages, and REITs. While the performance for direct equity investments and mortgages was positive this year, the REIT market (and our REIT portfolio) produced negative returns. At year-end, the portfolio was weighted 24.79 percent in REITs. This heavy weighting in REITs negatively affected our performance for the year. However, the out-performance by our REIT portfolio against the benchmark mitigated the effect of the overweighting.

Of the 7.13 percent return, 8.13 percent was in cash flow and negative 1.04 percent was due to appreciation. This compared with 1998 returns of 5.97 percent, of which 8.76 percent was cash flow and negative 2.59 percent was due to appreciation. In both cases, the negative appreciation is due to the rising interest rates affecting the debt market, as well as the negative performance in the REIT market. In all cases, the income component has been solid. The 1999 NCREI return was 10.24 percent. The total return on the PERS REIT portfolio for 1999 was negative 3.67 percent. This compared to the SPREIT Index return of negative 5.56 percent.



## VENTURE CAPITAL

### Venture Capital Market Value

As of December 31, 1999, the venture capital portfolio had a market value of \$93.65 million. This represented 17/100<sup>ths</sup> of one percent of the total PERS Fund.

### Venture Capital Structure

The Retirement Board has set a zero percent target allocation to venture capital and investments. The investment staff did not actively pursue investments in this area in 1999, but reviewed numerous proposals from in-state venture firms. In 1999, the board approved a \$25 million investment in Blue Chip Capital III. In addition, PERS funded commitments to venture firms that were approved in prior years. In all, PERS invested \$22.20 million in venture capital investments during 1999, and received \$5.60 million in distributions.

### Venture Capital Portfolio Statistics

#### Venture Capital Fund Status as of December 31, 1999

Fund	Initial Funding Date	Investment Fair Value*	Internal Rate of Return**	1999 Total Return
Blue Chip Capital I	11/1/92	\$11,727,566	25.56%	31.90%
Blue Chip Capital II	1/6/97	39,690,939	73.43%	184.08%
Blue Chip Capital III	6/1/99	5,905,927	-13.56%	-6.48%
Linsalata Capital III	5/20/98	9,984,098	-1.24%	-1.54%
MCM Capital Corporation	2/19/98	2,010,018	-22.20%	-23.43%
Northwest Ohio Venture	1/1/92	3,132,919	-6.29%	10.00%
Primus Capital I	2/1/84	37,755	11.21%	N/A
Primus Capital II	4/1/87	450,641	14.40%	290.70%
Primus Capital III	12/1/93	10,404,335	9.79%	167.11%
Primus Capital IV	7/2/97	10,301,635	22.19%	46.00%
<b>TOTAL</b>		<b>\$93,645,833</b>		

\*Fair Value is PERS capital balance as reported on the Partnership K-1.

\*\*Internal Rate of Return is the compound annual return from inception.

### Venture Capital Investment Returns

Our Venture Capital investments provided a return of 74.80 percent in 1999. Because our investments consist of a small number of funds at various stages of the investment life cycle, the performance tends to vary greatly from year to year. Overall, staff believes that the portfolio should produce healthy returns over the long run. The investments with Linsalata, MCM, Primus and Blue Chip are expected to continue to be successful. Our investment with the Northwest Ohio Venture Fund, which is in the liquidation phase, has been a disappointment.

**1999 PERS Venture Capital Data**

Investment Advisor	Investment Style	Market Value December 31, 1999	Market Value December 31, 1998
Blue Chip II	Diversified	\$39,690,939	\$10,218,184
Blue Chip I	Diversified	11,727,566	11,430,930
Primus III	Diversified	10,404,335	6,796,378
Primus IV	Technology	10,301,635	6,089,165
Linsalata	Manufacturing	9,984,098	2,929,637
Blue Chip III	Technology	5,909,927	N/A
Northwest	Diversified	3,132,919	3,349,675
MCM	Manufacturing	2,010,018	1,753,543
Primus II	Diversified	450,641	1,245,115
Primus I	Diversified	37,755	43,286
<b>Total</b>		<b>\$93,649,833</b>	<b>\$43,855,913</b>

## *Schedule of Investment Results*

	<u>1999</u>	<u>Rolling 3-Year</u>	<u>Rolling 5-Year</u>
<b>Total Portfolio</b>	11.94	13.24	13.67
Customized Benchmark	11.66	14.55	N/A
<b>Equity Portfolio</b>	14.59	21.99	22.14
Standard & Poor Supercomposite	20.26	27.29	28.33
<b>Fixed Income Portfolio</b>	-0.49	5.60	8.17
Salomon B.I.G. Index	-0.83	5.73	7.73
<b>Real Estate Portfolio</b>	7.13	8.91	9.67
Custom Real Estate Index	5.19	10.36	9.44
<b>Venture Capital Portfolio</b>	74.82	41.88	45.79
Standard & Poor 500	20.26	27.29	28.33
<b>International Portfolio</b>	44.87	16.35	N/A
MSCI ACWIF x US	30.91	16.86	N/A
<b>Short-Term Portfolio</b>	5.63	5.50	5.64
90 Day Treasury Bill	5.23	5.14	5.35

## Footnotes for Schedule of Investment Results

- **Customized benchmark** — performance data is calculated based upon the asset allocation targets and implementation schedules as specified by the Investment Policy in effect for each year. The asset allocation targets and associated time intervals these targets were in effect are displayed in the following table:

Asset Class	Full Year 1996	Full Year 1997	Full Year 1998	Full Year 1999
Domestic Equity	23.00%	27.00%	30.50%	35.00%
Fixed Income	62.50%	56.50%	51.00%	35.00%
International	2.00%	4.00%	6.00%	18.00%
Real Estate	8.00%	8.00%	8.00%	11.00%
Short-term Investments	4.50%	4.50%	4.50%	1.00%
Total	100.00%	100.00%	100.00%	100.00%

To arrive at customized benchmark performance, the asset allocation targets are multiplied by the performance of the corresponding asset class reference indices. The asset class reference indices are specified by the Investment Policy, and are displayed below:

Asset Class	1/1/96 through 9/30/98	10/1/98 through 12/31/98
Domestic Equity	S&P 500	S&P Supercomposite
Fixed Income	SSB BIG Index	SSB BIG Index
International	MSCI EAFE	MSCI AWI Free x US
Real Estate	NCREIF	RE Custom Composite
Short-term Investments	90-day US Treasury Bill	90-day US Treasury Bill

