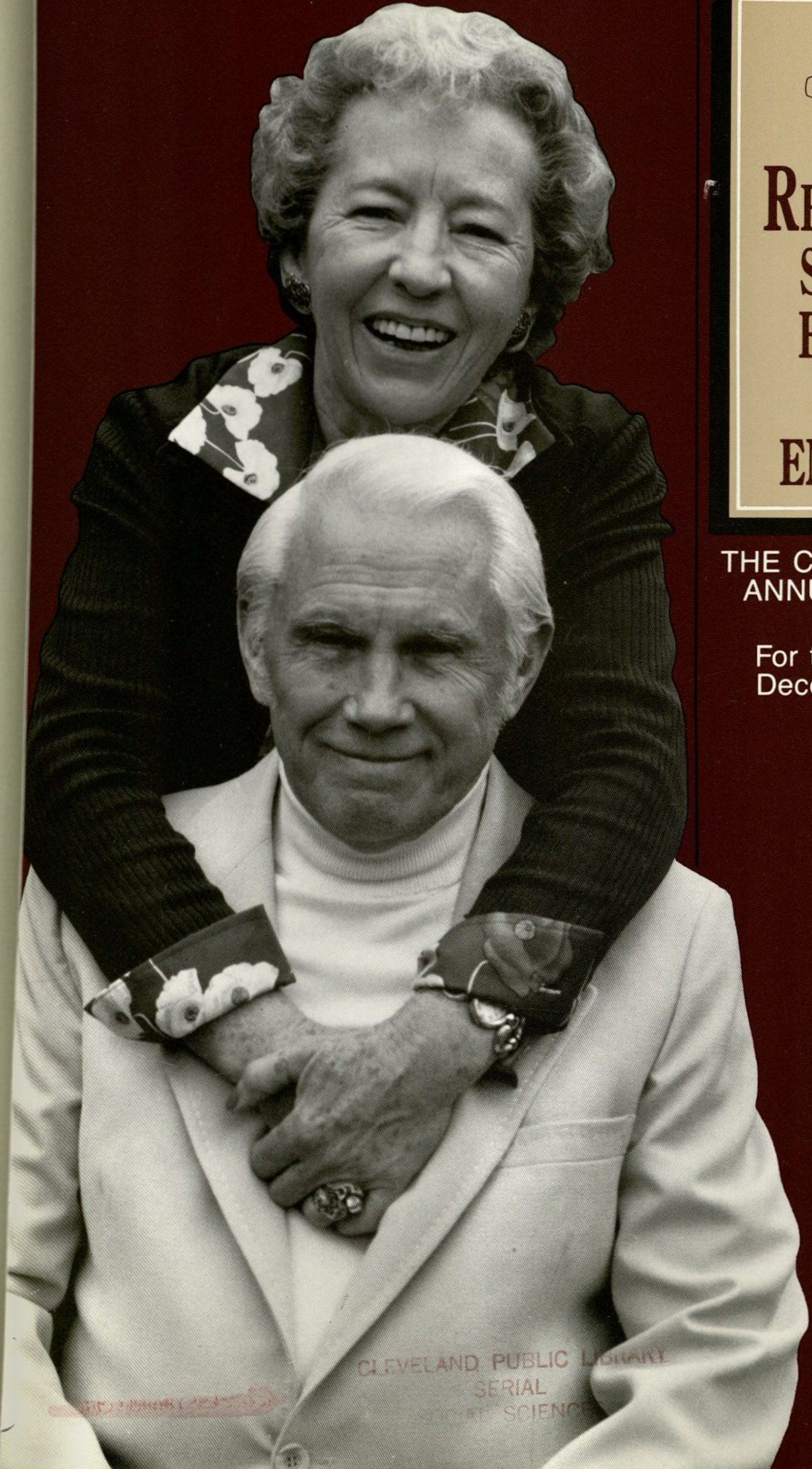
PUBLIC EMPLOYEES RETIREMENT SYSTEM OF OHIO

PERS

RETIREMENT SECURITY FOR OHIO PUBLIC EMPLOYEES

THE COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Year Ended December 31, 1988



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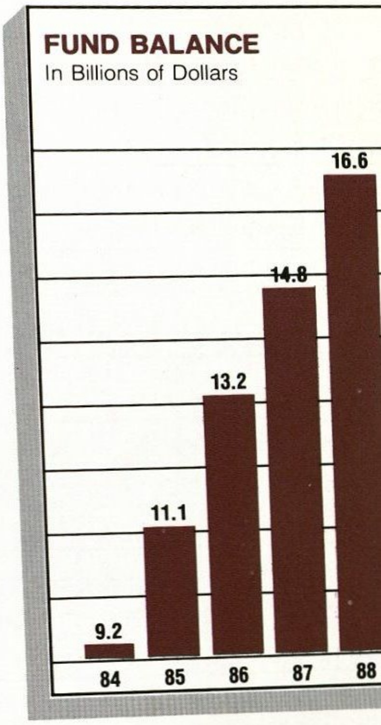
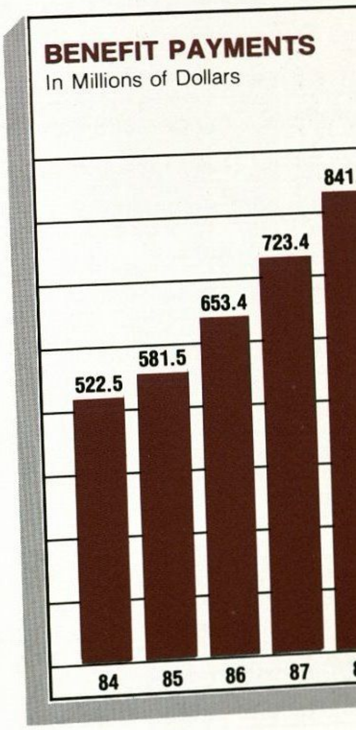
The Comprehensive Annual Financial Report
For The Year Ended December 31, 1988

Financial Summary

(In Dollars, 000's Omitted)	1988	1987
Member Contributions	$ 446,091	$ 420,978
Employer Contributions	769,145	741,840
Total Contributions	1,215,236	1,162,818
Investment and Other Income	1,451,387	1,325,418
Total Revenues	2,666,623	2,488,236
Benefit Payments	841,373	723,438
Refunds	81,220	81,803
Administrative Expense	11,256	10,271
Total Expenses	933,849	815,512
Excess of Revenues Over Expenses	1,732,774	1,672,724
Fund Balance, Beginning of Year	14,835,961	13,163,237
Fund Balance, End of Year	$16,568,735	$14,835,961





Public Employees Retirement System of Ohio
William S. McLaughlin, Executive Director
Richard E. Schumacher, Assistant Director, Controller
277 East Town Street, Columbus, Ohio 43215

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The Retirement Board

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

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

ELECTED MEMBERS

John M. Hurley
Representing Municipal Employees

Walter H. Kyle
Representing State Employees

Richard J. Rehmer
Representing College and University Employees

W. Emerson "Dusty" Rhodes
Representing Miscellaneous Employees

William G. Wilcox
Representing Retirants

Wayne F. Wilke
Representing County Employees

STATUTORY MEMBERS

Anthony J. Celebrezze, Jr.
Attorney General

Thomas E. Ferguson
State Auditor

William J. Flaherty
Director of Administrative Services

EXECUTIVE DIRECTOR

William S. McLaughlin

ASSISTANT DIRECTORS

Robert A. McLaughlin
Investments

Richard E. Schumacher
Controller

Seated (left to right) are: Walter H. Kyle, John M. F
F. Wilke, Dusty Rhodes, and Richard J. Rehmer; st

Anthony J. Celebrezze, Jr.

Thomas E. Fergusor

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

Letter of Transmittal

Dear Chairman and
Members of the Board:

It is a privilege to submit to you the Comprehensive Annual Financial Report for the Public Employees Retirement System of Ohio for the fiscal year ended December 31, 1988. We believe this report reflects a careful stewardship of the System's assets and dedicated service to members and retirants.

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

Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Public Employees Retirement System of Ohio for its Comprehensive Annual Financial Report for the fiscal year ended December 31, 1987. In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized Comprehensive Annual Financial Report whose contents conform to program standards. Such reports must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. We believe our current report continues to conform to Certificate of Achievement program requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Accounting System and Reports

The accrual basis of accounting is used in recording financial transactions. Expenses are recorded when the liability is incurred, and revenues are recorded in the accounting period in which they are earned and become measurable. Interest earned is accrued on a monthly basis. Entries for amortization of premium, accumulation of discount, and write-off of deferred loss also are accrued monthly. Losses on bond exchanges are accounted for under the deferral and amortization method. Accounts receivable at year end, in addition to accrued interest receivable, reflect accrued employer charges and investment proceeds due on sales that have not yet settled. Investments are recorded at cost; thus, on the balance sheet, bonds and mortgages are carried at amortized book value while stocks are carried at cost. Fixed assets are listed at cost less accumulated depreciation. Through our cash management program, receipts are deposited as received and are recorded as undistributed deposits until such time as they are allocated to member contributions, employer receivables, employer contributions, and investment income.