## Benchmark Index Descriptions

- **S&P Super Composite Index** — A broad U.S. equity market index comprised of 1,500 stocks which is created by combining the S&P 500 (Large Cap), S&P 400 (Mid Cap), and S&P 600 (Small Cap) indexes to represent over 80 percent of the total capitalization of the U.S. equity market. The index is market-weighted and is rebalanced on a periodic basis as determined by the provider, *Standard & Poor's*.
- **Salomon Smith Barney Broad Investment Grade Index (BIG)** — A broad U.S. fixed income market index comprised of over 6,000 bonds from the Government, Corporate, and Mortgage-Backed sectors. The index is market-weighted and is rebalanced on a periodic basis as determined by the provider, *Salomon Smith Barney*.
- **MSCI All Country World Ex-US Index (MSCI ACWIF x US)** — A broad global equity index comprised of over 2,100 stocks from 47 developed and emerging market countries. The index is market-weighted and is rebalanced on a periodic basis as determined by the provider, *Morgan Stanley Capital International*.
- **VC 100** — An index of 100 recently public, originally venture capital-financed, companies as calculated by the provider, *The Venture Capital Journal*.
- **PERS Custom Real Estate Index** — 60 percent NCREIF (appraisal-based valuations of privately-owned commercial real estate) adjusted for representative fees, plus 20 percent S&P REIT Index (publicly traded real estate investment trust securities), plus 20% Giliberto-Levy Commercial Mortgage Performance Index (a representative portfolio of institutional grade, fixed-rate/fixed-term, commercial mortgage whole loans), adjusted for representative fees.
- **Three-Month US Treasury Bill** — The 90-day Treasury Bill return as measured by Merrill Lynch under their internal security code, G001.
- **Inflation** — An index of the average monthly change in consumer prices for a fixed basket of goods and services compiled by the *Bureau of Labor Statistics*.

# List of Largest Assets Held

## Largest Stock Holdings (By Fair Value) December 31, 1999

Shares	Stock	Fair Value
1) 7,510,814	Microsoft Corporation	\$876,887,535
2) 4,842,117	General Electric Company	749,317,606
3) 4,799,082	Cisco Systems Incorporated	514,101,659
4) 6,569,108	Wal-Mart Stores Incorporated	454,089,591
5) 5,148,738	Exxon Corporation	414,795,205
6) 4,883,043	Intel Coporation	401,935,477
7) 4,522,751	Lucent Technologies Incorporated	339,206,325
8) 2,669,194	International Business Machines Corporation	287,939,303
9) 4,854,932	Citigroup Incorporated	270,359,026
10) 5,437,900	SBC Communications Incorporated	265,097,625

## Largest Bond Holdings (By Fair Value) December 31, 1999

Par	Bonds	Fair Value
1) \$1,775,025,709	GNMA Bond 6.500% due 07/01/2028 Rating AAA	\$1,669,089,276
2) 966,328,623	FNMA Bond 7.500% due 10/01/2029 Rating AAA	955,759,406
3) 814,568,509	FNMA Bond 8.000% due 11/01/2029 Rating AAA	821,186,878
4) 841,934,297	GNMA Bond 7.000% due 02/15/2028 Rating AAA	813,774,626
5) 581,660,605	FNMA Bond 7.000% due 05/01/2029 Rating AAA	562,436,866
6) 551,709,474	GNMA Bond 7.500% due 07/15/2026 Rating AAA	547,437,160
7) 570,658,520	GNMA Bonds 6.000% due 02/15/2029 Rating AAA	519,299,256
8) 422,340,000	U.S. Treasury Notes 6.000% due 08/15/2009 Rating AAA	409,009,896
9) 390,000,000	U.S. Treasury Bond 3.625% due 07/15/2002 Rating AAA	405,470,636
10) 377,950,000	U.S. Treasury Notes 5.875% due 11/30/2001 Rating AAA	375,558,286

**SCHEDULE OF U.S. STOCK BROKERAGE  
Commissions Paid  
Year Ended December 31, 1999**

Brokerage Firms	Shares Traded	Commissions Paid	Average Cents Per Share
Morgan Stanley & Company	80,363,343	\$ 2,766,059	3.4
Donaldson, Lufkin & Jenrette	39,012,283	1,630,272	4.2
Bear, Stearns & Company	39,644,591	1,549,640	3.9
Merrill Lynch, Inc.	32,582,189	1,305,069	4.0
Prudential Securities	22,991,404	1,137,332	4.9
Deutsche Banc Alex Brown	22,787,603	984,403	4.3
Salomon Smith Barney	19,898,248	977,617	4.9
Lehman Brothers, Inc.	19,962,294	970,204	4.9
Goldman, Sachs & Company	23,292,865	935,864	4.0
Paine Webber Mitchell Hutchins	22,128,333	912,962	4.1
First Boston Corporation	17,149,975	839,798	4.9
J.P. Morgan Securities, Inc.	16,982,209	837,811	4.9
Wertheim, Schroder & Co., Inc.	13,408,439	670,422	5.0
Jegg Mason & Company Inc.	20,345,834	651,615	3.2
CIBC World Markets	12,734,877	627,610	4.9
NationsBanc Montgomery Sec.	11,125,979	514,947	4.6
Monness, Crespi, Hardt & Co	9,058,881	425,344	4.7
William Blair	7,889,081	381,614	4.8
ABN AMRO Chicago Corporation	6,937,246	340,616	4.9
Jefferies & Company Inc.	6,364,986	308,879	4.9
Bernstein, Sanford C.	5,804,000	290,200	5.0
Sowen & Company	5,479,700	275,442	5.0
Warburg Dillon Read	5,376,752	267,053	5.0
Gerard, Klauer	4,560,030	226,914	5.0
Cantor Fitzgerald & Company	4,836,282	225,690	4.7
Others (includes 52 Brokerage Firms)*	94,149,313	4,542,395	4.8
<b>TOTAL</b>	<b>564,866,737</b>	<b>\$24,595,772</b>	<b>4.4</b>

A complete list of brokerage firms used in 1999 by PERS is available upon request.

# Investment Summary

	1999		1998	
	Fair Value	Percentage of Total Fair Value	Fair Value	Percentage of Total Fair Value
Fixed Income:				
U.S. Government & Agencies	\$ 4,171,338,316	7.26%	\$ 7,761,987,304	15.31%
Corporate Bonds	7,009,183,988	12.19	6,554,240,994	12.93
Mortgage & Mortgage Backed	7,389,585,637	12.85	7,239,428,115	14.28
Total Fixed Income	18,570,107,941	32.30	21,555,656,413	42.52
Common Stock	20,223,351,929	35.18	19,486,730,838	38.44
Real Estate	5,782,632,832	10.06	4,762,601,120	9.40
Venture Capital	93,645,833	0.16	43,855,913	0.09
International	11,826,348,399	20.57	2,446,360,635	4.83
Short-term Investments				
Commercial Paper	614,042,993	1.07	871,332,779	1.72
U.S. Treasury Obligations	376,972,817	0.66	1,521,104,962	3.00
<b>TOTAL</b>	<b>\$ 57,487,102,744</b>	<b>100.0%</b>	<b>\$ 50,687,642,660</b>	<b>100.0%</b>

# Actuarial Section

# Report of the Actuary



**GABRIEL, ROEDER, SMITH & COMPANY**  
Consultants & Actuaries

1000 Town Center • Suite 1000 • Southfield, Michigan 48075 • 248-799-9000 • 800-521-0498 • fax 248-799-9020

June 2, 2000

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

Dear Board Members:

The basic financial objective of the Public Employees Retirement System (PERS) is to establish and receive contributions which:

- when expressed in terms of percents of active member payroll will remain approximately level from generation to generation, and
- when combined with present assets and future investment return will be sufficient to meet the financial obligations of PERS to present and future retirees and beneficiaries.

The financial objective is addressed within the annual actuarial valuation. The valuation process develops contribution rates that are sufficient to fund the plan's current cost (i.e. the costs assigned by the valuation method to the year of service about to be rendered), as well as to fund unfunded actuarial accrued liabilities as a level percent of active member payroll over a finite period. The most recent valuations were completed based upon population data, asset data, and plan provisions as of December 31, 1998.

The plan administrative staff provides the actuary with data for the actuarial valuation. The actuary relies on the data after reviewing it for internal and year-to-year consistency. The actuary summarizes and tabulates population data in order to analyze longer-term trends. The plan's external auditor also audits the actuarial data annually.

The actuary prepared the following supporting schedules for the Comprehensive Annual Financial Report.

## Actuarial Section

Summary of Actuarial Assumptions  
Percent Retiring Next Year  
Probabilities of Retirement for Members Eligible to Retire  
Percent Separating Within Next year  
Individual Employee pay Increases  
Analysis of Financial Experience

## Financial Section

Schedule of Funding Progress



June 2, 2000

PERS Staff prepared the schedules showing the trend of short-term solvency based upon material prepared by the actuary.

Assets are valued on a market related basis that recognizes each year's difference between actual and assumed investment return over a closed four-year period.


Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. The Board adopts these assumptions after considering the advice of the actuary and other professionals. The assumptions comply with the requirements of Statement 25 of the Governmental Accounting Standards Board. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the contribution rates as needed. The December 31, 1998 valuations were based upon assumptions that were recommended in connection with a study of experience covering the 1991-95 period.

Pension experience was favorable during 1998. Assets now exceed accrued pension liabilities by a small margin. Whether or not this condition will continue indefinitely depends on future experience. Experience in the Retiree Health Plan, on the other hand, was less favorable than anticipated, leading to a shortening of computed solvency periods. Unfavorable experience in the Retiree Health Plan over an extended period of time could produce a need to modify plan design and/or to increase contributions to that plan.

**Based upon the results of the December 31, 1998 valuations, we are pleased to report to the Board that the Public Employees Retirement System of Ohio is meeting its basic financial objective and continues in sound condition in accordance with actuarial principles of level percent of payroll financing.**

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

  
Norman L. Jones, F.S.A., M.A.A.A.

  
Brian B. Murphy, F.S.A., M.A.A.A.

BBM:msw:md

GABRIEL, ROEDER, SMITH & COMPANY

# Summary of Assumptions

The following methods and assumptions were adopted by the Retirement Board after consulting with the Actuary. All assumptions are approved annually by the Board.

**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.

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

*Investment Return.* 7.75 percent, compounded annually, for all members and beneficiaries.

**Active Employee Total Payroll.** Increasing 4.75 percent annually, compounded annually, which is the inflation 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			Inflation	Increase Next Year		
	State	Local	Law		State	Local	Law
30	2.62 %	2.40 %	3.10 %	4.75 %	7.37 %	7.15 %	7.85 %
40	1.66	1.70	1.70	4.75	6.41	6.45	6.45
50	0.88	1.00	1.14	4.75	5.63	5.75	5.89
60	0.54	0.54	0.70	4.75	5.29	5.29	5.45

**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			
		Men	Women	State Men	State Women	Law Enforcement	Local Men	Local Women	Men	Women	
	0			39.00 %	35.00 %	18.00 %	36.00 %	34.50 %			
	1			17.00	17.00	10.00	17.00	18.00			
	2			13.00	14.00	8.00	13.00	14.00			
	3			9.00	10.00	7.00	10.00	11.00			
	4			6.50	8.00	6.00	8.00	9.00			
30	5 & over	.05 %	.03 %	5.16	6.66	3.52	5.40	7.28	.11 %	.08 %	
40		.11	.06	3.36	4.00	2.32	3.52	4.40	.36	.25	
50		.34	.13	2.28	2.90	1.62	2.82	3.36	.91	.65	
60		.84	.32	.60	.70	.50	.60	.80	1.97	1.64	

**Assets Valuation Method.** For actuarial purposes, assets are valued utilizing a method which recognizes expected return plus or minus a percentage of realized and unrealized investment gains and losses above or below expected return.

**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.

**Decrement Assumptions.** The following tables of probabilities for the indicated risk areas are used by the Actuary.

*Mortality.* The tables used in evaluating allowances to be paid were 90% of the 1971 Group Annuity Mortality Male and Female tables, projected to 1984

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

Retirement Age	% Retiring Next Year				
	State		Local		Law Enforcement
50-54	15 %	20 %	23 %	20 %	25 %
55-58	15	20	23	20	25
59	18	21	20	20	20
60	20	22	25	25	15
61	21	25	25	28	15
62	22	30	27	30	15
63	25	30	28	30	15
64	25	30	30	30	15
65	25	25	25	25	30
66	25	20	25	25	30
67	25	20	20	20	25
68	25	20	20	20	25
69-79	25	20	20	20	30
80	100	100	100	100	100

## Actuarial Valuation Data

Valuation Year	Active Members			Retired Lives			
	Number	Annual Payroll (\$ Millions)	Average Pay	% Increase in Average Pay	Number*	Annual Allowance (\$ Millions)	Average Allowance
1989	270,683	\$ 5,597	\$ 20,677	3.20 %	105,643	\$ 715	\$ 6,768
1990	277,963	6,036	21,715	5.02	107,177	762	7,109
1991	324,948	6,651	20,468	5.74	108,971	820	7,525
1992	333,848	6,889	20,635	(0.82)	111,779	896	8,016
1993	339,190	7,236	21,333	3.38	113,950	965	8,469
1994	343,477	7,625	22,119	3.68	116,001	1,024	8,828
1995	344,632	7,973	23,135	4.59	118,280	1,106	9,351
1996	352,408	8,340	23,666	2.30	121,219	1,216	10,031
1997	352,960	8,640	24,479	3.44	124,258	1,311	10,551
1998	354,431	9,017	25,441	3.93	127,139	1,409	11,082

\*Retired lives number represents an individual count of retirants and beneficiaries.

## Schedule of Retirants and Beneficiaries Added to and Removed from Rolls

Year Ended	Added to Rolls		Removed from Rolls		Rolls at End of Year		Percentage Increase in Annual Allowances	Average Annual Allowances
	Number	Annual Allowances	Number	Annual Allowances	Number*	Annual Allowances		
1994	6,318	\$ 75,309,312	4,159	\$ 9,811,987	114,342	\$ 1,019,030,837	6.87 %	\$ 8,912
1995	6,796	95,567,616	4,433	18,719,272	116,705	1,095,879,181	7.54	9,390
1996	7,497	108,028,996	4,406	12,574,601	119,796	1,191,333,576	8.71	9,945
1997	7,457	118,084,211	4,465	11,278,145	122,788	1,298,139,642	8.97	10,572
1998	7,556	116,000,363	4,926	18,222,925	125,418	1,395,917,080	7.53	11,130
1999	7,513	125,218,771	4,933	21,503,909	127,998	1,499,631,942	7.43	11,716

\*This number represents actual number of warrants written at year end. One warrant may be issued to multiple beneficiaries.