Management is responsible for maintaining systems of internal accounting controls which are designed to provide responsible assurances for the safeguarding of assets and the reliability of financial records. To help maintain these safeguards, an automated general ledger accounting system was installed July 1, 1988.

Revenues

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through investment income. The 1988 revenue from employee and employer contributions totaled $1,215.2 million. Net investment income for the period was $1,441.2 million. As a comparison, the same figures for 1987 were $1,162.8 million and $1,325.1 million, respectively. Contribution rates for both employees and employers remained unchanged from the prior year.

Expenses

Benefit payments are the primary disbursements of a Retirement System. Recurring benefit payments prescribed by the plan, refunds of the contributions to terminated employees, and the cost of administering the System comprise the total expense.

Disbursements to members and retirants for 1988 totaled $922.6 million. Of this amount $841.4 million was paid to the System's retirants and beneficiaries. Refunds to members or beneficiaries for reasons of separation from service or death totaled $81.2 million. Health care costs in 1988 amounted to $219.0 million. These costs are paid by the Public Employees Retirement System on a split-funding program initiated in January 1981. Claims processing is administered under this agreement by the Aetna Insurance Company.

Funding and Reserves

Funds, derived from the excess of revenues over expenses, are accumulated by the Retirement System in order to meet current and future benefit obligations to retirants and beneficiaries. The higher the level of funding, the larger the accumulations of assets and the greater the investment income potential. Continuous improvement in the funding of the System is sought through suitable reserves, higher investment earnings, and effective cost containment programs. As of December 31, 1988, funds established by the System totaled $16,568.7 million. The actuarial valuation dated December 31, 1987 reflects an unfunded accrued liability of $5,382.8 million. This is the difference between the employer accumulation fund balance and the actuarially calculated liability for the fund. This "unfunded accrued liability" is being amortized over future years. The state government and the local government liabilities are being funded over 38 years, and the law enforcement portion over 13 years.

Investments

The investment portfolio provided net revenues of $1,441.2 million in 1988. Net revenues are comprised of bond interest, accumulation of discount, amortization of premium, dividend income, recognized gains and losses on the sale of securities, and amortization of deferred loss on bonds sold. A detailed listing of the portfolio is presented on pages 36 to 47.

Professional Services

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

Changes Enacted

Amended House Bill 760 went into effect January 1, 1989, which increased the benefit formula for future retirants and provided certain benefit improvements for some PERS recipients. An increase in the death benefit was also a provision of this legislation.

Acknowledgements

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

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

Respectfully submitted,

William S. McLaughlin
Executive Director

Richard E. Schumacher
Assistant Director—Controller

June 1, 1989
Columbus, Ohio

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, 1987

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.

GOVERNMENT FINANCE OFFICERS ASSOCIATION OF THE UNITED STATES AND CANADA CORPORATION SEAL CHICAGO

President

Executive Director

Plan Statement
Retirement Security for Ohio Public Employees

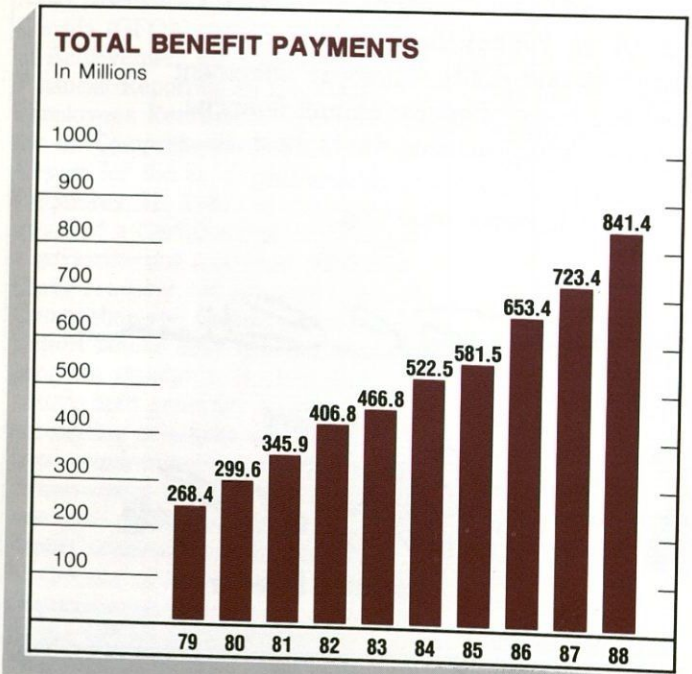
The Public Employees Retirement System of Ohio (PERS) was created by the Ohio General Assembly to provide retirement, disability retirement, and survivor benefit programs for the public employees of Ohio who are not covered by another state or local retirement system.

All public employees in Ohio, 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.

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

The following individuals are excluded from membership:

1. persons receiving a disability benefit or a service retirement allowance from any other Ohio public retirement system, unless membership in PERS and the other system was established prior to Aug. 20, 1976;
2. persons actively contributing to the Police and Firemen's Disability and Pension Fund, the State Highway Patrol Retirement System, or the Cincinnati Retirement System;
3. inmates of state correctional and penal institutions;
4. patients in hospitals operated by the Departments of Mental Health or Mental Retardation;
5. patients in the Ohio Veterans' Home and residents of county homes;
6. elected officials of public employers which are not covered by PERS;
7. employees of temporary help services who perform services for public employers;
8. employees of private contractors except public employees transferred with previously publicly-operated functions and performing the same duties as before;
9. individuals performing services under a personal service contract as an independent contractor; and
10. new, summer only, employees not members of PERS who are contributing to the State Teachers Retirement System or School Employees Retirement System on a full-time basis for the current school year.



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

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

Public Employees Retirement Law enables law enforcement personnel employed covered under the law enforcement division to retire with 25 years of law enforcement service credit at age 52, or at a reduced rate as early as age 48. The law also permits retirement at age 62 for any officer with at least 15 years of service credit. The maximum benefit limit is 90 percent of final average salary for effective benefit dates on or after Jan. 1, 1989.

Contributions

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

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

BENEFITS

Age and Service Retirement

Members are eligible to retire at age 60 with at least five years 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 performed for the state of Ohio or an Ohio political subdivision on which contributions have been paid;
2. certain military service which interrupted contributing public service;
3. prior service before 1935;
4. any out-of-public service period of three years or less during which the member was receiving an award under Ohio's Workers' Compensation;
5. previously unreported service in Ohio after 1935;
6. service purchased by the member for:
   a. other military service that is not being used for other retirement programs, except Social Security;
   b. prisoner-of-war service;
   c. an authorized leave of absence, which did not exceed one year;
   d. comparable public service that is not being used for other retirement programs, except Social Security, performed outside Ohio or with the federal government or for which contributions were made to an Ohio municipal retirement system;
   e. service restored by redeposit which had been cancelled by an earlier refund of PERS contributions;
   f. service in an Ohio police or fire department which was covered by the Police and Firemen's Disability and Pension Fund or in the State Highway Patrol which was covered by the Highway Patrol Retirement System that is not being used for other retirement benefits;
   g. up to 35 percent additional credit on completed terms of full-time contributing elective service or board, commission, or other public body service by members who are appointed by the governor with the advice and consent of the Senate;
7. service purchased by an employer under a retirement incentive plan.

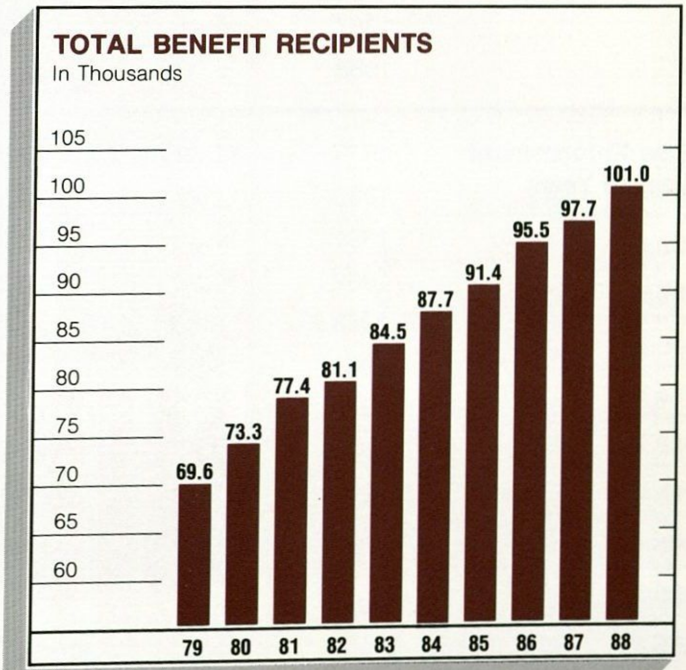
When a member files an application for age and service retirement a choice of several plans of payment is available. A Straight Life Annuity pays the highest amount but stops at the retirant's death. The optional plans provide a lesser benefit amount during a retirant's life but the benefit continues to a designated beneficiary after the retirant's death. A return of employee contributions is guaranteed.