## Short-Term Solvency Test

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

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 (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	Portions of Accrued Liabilities Covered by Reported Assets		
					(1)	(2)	(3)
1989	\$ 3,076	\$ 7,510	\$ 13,208	\$ 18,550	100 %	100 %	60%
1990	3,386	7,981	14,826	20,655	100	100	63
1991	3,720	8,582	16,169	23,097	100	100	67
1992	4,062	9,403	17,536	25,969	100	100	71
1993	4,481	10,010	19,688	29,251	100	100	75
1994	4,895	10,605	20,710	31,771	100	100	79
1995	5,299	11,477	22,378	34,877	100	100	81
1996 *	5,681	12,531	14,419	30,534	100	100	85
1997 *	6,074	13,587	15,311	33,846	100	100	93
1998 *	6,508	14,665	16,541	38,360	100	100	104

\* Does not include assets set aside to pay healthcare benefits.

## 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			
	1998	1997	1996	1995
<b>Age &amp; Service Retirements.</b> If members retire at older ages than assumed, there is a gain. If younger ages, a loss.	\$ 48.6	\$ 27.2	\$ 19.9	\$ 28.7
<b>Disability Benefits.</b> If disability claims are less than assumed, there is a gain. If more claims, a loss.	49.4	44.8	57.4	64.3
<b>Death-in-Service Annuities.</b> If survivor claims are less than assumed, there is a gain. If more claims, a loss.	3.5	3.1	3.6	3.8
<b>Other Separations.</b> If more liabilities are released by other separations than assumed, there is a gain. If smaller releases, a loss.	( 143.3 )	( 89.6 )	( 145.8 )	( 278.9 )
<b>Pay Increases.</b> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	288.1	267.6	274.0	341.8
<b>Investment Return.</b> If there is greater investment return than assumed, there is a gain. If less return, a loss.	1,733.3	801.4	573.5	394.6
<b>Health Insurance &amp; Medicare Premiums.</b> If there are smaller increases than assumed, there is a gain. If greater increases, a loss.	N/A *	NA *	560.1	( 58.3 )
<b>Gain (or Loss) During Year from Financial Experience</b>	\$ 1,979.6	\$ 1,054.5	\$ 1,342.7	\$ 496.0

\*Gains (or losses) are no longer calculated on health insurance and Medicare premiums because PERS no longer calculates accrued liabilities for health care.



*Statistical  
Section*

# Employer Contribution Rates

	Year	Current		Survivor Benefits	Unfunded Liability		Total
		Normal	Health		Past Service	Health	
<b>State</b>	1990	5.15 %	3.16 %	1.01 %	3.07 %	1.32 %	13.71 %
	1991*	5.48	3.34	1.01	2.40	1.08	13.31
	1992	5.49	3.34	1.02	2.51	0.95	13.31
	1993	5.49	3.24	1.08	2.45	1.05	13.31
	1994	5.34	3.37	1.07	2.61	0.92	13.31
	1995	5.31	3.39	1.09	2.62	0.90	13.31
	1996	5.57	3.54	1.09	2.36	0.75	13.31
	1997	5.62	3.31	0.59	2.81	0.98	13.31
	1998	5.62	4.20	0.59	2.90	0.00	13.31
	1999	5.62	4.20	0.59	2.90	0.00	13.31
<b>Local</b>	1990	4.65 %	3.92 %	0.99 %	2.89 %	1.50 %	13.95 %
	1991*	4.99	4.13	0.99	2.31	1.13	13.55
	1992	5.02	4.17	1.00	2.42	0.94	13.55
	1993	4.95	4.20	1.00	2.49	0.91	13.55
	1994	4.81	4.29	0.99	2.64	0.82	13.55
	1995	4.85	4.26	1.00	2.59	0.85	13.55
	1996	5.16	4.44	1.00	2.28	0.67	13.55
	1997	5.57	4.29	0.59	2.28	0.82	13.55
	1998	5.57	4.20	0.59	3.19	0.00	13.55
	1999	5.57	4.20	0.58	3.20	0.00	13.55
<b>Law Enforcement</b>	1990	7.73 %	4.33 %	1.45 %	3.34 %	1.25 %	18.10 %
	1991	8.23	4.37	1.45	1.13	0.82	16.00
	1992	8.08	4.46	1.44	1.29	0.73	16.00
	1993	7.87	5.06	1.45	1.49	0.13	16.00
	1994	8.21	4.93	1.44	1.16	0.96	16.70
	1995	7.97	4.82	1.56	1.28	1.07	16.70
	1996	8.15	4.95	1.56	1.10	0.94	16.70
	1997	9.61	4.70	0.89	0.74	0.76	16.70
	1998	9.61	4.20	0.89	2.00	0.00	16.70
	1999	9.61	4.20	0.88	2.01	0.00	16.70

\* Rate effective July 1, 1991

## DISBURSEMENTS BY CATEGORY

Year				Benefits		
	Annuities	Disabilities	Other Systems	Survivors	CPI	Post Retirement Legislative Increase
1990	\$ 493,081,656	\$ 63,546,647	\$ 3,229,381	\$ 37,764,185	\$ 106,013,735	\$ 50,389,589
1991	531,188,927	70,423,067	3,484,009	39,601,327	120,558,352	47,510,253
1992	577,820,133	78,697,614	4,550,956	41,737,122	135,927,428	44,686,312
1993	620,080,348	91,337,107	4,636,808	43,855,109	151,763,785	41,860,355
1994	655,822,239	105,602,623	5,222,468	46,229,029	167,031,125	39,123,353
1995	701,867,702	119,699,694	6,762,310	48,103,168	182,925,717	36,520,590
1996	757,995,460	138,848,062	4,734,682	50,844,206	199,783,533	39,127,634
1997	822,581,843	155,239,567	6,037,460	53,220,591	219,887,499	41,172,682
1998	881,261,294	173,229,819	5,937,875	55,975,704	241,745,889	37,766,500
1999	947,588,558	189,724,304	6,688,026	59,181,847	261,973,594	34,475,613

## Revenues by Source

Year	Members' Contributions	Employers' Contributions	Employers' Contributions as a Percentage of Covered Payroll	Investment Income (Net)	Other	Total
1990	\$ 517,629,799	\$ 858,207,902	13.96 %	\$ 1,876,319,720	\$ 159,017	\$ 3,252,316,438
1991	562,818,132	925,097,737	13.75	2,418,425,646	84,878	3,906,426,393
1992	589,700,557	971,602,348	13.51	2,648,454,471	( 189,141 )	4,209,568,235
1993	639,366,718	1,012,814,909	13.51	2,683,394,902 *	592,395	4,336,168,924
1994	679,907,661	1,065,570,715	13.51	( 134,383,505 )*	229,502	1,611,324,373
1995	698,987,279	1,107,696,800	13.53	6,134,722,598 *	263,915	7,941,670,592
1996	737,292,990	1,181,597,072	13.54	2,848,123,681 *	867,738	4,767,881,481
1997	773,100,594	1,233,637,457	13.54	5,421,861,077 *	754,023	7,429,353,151
1998	799,281,516	1,266,445,268	13.55	6,045,862,119 *	237,360	8,111,826,263
1999	839,186,449	1,327,889,681	13.56	6,495,797,615 *	1,785,346	8,664,659,091

\* GASB 25 was adopted in 1994 and applied retroactively to January 1, 1993. As a result, net investment income includes net appreciation (depreciation) in fair value of investments for 1993 through 1999 which can create significant fluctuations.

			<i>Refunds</i>		Total
Health Care	Death Benefits	Separation	Beneficiaries	Other	All Payments
\$ 225,610,040	\$ 5,076,344	\$ 78,847,373	\$ 4,080,822	\$ 22,637,292	\$ 1,090,277,064
281,799,972	5,292,320	74,682,948	4,434,088	17,840,419	1,196,815,682
302,486,109	5,677,159	81,001,038	4,130,148	17,632,947	1,294,347,021
307,001,902	5,203,412	76,066,042	5,123,185	3,895,870	1,350,823,923
327,578,426	5,718,038	86,026,417	5,403,248	1,760,429	1,445,517,395
353,685,547	6,304,298	100,842,250	5,100,749	2,089,485	1,563,901,510
369,213,858	5,987,329	102,212,756	5,598,156	2,232,831	1,676,578,507
389,845,273	6,464,758	131,184,720	5,827,194	2,612,260	1,834,073,847
440,596,663	6,321,994	116,866,392	5,824,082	2,919,433	1,968,445,645
523,599,349	6,308,220	101,426,721	4,477,399	14,727,841	2,150,171,472

## *Expenses by Type*

Year	Benefit Payments	Refunds	Administrative Expenses	Total
1990	\$ 984,711,577	\$ 105,565,487	\$ 13,398,269	\$ 1,103,675,333
1991	1,099,858,227	96,957,455	15,421,235	1,212,236,917
1992	1,191,582,888	102,764,133	16,178,012	1,310,525,033
1993	1,265,738,826	85,085,097	17,029,933	1,367,853,856
1994	1,352,327,301	93,190,094	17,212,600	1,462,729,995
1995	1,455,869,026	108,029,484	18,232,175	1,582,130,685
1996	1,566,534,763	110,043,743	18,650,473	1,695,228,979
1997	1,694,449,673	139,624,174	20,107,718	1,854,181,565
1998	1,842,835,738	125,609,907	21,530,875	1,989,976,520
1999	2,029,539,511	120,631,961	24,142,273	2,174,313,745



# Schedule of Benefit Recipients by Benefit Type

December 31, 1999

Amount of Monthly Benefit	Number of Recipients	Annuities	Disabilities	Survivors
\$1-249	17,838	15,256	412	2,170
250-499	23,192	17,974	1,048	4,170
500-999	35,726	27,685	4,098	3,943
1,000-1,499	22,305	16,936	4,417	952
1,500-1,999	14,051	10,713	2,990	348
2,000 & over	14,886	12,781	1,903	202
Totals	127,998	101,345	14,868	11,785

# Schedule of Average Benefit Payments

	Years Credited Service					
	5-9	10-14	15-19	20-24	25-30	30+
<b>Period 1/1/94-12/31/94</b>						
Average Monthly Benefit*	\$314.31	\$474.69	\$729.08	\$1,060.73	\$1,349.43	\$2,063.74
Average Final Average Salary	\$17,733.22	\$20,670.67	\$24,551.76	\$27,275.35	\$29,551.75	\$33,982.60
Number of Active Recipients	466	1,146	892	783	837	1,287
<b>Period 1/1/95-12/31/95</b>						
Average Monthly Benefit*	\$396.39	\$529.18	\$783.36	\$1,085.29	\$1,437.61	\$2,221.76
Average Final Average Salary	\$21,078.58	\$23,778.57	26,398.46	\$28,785.11	\$31,832.60	\$36,962.98
Number of Active Recipients	488	1,170	927	901	959	1,735
<b>Period 1/1/96-12/31/96</b>						
Average Monthly Benefit*	\$362.95	\$478.46	\$797.55	\$1,107.09	\$1,431.25	\$2,202.08
Average Final Average Salary	\$19,249.83	\$21,922.79	\$27,153.13	\$29,667.77	\$32,237.22	\$37,557.22
Number of Active Recipients	550	1,173	996	1,014	1,047	1,976
<b>Period 1/1/97-12/31/97</b>						
Average Monthly Benefit*	\$414.29	\$532.41	\$815.71	\$1,122.26	\$1,458.31	\$2,305.37
Average Final Average Salary	\$21,619.77	\$25,050.77	\$28,384.15	\$30,867.41	\$33,741.06	\$40,359.77
Number of Active Recipients	534	1,191	979	914	967	2,153
<b>Period 1/1/98-12/31/98</b>						
Average Monthly Benefit*	\$396.14	\$512.69	\$796.03	\$1,121.63	\$1,443.49	\$2,201.75
Average Final Average Salary	\$19,720.50	\$24,318.01	\$28,340.27	\$31,316.13	\$34,151.53	\$39,870.07
Number of Active Recipients	554	1,294	1,014	973	1,028	2,153
<b>Period 1/1/99-12/31/99</b>						
Average Monthly Benefit*	\$468.30	\$545.41	\$834.50	\$1,135.37	\$1,496.99	\$2,315.90
Average Final Average Salary	\$22,724.67	\$26,513.71	\$29,827.86	\$32,856.47	\$35,700.70	\$42,947.64
Number of Active Recipients	446	1,095	846	897	960	2,079

\* "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
1990	85,916	8,294	10,981	105,191
1991	87,364	8,670	11,068	107,102
1992	89,736	9,079	11,158	109,973
1993	91,048	9,879	11,256	112,183
1994	92,224	10,758	11,360	114,342
1995	93,718	11,561	11,426	116,705
1996	95,739	12,547	11,510	119,796
1997	97,833	13,335	11,620	122,788
1998	99,619	14,146	11,653	125,418
1999	101,345	14,868	11,785	127,998

### Number of New Benefit Recipients and Refund Payments

Year	Annuities	Disabilities	Survivors	Refund
1990	4,140	745	451	24,878
1991	4,406	802	534	27,165
1992	5,330	793	505	38,894
1993	4,463	1,195	537	37,336
1994	4,428	1,327	563	39,457
1995	4,908	1,353	535	39,536
1996	5,394	1,536	567	38,195
1997	5,371	1,470	616	40,806
1998	5,490	1,487	579	38,299
1999	5,387	1,474	652	36,442

### Member Count

Year-end	Active Contributing	Inactive	Total
1990	278,969	73,882	352,851
1991	328,981	71,216	400,197
1992	349,674	73,660	423,334
1993	347,937	96,268	444,205
1994	358,149	110,745	468,894
1995	365,383	127,491	492,874
1996	369,467	148,274	517,741
1997	365,384	175,020	540,404
1998	371,563	192,273	563,836
1999	383,286	207,345	590,631