Benefit payments vary in amount depending on length of public service, final average salary, age, and plan of payment selection. Final average salary is determined by taking the average of the three highest years of earnable salary. In no case can the age and service benefit exceed 90 percent of final average salary or 100 percent if the effective benefit date is on or after Jan. 1, 1989.

Disability Retirement

Before reaching age 60, a member who has at least five years of service credit and becomes permanently disabled for the performance of duty may apply to the Retirement Board for monthly disability benefits. Beginning Jan. 1, 1989, a member covered under the law enforcement division does not need five years of contributing credit to apply for disability if the disabling condition is the result of an on-duty illness or injury that occurred during or resulted from performance of duty.

The member may be required to have a yearly medical examination. The Board will select the physician and pay



EMPLOYER CONTRIBUTION RATES

	Calendar Year	Current: Normal	Current: Health	Current: Survivor Benefits	Unfunded Liability: Past Service	Unfunded Liability: Health	Total
State Last 10 Years	1979	6.62%	1.25%	1.32%	3.60%	0.92%	13.71%
	1980	6.41	1.31	1.34	3.92	0.73	13.71
	1981	6.40	1.27	1.04	4.09	0.91	13.71
	1982	5.77	1.10	0.99	4.93	0.92	13.71
	1983	4.55	1.65	0.86	5.25	1.40	13.71
	1984	4.61	1.70	0.80	5.13	1.47	13.71
	1985	4.73	2.17	0.84	4.47	1.50	13.71
	1986	4.84	2.23	0.75	4.35	1.54	13.71
	1987	4.98	2.19	0.84	4.22	1.48	13.71
	1988	5.43	2.78	1.06	3.36	1.08	13.71
Local Last 10 Years	1979	6.96	1.68	1.30	3.16	0.85	13.95
	1980	6.79	1.75	1.38	3.33	0.70	13.95
	1981	6.67	1.65	1.06	3.65	0.92	13.95
	1982	6.03	1.27	1.07	4.66	0.92	13.95
	1983	4.86	1.97	0.92	4.83	1.37	13.95
	1984	4.83	2.20	0.88	4.56	1.48	13.95
	1985	4.99	2.53	0.91	4.02	1.50	13.95
	1986	4.95	2.76	0.80	3.87	1.57	13.95
	1987	5.11	2.69	0.90	3.75	1.50	13.95
	1988	5.00	3.18	1.05	3.49	1.23	13.95
Law Enforcement Last 10 Years	1979	11.69	1.68	0.83	3.62	0.28	18.10
	1980	11.82	1.75	0.94	2.89	0.70	18.10
	1981	11.35	1.65	1.28	3.46	0.36	18.10
	1982	10.38	1.27	1.58	4.47	0.40	18.10
	1983	8.66	2.00	1.42	5.27	0.75	18.10
	1984	8.15	2.32	1.57	5.14	0.92	18.10
	1985	8.19	2.90	1.56	4.35	1.10	18.10
	1986	8.07	3.12	1.53	4.30	1.08	18.10
	1987	7.99	3.05	1.52	4.45	1.09	18.10
	1988	8.58	3.45	1.55	3.52	1.00	18.10

for the examination which will determine medical eligibility.

The benefit is calculated similar to the age and service formula. There is no reduction for age and the amount of the allowance is based on final average salary and years of PERS service, plus the length of time between the effective date of disability retirement and age 60. Payments cannot be less than 30 percent nor more than 75 percent of final average salary.

Survivor Benefits

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

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

1. Spouse.
2. If no spouse, the youngest dependent child under age 18 (or under age 22 if a student). If monthly benefits are selected, payments will be determined on the basis of all the minor children and divided equally among them. Incompetent, dependent children, regardless of age, are included.
3. If monthly survivor benefits are not payable or there are no dependent children, all living children will share equally in a refund of the account.
4. The older parent.
5. If none of the foregoing, a refund of the account will be paid to the estate.

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

The dependents qualify for available monthly benefits as follows:

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

Monthly benefits are calculated as a percentage which cannot exceed 60 percent of the member's final average salary.

If the member dies after reaching retirement age but before applying for benefits, the surviving spouse, or other sole dependent beneficiary, regardless of age, may elect to take a monthly joint survivorship allowance for life, known as Option 1.

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

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

NUMBER OF EMPLOYER UNITS

Last 10 Years

Calendar Year	State	County	Law Enforcement	Municipalities	Villages	Miscellaneous	Libraries	Townships	Totals
1979	262	198	88	281	569	323	248	1,283	**3,252**
1980	253	193	88	284	560	327	248	1,275	**3,228**
1981	252	200	146	291	569	328	249	1,286	**3,321**
1982	248	207	151	294	576	348	249	1,267	**3,340**
1983	259	170	162	300	584	353	249	1,342	**3,419**
1984	270	184	148	330	561	371	254	1,296	**3,414**
1985	239	197	174	296	599	355	249	1,302	**3,411**
1986	239	235	175	338	603	288	251	1,306	**3,435**
1987	240	236	177	342	607	299	252	1,306	**3,459**
1988	240	239	186	341	601	298	251	1,309	**3,465**

DISBURSEMENTS BY CATEGORY

Last 10 Years

	Benefits					
	Annuities	Disabilities	Other Systems	Survivors	CPI	Post Retirement Legislative Incr.
1979	$153,958,033	$18,801,479	$2,038,904	$19,808,511	$13,212,604	$18,170,820
1980	170,755,615	21,862,642	1,849,714	21,521,104	19,101,857	18,956,041
1981	192,045,068	24,970,899	1,967,683	22,974,505	24,942,579	23,399,149
1982	214,286,038	27,372,888	2,023,006	24,535,836	31,468,090	27,594,317
1983	239,346,014	29,678,413	2,615,346	25,977,513	38,569,453	25,841,902
1984	266,061,642	32,411,456	3,227,849	27,608,949	46,263,861	40,967,243
1985	297,771,528	36,811,337	3,818,776	29,136,086	54,905,210	40,238,117
1986	330,641,045	41,693,306	2,902,443	31,076,948	64,319,209	38,034,762
1987	363,424,328	46,658,177	3,231,189	33,044,661	73,612,942	35,800,025
1988	416,758,803	51,625,775	3,223,604	34,735,329	80,357,076	33,742,346

Additional Benefits

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

Refunds

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

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

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

Health Care	Death Benefits	Refunds: Separation	Refunds: Beneficiaries	Other	Total All Payments
$ 41,112,677	$1,330,560	$76,573,982	$2,524,667	$16,847,635	**$364,379,872**
44,182,218	1,379,989	61,560,229	2,515,380	438,790	**364,123,579**
54,033,205	1,524,491	73,182,786	2,617,655	438,489	**422,096,509**
78,112,241	1,436,081	63,954,454	2,722,037	302,391	**473,807,379**
103,156,330	1,585,587	59,871,357	2,673,207	600,262	**529,915,384**
104,257,965	1,667,291	80,620,354	3,154,663	1,333,043	**607,574,316**
117,178,501	1,653,025	72,916,583	3,135,948	583,536	**658,148,647**
143,141,885	1,630,683	76,349,378	3,243,057	959,624	**733,992,340**
166,021,858	1,644,845	78,282,220	3,302,041	218,183	**805,240,469**
219,010,835	1,919,432	76,778,952	4,099,350	341,831	**922,593,333**

MEMBER COUNT

Last 10 Years

	Active Contributing	Inactive	Total
1979	263,614	46,404	**310,018**
1980	258,559	52,782	**311,341**
1981	255,097	53,005	**308,102**
1982	251,169	52,454	**303,623**
1983	250,566	53,560	**304,126**
1984	250,796	53,931	**304,727**
1985	254,797	54,746	**309,543**
1986	258,608	56,710	**315,318**
1987	262,208	60,291	**322,499**
1988	268,460	63,642	**332,102**

MEMBER CONTRIBUTION RATES

Last 10 Years

Calendar Year	Contribution Rate
1979	8.5%
1980	8.5
1981	8.5
1982	8.5*
1983	8.5*
1984	8.5*
1985	8.5*
1986	8.5*
1987	8.5*
1988	8.5*