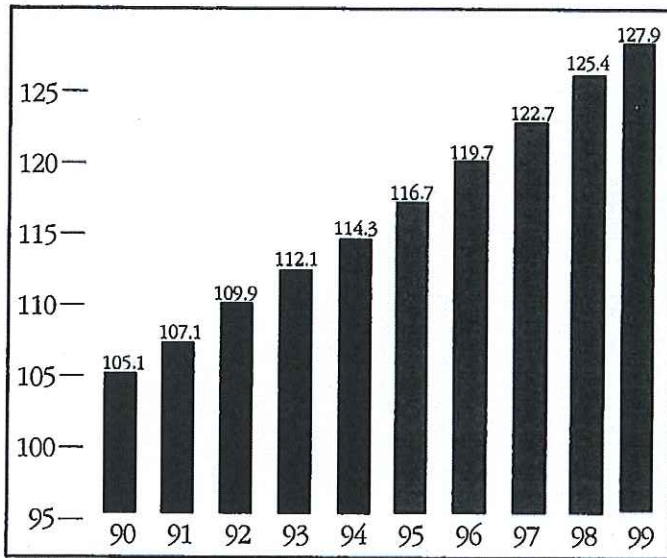
### Member Contribution Rates

Year	Regular	Law Enforcement
1990	8.5%	9.5%
1991	8.5	9.0
1992	8.5	9.0
1993	8.5	9.0
1994	8.5	9.0
1995	8.5	9.0
1996	8.5	9.5
1997	8.5	9.0
1998	8.5	9.0
1999	8.5	9.0

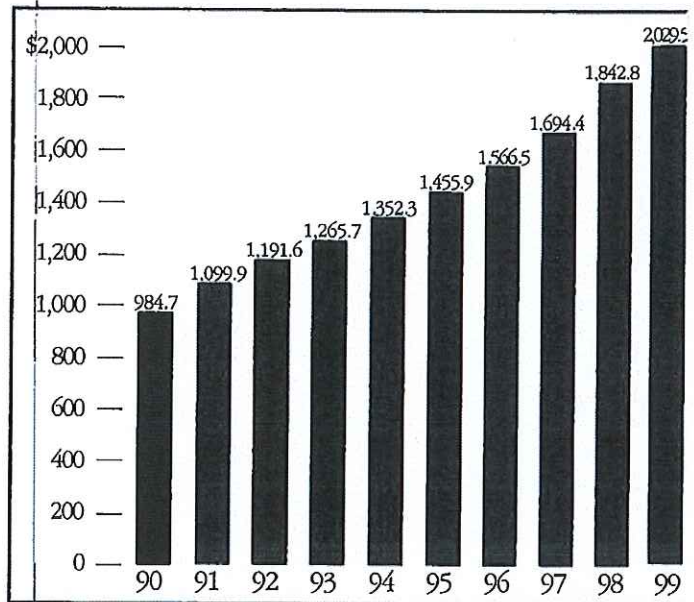
### Number of Employer Units

Calendar Year	Law								Totals
	State	County	Enforcement	Municipalities	Villages	Miscellaneous	Libraries	Township	
1990	263	239	206	341	613	327	255	1,310	3,554
1991	263	237	212	339	611	327	256	1,311	3,556
1992	265	234	211	336	613	320	256	1,310	3,545
1993	280	238	214	338	620	324	257	1,312	3,538
1994	287	238	207	340	634	340	257	1,311	3,614
1995	288	238	208	340	651	354	256	1,310	3,645
1996	289	238	213	339	658	374	256	1,312	3,679
1997	292	236	226	338	666	379	256	1,312	3,705
1998	327	247	233	338	672	400	256	1,312	3,785
1999	332	247	233	337	673	406	257	1,312	3,797

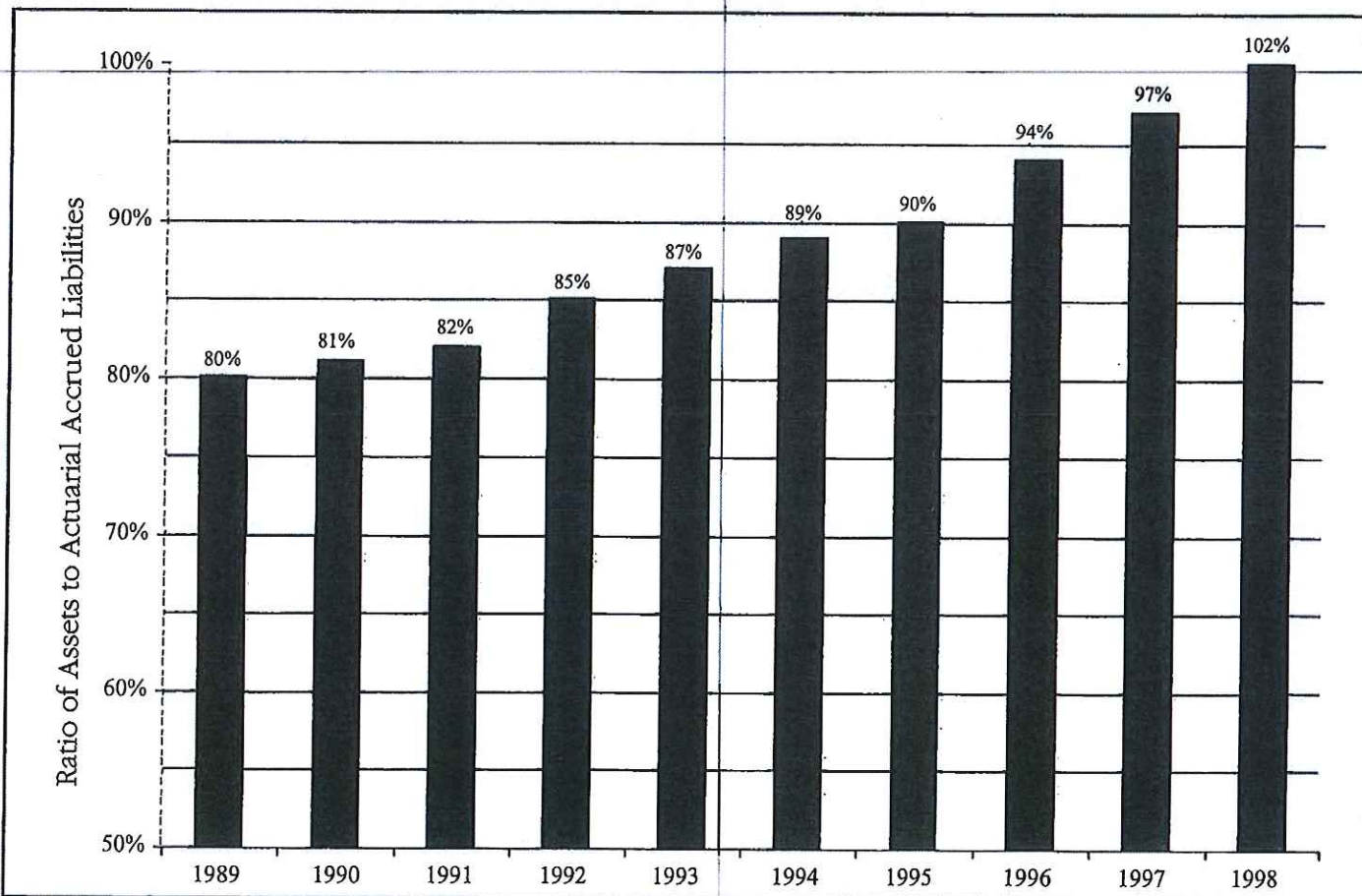
*Total Benefit Recipients*  
(in thousands)



*Total Benefit Payments*  
(\$ in Millions)



*Funding Progress*  
(Pension Only)





Plan  
Statement

The Public Employees Retirement System of Ohio (PERS) was created by the Ohio General Assembly to provide retirement, disability, and survivor benefit programs for the public employees of Ohio. This summary outlines the Ohio law which regulates PERS; however, it cannot and does not change any of the provisions of the Ohio Revised Code.