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

Schedule of Average Benefit Payments*

	Years Credited Service					
	5-9	10-14	15-19	20-24	25-30	30+
Period 1/1/84-12/31/84						
Average Monthly Benefit*	$161.78	$315.66	$463.39	$640.37	$879.32	$1,319.44
Average Final Average Salary	$11,020.77	$14,537.13	$15,888.33	$17,779.56	$20,123,45	$22,791.23
Number of Active Recipients	1,022	1,281	1,164	835	677	1,140
Period 1/1/85-12/31/85						
Average Monthly Benefit*	$177.53	$329.50	$491.40	$690.60	$925.00	$1,378.77
Average Final Average Salary	$12,178.67	$15,623.30	$17,543.81	$19,340.33	$21,603.87	$24,740.23
Number of Active Recipients	1,061	1,174	1,136	881	742	1,185
Period 1/1/86-12/31/86						
Average Monthly Benefit*	$161.23	$323.10	$501.93	$688.30	$921.24	$1,326.13
Average Final Average Salary	$12,132.40	$15,673.87	$18,175.85	$19,814.66	$22,018.32	$24,463.25
Number of Active Recipients	1,415	1,254	1,168	900	697	1,188
Period 1/1/87-12/31/87						
Average Monthly Benefit*	$202.59	$349.49	$520.18	$713.42	$939.76	$1,446.57
Average Final Average Salary	$12,880.97	$16,872.95	$19,314.22	$20,871.18	$22,815.04	$26,417.06
Number of Active Recipients	377	1,003	993	918	799	1,729
Period 1/1/88-12/31/88						
Average Monthly Benefit*	$214.43	$332.08	$540.20	$729.03	$990.46	$1,586.96
Average Final Average Salary	$13,460.97	$16,400.07	$20,183.48	$21,413.99	$24,384.78	$29,133.97
Number of Active Recipients	376	932	968	942	758	1,930
Period 1/1/84-12/31/88						
Average Monthly Benefit*	$183.51	$329.98	$503.42	$692.34	$931.16	$1,411.57
Average Final Average Salary	$12,334.76	$15,821.46	$18,221.14	$19,843.94	$22,189.09	$25,509.15
Number of Active Recipients	4,251	5,644	5,429	4,476	3,673	7,172

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

NUMBER OF BENEFIT RECIPIENTS BY CATEGORY

As of Year-End	Annuities	Disabilities	Survivors	Total
1979	55,866	4,770	8,952	**69,588**
1980	58,798	5,184	9,354	**73,336**
1981	62,212	5,565	9,614	**77,391**
1982	65,363	5,807	9,901	**81,071**
1983	68,345	6,017	10,132	**84,494**
1984	71,228	6,189	10,315	**87,732**
1985	74,407	6,517	10,467	**91,391**
1986	77,960	6,864	10,681	**95,505**
1987	79,648	7,272	10,828	**97,748**
1988	82,462	7,560	10,940	**100,962**

NUMBER OF NEW BENEFIT RECIPIENTS AND REFUND PAYMENTS

For the Year Ending Dec. 31	Annuities	Disabilities	Survivors	Refund
1979	4,851	701	666	**53,727**
1980	5,068	715	727	**36,831**
1981	5,772	693	667	**35,108**
1982	5,445	563	631	**28,283**
1983	5,143	509	596	**23,665**
1984	5,475	562	568	**28,988**
1985	5,516	683	535	**21,766**
1986	6,196	730	620	**22,976**
1987	4,567	775	560	**22,246**
1988	5,731	703	513	**23,547**

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PUBLIC EMPLOYEES RETIREMENT SYSTEM OF OHIO

PERS

FINANCIAL SECTION

THE COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Year Ended December 31, 1988

INDEPENDENT AUDITORS' REPORT

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

We have audited the accompanying balance sheet of the Public Employees Retirement System of Ohio as of December 31, 1988 and the related statements of revenues, expenses, and changes in fund balances and of changes in financial position for the year then ended. Our audit also comprehended the Additional Information of the System, listed in the accompanying table of contents, for the year ended December 31, 1988. These financial statements and the Additional Information are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audit. The System's financial statements and Additional Information for the year ended December 31, 1987 were audited by other auditors whose report, dated May 5, 1988, expressed an unqualified opinion on those statements.

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

In our opinion, such 1988 financial statements present fairly, in all material respects, the financial position of the System at December 31, 1988 and the results of its operations and the changes in its financial position for the year then ended in conformity with generally accepted accounting principles. Also, in our opinion, such Additional Information for the year ended December 31, 1988, when considered in relation to the basic 1988 financial statements, present fairly in all material respects the information shown therein.

Deloitte Haskins + Sells

May 5, 1989

Balance Sheet
As Of December 31, 1988 and 1987

	1988	1987
ASSETS		
Cash and Short-Term Securities (Note 3):		
Cash	$ 5,073,263	$ 13,232,659
Short-Term Securities	2,319,957,960	197,741,481
	2,325,031,223	210,974,140
Receivables:		
Employers	89,965,653	88,151,508
Retirement Incentive Plan	65,713,895	46,617,568
Investment Sale Proceeds	15,633,524	34,738,319
Accrued Interest and Dividends	142,053,482	159,321,311
	313,366,554	328,828,706
Investments (Notes 3 and 4):		
Bonds	5,605,292,950	4,866,257,694
Mortgages	4,823,072,121	5,134,807,150
Stocks	2,956,399,245	3,753,960,824
Real Estate	433,926,567	302,418,148
Venture Capital, Stocks and Notes	34,273,561	32,821,788
	13,852,964,444	14,090,265,604
Fixed Assets:		
Land	1,708,409	1,708,409
Building and Building Improvements	6,676,575	5,595,537
Furniture, Fixtures, and Equipment	5,352,506	4,730,812
	13,737,490	12,034,758
Accumulated Depreciation	(4,259,018)	(3,501,334)
	9,478,472	8,533,424
Other Assets:		
Deferred Losses on Bonds Sold (Note 4)	126,070,138	231,000,193
Prepaid Expenses	866,100	667,645
	126,936,238	231,667,838
TOTAL ASSETS	$16,627,776,931	$14,870,269,712
LIABILITIES AND FUND BALANCES		
Liabilities:		
Undistributed Deposits	$ 9,401,382	$ 6,384,596
Medical Benefits Payable	39,075,219	12,384,132
Investment Commitments Payable	7,542,531	12,971,294
Accrued Administrative Expenses (Notes 8 and 9)	3,023,224	2,568,458
Total Liabilities	59,042,356	34,308,480
Fund Balances:		
Employees' Savings Fund	2,843,386,629	2,615,236,360
Employers' Accumulation Fund [Unfunded Accrued Liabilities: 1988—$5,382,820,108; 1987—$5,153,320,774 (Note 5)]	7,314,749,961	6,406,957,828
Annuity and Pension Reserve Fund	5,929,349,287	5,330,085,576
Survivors' Benefit Fund	469,068,312	472,518,482
Income Fund	12,267,757	10,986,330
Expense Fund	(87,371)	176,656
Total Fund Balances	16,568,734,575	14,835,961,232
TOTAL LIABILITIES AND FUND BALANCES	$16,627,776,931	$14,870,269,712

See Notes to Financial Statements

Statement of Changes in Financial Position
For The Years Ended December 31, 1988 and 1987

	1988	1987
Funds Provided By:		
Excess of Revenues Over Expenses	**$ 1,732,773,343**	$ 1,672,724,143
Items Not Requiring Or (Providing) Funds:		
Depreciation	**762,740**	673,955
Loss on Disposal of Fixed Assets	**184**	1,114
Increase (Decrease) in Funds Due to Changes in:		
Employers' Receivables	**(1,814,145)**	(2,395,180)
Retirement Incentive Plan Receivable	**(19,096,327)**	(46,617,568)
Investment Sale Proceeds Receivable	**19,104,795**	(15,251,089)
Accrued Interest and Dividends Receivable	**17,267,829**	(23,007,824)
Deferred Losses on Bonds Sold	**104,930,055**	(146,780,107)
Prepaid Expenses	**(198,455)**	(213,173)
Undistributed Deposits	**3,016,786**	(23,776,367)
Medical Benefits Payable	**26,691,087**	778,542
Investment Commitments Payable	**(5,428,763)**	(14,673,597)
Accrued Administrative Expenses	**454,766**	390,364
Sales and Maturities of Investments—Net Book Value:		
Bonds	**14,602,852,268**	11,963,495,640
Mortgages	**1,753,869,597**	5,633,166,220
Stocks	**1,824,195,653**	1,083,974,679
Real Estate	**54,050,172**	32,037,666
Venture Capital—Stocks and Notes	**4,201,465**	1,942,691
Proceeds from Sale of Fixed Assets	**587**	
Total Funds Provided	**20,117,633,637**	20,116,470,109
Funds Used For:		
Purchase of Investments:		
Bonds	**15,341,887,524**	14,120,803,655
Mortgages	**1,442,134,568**	5,829,874,185
Stocks	**1,026,634,074**	2,694,561,482
Real Estate	**185,558,591**	172,265,660
Venture Capital, Stocks and Notes	**5,653,238**	2,416,917
Additions to Fixed Assets	**1,708,559**	800,356
Total Funds Used	**18,003,576,554**	22,820,722,255
Net Increase (Decrease) In Funds	**2,114,057,083**	(2,704,252,146)
Cash and Short-Term Securities, Beginning of Year	**210,974,140**	2,915,226,286
Cash and Short-Term Securities, End of Year	**$ 2,325,031,223**	$ 210,974,140