Member Eligibility

All public employees, except those covered by another state retirement system in Ohio or by the Cincinnati Retirement System, are required to become contributing members of PERS when they begin public employment unless they may be exempted or excluded.

The law provides for optional membership for elected public officials. Students, not already members, working for the public school, college, or university they are attending may be exempt from contributing to PERS by filing a request for exemption within the first month of employment.

The following individuals are excluded from membership:

- 1) inmates of state correctional institutions;
2) patients in hospitals operated by the Departments of Mental Health or Mental Retardation;
3) patients in the Ohio Veterans' Home and residents of county homes;
4) elected officials of public employers who have no employees subject to PERS coverage;
5) employees of temporary help services who perform services for public employers;
6) individuals serving on a temporary basis in case of fire, storm, snow, earthquake, flood, or other similar emergency;
7) persons employed under the federal Job Training Partnership Act;
8) members of the Motor Vehicle Salvage Dealers Board or the Motor Vehicle's Board;
9) employees of private contractors except public employees transferred with previously publicly-operated functions and performing the same duties as before;
10) individuals performing services under a contract as an independent contractor;
11) election workers who earn less than \$500 per calendar year;
12) firefighters except those who were members before Aug. 3, 1992 and elected to remain members;
13) board members of city or general health district boards of health whose compensation is established in Section 3709.02 or 3709.05;

- 14) full-time faculty and administrative state employees in the unclassified civil service of state colleges/universities who choose to participate in an alternate retirement plan (ARP); and
15) board members of a sanitary district established under Chapter 6115.

PERS provides special retirement coverage for certain law enforcement officers. These individuals, who must have a Peace Officer's Training School Certificate, are covered if they were hired on or after the dates of the enabling legislation. If they were employed before the legislation was enacted, they had the option to be covered; if they did not elect to law enforcement coverage, they remained under the regular PERS schedule of benefits.

Those listed below, whose primary duties are to preserve the peace, to protect life and property, and to enforce the laws of Ohio, are covered they are:

- 1) sheriffs and deputy sheriffs;
2) full-time township constables or police officers,
3) criminal bailiffs or court constables who were deputized by a county sheriff and employed under Section 2301.12,
4) full-time state university law enforcement officers under Section 3345.04,
5) full-time bailiffs or deputy bailiffs appointed by the Hamilton County Municipal Court Clerk of Courts under Section 1901.32(A)(3), and
6) full-time county narcotics agents.

The following groups also are eligible for law enforcement coverage:

- 7) full-time undercover drug agents as defined in Section 109.79,
8) full-time enforcement agents with the Ohio Department of Public Safety under Section 5502.14,
9) full-time park officers under Section 1541.10, forest officers under Section 1503.29, wildlife officers under Section 1531.13, or state watercraft officers under Section 1547.521 with the Ohio Department of Natural Resources,
10) full-time park district police officers under Section 511.232 or 1545.13,
11) full-time conservancy district officers under Section 6101.75,
12) full-time municipal corporation police officers not covered by the Ohio Police and Fire Pension Fund,
13) police employed by the Ohio Veterans' Home under Section 6907.02,

- 4) special police employed by a state mental health institution under Section 5119.14, and
- 5) special police employed by a state institution for the mentally retarded and developmentally disabled under Section 5123.13.

## 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 state contribution rate is 13.31 percent. Local employers contribute 13.55 percent and employers in the law enforcement division contribute 16.70 percent.

The current contribution rate for members is 8.5 percent of earnable salary. Members in the law enforcement division pay 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 their individual account as of the previous Dec. 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 account.

## *Benefits for Contributing Members*

### *Age and Service Retirement*

Members are eligible to retire at age 60 with at least five years 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 for which contributions have been paid;
- 2) certain military service which interrupted contributing public service;
- 3) any out-of-public service period of three years or less during which the member was receiving an award under Workers' Compensation;
- 4) previously unreported service in Ohio;
- 5) 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 service in the State Highway Patrol and covered by the Highway Patrol Retirement System that is not being used for other retirement benefits;
- g) service which was previously covered by a valid exemption under PERS;
- h) 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;
- i) service purchase 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 their death to a spouse (Plan A) or to another designated beneficiary (Plans C, or D-joint and survivor annuity). 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 (FAS), age, and plan of payment selection. FAS is determined by taking the average of the three highest years of earnable

salary. In no case can the age and service formula benefit exceed 100 percent of FAS or the limits under Internal Revenue Code Section 415.

### *Disability Benefits*

PERS members are eligible for one of two disability programs, the **original** plan or the **revised** plan. Employees who had contributions on deposit with PERS on July 29, 1992 had a one-time opportunity to select coverage under one of these programs. Those employees hired after July 29, 1992 are covered only under the revised plan. There are a number of features common to both plans.

A member who has at least five years of contributing service credit and becomes disabled for the performance of duty may apply to the Retirement Board for monthly disability benefits. Those members in the law enforcement division do not need five years of service credit to apply for disability if the disabling condition was the result of an on-duty illness or injury, or an injury which occurred during or resulted from the performance of duty.

A member must go off the payroll because of a presumably permanent disabling condition, either mental or physical, which prevents performance of their job. No more than two years must have passed since the member's job termination unless at the end of the two-year period, the member was disabled and unable to file an application. The member must not be receiving an age and service retirement benefit. If the Retirement Board approves the disability application, the benefit is effective the first day of the month following the member's service termination, provided the member is otherwise eligible. A disability benefit recipient may be required to have a medical examination at least once a year.

A disability benefit terminates under either plan if the member is no longer disabled, returns to public service, chooses to begin receiving an age and service benefit, dies, or requests termination of the benefit.

The amount of disability allowance under the original plan is based on the FAS and years of service with PERS, plus the length of time between the effective date of disability and age 60. The disability benefit cannot exceed 75 percent, nor be less than 30 percent of the member's final average salary. The benefit is fully taxable until normal retirement age and then a specified dollar amount each month representing the return of taxed contributions is tax-free. For a law enforcement

member disabled due to an on-duty injury or illness, 30 percent of the benefit payment is excludable from taxable income.

The benefit under the revised plan is based on the FAS and years of service with PERS with no early retirement reductions, but cannot be less than 45 percent or exceed 60 percent of FAS. The benefit is fully taxable as long as it is received. For a law enforcement member disabled due to an on-duty injury or illness, 45 percent of the benefit payment is excludable from taxable income.