See Notes to Financial Statements

Statements of Revenues, Expenses, and Changes in Fund Balances

For The Years Ended December 31, 1988 and 1987

			1988
	Employees' Savings	Employers' Accumulation	Annuity And Pension Reserve
Revenues:			
Members' Contributions	$ 446,087,140		
Employers' Contributions		$ 769,144,695	
Investment Income			
Other			$ 79,986
Total Revenues	446,087,140	769,144,695	79,986
Expenses:			
Benefit Payments			781,108,886
Refunds	81,211,276	8,064	
Administrative Expense			
Total Expenses	81,211,276	8,064	781,108,886
Excess (Deficit) of Revenues Over Expenses	364,875,864	769,136,631	(781,028,900)
Transfers—Increase (Decrease):			
Retirement Benefits	(184,168,577)	(538,125,875)	722,294,452
Disability Benefits	(11,740,366)	(81,869,902)	93,610,268
Survivor Benefits	(5,051,769)	(24,709,512)	
Retirement To (From) Other Systems	(1,946,746)	(1,106,055)	3,052,801
Statutory Interest	66,155,323	(66,155,323)	
Annual Interest		487,892,497	405,946,809
Other	26,540	362,729,672	155,388,281
Total Transfers	(136,725,595)	138,655,502	1,380,292,611
Balance, Beginning of Year	2,615,236,360	6,406,957,828	5,330,085,576
Balance, End of Year	$2,843,386,629	$7,314,749,961	$5,929,349,287

See Notes to Financial Statements

Survivors' Annuities	Income	Expense	Total	1987 Total
		$ 3,989	$ 446,091,129	$ 420,977,772
			769,144,695	741,840,413
	$ 1,441,226,325		1,441,226,325	1,325,054,638
$ 3,838	10,076,796		10,160,620	362,986
3,838	1,451,303,121	3,989	2,666,622,769	2,488,235,809
60,264,314			841,373,200	723,438,025
	687	106	81,220,133	81,802,444
		11,256,093	11,256,093	10,271,197
60,264,314	687	11,256,199	933,849,426	815,511,666
(60,260,476)	1,451,302,434	(11,252,210)	1,732,773,343	1,672,724,143
29,761,281				
27,049,025	(920,888,331)			
	(529,132,676)	10,988,183		
56,810,306	(1,450,021,007)	10,988,183		
472,518,482	10,986,330	176,656	14,835,961,232	13,163,237,089
$469,068,312	$ 12,267,757	$ (87,371)	$16,568,734,575	$14,835,961,232

Notes to Financial Statements

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

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

Investments—Section 145.11 of the Ohio Revised Code authorizes PERS to invest in various instruments (meeting various rating criteria) which include obligations of the U.S. Treasury and U.S. agencies, state and local governments, various mortgage loans, corporate bonds, common and preferred stock, commercial paper, and real estate. PERS did not engage in any repurchase or reverse repurchase transactions during either 1988 or 1987.

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

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

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

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, fixtures, and equipment	3 - 10

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

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

- *The Employees' Savings Fund* represents members' contributions held in trust pending their refund or transfer to a benefit disbursement fund. Upon an employee's retirement, such employee account is credited with an amount of interest (statutory interest) on the employee's contributions based on a rate of 3 percent to 4 percent compounded annually as required by Chapter 145 of the Ohio Revised Code. Such statutory interest does not vest with the employee.
- *The Employers' Accumulation Fund* is used to accumulate employers' contributions to be used in providing the reserves required for transfer to the Annuity and Pension Reserve Fund as members retire or become eligible for disability benefits and to the Survivors' Benefit Fund for benefits due dependents of deceased members.
- *The Annuity and Pension Reserve Fund* is the fund from which annuity and disability pensions are paid. This reserve was fully funded according to the latest actuarial study dated December 31, 1987, and accordingly, there are sufficient assets available to this fund to pay the vested benefits of all retirants and beneficiaries as of that valuation date.
- *The Survivors' Benefit Fund* is the fund from which benefits due dependents of deceased members of the retirement system are paid. This fund is also fully funded as of December 31, 1987.
- *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.

Reclasses—In years prior to 1988, certain amounts of employers' contributions were allocated to the Survivors' Benefit Fund. However, Chapter 145 of the Ohio Revised Code requires that these contributions are to be credited to the Employers' Accumulation Fund until such time as a reserve is required in the Survivors' Benefit Fund (upon death of a retirant); accordingly, the cumulative amount of such prior years' allocations ($153,560,264) has been reclassified from the Survivors' Benefit Fund to the Employers' Accumulation Fund as of December 31, 1987.

2. DESCRIPTION OF PERS

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

PERS is not considered 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.

Employer, employee membership and retirant data as of December 31, 1987 and 1986 (per latest available actuarial data) follows:

	1987	1986
Employer Units:		
State group	**240**	239
Local government group	**3,042**	3,021
Law enforcement group	**177**	175
Employee Members and Retirants:		
Retirants and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them	**115,809**	111,716
Active employees:		
Vested	**151,800**	157,173
Nonvested	**107,181**	97,446

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

Benefits

- *Age and Service Benefits*—Benefits are calculated on the basis of age, final average salary, and service credit. Members are eligible for retirement benefits at age 60 with 5 or more years of service credit, age 55 with 25 or more years of service credit, or at any age with 30 or more years of service credit. The benefit is based on 2.1 percent of final average salary multiplied by the years of service credit (2.5 percent for years of service in excess of 30 years, effective for members retiring after December 31, 1988). Persons retiring before age 65 with less than 30 years of service credit receive a percentage reduction in benefit amounts. Retirement benefits vest after 5 years of credited service.
- *Law Enforcement Officers' Benefits*—Full-time sheriffs, deputy sheriffs, and full-time township constables or police officers are eligible for special retirement options. This option is available to those members of this class at age 52 or older with 25 or more years of credited service. The benefit is calculated by multiplying 2.5 percent of final average salary by the first 20 years of service, 2 percent of final average salary by the next five years of service, and 1.5 percent of final average salary for each additional year of service (2.1 percent of final average salary for each year of service over 20 years, effective for members retiring after December 31, 1988). This option also permits early retirement under qualifying circumstances as early as age 48.
- *Early Retirement Incentive*—Employers under PERS may establish an early retirement incentive plan utilizing the purchase of service credit. To be eligible, employees must be able to retire under existing plan provisions after the purchase of the additional credit. Electing employers must contribute all such additional costs as are actuarially determined to fund the benefits. Such plan, if adopted, must be offered to a minimum of 5 percent of covered employees and provide for the purchase of up to five years credit, limited to a maximum of 20 percent of total service credit.
- *Disability Benefits*—A member who becomes permanently disabled for the performance of duty before age 60 and has completed 60 months of contributing service is eligible for a disability benefit. Law enforcement officers are immediately eligible for disability benefits if disabled by an on-duty illness or injury.
- *Survivor Benefits*—Dependents of deceased members may qualify for survivor benefits if the deceased employee had at least 18 months of service credit with three months of credit within the two and one-half years immediately preceding death. Chapter 145 of the Ohio Revised Code specifies the dependents and the conditions under which they qualify for survivor benefits.
- *Health Care Benefits*—The System provides comprehensive health care benefits to retirants and their dependents. Coverage includes hospitalization, physicians' fees, prescription drugs, and reimbursement of monthly Medicare premiums. The System determines the amount, if any, of the associated health care costs that will be absorbed by the System. The System has adopted cost containment measures that require annual deductible payments on claims by retirants, their covered spouses, or other dependents.
- *Other Benefits*—Annually, after retirement, retirement benefits are increased 3 percent if the cost of living, as measured by the Consumer Price Index, has increased by at least 3 percent on a cumulative basis. A death benefit of $500 is paid to the beneficiary of a deceased retirant ($500 - $2,500, determined by number of years of service credit of the retirant, effective January 1, 1989).
- *Refunds*—Upon termination of employment, a member may withdraw accumulated contributions made to PERS. The law requires a three month waiting period after service termination before the refund may be paid. The acceptance of a refund cancels the individual's rights and benefits in PERS. Employer contributions to PERS are not refundable.