When the disability benefit under the revised plan ends, the member may have the opportunity to apply for a service retirement benefit or apply for a refund of the account, which is not reduced by the amount of disability benefits paid. The benefit amount would be the greater of: a) 2.1 percent of FAS multiplied by the years of service (contributing and disability) not to exceed 45 percent of FAS, or b) the regular or law enforcement benefit calculation using only the member's years of contributing service.

### *Survivor Benefits*

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

- 1) Spouse.
- 2) Children.
- 3) Dependent parents.
- 4) If none of the above, parents share equally in a refund of the account.
- 5) If none of the foregoing, a refund of the account will be paid to the estate.

Qualified beneficiaries will be eligible to receive monthly survivor benefits if, at the time of the member's death, at least one of the following qualifications was met:

- 1) 18 full months of Ohio service credit with three of those months within the two and one half years immediately before death, or
- 2) receiving a disability benefit from PERS, or
- 3) eligible for retirement but did not retire and continued to work

If, at the member's death, none of these requirements were met, a refund of contributions paid into PERS for the account may be made. The member's beneficiary may choose a refund of contributions only if there are not children eligible for monthly benefits. If the member dies while receiving a disability benefit under the original plan and eligible survivors are allowed to select a cash refund of the account, the amount is reduced by the amount of disability benefits that had already been paid. There is no reduction in amount if the member dies while receiving a benefit under the revised disability plan or while still working.

**Surviving Spouse** – If the member had at least 10 full years of Ohio service credit, their surviving spouse (at age 50 or older, with no children eligible for monthly benefits) may receive benefits of \$106 a month or an amount equal to 25 percent of final average salary, whichever is higher. If the member had less than 10 full years of Ohio service credit, the surviving spouse (at age 52 or older with no children eligible for monthly benefits) may receive the greater of \$96 per month or 25 percent of final average salary.

These benefits are payable regardless of the age of a surviving spouse adjudged physically or mentally incompetent. Also, a spouse with children eligible for monthly benefits will receive a benefit immediately regardless of the age of the spouse.

As long as the member did not have any children eligible for a monthly benefit, and the member was eligible to retire on a monthly benefit but chose to stay on the job, a monthly benefit for the spouse at the member's death may be calculated as though the member had retired and taken Plan D. This option provides for the monthly allowance to continue through the spouse's lifetime.

**Child** – A child may qualify for monthly benefits if they are an unmarried or legally adopted child under age 18, (or 22, if a qualified student attending an accredited school) or a child, at any age, who is physically or mentally incompetent at the time of the member's death. Benefits terminate upon a first marriage, adoption, abandonment, death, or during active military service.

Also, survivor benefits will be stopped after a 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. Forms are provided by PERS for submission

of the necessary proof by the surviving spouse or student, and by the school.

**Dependent Parent** – A dependent parent is one who received at least one-half support from the member during the 12 months preceding the member's death. A dependent parent may receive survivor benefits if age 65 or older, or at any age if adjudged physically or mentally incompetent at the time of the member's death. Payments to dependent parents stop in the event of a first marriage or death.

### *Additional Benefits*

**Health Care Coverage** – PERS-provided health care is not a statutorily-required benefit. Currently, when applying for age and service retirement a member with 10 years of Ohio service credit shall have PERS health care plan coverage available. These 10 years may not include out-of-state and/or military service purchased after Jan. 29, 1981, service credit granted under a retirement incentive plan, or credit purchased after May 4, 1992 for exempt service. Health care coverage for disability recipients and primary survivor recipients is available. Dependents of eligible recipients may be covered through premium deductions. Qualified benefit recipients also may be eligible for alternative health care plans (HMOs) which may require a premium deduction.

Members with less than 10 years of service credit at age and service retirement may obtain access to independent health care coverage offered by our health care administrators. This coverage is neither offered by PERS nor is it the responsibility of the Retirement System. PERS does not pay premiums, claims, or withhold any premiums for this coverage.

**Medicare Part B Reimbursement** – Recipients who are eligible for health care must enroll in Medicare B (medical) when they become eligible for Medicare B even if they are covered by health care through their current employer. Proof of enrollment must be submitted and PERS will then reimburse a recipient for the basic premium cost of the Medicare B premium as long as the recipient is enrolled in Medicare B. The amount is added to the monthly benefit.

**Cost-of-Living Adjustment** – Once a benefit recipient has received benefits for 12 months, an annual cost-of-living adjustment is provided to benefit recipients in each year the Consumer Price Index (CPI) shows an increase. The adjustment is the lesser of 3 percent or the actual CPI increase.



**Death Benefit** – Upon the death of an age and service or disability benefit recipient, a lump sum death benefit is paid to the qualified beneficiary. The benefit, from \$500 to \$2,500, is based on the recipient's years of service credit.

### *Refunds*

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

Before a refund may be issued, the law requires three months must elapse from the date certified by the employer that the member terminated public employment. If a member is also a member of the State Teachers Retirement System or the 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 employment for at least 18 months, the amount refunded, plus interest, may be redeposited and service credit restored.

### *Coverage and Benefits for Re-Employed Retirants*

After a member retires, re-employment in a job that is covered by PERS, including service in an elected position, may affect continuing receipt of an age and service retirement benefit.

Retirants begin contributing from the first day of re-employment at a rate of 8.5 percent of earnable salary. State employers contribute 13.31 percent for these re-employed retirants and local employers contribute 13.55 percent.

A retirant should not be re-employed for at least six months after retirement from a PERS-covered employer. A retirant who returns to work and has not been retired for the required six months must contribute, but the current retirement allowance for each month in which re-employment occurs during those six months will be forfeited.

All re-employed retirants must elect to either:

- 1) receive compensation, have their retirement allowance suspended for the period of re-employment and make contributions toward a formula benefit, or
- 2) receive compensation, continue to receive their retirement allowance and make contributions toward a money purchase annuity, which is based on the calculation of the sum of employee contributions for the period of re-employment, plus allowable interest multiplied by two.

If the PERS retirant elects to receive both the retirement allowance and salary for the re-employment period, the employer must provide the re-employed retirant's primary health care coverage if it is available to employees in comparable positions. The employer health care coverage cannot be waived by the re-employed retirant. Suspension or forfeiture of the retirement allowance interrupts the retirant's health care coverage.

A person who is retired from PERS and returns to PERS-covered employment as an elected official is treated as a re-employed retirant. A person who is retired from another Ohio state retirement system and becomes a PERS member as an elected official also is treated as a re-employed retirant. However, if a PERS member is covered for non-elected official service, and, also is an elected official contributing to Social Security for the elected position, their elected service has no effect on their PERS retirement, and they are not PERS re-employed retirants for subsequent elected services.

An elected official who retires during a term of office and who is re-appointed to the position during the same term or is elected to the position for the next consecutive term can choose only the option to have their retirement allowance suspended and contribute to a formula benefit.

A PERS retirant cannot continue to receive benefits and work as an independent contractor under a contract for any period of time for the employer from which they retired.

A disability or age and service benefit recipient from another Ohio system coming into PERS-covered employment should be retired for at least two months and must begin contributions to PERS from the first day of employment. These recipients will earn only a money purchase annuity based on the calculation of the sum of employee contributions received for the period of re-employment, plus allowable interest, multiplied by two.