Contributions—PERS' funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as a percentage of annual covered payroll, are adequate to accumulate adequate assets to pay benefits when due. Level percentage of payroll employer contribution rates is determined using the entry age normal actuarial funding method. This formula determines the amount of contributions necessary to fund: (1) the current service cost, which represents the estimated amount necessary to pay for benefits earned by the employees during the current service year; and (2) the prior service cost for service earned prior to plan inception and subsequent benefit increases, which represents the amount necessary to pay for unfunded accrued liabilities over a period of 38 years for state, 38 years for local government, and 13 years for law enforcement divisions. Currently the rates based on gross payroll are:

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

These rates fall within the range set by the Ohio Revised Code.

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

3. CASH AND INVESTMENTS

PERS' cash deposits at December 31, 1988 and 1987 were entirely covered by federal deposit insurance coverage or by collateral held in the name of PERS' custodian, the Treasurer of the State of Ohio, as required by the Ohio Revised Code.

A summary of short-term securities and investments held at December 31, 1988 and 1987 is as follows:

Market Value—If available, quoted market prices have been used to value investments as of December 31, 1988 and 1987. Securities not having a quoted market price have been valued based on yields currently available on comparable securities of issuers with similar credit ratings. Venture capital not having quoted market prices are valued at cost. The market value of real estate commingled funds is based upon appraisals of the properties held.

Weighted average purchase yields are as follows:

	1988	1987
Short-term securities	**7.69%**	7.49%
Long-term investments	**8.51%**	8.38%
Total yield	**8.42%**	8.38%
Total yield adjusted for amortization of deferred losses on bonds sold	**8.37%**	8.31%

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

All investments of PERS meet the criteria of Category 1 except the real estate commingled funds, which by their

	Book Value	Market Value
	December 31, 1988	
Short-term Securities	$ 2,319,957,960	$ 2,319,957,960
Investments:		
Bonds—par value	$11,889,973,028	
Net unamortized discount	6,284,680,078	
Bonds—net	5,605,292,950	$ 5,595,808,700
Mortgages—par value	5,535,486,897	
Net unamortized discount	712,414,776	
Mortgages—net	4,823,072,121	4,831,674,161
Common stocks	2,956,399,245	3,451,279,496
Real estate	433,926,567	496,188,654
Venture capital	34,273,561	24,038,372
Total Investments	$13,852,964,444	$14,398,989,383
	December 31, 1987	
Short-term Securities	$ 197,741,481	$ 198,345,888
Investments:		
Bonds—par value	$10,294,244,479	
Net unamortized discount	5,427,986,785	
Bonds—net	4,866,257,694	$ 4,997,906,106
Mortgages—par value	6,026,059,786	
Net unamortized discount	891,252,636	
Mortgages—net	5,134,807,150	5,122,413,206
Stocks—common and preferred	3,753,960,824	4,197,816,028
Real estate	302,418,148	352,543,625
Venture capital	32,821,788	32,823,033
Total Investments	$14,090,265,604	$14,703,501,998

nature are not required to be so categorized. Investments are held in the name of PERS or its nominee by the Treasurer of the State of Ohio as custodian.

4. DEFERRED LOSSES ON BONDS SOLD

PERS defers losses on the sale of bonds under a program to reinvest the proceeds in similar bonds. These exchanges are made to increase annual income, to shorten or lengthen maturity as market conditions change, or to improve the quality of the bond portfolio. The following presents the activity in this account for the years ended December 31, 1988 and 1987.

	1988	1987
Beginning Balance	**$ 231,000,193**	$ 84,220,086
Losses Deferred on Bonds Exchanged	**151,017,105**	342,149,646
Losses Amortized	**(12,289,206)**	(14,140,579)
Losses Written Off on Sales Prior to Maturity	**(243,657,954)**	(181,228,960)
Ending Balance	**$ 126,070,138**	$ 231,000,193

5. ACTUARIAL ASSUMPTIONS AND METHODS

The actuarial assumptions employed by the actuary for funding purposes as of December 31, 1987, the date of the latest actuarial study, include:

- *Investment Return*—7.5 percent per year, compounded annually.
- *Salary Scale*—The active member payroll is assumed to increase 5.5 percent annually, which is the portion of the individual pay increase assumptions attributable to inflation. Also assumed are additional projected salary increases ranging from 0 percent to 4 percent per year, depending on age, attributable to seniority/merit. Benefit payments are assumed to increase 3 percent per year after retirement.
- *Multiple Decrement Tables*

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

  Disability— Based upon PERS' experience.

  Withdrawal—Based upon PERS' experience.
- *Health Care Benefits*—Assumed liabilities are based on PERS' experience adjusted for 5.5 percent increase in costs annually. All benefit recipients were assumed to be eligible for Medicare on attainment of age 65, or immediately if retired for disability.

There were no changes in actuarial assumptions during either year. For actuarial purposes, assets are valued at book value plus an adjustment for 20 percent of unrealized market appreciation on investment assets.

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

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

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

The unfunded liability (including projections for health care costs) based upon the two most recent annual actuarial valuations is as follows:

	December 31, 1987				December 31, 1986
	State Group	Local Government Group	Law Enforcement Group	Total	Total
Present value of actuarial accrued liability for active and inactive accounts	$5,654,695,855	$8,238,205,750	$277,797,568	$14,170,699,173	$13,017,382,943
Less:					
Employers' Accumulation Fund*	2,450,991,909	3,465,644,246	181,373,127	6,098,009,282	5,215,073,064
Employees' Savings Fund	1,006,847,135	1,557,648,443	50,740,782	2,615,236,360	2,387,872,105
Market Value Adjustment	29,032,402	44,108,353	1,492,668	74,633,423	261,117,000
Unfunded accrued liability	$2,167,824,409	$3,170,804,708	$ 44,190,991	$ 5,382,820,108	$ 5,153,320,774

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

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

GASB Statement No. 5 established standard disclosure of pension information by public employee retirement systems. The Statement, effective for fiscal years beginning after December 15, 1986, pertains to pension obligations only, and did not address health care benefits.

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

The pension benefit obligations were determined as part of actuarial valuations at December 31, 1987 and 1986. The significant actuarial assumptions used to compute the pension benefit obligations are the same as those used for funding purposes and to compute contribution requirements. At December 31, 1987 and 1986, the unfunded pension benefit obligation was $2,569 million and $2,443 million determined as follows (in millions):

	1987	1986
Pension benefit obligation:		
Retirants and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	**$ 6,167**	$ 5,528
Current employees:		
Accumulated employee contributions including allocated investment income	**2,551**	2,358
Employer-financed vested	**5,550**	5,247
Employer-financed nonvested	**201**	151
Total pension benefit obligation	**14,469**	13,284
Net assets available for benefits (excluding amounts allocated to health care costs), at cost (market value: 1988—$12,302; 1987—$11,313)	**11,900**	10,841
Unfunded pension benefit obligation	**$ 2,569**	$ 2,443

The Ohio Revised Code provides statutory authority for employee and employer contributions. The employee contribution rates are 8.5 percent for employees other than law enforcement. Law enforcement employees contribute 9.5 percent of covered salary. The total 1988 employer contribution rate for state employers is 13.71 percent of covered payroll; 9.85 percent is the portion that is used to fund pension obligations. For local government employer units the rate is 13.95 percent of which 9.54 percent is used to fund pension obligations. The law enforcement employer rate is 18.10 percent and 13.65 percent is used to fund pension obligations. The difference between the total employer rate and the portion used to fund pension obligations is the amount used to fund the health care program for retirants.

Contributions for 1988 totaling $990,912,440 (employers—$558,386,327; employees—$432,526,113) were made in accordance with actuarially determined contribution requirements determined through an actuarial valuation performed at December 31, 1986. All other actuarially determined contributions to the system were used for the purpose of funding health care.

The contributions used to fund the pension obligations represented 9.8 percent and 8.5 percent of active member payroll for employers and employees, respectively. Employers' contributions consisted of: a) $289,306,292 normal cost, and b) $157,477,151 amortization of unfunded actuarial accrued liability.

Historical trend information is unavailable for years prior to 1986. The information for 1986 and 1987 is presented below (dollar amounts in millions):

Fiscal Year	(1) Net Assets Available For Benefits	(2) Pension Benefit Obligation (PBO)	(3) Percent Funded (1) ÷ (2)	(4) Unfunded PBO (2) − (1)	(5) Annual Covered Payroll	(6) Unfunded PBO as a Percentage of Covered Payroll (4) ÷ (5)
1986	$10,841	$13,284	81.6%	$2,443	$4,543	53.8%
1987	$11,900	$14,469	82.2%	$2,569	$4,864	52.8%

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

7. LEASES

PERS leases equipment with lease terms of one year or less. Total rent expense was $268,782 and $287,449 for the years ended December 31, 1988 and 1987, respectively.

8. VACATION AND SICK LEAVE

As of December 31, 1988 and 1987, $1,948,000 and $1,746,245, respectively, was accrued for unused vacation and sick leave for PERS' employees. Employees who resign or retire are entitled to full compensation for all earned unused vacation. Unused sick leave pay is lost upon termination. However, employees who retire are entitled to receive payment for a percentage of unused sick leave.

9. DEFERRED COMPENSATION PLAN

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

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

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

The deferred compensation assets of $691,871 and $496,352, at market value, and the related liability to PERS employees are included in the accompanying financial statements as of December 31, 1988 and 1987, respectively.

10. DEFINED BENEFIT PENSION PLAN

All employees of the System are eligible for membership in PERS. The payroll for such employees for the year ended December 31, 1988 was $5,667,347. Covered payroll paid to System employees participating in PERS was $5,390,259 for the year ended December 31, 1988. The System's contributions and its employees' contributions for the year ended December 31, 1988 were $738,022 and $458,172, respectively. These contributions represented 13.95 percent and 8.5 percent of covered payroll, respectively.

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

11. PROFESSIONAL TRENDS

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

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

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

In April 1983, the NCGA adopted Statement 6 "Pension Accounting and Financial Reporting: Public Employee Retirement Systems and State and Local Government Employers." The accounting procedures promulgated in NCGA Statement 6 regarding the reporting of fixed income securities states that a gain or loss arising from an exchange may be accounted for under either the completed transaction method or the deferral and amortization method (swap method). If the deferral and amortization method is used, it must be used consistently for gains and losses. Transactions should not be timed deliberately to avoid immediate recognition of losses while recognizing gains. As PERS presently defers only losses on exchanged securities, the adoption and enactment of NCGA Statement 6, which requires the deferral of both gains and losses, would entail substantial changes in the reporting and accounting of exchanged securities.

In September of 1983, NCGA Statement 6 was deferred indefinitely. In November 1983, the FASB issued Statement No. 75 which deferred indefinitely the application of FASB No. 35 to pension plans of state and local governmental units.

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

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

Cash Receipts and Disbursements

For The Years Ended December 31, 1988 and 1987

	1988	1987
Cash Balance at Beginning of Year	$ 13,232,659	$ 25,510,670
Receipts:		
Members' Contributions	427,394,606	403,127,862
Employers' Contributions	744,316,776	688,723,621
Purchases of Back Service	12,607,836	12,081,727
State Subsidies	3,838,183	3,547,655
Short-Term Securities Matured and Sold	8,920,516,265	14,310,005,535
Investments Matured and Sold	18,730,861,157	18,424,567,464
Interest and Dividends	1,086,077,425	1,406,150,447
Undistributed Deposits	9,401,382	6,384,596
Miscellaneous	9,961,200	362,894
TOTAL CASH RECEIPTS	29,944,974,830	35,254,951,801
Disbursements:		
Refunds:		
Separation	77,120,435	78,500,260
Beneficiaries	4,100,236	3,302,041
Annuity Payments:		
Retirement Annuities	647,577,578	570,220,223
Disability Benefits	105,412,582	94,541,068
Survivor Annuities	58,446,254	54,677,279
Retirement to Other Systems	3,223,604	3,231,189
Short-Term Securities Purchased	11,042,732,745	11,618,031,400
Investment Purchases	18,002,577,847	22,834,511,449
Administrative Expenses	11,942,945	10,214,903
TOTAL CASH DISBURSEMENTS	29,953,134,226	35,267,229,812
CASH BALANCE AT END OF YEAR	$ 5,073,263	$ 13,232,659

Administrative Expense

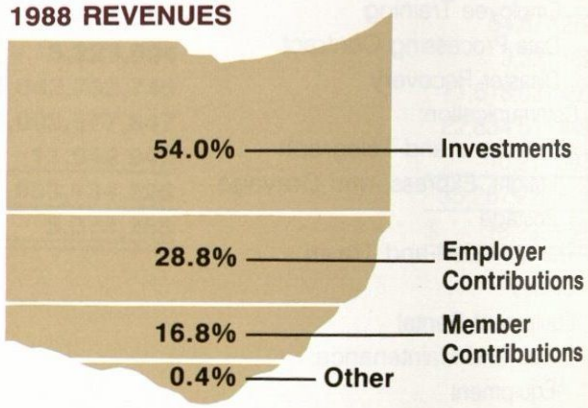
For The Years Ended December 31, 1988 and 1987

	1988	1987
Personal Services:		
Salaries and Wages	**$ 5,667,347**	$ 5,153,514
Retirement Contributions	**755,693**	704,904
Insurance	**799,080**	600,739
Bureau of Employment Services		424
	7,222,120	6,459,581
Supplies:		
Office Supplies	**166,222**	178,087
Printing and Publications	**94,361**	68,249
Dues and Subscriptions	**14,060**	13,061
	274,643	259,397
Other Services and Charges:		
Professional Services:		
Auditing	**66,400**	76,115
Actuarial and Technical	**110,205**	84,570
Investment	**382,643**	385,848
Medical	**229,815**	177,007
Pension Review	**7,922**	28,395
Employee Training	**28,199**	20,976
Data Processing Contract	**101,759**	39,561
Disaster Recovery	**14,400**	17,667
Communication:		
Telephone and Telegraph	**123,492**	137,521
Freight, Express, and Drayage	**6,859**	6,277
Postage	**655,770**	568,874
Transportation and Travel	**132,835**	133,562
Utilities	**170,037**	163,687
Equipment Rental	**541,649**	610,476
Repair and Maintenance:		
Equipment	**2,436**	1,733
Building	**230,782**	249,091
Microfilm	**25,042**	23,095
Retirement Study Commission	**149,695**	131,267
Miscellaneous	**16,650**	22,542
	2,996,590	2,878,264
Depreciation On:		
Building	**138,924**	138,873
Equipment and Fixtures	**623,816**	535,082
	762,740	673,955
TOTAL ADMINISTRATIVE EXPENSE	**$11,256,093**	$10,271,197

Investment Summary
For The Year Ended December 31, 1988

	January 1, 1988		
	Book Value	Market Value	Purchases
Bonds			
U.S. Gov't. & Agencies	$ 3,209,036,572	$ 3,393,062,027	$13,815,209,941
Corporate			
Industrial	508,753,312		298,036,642
Utilities	437,733,861		479,828,895
Finance	220,648,089		124,729,992
Total Corporate	1,167,135,262	1,120,019,408	902,595,529
Canadian Obligations	490,085,860	484,824,671	624,082,054
Mortgages	5,134,807,150	5,122,413,206	1,442,134,568
Stocks	3,753,960,824	4,197,816,028	1,026,634,074
Real Estate	302,418,148	352,543,625	185,558,591
Venture Capital, Stocks and Notes	32,821,788	32,823,033	5,653,238
Total	$14,090,265,604	$14,703,501,998	$18,001,867,995

1988 REVENUES



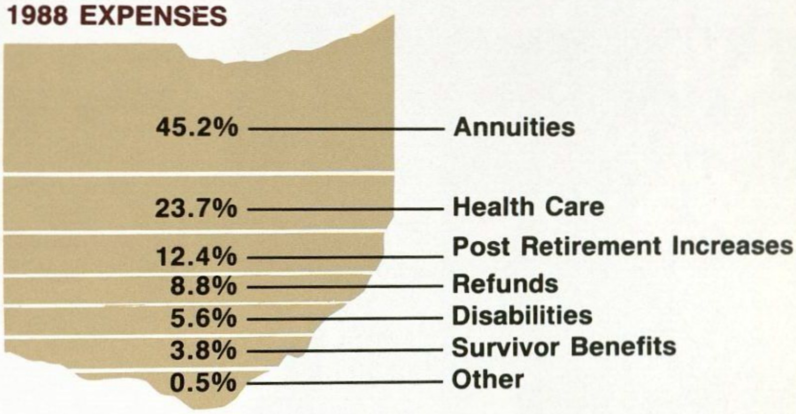
REVENUES BY SOURCE
Last 10 Years

	Members' Contributions	Employers' Contributions	Investment Income (Net)	Other	Total
1979	$248,550,285	$394,820,271	$ 218,710,495	$ 204,640	$ 862,285,691
1980	269,246,190	439,006,229	329,014,384	184,250	1,037,451,053
1981	284,930,608	469,535,130	457,387,532	230,852	1,212,084,122
1982	311,779,921	505,809,912	686,420,515*	192,959	1,504,203,307
1983	330,125,897	544,109,013	666,680,588	56,228	1,540,971,726
1984	345,368,439	557,498,416	713,857,919	187,347	1,616,912,121
1985	370,005,032	597,079,409	1,601,928,648	251,641	2,569,264,730
1986	391,193,417	627,520,315	1,830,721,267	209,457	2,849,644,456
1987	420,977,772	741,840,413	1,325,054,638	362,986	2,488,235,809
1988	446,091,129	769,144,695	1,441,226,325	10,160,620	2,666,622,769

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

December 31, 1988				
Maturities, Sales & Accruals	Book Value	Market Value	% Total Portfolio (Book Value)	Purchase Yield
$12,636,341,262	$ 4,387,905,251	$ 4,434,844,001	31.67	9.12%
665,379,665	141,410,289			
905,638,962	11,923,794			
326,275,261	19,102,820			
1,897,293,888	172,436,903	112,059,482	1.25	14.24%
69,217,118	1,044,950,796	1,048,905,217	7.54	9.73%
1,753,869,597	4,823,072,121	4,831,674,161	34.82	9.77%
1,824,195,653	2,956,399,245	3,451,279,496	21.34	4.49%
54,050,172	433,926,567	496,188,654	3.13	
4,201,465	34,273,561	24,038,372	.25	1.17%
$18,239,169,155	$13,852,964,444	$14,398,989,383	100.00	8.51%

1988 EXPENSES



EXPENSES BY TYPE
Last 10 Years

	Benefit Payments	Refunds	Administrative Expense	Total
1979	$268,433,588	$95,946,284	$ 5,205,476	$369,585,348
1980	299,609,180	64,514,399	5,798,912	369,922,491
1981	345,857,579	76,238,930	6,620,678	428,717,187
1982	406,828,497	66,978,882	7,223,272	481,030,651
1983	466,770,558	63,144,826	8,774,539	538,689,923
1984	522,466,256	85,108,060	9,137,846	616,712,162
1985	581,512,580	76,636,067	9,144,206	667,292,853
1986	653,440,281	80,552,059	9,467,193	743,459,533
1987	723,438,025	81,802,444	10,271,197	815,511,666
1988	841,373,200	81,220,133	11,256,093	933,849,426

Report of the Actuary

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

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

In order to measure progress toward this fundamental objective, PERS has annual actuarial valuations to (i) compute present financial position, and (ii) test the adequacy of established contribution rates. The latest completed actuarial valuations were based upon data and assumptions as of December 31, 1987. These valuations indicate that the contribution rates, established by the Retirement Board for benefits then in effect, meet the basic financial objective.

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

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

Respectfully submitted,

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

GABRIEL, ROEDER, SMITH & COMPANY
Actuaries & Consultants

April 21, 1989

PUBLIC EMPLOYEES RETIREMENT SYSTEM OF OHIO

PERS

ACTUARIAL SECTION

THE COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Year Ended December 31, 1988

Summary of Assumptions
Adopted by Retirement Board After Consulting with Actuary

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

Assets Valuation Method. Present assets were valued at amortized cost plus 20 percent of the System's unrealized appreciation as of December 31, 1987.

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

Economic Assumptions. The following economic assumptions, adopted in 1982, are used by the Actuary.

Investment Return. 7.5 percent annually, compounded annually. Considering other financial assumptions, the 7.5 percent rate translates to an assumed real rate of return of 2 percent; the real rate of return is the rate of investment return over the inflation rate.

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

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

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

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

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

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

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

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

Sample Ages	Years of Service	% Separating Within Next Year								
		Death		Withdrawal					Disability	
				State		Law Enforcement	Local			
		Men	Women	Men	Women		Men	Women	Men	Women
	0	%	%	30.00%	30.00%	20.00%	30.00%	25.00%	%	%
	1			22.00	22.00	15.00	22.00	20.00		
	2			18.00	18.00	12.00	18.00	18.00		
	3			12.00	15.00	10.00	12.00	15.00		
	4			10.00	12.00	7.00	10.00	12.00		
30	5 & Over	.10	.07	8.30	10.70	5.40	8.10	10.70		
40		.17	.13	5.40	6.60	4.00	5.70	6.60	.07	0.06
50		.63	.36	2.60	3.80	2.40	3.20	3.80	.37	.21
60		1.88	1.01	0.50	0.80	0.40	0.60	0.80	1.04	.69

Actuarial Valuation Data

	Active Members			Retired Lives		
Valuation Year	Number	Annual Payroll ($ Millions)	Average Pay	Number	Annual Allowance ($ Millions)	Average Allowance
1978	274,700	$3,056	$11,124	64,386	$191	$2,964
1979	261,513	3,217	12,302	69,858	231	3,312
1980	256,688	3,441	13,405	73,620	257	3,497
1981	252,623	3,308	13,092	77,718	302	3,880
1982	248,855	3,654	14,683	81,166	331	4,076
1983	248,307	3,814	15,361	85,594	369	4,285
1984	248,483	4,044	16,278	90,302	424	4,691
1985	251,748	4,282	17,007	93,867	471	5,021
1986	254,619	4,543	17,842	97,906	519	5,298
1987	258,981	4,864	18,782	100,010	565	5,652

Summary of Unfunded Accrued Liabilities

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

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

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

Valuation Year	Actuarial Accrued Liabilities (AAL)	Valuation Assets	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as a % of Active Member Payroll
1978	$ 7,576	$ 4,015	$3,561	53%	$3,056	117%
1979	8,965	4,667	4,298	52	3,217	134
1980	10,388	5,235	5,153	50	3,441	150
1981	11,055	6,106	4,949	55	3,308	150
1982	12,399	7,145	5,254	58	3,654	144
1983	13,976	8,156	5,820	58	3,814	153
1984	15,473	9,156	6,317	59	4,044	156
1985	17,138	11,049	6,089	64	4,282	142
1986	18,558	13,403*	5,155	72	4,543	113
1987	20,282	14,899*	5,383	73	4,864	111

*Includes market adjustment

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 (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (liability 3) will be partially covered by the remainder of present assets. Generally, if the system has been using level cost financing, the funded portion of liability 3 will increase over time. Liability 3 being fully funded is very rare.

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

Computed Accrued Liabilities ($ Amounts in Millions)

Valuation Year	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
1978	$1,126	$1,923	$4,527	$ 4,015	100	100	21
1979	1,216	2,414	5,334	4,667	100	100	19
1980	1,363	2,710	6,316	5,235	100	100	18
1981	1,491	3,296	6,268	6,106	100	100	21
1982	1,664	3,588	7,146	7,145	100	100	26
1983	1,843	4,011	8,123	8,156	100	100	28
1984	2,011	4,486	8,976	9,156	100	100	30
1985	2,190	5,031	9,917	11,049	100	100	40
1986	2,358	5,540	10,660	13,403*	100	100	52
1987	2,615	6,111	11,556	14,899*	100	100	53

*Includes market adjustment.

Actual vs. Recommended Contribution Rates

The Board adopted all contribution rates as recommended by the Actuary

Analysis of Financial Experience

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

Type of Activity	Gain (or Loss) For Year $ in Millions 1987	1986	1985
Age & Service Retirements. If members retire at older ages than assumed, there is a gain. If younger ages, a loss.	**$ 4.2**	$ (1.5)	$ 0.9
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	**5.6**	15.9	20.2
Death-In-Service Annuities. If survivor claims are less than assumed, there is a gain. If more claims, a loss.	**27.9**	9.2	9.7
Other Separations. If more liabilities are released by other separations than assumed, there is a gain. If smaller releases, a loss.	**(150.9)**	(136.1)	(159.9)
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	**66.9**	109.0	171.0
Investment Return. If there is greater investment return than assumed, there is a gain. If less return, a loss.	**133.6**	980.8	901.0
Health Insurance & Medicare Premiums. If there are smaller increases than assumed, there is a gain. If greater increases, a loss.	**(244.8)**	(199.4)	(245.0)
Gain (or Loss) During Year From Financial Experience	**$(157.5)**	$777.9	$697.9

PUBLIC EMPLOYEES
RETIREMENT SYSTEM
OF OHIO

PERS

INVESTMENT SECTION

In 1988, PERS' investment returns were well above actuarially assumed returns. Total fund performance was +9.3%, versus an actuarial rate of +7.5%.

THE COMPREHENSIVE
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REPORT

For the Year Ended
December 31, 1988